

Versions ~

vi_diff.txt	Main differences between Vim and Vi
version4.txt	Differences between Vim version 3.0 and 4.x
version5.txt	Differences between Vim version 4.6 and 5.x
version6.txt	Differences between Vim version 5.7 and 6.x
version7.txt	Differences between Vim version 6.4 and 7.x
version8.txt	Differences between Vim version 7.4 and 8.x

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*vi_diff.txt*   For Vim version 8.0.  Last change: 2016 Aug 16
```

VIM REFERENCE MANUAL by Bram Moolenaar

Differences between Vim and Vi

vi-differences

Throughout the help files differences between Vim and Vi/Ex are given in curly braces, like "{not in Vi}". This file only lists what has not been mentioned in other files and gives an overview.

Vim is mostly POSIX 1003.2-1 compliant. The only command known to be missing is ":open". There are probably a lot of small differences (either because Vim is missing something or because Posix is beside the mark).

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1. Simulated command *simulated-command*
```

This command is in Vi, but Vim only simulates it:

		:o *:op* *:open*
:[range]o[pen]	Works like :visual : end Ex mode.	
	{Vi: start editing in open mode}	
:[range]o[pen] /pattern/	As above, additionally move the cursor to the	
	column where "pattern" matches in the cursor	
	line.	

Vim does not support open mode, since it's not really useful. For those situations where ":open" would start open mode Vim will leave Ex mode, which allows executing the same commands, but updates the whole screen instead of only one line.

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2. Missing options *missing-options*
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These options are in the Unix Vi, but not in Vim. If you try to set one of them you won't get an error message, but the value is not used and cannot be printed.

autoprint (ap)	boolean (default on)	*'autoprint'* *'ap'*
beautify (bf)	boolean (default off)	*'beautify'* *'bf'*
flash (fl)	boolean (default ??)	*'flash'* *'fl'*
graphic (gr)	boolean (default off)	*'graphic'* *'gr'*

hardtabs (ht)	number (default 8)	'hardtabs' * 'ht' *
	number of spaces that a <Tab> moves on the display	
mesg	boolean (default on)	'mesg' *
novice	boolean (default off)	'novice' *
open	boolean (default on)	'open' *
optimize (op)	boolean (default off)	'optimize' * 'op' *
redraw	boolean (default off)	'redraw' *
slowopen (slow)	boolean (default off)	'slowopen' * 'slow' *
sourceany	boolean (default off)	'sourceany' *
w300	number (default 23)	'w300' *
w1200	number (default 23)	'w1200' *
w9600	number (default 23)	'w9600' *

3. Limits

limits

Vim has only a few limits for the files that can be edited {Vi: can not handle <Nul> characters and characters above 128, has limited line length, many other limits}.

E340

Maximum line length	On machines with 16-bit ints (Amiga and MS-DOS real mode): 32767, otherwise 2147483647 characters. Longer lines are split.
Maximum number of lines	2147483647 lines.
Maximum file size	2147483647 bytes (2 Gbyte) when a long integer is 32 bits. Much more for 64 bit longs. Also limited by available disk space for the swap-file .

E75

Length of a file path	Unix and Win32: 1024 characters, otherwise 256 characters (or as much as the system supports).
Length of an expanded string option	Unix and Win32: 1024 characters, otherwise 256 characters
Maximum display width	Unix and Win32: 1024 characters, otherwise 255 characters
Maximum lhs of a mapping	50 characters.
Number of different highlighting types:	over 30000
Range of a Number variable:	-2147483648 to 2147483647 (might be more on 64 bit systems)
Maximum length of a line in a tags file:	512 bytes.

Information for undo and text in registers is kept in memory, thus when making (big) changes the amount of (virtual) memory available limits the number of undo levels and the text that can be kept in registers. Other things are also kept in memory: Command-line history, error messages for Quickfix mode, etc.

Memory usage limits

The option 'maxmem' ('mm') is used to set the maximum memory used for one buffer (in kilobytes). 'maxmemtot' is used to set the maximum memory used for all buffers (in kilobytes). The defaults depend on the system used. For the Amiga and MS-DOS, 'maxmemtot' is set depending on the amount of memory available.

These are not hard limits, but tell Vim when to move text into a swap file.

If you don't like Vim to swap to a file, set 'maxmem' and 'maxmemtot' to a very large value. The swap file will then only be used for recovery. If you don't want a swap file at all, set 'updatecount' to 0, or use the "-n" argument when starting Vim.

4. The most interesting additions

vim-additions

Vi compatibility. |'compatible'|
 Although Vim is 99% Vi compatible, some things in Vi can be considered to be a bug, or at least need improvement. But still, Vim starts in a mode which behaves like the "real" Vi as much as possible. To make Vim behave a little bit better, try resetting the 'compatible' option:
`:set nocompatible`
 Or start Vim with the "-N" argument:
`vim -N`
 Vim starts with 'nocompatible' automatically if you have a .vimrc file. See |startup|. The 'coptions' option can be used to set Vi compatibility on/off for a number of specific items.

Support for different systems.

Vim can be used on:

- All Unix systems (it works on all systems it was tested on, although the GUI and Perl interface may not work everywhere).
- Amiga (500, 1000, 1200, 2000, 3000, 4000, ...).
- MS-DOS in real-mode (no additional drivers required).
- In protected mode on Windows 3.1 and MS-DOS (DPMS driver required).
- Windows 95 and Windows NT, with support for long file names.
- OS/2 (needs emx.dll)
- Atari MiNT
- VMS
- BeOS
- Macintosh
- Risc OS
- IBM OS/390

Note that on some systems features need to be disabled to reduce resource usage, esp. on MS-DOS. For some outdated systems you need to use an older Vim version.

Multi level persistent undo. |undo|
 'u' goes backward in time, 'CTRL-R' goes forward again. Set option 'undolevels' to the number of changes to be remembered (default 1000). Set 'undolevels' to 0 for a Vi-compatible one level undo. Set it to -1 for no undo at all.
 When all changes in a buffer have been undone, the buffer is not considered changed anymore. You can exit it with :q, without <!>. When undoing a few changes and then making a new change Vim will create a branch in the undo tree. This means you can go back to any state of the text, there is no risk of a change causing text to be lost forever. |undo-tree|
 The undo information is stored in a file when the 'undofile' option is set. This means you can exit Vim, start Vim on a previously edited file and undo changes that were made before exiting Vim.

Graphical User Interface (GUI). |gui|
 Included support for GUI: menu's, mouse, scrollbars, etc. You can define your own menus. Better support for CTRL/SHIFT/ALT keys in combination with special keys and mouse. Supported for various platforms, such as X11 (with Motif and Athena interfaces), GTK, Win32 (Windows 95 and later), BeOS, Amiga and Macintosh.

Multiple windows and buffers. |windows.txt|
 Vim can split the screen into several windows, each editing a different buffer or the same buffer at a different location. Buffers can still be loaded (and changed) but not displayed in a window. This is called a hidden buffer. Many commands and options have been added for this facility.

Vim can also use multiple tab pages, each with one or more windows. A line with tab labels can be used to quickly switch between these pages. |tab-page|

Syntax highlighting. |:syntax|
Vim can highlight keywords, patterns and other things. This is defined by a number of |:syntax| commands, and can be made to highlight most languages and file types. A number of files are included for highlighting the most common languages, like C, C++, Java, Pascal, Makefiles, shell scripts, etc. The colors used for highlighting can be defined for ordinary terminals, color terminals and the GUI with the |:highlight| command. A convenient way to do this is using a |:colorscheme| command. The highlighted text can be exported as HTML. |convert-to-HTML| Other items that can be highlighted are matches with the search string |'hlsearch'|, matching parens |matchparen| and the cursor line and column |'cursorline'| |'cursorcolumn'|.

Spell checking. |spell|
When the 'spell' option is set Vim will highlight spelling mistakes. About 50 languages are currently supported, selected with the 'spelllang' option. In source code only comments and strings are checked for spelling.

Folding. |folding|
A range of lines can be shown as one "folded" line. This allows overviews of a file and moving blocks of text around quickly. Folds can be created manually, from the syntax of the file, by indent, etc.

Diff mode. |diff|
Vim can show two versions of a file with the differences highlighted. Parts of the text that are equal are folded away. Commands can be used to move text from one version to the other.

Plugins. |add-plugin|
The functionality can be extended by dropping a plugin file in the right directory. That's an easy way to start using Vim scripts written by others. Plugins can be for all kind of files, or specifically for a filetype. Packages make this even easier. |packages|

Asynchronous communication and timers. |channel| |job| |timer|
Vim can exchange messages with other processes in the background. This makes it possible to have servers do work and send back the results to Vim. |channel|
Vim can start a job, communicate with it and stop it. |job|
Timers can fire once or repeatedly and invoke a function to do any work. |timer|

Repeat a series of commands. |q|
"q{c}" starts recording typed characters into named register {c}. A subsequent "q" stops recording. The register can then be executed with the "@{c}" command. This is very useful to repeat a complex action.

Flexible insert mode. |ins-special-special|
The arrow keys can be used in insert mode to move around in the file. This breaks the insert in two parts as far as undo and redo is concerned.

CTRL-O can be used to execute a single Normal mode command. This is

almost the same as hitting <Esc>, typing the command and doing |a|.

Visual mode.

|Visual-mode|

Visual mode can be used to first highlight a piece of text and then give a command to do something with it. This is an (easy to use) alternative to first giving the operator and then moving to the end of the text to be operated upon.

|v| and |V| are used to start Visual mode. |v| works on characters and |V| on lines. Move the cursor to extend the Visual area. It is shown highlighted on the screen. By typing "o" the other end of the Visual area can be moved. The Visual area can be affected by an operator:

d	delete
c	change
y	yank
> or <	insert or delete indent
!	filter through external program
=	filter through indent
:	start : command for the Visual lines.
gq	format text to 'textwidth' columns
J	join lines
~	swap case
u	make lowercase
U	make uppercase

Block operators.

|visual-block|

With Visual mode a rectangular block of text can be selected. Start Visual mode with CTRL-V. The block can be deleted ("d"), yanked ("y") or its case can be changed ("~", "u" and "U"). A deleted or yanked block can be put into the text with the "p" and "P" commands.

Help system.

|:help|

Help is displayed in a window. The usual commands can be used to move around, search for a string, etc. Tags can be used to jump around in the help files, just like hypertext links. The |:help| command takes an argument to quickly jump to the info on a subject. <F1> is the quick access to the help system. The name of the help index file can be set with the 'helpfile' option.

Command-line editing and history.

|cmdline-editing|

You can insert or delete at any place in the command-line using the cursor keys. The right/left cursor keys can be used to move forward/backward one character. The shifted right/left cursor keys can be used to move forward/backward one word. CTRL-B/CTRL-E can be used to go to the begin/end of the command-line.

|cmdline-history|

The command-lines are remembered. The up/down cursor keys can be used to recall previous command-lines. The 'history' option can be set to the number of lines that will be remembered. There is a separate history for commands and for search patterns.

Command-line completion.

|cmdline-completion|

While entering a command-line (on the bottom line of the screen) <Tab> can be typed to complete

what	example	~
- command	:e<Tab>	
- tag	:ta scr<Tab>	
- option	:set sc<Tab>	
- option value	:set hf=<Tab>	
- file name	:e ve<Tab>	
- etc.		

If there are multiple matches, CTRL-N (next) and CTRL-P (previous) will walk through the matches. <Tab> works like CTRL-N, but wraps around to the first match.

The 'wildchar' option can be set to the character for command-line completion, <Tab> is the default. CTRL-D can be typed after an (incomplete) wildcard; all matches will be listed. CTRL-A will insert all matches. CTRL-L will insert the longest common part of the matches.

Insert-mode completion.

|ins-completion|

In Insert mode the CTRL-N and CTRL-P keys can be used to complete a word that appears elsewhere. |i_CTRL-N|

With CTRL-X another mode is entered, through which completion can be done for:

i_CTRL-X_CTRL-F	file names
i_CTRL-X_CTRL-K	words from 'dictionary' files
i_CTRL-X_CTRL-T	words from 'thesaurus' files
i_CTRL-X_CTRL-I	words from included files
i_CTRL-X_CTRL-L	whole lines
i_CTRL-X_CTRL-J	words from the tags file
i_CTRL-X_CTRL-D	definitions or macros
i_CTRL-X_CTRL-O	Omni completion: clever completion specifically for a file type

etc.

Long line support.

|'wrap'| |'linebreak'|

If the 'wrap' option is off, long lines will not wrap and only part of them will be shown. When the cursor is moved to a part that is not shown, the screen will scroll horizontally. The minimum number of columns to scroll can be set with the 'sidescroll' option. The |zh| and |zl| commands can be used to scroll sideways.

Alternatively, long lines are broken in between words when the 'linebreak' option is set. This allows editing a single-line paragraph conveniently (e.g. when the text is later read into a DTP program). Move the cursor up/down with the |gk| and |gj| commands.

Text formatting.

|formatting|

The 'textwidth' option can be used to automatically limit the line length. This supplements the 'wrapmargin' option of Vi, which was not very useful. The |gq| operator can be used to format a piece of text (for example, |gqap| formats the current paragraph). Commands for text alignment: |:center|, |:left| and |:right|.

Extended search patterns.

|pattern|

There are many extra items to match various text items. Examples:

A "\n" can be used in a search pattern to match a line break.

"x\{2,4}" matches "x" 2 to 4 times.

"\s" matches a white space character.

Directory, remote and archive browsing.

|netrw|

Vim can browse the file system. Simply edit a directory. Move around in the list with the usual commands and press <Enter> to go to the directory or file under the cursor.

This also works for remote files over ftp, http, ssh, etc.

Zip and tar archives can also be browsed. |tar| |zip|

Edit-compile-edit speedup.

|quickfix|

The |:make| command can be used to run the compilation and jump to the first error. A file with compiler error messages is interpreted. Vim jumps to the first error.

Each line in the error file is scanned for the name of a file, line number and error message. The 'errorformat' option can be set to a list of scanf-like strings to handle output from many compilers.

The |:cn| command can be used to jump to the next error.
 |:cl| lists all the error messages. Other commands are available.
 The 'makeef' option has the name of the file with error messages.
 The 'makeprg' option contains the name of the program to be executed with the |:make| command.
 The 'shellpipe' option contains the string to be used to put the output of the compiler into the errorfile.

Finding matches in files. |:vimgrep|
 Vim can search for a pattern in multiple files. This uses the advanced Vim regexp pattern, works on all systems and also works to search in compressed files.

Improved indenting for programs. |'cindent'|
 When the 'cindent' option is on the indent of each line is automatically adjusted. C syntax is mostly recognized. The indent for various styles can be set with 'cinoptions'. The keys to trigger indenting can be set with 'cinkeys'.

Comments can be automatically formatted. The 'comments' option can be set to the characters that start and end a comment. This works best for C code, but also works for e-mail (">" at start of the line) and other types of text. The |=| operator can be used to re-indent lines.

For many other languages an indent plugin is present to support automatic indenting. |30.3|

Searching for words in included files. |include-search|
 The |[i] command can be used to search for a match of the word under the cursor in the current and included files. The 'include' option can be set to a pattern that describes a command to include a file (the default is for C programs).
 The |[I] command lists all matches, the |[CTRL-I] command jumps to a match.
 The |[d|, |[D| and |[CTRL-D| commands do the same, but only for lines where the pattern given with the 'define' option matches.

Automatic commands. |autocommand|
 Commands can be automatically executed when reading a file, writing a file, jumping to another buffer, etc., depending on the file name. This is useful to set options and mappings for C programs, documentation, plain text, e-mail, etc. This also makes it possible to edit compressed files.

Scripts and Expressions. |expression|
 Commands have been added to form up a powerful script language.
 |:if| Conditional execution, which can be used for example to set options depending on the value of \$TERM.
 |:while| Repeat a number of commands.
 |:for| Loop over a list.
 |:echo| Print the result of an expression.
 |:let| Assign a value to an internal variable, option, etc. Variable types are Number, String, List and Dictionary.
 |:execute| Execute a command formed by an expression.
 |:try| Catch exceptions.
 etc., etc. See |eval|. Debugging and profiling are supported. |debug-scripts| |profile|

If this is not enough, an interface is provided to |Python|, |Ruby|, |Tcl|, |Lua|, |Perl| and |MzScheme|.

Viminfo. |viminfo-file|
The command-line history, marks and registers can be stored in a file that is read on startup. This can be used to repeat a search command or command-line command after exiting and restarting Vim. It is also possible to jump right back to where the last edit stopped with |'0|. The 'viminfo' option can be set to select which items to store in the .viminfo file. This is off by default.

Printing. |printing|
The |:hardcopy| command sends text to the printer. This can include syntax highlighting.

Mouse support. |mouse-using|
The mouse is supported in the GUI version, in an xterm for Unix, for BSDs with sysmouse, for Linux with gpm, for MS-DOS, and Win32. It can be used to position the cursor, select the visual area, paste a register, etc.

Usage of key names. |<>| |key-notation|
Special keys now all have a name like <Up>, <End>, etc.
This name can be used in mappings, to make it easy to edit them.

Editing binary files. |edit-binary|
Vim can edit binary files. You can change a few characters in an executable file, without corrupting it. Vim doesn't remove NUL characters (they are represented as <NL> internally).
|-b| command-line argument to start editing a binary file
|'binary'| Option set by |-b|. Prevents adding an <EOL> for the last line in the file.

Multi-language support. |multi-lang|
Files in double-byte or multi-byte encodings can be edited. There is UTF-8 support to be able to edit various languages at the same time, without switching fonts. |UTF-8|
Messages and menus are available in different languages.

Move cursor beyond lines.
When the 'virtualedit' option is set the cursor can move all over the screen, also where there is no text. This is useful to edit tables and figures easily.

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5. Other vim features

other-features

A random collection of nice extra features.

When Vim is started with "-s scriptfile", the characters read from "scriptfile" are treated as if you typed them. If end of file is reached before the editor exits, further characters are read from the console.

The "-w" option can be used to record all typed characters in a script file. This file can then be used to redo the editing, possibly on another file or after changing some commands in the script file.

The "-o" option opens a window for each argument. "-o4" opens four windows.

Vi requires several termcap entries to be able to work full-screen. Vim only requires the "cm" entry (cursor motion).

In command mode:

When the 'showcmd' option is set, the command characters are shown in the last line of the screen. They are removed when the command is finished.

If the 'ruler' option is set, the current cursor position is shown in the last line of the screen.

"U" still works after having moved off the last changed line and after "u".

Characters with the 8th bit set are displayed. The characters between '~' and 0xa0 are displayed as "~?", "~@", "~A", etc., unless they are included in the 'isprint' option.

"][" goes to the next ending of a C function (}') in column 1).

"[" goes to the previous ending of a C function (}') in column 1).

"]f", "[f" and "gf" start editing the file whose name is under the cursor. CTRL-W f splits the window and starts editing the file whose name is under the cursor.

"*" searches forward for the identifier under the cursor, "#" backward.

"K" runs the program defined by the 'keywordprg' option, with the identifier under the cursor as argument.

"%" can be preceded with a count. The cursor jumps to the line that percentage down in the file. The normal "%" function to jump to the matching brace skips braces inside quotes.

With the CTRL-] command, the cursor may be in the middle of the identifier.

The used tags are remembered. Commands that can be used with the tag stack are CTRL-T, ":pop" and ":tag". ":tags" lists the tag stack.

The 'tags' option can be set to a list of tag file names. Thus multiple tag files can be used. For file names that start with "./", the "./" is replaced with the path of the current file. This makes it possible to use a tags file in the same directory as the file being edited.

Previously used file names are remembered in the alternate file name list.

CTRL-^ accepts a count, which is an index in this list.

":files" command shows the list of alternate file names.

"#<N>" is replaced with the <N>th alternate file name in the list.

"#<" is replaced with the current file name without extension.

Search patterns have more features. The <NL> character is seen as part of the search pattern and the substitute string of ":s". Vi sees it as the end of the command.

Searches can put the cursor on the end of a match and may include a character offset.

Count added to "~", ":next", ":Next", "n" and "N".

The command ":next!" with 'autowrite' set does not write the file. In vi the file was written, but this is considered to be a bug, because one does not expect it and the file is not written with ":rewind!".

In Vi when entering a <CR> in replace mode deletes a character only when 'ai' is set (but does not show it until you hit <Esc>). Vim always deletes a

character (and shows it immediately).

Added :wnext command. Same as ":write" followed by ":next".

The ":w!" command always writes, also when the file is write protected. In Vi you would have to do ":%!chmod +w %:S" and ":set noro".

When 'tildeop' has been set, "~" is an operator (must be followed by a movement command).

With the "J" (join) command you can reset the 'joinspaces' option to have only one space after a period (Vi inserts two spaces).

"cw" can be used to change white space formed by several characters (Vi is confusing: "cw" only changes one space, while "dw" deletes all white space).

"o" and "O" accept a count for repeating the insert (Vi clears a part of display).

Flags after Ex commands not supported (no plans to include it).

On non-UNIX systems ":cd" command shows current directory instead of going to the home directory (there isn't one). ":pwd" prints the current directory on all systems.

After a ":cd" command the file names (in the argument list, opened files) still point to the same files. In Vi ":cd" is not allowed in a changed file; otherwise the meaning of file names change.

":source!" command reads Vi commands from a file.

":mkexrc" command writes current modified options and mappings to a ".exrc" file. ":mkvimrc" writes to a ".vimrc" file.

No check for "tail recursion" with mappings. This allows things like ":map! foo ^}foo".

When a mapping starts with number, vi loses the count typed before it (e.g. when using the mapping ":map g 4G" the command "7g" goes to line 4). This is considered a vi bug. Vim concatenates the counts (in the example it becomes "74G"), as most people would expect.

The :put! command inserts the contents of a register above the current line.

The "p" and "P" commands of vi cannot be repeated with "." when the putted text is less than a line. In Vim they can always be repeated.

":noremap" command can be used to enter a mapping that will not be remapped. This is useful to exchange the meaning of two keys. ":cmap", ":cunmap" and ":cnoremap" can be used for mapping in command-line editing only. ":imap", ":iunmap" and ":inoremap" can be used for mapping in insert mode only. Similar commands exist for abbreviations: ":noreabbrev", ":iabbrev", ":cabbrev", ":iunabbrev", ":cunabbrev", ":inoreabbrev", ":cnoreabbrev".

In Vi the command ":map foo bar" would remove a previous mapping ":map bug foo". This is considered a bug, so it is not included in Vim. ":unmap! foo" does remove ":map! bug foo", because unmapping would be very difficult otherwise (this is vi compatible).

The ':' register contains the last command-line.
The '%' register contains the current file name.
The '.' register contains the last inserted text.

`":dis"` command shows the contents of the yank registers.

`CTRL-O/CTRL-I` can be used to jump to older/newer positions. These are the same positions as used with the `'` command, but may be in another file. The `":jumps"` command lists the older positions.

If the `'shiftround'` option is set, an indent is rounded to a multiple of `'shiftwidth'` with `>` and `<` commands.

The `'scrolljump'` option can be set to the minimum number of lines to scroll when the cursor gets off the screen. Use this when scrolling is slow.

The `'scrolloff'` option can be set to the minimum number of lines to keep above and below the cursor. This gives some context to where you are editing. When set to a large number the cursor line is always in the middle of the window.

Uppercase marks can be used to jump between files. The `":marks"` command lists all currently set marks. The commands `"]` and `"]` jump to the end of the previous operator or end of the text inserted with the put command. `"["` and `"["` do jump to the start.

The `'shelltype'` option can be set to reflect the type of shell used on the Amiga.

The `'highlight'` option can be set for the highlight mode to be used for several commands.

The `CTRL-A` (add) and `CTRL-X` (subtract) commands are new. The count to the command (default 1) is added to/subtracted from the number at or after the cursor. That number may be decimal, octal (starts with a `'0'`) or hexadecimal (starts with `'0x'`). Very useful in macros.

With the `:set` command the prefix `inv` can be used to invert boolean options.

In both Vi and Vim you can create a line break with the `":substitute"` command by using a `CTRL-M`. For Vi this means you cannot insert a real `CTRL-M` in the text. With Vim you can put a real `CTRL-M` in the text by preceding it with a `CTRL-V`.

In Insert mode:

If the `'revins'` option is set, insert happens backwards. This is for typing Hebrew. When inserting normal characters the cursor will not be shifted and the text moves rightwards. Backspace, `CTRL-W` and `CTRL-U` will also work in the opposite direction. `CTRL-B` toggles the `'revins'` option. In replace mode `'revins'` has no effect. Only when enabled at compile time.

The backspace key can be used just like `CTRL-D` to remove auto-indents.

You can backspace, `CTRL-U` and `CTRL-W` over line breaks if the `'backspace'` (bs) option includes `"eol"`. You can backspace over the start of insert if the `'backspace'` option includes `"start"`.

When the `'paste'` option is set, a few options are reset and mapping in insert mode and abbreviation are disabled. This allows for pasting text in windowing systems without unexpected results. When the `'paste'` option is reset, the old option values are restored.

`CTRL-T/CTRL-D` always insert/delete an indent in the current line, no matter

what column the cursor is in.

CTRL-@ (insert previously inserted text) works always (Vi: only when typed as first character).

CTRL-A works like CTRL-@ but does not leave insert mode.

CTRL-R {0-9a-z..} can be used to insert the contents of a register.

When the 'smartindent' option is set, C programs will be better auto-indented. With 'cindent' even more.

CTRL-Y and CTRL-E can be used to copy a character from above/below the current cursor position.

After CTRL-V you can enter a three digit decimal number. This byte value is inserted in the text as a single character. Useful for international characters that are not on your keyboard.

When the 'expandtab' (et) option is set, a <Tab> is expanded to the appropriate number of spaces.

The window always reflects the contents of the buffer (Vi does not do this when changing text and in some other cases).

If Vim is compiled with DIGRAPHS defined, digraphs are supported. A set of normal digraphs is included. They are shown with the ":digraph" command. More can be added with ":digraph {char1}{char2} {number}". A digraph is entered with "CTRL-K {char1} {char2}" or "{char1} BS {char2}" (only when 'digraph' option is set).

When repeating an insert, e.g. "10atest <Esc>" vi would only handle wrapmargin for the first insert. Vim does it for all.

A count to the "i" or "a" command is used for all the text. Vi uses the count only for one line. "3iabc<NL>def<Esc>" would insert "abcabcabc<NL>def" in Vi but "abc<NL>defabc<NL>defabc<NL>def" in Vim.

In Command-line mode:

<Esc> terminates the command-line without executing it. In vi the command line would be executed, which is not what most people expect (hitting <Esc> should always get you back to command mode). To avoid problems with some obscure macros, an <Esc> in a macro will execute the command. If you want a typed <Esc> to execute the command like vi does you can fix this with

```
":cmap ^V<Esc> ^V<CR>"
```

General:

The 'ttimeout' option is like 'timeout', but only works for cursor and function keys, not for ordinary mapped characters. The 'timeoutlen' option gives the number of milliseconds that is waited for. If the 'esckeys' option is not set, cursor and function keys that start with <Esc> are not recognized in insert mode.

There is an option for each terminal string. Can be used when termcap is not supported or to change individual strings.

The 'fileformat' option can be set to select the <EOL>: "dos" <CR><NL>, "unix" <NL> or "mac" <CR>.

When the 'fileformats' option is not empty, Vim tries to detect the type of

<EOL> automatically. The 'fileformat' option is set accordingly.

On systems that have no job control (older Unix systems and non-Unix systems) the CTRL-Z, ":stop" or ":suspend" command starts a new shell.

If Vim is started on the Amiga without an interactive window for output, a window is opened (and :sh still works). You can give a device to use for editing with the |-d| argument, e.g. "-d con:20/20/600/150".

The 'columns' and 'lines' options are used to set or get the width and height of the display.

Option settings are read from the first and last few lines of the file. Option 'modelines' determines how many lines are tried (default is 5). Note that this is different from the Vi versions that can execute any Ex command in a modeline (a major security problem). |trojan-horse|

If the 'insertmode' option is set (e.g. in .exrc), Vim starts in insert mode. And it comes back there, when pressing <Esc>.

Undo information is kept in memory. Available memory limits the number and size of change that can be undone. This may be a problem with MS-DOS, is hardly a problem on the Amiga and almost never with Unix and Win32.

If the 'backup' or 'writebackup' option is set: Before a file is overwritten, a backup file (.bak) is made. If the "backup" option is set it is left behind.

Vim creates a file ending in ".swp" to store parts of the file that have been changed or that do not fit in memory. This file can be used to recover from an aborted editing session with "vim -r file". Using the swap file can be switched off by setting the 'updatecount' option to 0 or starting Vim with the "-n" option. Use the 'directory' option for placing the .swp file somewhere else.

Vim is able to work correctly on filesystems with 8.3 file names, also when using messydos or crossdos filesystems on the Amiga, or any 8.3 mounted filesystem under Unix. See |'shortname'|.

Error messages are shown at least one second (Vi overwrites error messages).

If Vim gives the |hit-enter| prompt, you can hit any key. Characters other than <CR>, <NL> and <Space> are interpreted as the (start of) a command. (Vi only accepts a command starting with ':').

The contents of the numbered and unnamed registers is remembered when changing files.

The "No lines in buffer" message is a normal message instead of an error message, since that may cause a mapping to be aborted.

The AUX: device of the Amiga is supported.

=====

6. Command-line arguments *cmdline-arguments*

Different versions of Vi have different command-line arguments. This can be confusing. To help you, this section gives an overview of the differences.

Five variants of Vi will be considered here:

Elvis	Elvis version 2.1b
Nvi	Nvi version 1.79

Posix	Posix 1003.2
Vi	Vi version 3.7 (for Sun 4.1.x)
Vile	Vile version 7.4 (incomplete)
Vim	Vim version 5.2

Only Vim is able to accept options in between and after the file names.

```
+{command}      Elvis, Nvi, Posix, Vi, Vim: Same as "-c {command}".

-              Nvi, Posix, Vi: Run Ex in batch mode.
              Vim: Read file from stdin (use -s for batch mode).

--            Vim: End of options, only file names are following.

--cmd {command} Vim: execute {command} before sourcing vimrc files.

--echo-wid      Vim: GTK+ echoes the Window ID on stdout

--help          Vim: show help message and exit.

--literal       Vim: take file names literally, don't expand wildcards.

--nofork        Vim: same as |-f|

--noplugin[s]   Vim: Skip loading plugins.

--remote        Vim: edit the files in another Vim server

--remote-expr {expr}  Vim: evaluate {expr} in another Vim server

--remote-send {keys}  Vim: send {keys} to a Vim server and exit

--remote-silent {file} Vim: edit the files in another Vim server if possible

--remote-wait    Vim: edit the files in another Vim server and wait for it

--remote-wait-silent  Vim: like --remote-wait, no complaints if not possible

--role {role}    Vim: GTK+ 2: set role of main window

--serverlist     Vim: Output a list of Vim servers and exit

--servername {name}  Vim: Specify Vim server name

--socketid {id}    Vim: GTK window socket to run Vim in

--windowid {id}    Vim: Win32 window ID to run Vim in

--version        Vim: show version message and exit.

-?              Vile: print usage summary and exit.

-a              Elvis: Load all specified file names into a window (use -o for
              Vim).

-A              Vim: Start in Arabic mode (when compiled with Arabic).

-b {blksize}     Elvis: Use {blksize} blocksize for the session file.
-b              Vim: set 'binary' mode.

-C              Vim: Compatible mode.
```

-c {command} Elvis, Nvi, Posix, Vim: run {command} as an Ex command after loading the edit buffer.
Vim: allow up to 10 "-c" arguments

-d {device} Vim: Use {device} for I/O (Amiga only). {only when compiled without the |+diff| feature}

-d Vim: start with 'diff' set. |vimdiff|

-dev {device} Vim: Use {device} for I/O (Amiga only).

-D Vim: debug mode.

-e Elvis, Nvi, Vim: Start in Ex mode, as if the executable is called "ex".

-E Vim: Start in improved Ex mode |gQ|, like "exim".

-f Vim: Run GUI in foreground (Amiga: don't open new window).

-f {session} Elvis: Use {session} as the session file.

-F Vim: Start in Farsi mode (when compiled with Farsi).
Nvi: Fast start, don't read the entire file when editing starts.

-G {gui} Elvis: Use the {gui} as user interface.

-g Vim: Start GUI.

-g N Vile: start editing at line N

-h Vim: Give help message.
Vile: edit the help file

-H Vim: start Hebrew mode (when compiled with it).

-i Elvis: Start each window in Insert mode.

-i {vminfo} Vim: Use {vminfo} for vminfo file.

-L Vim: Same as "-r" (also in some versions of Vi).

-l Nvi, Vi, Vim: Set 'lisp' and 'showmatch' options.

-m Vim: Modifications not allowed to be written, resets 'write' option.

-M Vim: Modifications not allowed, resets 'modifiable' and the 'write' option.

-N Vim: No-compatible mode.

-n Vim: No swap file used.

-nb[args] Vim: open a NetBeans interface connection

-O[N] Vim: Like -o, but use vertically split windows.

-o[N] Vim: Open [N] windows, or one for each file.

-p[N] Vim: Open [N] tab pages, or one for each file.

-P {parent-title} Win32 Vim: open Vim inside a parent application window

-q {name} Vim: Use {name} for quickfix error file.

```

-q{name}      Vim: Idem.
-R            Elvis, Nvi, Posix, Vile, Vim: Set the 'readonly' option.
-r            Elvis, Nvi, Posix, Vi, Vim: Recovery mode.
-S            Nvi: Set 'secure' option.
-S {script}   Vim: source script after starting up.
-s            Nvi, Posix, Vim: Same as "-" (silent mode), when in Ex mode.
              Elvis: Sets the 'safer' option.
-s {scriptin} Vim: Read from script file {scriptin}; only when not in Ex
              mode.
-s {pattern}  Vile: search for {pattern}
-t {tag}      Elvis, Nvi, Posix, Vi, Vim: Edit the file containing {tag}.
-t{tag}      Vim: Idem.
-T {term}     Vim: Set terminal name to {term}.
-u {vimrc}    Vim: Read initializations from {vimrc} file.
-U {gvimrc}   Vim: Read GUI initializations from {gvimrc} file.
-v            Nvi, Posix, Vi, Vim: Begin in Normal mode (visual mode, in Vi
              terms).
              Vile: View mode, no changes possible.
-V            Elvis, Vim: Verbose mode.
-V{nr}        Vim: Verbose mode with specified level.
-w {size}     Elvis, Posix, Nvi, Vi, Vim: Set value of 'window' to {size}.
-w{size}     Nvi, Vi: Same as "-w {size}".
-w {name}     Vim: Write to script file {name} (must start with non-digit).
-W {name}     Vim: Append to script file {name}.
-x            Vi, Vim: Ask for encryption key. See |encryption|.
-X            Vim: Don't connect to the X server.
-y            Vim: Start in easy mode, like |evim|.
-Z            Vim: restricted mode
@{cmdfile}   Vile: use {cmdfile} as startup file.

```

7. POSIX compliance

posix *posix-compliance*

In 2005 the POSIX test suite was run to check the compatibility of Vim. Most of the test was executed properly. There are the few things where Vim is not POSIX compliant, even when run in Vi compatibility mode.

\$VIM_POSIX

Set the \$VIM_POSIX environment variable to have 'coptions' include the POSIX flags when Vim starts up. This makes Vim run as POSIX as it can. That's a bit different from being Vi compatible.

This is where Vim does not behave as POSIX specifies and why:

posix-screen-size

The \$COLUMNS and \$LINES environment variables are ignored by Vim if

the size can be obtained from the terminal in a more reliable way.
Add the '|' flag to 'coptions' to have \$COLUMNS and \$LINES overrule sizes obtained in another way.

The "{" and "}" commands don't stop at a "{" in the original Vi, but POSIX specifies it does. Add the '{' flag to 'coptions' if you want it the POSIX way.

The "D", "o" and "O" commands accept a count. Also when repeated. Add the '#' flag to 'coptions' if you want to ignore the count.

The ":cd" command fails if the current buffer is modified when the '.' flag is present in 'coptions'.

There is no ATTENTION message, the "A" flag is added to 'shortmess'.

These are remarks about running the POSIX test suite:

- vi test 33 sometimes fails for unknown reasons
- vi test 250 fails; behavior will be changed in a new revision
<http://www.opengroup.org/austin/mailarchives/ag-review/msg01710.html>
 (link no longer works, perhaps it's now:
https://www.opengroup.org/sophocles/show_mail.tpl?CALLER=show_archive.tpl&source=L&listname=austin-review-l&id=1711)
- vi test 310 fails; exit code non-zero when any error occurred?
- ex test 24 fails because test is wrong. Changed between SUSv2 and SUSv3.
- ex tests 47, 48, 49, 72, 73 fail because .exrc file isn't read in silent mode and \$EXINIT isn't used.
- ex tests 76, 78 fail because echo is used instead of printf. (fixed)
 Also: problem with \s not changed to space.
- ex test 355 fails because 'window' isn't used for "30z".
- ex test 368 fails because shell command isn't echoed in silent mode.
- ex test 394 fails because "=" command output isn't visible in silent mode.
- ex test 411 fails because test file is wrong, contains stray ':'.
- ex test 475 and 476 fail because reprint output isn't visible in silent mode.
- ex test 480 and 481 fail because the tags file has spaces instead of a tab.
- ex test 502 fails because .exrc isn't read in silent mode.
- ex test 509 fails because .exrc isn't read in silent mode. and exit code is 1 instead of 2.
- ex test 534 fails because .exrc isn't read in silent mode.

vim:tw=78:ts=8:ft=help:norl:
 version4.txt For Vim version 8.0. Last change: 2006 Apr 24

VIM REFERENCE MANUAL by Bram Moolenaar

This document lists the incompatible differences between Vim 3.0 and Vim 4.0. Although 4.0 is mentioned here, this is also for version 4.1, 4.2, etc..

This file is important for everybody upgrading from Vim 3.0. Read it carefully to avoid unexpected problems.

'backup' option default changed	backup-changed
Extension for backup file changed	backup-extension
Structure of swap file changed	swapfile-changed
"-w scriptout" argument changed	scriptout-changed
Backspace and Delete keys	backspace-delete
Escape for changed	escape-bar
Key codes changed	key-codes-changed
Terminal options changed	termcap-changed

'errorformat' option changed	errorformat-changed
'graphic' option gone	graphic-option-gone
'yankendofline' option gone	ye-option-gone
'icon' and 'title' default value changed	icon-changed
'highlight' option changed	highlight-changed
'tildeop' and 'weirdinvert' short names changed	short-name-changed
Use of "v", "V" and "CTRL-V" in Visual mode	use-visual-cmds
CTRL-B in Insert mode removed	toggle-revins

'backup' option default changed *backup-changed*

The default value for 'backup' used to be on. This resulted in a backup file being made when the original file was overwritten.

Now the default for 'backup' is off. As soon as the writing of the file has successfully finished, the backup file is deleted. If you want to keep the backup file, set 'backup' on in your vimrc. The reason for this change is that many people complained that leaving a backup file behind is not Vi-compatible. |'backup'|

Extension for backup file changed *backup-extension*

The extension for the backup file used to be ".bak". Since other programs also use this extension and some users make copies with this extension, it was changed to the less obvious "~". Another advantage is that this takes less space, which is useful when working on a system with short file names. For example, on MS-DOS the backup files for "longfile.c" and "longfile.h" would both become "longfile.bak"; now they will be "longfile.c~" and "longfile.h~".

If you prefer to use ".bak", you can set the 'backupext' option: >
:set bex=.bak

Structure of swap file changed *swapfile-changed*

The contents of the swap file were extended with several parameters. Vim stores the user name and other information about the edited file to make recovery more easy and to be able to know where the swap file comes from. The first part of the swap file can now be understood on a machine with a different byte order or sizeof(int). When you try to recover a file on such a machine, you will get an error message that this is not possible.

Because of this change, swap files cannot be exchanged between 3.0 and 4.0. If you have a swap file from a crashed session with 3.0, use Vim 3.0 to recover the file---don't use 4.0. |swap-file|

"-w scriptout" argument changed *scriptout-changed*

"vim -w scriptout" used to append to the scriptout file. Since this was illogical, it now creates a new file. An existing file is not overwritten (to avoid destroying an existing file for those who rely on the appending). [This was removed again later] |-w|

Backspace and Delete keys *backspace-delete*

In 3.0 both the delete key and the backspace key worked as a backspace in insert mode; they deleted the character to the left of the cursor. In 4.0 the delete key has a new function: it deletes the character under the cursor, just like it does on the command-line. If the cursor is after the end of the line and 'bs' is set, two lines are joined. || |i_|

In 3.0 the backspace key was always defined as CTRL-H and delete as CTRL-?. In 4.0 the code for the backspace and delete key is obtained from termcap or termLib, and adjusted for the "stty erase" value on Unix. This helps people who define the erase character according to the keyboard they are working on. |<BS>| |i_<BS>|

If you prefer backspace and delete in Insert mode to have the old behavior, put this line in your vimrc:

```
inoremap ^? ^H
```

And you may also want to add these, to fix the values for <BS> and :

```
set t_kb=^H
set t_kD=^?
```

(Enter ^H with CTRL-V CTRL-H and ^? with CTRL-V CTRL-? or .)

If the value for t_kb is correct, but the t_kD value is not, use the ":fixdel" command. It will set t_kD according to the value of t_kb. This is useful if you are using several different terminals. |:fixdel|

When ^H is not recognized as <BS> or , it is used like a backspace.

Escape for | changed

escape-bar

When the 'b' flag is present in 'coptions', the backslash cannot be used to escape '|' in mapping and abbreviate commands, only CTRL-V can. This is Vi-compatible. If you work in Vi-compatible mode and had used "\|" to include a bar in a mapping, this needs to be replaced by "^V|". See |:bar|.

Key codes changed

key-codes-changed

The internal representation of key codes has changed dramatically. In 3.0 a one-byte code was used to represent a key. This caused problems with different characters sets that also used these codes. In 4.0 a three-byte code is used that cannot be confused with a character. |key-notation|

If you have used the single-byte key codes in your vimrc for mappings, you will have to replace them with the 4.0 codes. Instead of using the three-byte code directly, you should use the symbolic representation for this in <>. See the table below. The table also lists the old name, as it was used in the 3.0 documentation.

The key names in <> can be used in mappings directly. This makes it possible to copy/paste examples or type them literally. The <> notation has been introduced for this |<>|. The 'B' and '<' flags must not be present in 'coptions' to enable this to work |'coptions'|.

old name	new name	old code	old MS-DOS code ~
----------	----------	----------	-------------------

		hex	dec	hex	dec	~
<ESC>	<Esc>					
<TAB>	<Tab>					
<LF>	<NL> <NewLine> <LineFeed>					
<SPACE>	<Space>					
<NUL>	<Nul>					
<BELL>	<Bell>					
<BS>	<BS> <BackSpace>					
<INSERT>	<Insert>					
	 <Delete>					
<HOME>	<Home>					
<END>	<End>					
<PAGE_UP>	<PageUp>					
<PAGE_DOWN>	<PageDown>					
<C_UP>	<Up>	0x80	128	0xb0	176	
<C_DOWN>	<Down>	0x81	129	0xb1	177	
<C_LEFT>	<Left>	0x82	130	0xb2	178	
<C_RIGHT>	<Right>	0x83	131	0xb3	179	
<SC_UP>	<S-Up>	0x84	132	0xb4	180	
<SC_DOWN>	<S-Down>	0x85	133	0xb5	181	
<SC_LEFT>	<S-Left>	0x86	134	0xb6	182	
<SC_RIGHT>	<S-Right>	0x87	135	0xb7	183	
<F1>	<F1>	0x88	136	0xb8	184	
<F2>	<F2>	0x89	137	0xb9	185	
<F3>	<F3>	0x8a	138	0xba	186	
<F4>	<F4>	0x8b	139	0xbb	187	
<F5>	<F5>	0x8c	140	0xbc	188	
<F6>	<F6>	0x8d	141	0xbd	189	
<F7>	<F7>	0x8e	142	0xbe	190	
<F8>	<F8>	0x8f	143	0xbf	191	
<F9>	<F9>	0x90	144	0xc0	192	
<F10>	<F10>	0x91	145	0xc1	193	
<SF1>	<S-F1>	0x92	146	0xc2	194	
<SF2>	<S-F2>	0x93	147	0xc3	195	
<SF3>	<S-F3>	0x94	148	0xc4	196	
<SF4>	<S-F4>	0x95	149	0xc5	197	
<SF5>	<S-F5>	0x96	150	0xc6	198	
<SF6>	<S-F6>	0x97	151	0xc7	199	
<SF7>	<S-F7>	0x98	152	0xc8	200	
<SF8>	<S-F8>	0x99	153	0xc9	201	
<SF9>	<S-F9>	0x9a	154	0xca	202	
<SF10>	<S-F10>	0x9b	155	0xcb	203	
<HELP>	<Help>	0x9c	156	0xcc	204	
<UNDO>	<Undo>	0x9d	157	0xcd	205	
	(not used)	0x9e	158	0xce	206	
	(not used)	0x9f	159	0xcf	207	

Terminal options changed

termcap-changed

The names of the terminal options have been changed to match the termcap names of these options. All terminal options now have the name t_xx, where xx is the termcap name. Normally these options are not used, unless you have a termcap entry that is wrong or incomplete, or you have set the highlight options to a different value.

|terminal-options|

Note that for some keys there is no termcap name. Use the <> type of name instead, which is a good idea anyway.

Note that "t_ti" has become "t_mr" (invert/reverse output) and "t_ts" has become "t_ti" (init terminal mode). Be careful when you use "t_ti"!

old name	new name	meaning	~
t_cdl	t_DL	delete number of lines	*t_cdl*
t_ci	t_vi	cursor invisible	*t_ci*
t_cil	t_AL	insert number of lines	*t_cil*
t_cm	t_cm	move cursor	
t_cri	t_RI	cursor number of chars right	*t_cri*
t_cv	t_ve	cursor visible	*t_cv*
t_cvv	t_vs	cursor very visible	*t_cvv*
t_dl	t_dl	delete line	
t_cs	t_cs	scroll region	
t_ed	t_cl	clear display	*t_ed*
t_el	t_ce	clear line	*t_el*
t_il	t_al	insert line	*t_il*
	t_da	display may be retained above the screen	
	t_db	display may be retained below the screen	
t_ke	t_ke	put terminal out of keypad transmit mode	
t_ks	t_ks	put terminal in keypad transmit mode	
t_ms	t_ms	save to move cursor in highlight mode	
t_se	t_se	normal mode (undo t_so)	
t_so	t_so	shift out (standout) mode	
t_ti	t_mr	reverse highlight	
t_tb	t_md	bold mode	*t_tb*
t_tp	t_me	highlight end	*t_tp*
t_sr	t_sr	scroll reverse	
t_te	t_te	out of termcap mode	
t_ts	t_ti	into termcap mode	*t_ts_old*
t_vb	t_vb	visual bell	
t_csc	t_CS	cursor is relative to scroll region	*t_csc*
t_ku	t_ku	<Up>	arrow up
t_kd	t_kd	<Down>	arrow down
t_kr	t_kr	<Right>	arrow right
t_kl	t_kl	<Left>	arrow left
t_sku		<S-Up>	shifted arrow up
t_skd		<S-Down>	shifted arrow down
t_skr	t_%i	<S-Right>	shifted arrow right
t_skl	t_#4	<S-Left>	shifted arrow left
t_f1	t_k1	<F1>	function key 1
t_f2	t_k2	<F2>	function key 2
t_f3	t_k3	<F3>	function key 3
t_f4	t_k4	<F4>	function key 4
t_f5	t_k5	<F5>	function key 5
t_f6	t_k6	<F6>	function key 6
t_f7	t_k7	<F7>	function key 7
t_f8	t_k8	<F8>	function key 8
t_f9	t_k9	<F9>	function key 9
t_f10	t_k;	<F10>	function key 10
t_sf1		<S-F1>	shifted function key 1
t_sf2		<S-F2>	shifted function key 2
t_sf3		<S-F3>	shifted function key 3
t_sf4		<S-F4>	shifted function key 4
t_sf5		<S-F5>	shifted function key 5
t_sf6		<S-F6>	shifted function key 6
t_sf7		<S-F7>	shifted function key 7
t_sf8		<S-F8>	shifted function key 8
t_sf9		<S-F9>	shifted function key 9

t_sf10	<S-F10>	shifted function key 10	*t_sf10*
t_help	t_%1 <Help>	help key	*t_help*
t_undo	t_&8 <Undo>	undo key	*t_undo*

'errorformat' option changed *errorformat-changed*

'errorformat' can now contain several formats, separated by commas. The first format that matches is used. The default values have been adjusted to catch the most common formats.

|errorformat|

If you have a format that contains a comma, it needs to be preceded with a backslash. Type two backslashes, because the ":set" command will eat one.

'graphic' option gone *graphic-option-gone*

The 'graphic' option was used to make the characters between <~> and 0xa0 display directly on the screen. Now the 'isprint' option takes care of this with many more possibilities. The default setting is the same; you only need to look into this if you previously set the 'graphic' option in your vimrc.

|'isprint'|

'yankendofline' option gone *ye-option-gone*

The 'yankendofline' option has been removed. Instead you can just use

:map Y y\$

'icon' and 'title' default value changed *icon-changed*

The 'title' option is now only set by default if the original title can be restored. Avoids "Thanks for flying Vim" titles. If you want them anyway, put ":set title" in your vimrc.

|'title'|

The default for 'icon' now depends on the possibility of restoring the original value, just like 'title'. If you don't like your icon titles to be changed, add this line to your vimrc:

:set noicon

|'icon'|

'highlight' option changed *highlight-changed*

The 'i' flag now means italic highlighting, instead of invert. The 'r' flag is used for reverse highlighting, which is what 'i' used to be. Normally you won't see the difference, because italic mode is not supported on most terminals and reverse mode is used as a fallback.

|'highlight'|

When an occasion is not present in 'highlight', use the mode from the default value for 'highlight', instead of reverse mode.

'tildeop' and 'weirdinvert' short names changed *short-name-changed*

Renamed 'to' (abbreviation for 'tildeop') to 'top'. |'tildeop'|

Renamed 'wi' (abbreviation for 'weirdinvert') to 'wiv'. |'weirdinvert'|

This was done because Vi uses 'wi' as the short name for 'window' and 'to' as the short name for 'timeout'. This means that if you try setting these options, you won't get an error message, but the effect will be different.

Use of "v", "V" and "CTRL-V" in Visual mode *use-visual-cmds*

In Visual mode, "v", "V", and "CTRL-V" used to end Visual mode. Now this happens only if the Visual mode was in the corresponding type. Otherwise the type of Visual mode is changed. Now only ESC can be used in all circumstances to end Visual mode without doing anything. |v_V|

CTRL-B in Insert mode removed *toggle-revins*

CTRL-B in Insert mode used to toggle the 'revins' option. If you don't know this and accidentally hit CTRL-B, it is very difficult to find out how to undo it. Since hardly anybody uses this feature, it is disabled by default. If you want to use it, define RIGHTLEFT in feature.h before compiling. |'revins'|

vim:tw=78:ts=8:ft=help:norl:
version5.txt For Vim version 8.0. Last change: 2016 Feb 27

VIM REFERENCE MANUAL by Bram Moolenaar

Welcome to Vim Version 5.0!

This document lists the differences between Vim 4.x and Vim 5.0. Although 5.0 is mentioned here, this is also for version 5.1, 5.2, etc. See |vi_diff.txt| for an overview of differences between Vi and Vim 5.0. See |version4.txt| for differences between Vim 3.0 and Vim 4.0.

INCOMPATIBLE: |incompatible-5|

Default value for 'compatible' changed	cp-default
Text formatting command "Q" changed	Q-command-changed
Command-line arguments changed	cmdline-changed
Autocommands are kept	autocmds-kept
Use of 'hidden' changed	hidden-changed
Text object commands changed	text-objects-changed
X-Windows Resources removed	x-resources
Use of \$VIM	\$VIM-use
Use of \$HOME for MS-DOS and Win32	\$HOME-use
Tags file format changed	tags-file-changed
Options changed	options-changed
CTRL-B in Insert mode gone	i_CTRL-B-gone

NEW FEATURES: |new-5|

Syntax highlighting	new-highlighting
Built-in script language	new-script
Perl and Python support	new-perl-python
Win32 GUI version	added-win32-GUI
VMS version	added-VMS
BeOS version	added-BeOS
Macintosh GUI version	added-Mac
More Vi compatible	more-compatible

Read input from stdin	read-stdin
Regular expression patterns	added-regex
Overloaded tags	tag-overloaded
New commands	new-commands
New options	added-options
New command-line arguments	added-cmdline-args
Various additions	added-various
 IMPROVEMENTS	 improvements-5
 COMPILE TIME CHANGES	 compile-changes-5
 BUG FIXES	 bug-fixes-5
 VERSION 5.1	 version-5.1
Changed	changed-5.1
Added	added-5.1
Fixed	fixed-5.1
 VERSION 5.2	 version-5.2
Long lines editable	long-lines
File browser added	file-browser-5.2
Dialogs added	dialogs-added
Popup menu added	popup-menu-added
Select mode added	new-Select-mode
Session files added	new-session-files
User defined functions and commands	new-user-defined
New interfaces	interfaces-5.2
New ports	ports-5.2
Multi-byte support	new-multi-byte
New functions	new-functions-5.2
New options	new-options-5.2
New Ex commands	new-ex-commands-5.2
Changed	changed-5.2
Added	added-5.2
Fixed	fixed-5.2
 VERSION 5.3	 version-5.3
Changed	changed-5.3
Added	added-5.3
Fixed	fixed-5.3
 VERSION 5.4	 version-5.4
Runtime directory introduced	new-runtime-dir
Filetype introduced	new-filetype-5.4
Vim script line continuation	new-line-continuation
Improved session files	improved-sessions
Autocommands improved	improved-autocmds-5.4
Encryption	new-encryption
GTK GUI port	new-GTK-GUI
Menu changes	menu-changes-5.4
Viminfo improved	improved-viminfo
Various new commands	new-commands-5.4
Various new options	new-options-5.4
Vim scripts	new-script-5.4
Avoid hit-enter prompt	avoid-hit-enter
Improved quickfix	improved-quickfix
Regular expressions	regex-changes-5.4
Changed	changed-5.4
Added	added-5.4
Fixed	fixed-5.4


```

VERSION 5.5                |version-5.5|
Changed                    |changed-5.5|
Added                     |added-5.5|
Fixed                      |fixed-5.5|

```

```

VERSION 5.6                |version-5.6|
Changed                    |changed-5.6|
Added                     |added-5.6|
Fixed                      |fixed-5.6|

```

```

VERSION 5.7                |version-5.7|
Changed                    |changed-5.7|
Added                     |added-5.7|
Fixed                      |fixed-5.7|

```

```

VERSION 5.8                |version-5.8|
Changed                    |changed-5.8|
Added                     |added-5.8|
Fixed                      |fixed-5.8|

```

```

=====
                                INCOMPATIBLE                *incompatible-5*

Default value for 'compatible' changed                *cp-default*
-----

```

Vim version 5.0 tries to be more Vi compatible. This helps people who use Vim as a drop-in replacement for Vi, but causes some things to be incompatible with version 4.x.

In version 4.x the default value for the 'compatible' option was off. Now the default is on. The first thing you will notice is that the "u" command undoes itself. Other side effects will be that mappings may work differently or not work at all.

Since a lot of people switching from Vim 4.x to 5.0 will find this annoying, the 'compatible' option is switched off if Vim finds a vimrc file. This is a bit of magic to make sure that 90% of the Vim users will not be bitten by this change.

What does this mean?

- If you prefer to run in 'compatible' mode and don't have a vimrc file, you don't have to do anything.
 - If you prefer to run in 'nocompatible' mode and do have a vimrc file, you don't have to do anything.
 - If you prefer to run in 'compatible' mode and do have a vimrc file, you should put this line first in your vimrc file: >


```
      :set compatible
```
 - If you prefer to run in 'nocompatible' mode and don't have a vimrc file, you can do one of the following:
 - Create an empty vimrc file (e.g.: "~/.vimrc" for Unix).
 - Put this command in your .exrc file or \$XINIT: >


```
          :set nocompatible
```
- < - Start Vim with the "-N" argument.

If you are new to Vi and Vim, using 'nocompatible' is strongly recommended, because Vi has a lot of unexpected side effects, which are avoided by this setting. See 'compatible'.

If you like some things from 'compatible' and some not, you can tune the compatibility with 'coptions'.

When you invoke Vim as "ex" or "gex", Vim always starts in compatible mode.

Text formatting command "Q" changed

Q-command-changed

The "Q" command formerly formatted lines to the width the 'textwidth' option specifies. The command for this is now "gq" (see |gq| for more info). The reason for this change is that "Q" is the standard Vi command to enter "Ex" mode, and Vim now does in fact have an "Ex" mode (see |Q| for more info).

If you still want to use "Q" for formatting, use this mapping: >

```
:noremap Q gq
```

And if you also want to use the functionality of "Q": >

```
:noremap gQ Q
```

Command-line arguments changed

cmdline-changed

Command-line file-arguments and option-arguments can now be mixed. You can give options after the file names. Example: >

```
vim main.c -g
```

This is not possible when editing a file that starts with a '-'. Use the "--" argument then |---|: >

```
vim -g -- -main.c
```

"-v" now means to start Ex in Vi mode, use "-R" for read-only mode.

```
old: "vim -v file"      |-v|
```

```
new: "vim -R file"     |-R|
```

"-e" now means to start Vi in Ex mode, use "-q" for quickfix.

```
old: "vim -e errorfile" |-e|
```

```
new: "vim -q errorfile" |-q|
```

"-s" in Ex mode now means to run in silent (batch) mode. |-s-ex|

"-x" reserved for crypt, use "-f" to avoid starting a new CLI (Amiga).

```
old: "vim -x file"      |-x|
```

```
new: "vim -f file"      |-f|
```

Vim allows up to ten "+cmd" and "-c cmd" arguments. Previously Vim executed only the last one.

"-n" now overrides any setting for 'updatecount' in a vimrc file, but not in a gvimrc file.

Autocommands are kept

autocmds-kept

Before version 5.0, autocommands with the same event, file name pattern, and command could appear only once. This was fine for simple autocommands (like setting option values), but for more complicated autocommands, where the same command might appear twice, this restriction caused problems. Therefore Vim stores all autocommands and keeps them in the order that they are defined.

The most obvious side effect of this change is that when you source a vimrc file twice, the autocommands in it will be defined twice. To avoid this, do one of these:

- Remove any autocommands that might potentially defined twice before defining them. Example: >


```
:au! * *.ext
      :au BufEnter *.ext ...
```
- Put the autocommands inside an ":if" command. Example: >


```
if !exists("did_ext_autocmds")
  let did_ext_autocmds = 1
  autocmd BufEnter *.ext ...
endif
```
- Put your autocommands in a different autocommand group so you can remove them before defining them |:augroup|: >


```
augroup uncompress
  au!
  au BufReadPost *.gz ...
augroup END
```

Use of 'hidden' changed

hidden-changed

In version 4.x, only some commands used the 'hidden' option. Now all commands uses it whenever a buffer disappears from a window.

Previously you could do ":buf xxx" in a changed buffer and that buffer would then become hidden. Now you must set the 'hidden' option for this to work.

The new behavior is simpler: whether Vim hides buffers no longer depends on the specific command that you use.

- with 'hidden' not set, you never get hidden buffers. Exceptions are the ":hide" and ":close!" commands and, in rare cases, where you would otherwise lose changes to the buffer.
- With 'hidden' set, you almost never unload a buffer. Exceptions are the ":bunload" or ":bdel" commands.

":buffer" now supports a "!" : abandon changes in current buffer. So do ":bnext", ":bprev", etc.

Text object commands changed

text-objects-changed

Text object commands have new names. This allows more text objects and makes characters available for other Visual mode commands. Since no more single characters were available, text objects names now require two characters. The first one is always 'i' or 'a'.

OLD	NEW	~	
a	aw	a word	v_aw
A	aW	a WORD	v_aW
s	as	a sentence	v_as
p	ap	a paragraph	v_ap
S	ab	a {} block	v_ab
P	aB	a {} block	v_aB

There is another set of text objects that starts with "i", for "inner". These select the same objects, but exclude white space.

X-Windows Resources removed

x-resources

Vim no longer supports the following X resources:

- boldColor
- italicColor
- underlineColor
- cursorColor

Vim now uses highlight groups to set colors. This avoids the confusion of using a bold Font, which would imply a certain color. See |:highlight| and |gui-resources|.

Use of \$VIM

\$VIM-use

Vim now uses the VIM environment variable to find all Vim system files. This includes the global vimrc, gvimrc, and menu.vim files and all on-line help and syntax files. See |\$VIM|. Starting with version 5.4, |\$VIMRUNTIME| can also be used.

For Unix, Vim sets a default value for \$VIM when doing "make install".

When \$VIM is not set, its default value is the directory from 'helpfile', excluding "/doc/help.txt".

Use of \$HOME for MS-DOS and Win32

\$HOME-use

The MS-DOS and Win32 versions of Vim now first check \$HOME when searching for a vimrc or exrc file and for reading/storing the viminfo file. Previously Vim used \$VIM for these systems, but this causes trouble on a system with several users. Now Vim uses \$VIM only when \$HOME is not set or the file is not found in \$HOME. See |_vimrc|.

Tags file format changed

tags-file-changed

Only tabs are allowed to separate fields in a tags file. This allows for spaces in a file name and is still Vi compatible. In previous versions of Vim, any white space was allowed to separate the fields. If you have a file which doesn't use a single tab between fields, edit the tags file and execute this command: >

```
:%s/\(\S*\)\s\+\(\S*\)\s\+\(.*\)/\1\t2\t3/
```

Options changed

options-changed

The default value of 'errorfile' has changed from "errors.vim" to "errors.err". The reason is that only Vim scripts should have the ".vim" extensions.

The ":make" command no longer uses the 'errorfile' option. This prevents the output of the ":make" command from overwriting a manually saved error file. ":make" uses the 'makeef' option instead. This also allows for generating a unique name, to prevent concurrently running ":make" commands from overwriting each other's files.

With 'insertmode' set, a few more things change:

- <Esc> in Normal mode goes to Insert mode.
- <Esc> in Insert mode doesn't leave Insert mode.
- When doing ":set im", go to Insert mode immediately.

Vim considers a buffer to be changed when the 'fileformat' (formerly the

'textmode' option) is different from the buffer's initial format.

CTRL-B in Insert mode gone

i_CTRL-B-gone

When Vim was compiled with the |+rightleft| feature, you could use CTRL-B to toggle the 'revins' option. Unfortunately, some people hit the 'B' key accidentally when trying to type CTRL-V or CTRL-N and then didn't know how to undo this. Since toggling the 'revins' option can easily be done with the mapping below, this use of the CTRL-B key is disabled. You can still use the CTRL-_ key for this |i_CTRL-_|. >

```
:imap <C-B> <C-O>:set revins!<CR>
```

=====

NEW FEATURES

new-5

Syntax highlighting

new-highlighting

Vim now has a very flexible way to highlighting just about any type of file. See |syntax|. Summary: >

```
:syntax on
```

Colors and attributes can be set for the syntax highlighting, and also for other highlighted items with the ':' flag in the 'highlight' option. All highlighted items are assigned a highlight group which specifies their highlighting. See |:highlight|. The default colors have been improved.

You can use the "Normal" group to set the default fore/background colors for a color terminal. For the GUI, you can use this group to specify the font, too.

The "2html.vim" script can be used to convert any file that has syntax highlighting to HTML. The colors will be exactly the same as how you see them in Vim. With a HTML viewer you can also print the file with colors.

Built-in script language

new-script

A few extra commands and an expression evaluator enable you to write simple but powerful scripts. Commands include ":if" and ":while". Expressions can manipulate numbers and strings. You can use the '=' register to insert directly the result of an expression. See |expression|.

Perl and Python support

new-perl-python

Vim can call Perl commands with ":perl" and ":perl!", etc. See |perl|. Patches made by Sven Verdoolaege and Matt Gerassimoff.

Vim can call Python commands with ":python" and ":pyfile". See |python|.

Both of these are only available when enabled at compile time.

Win32 GUI version

added-win32-GUI

The GUI has been ported to MS Windows 95 and NT. All the features of the X11 GUI are available to Windows users now. |gui-w32|

This also fixes problems with running the Win32 console version under Windows 95, where console support has always been bad.

There is also a version that supports OLE automation interface. |if_ole.txt|
 Vim can be integrated with Microsoft Developer Studio using the VisVim DLL.
 It is possible to produce a DLL version of gvim with Borland C++ (Aaron).

VMS version

added-VMS

Vim can now also be used on VMS systems. Port done by Henk Elbers.
 This has not been tested much, but it should work.
 Sorry, no documentation!

BeOS version

added-BeOS

Vim can be used on BeOS systems (including the BeBox). (Olaf Seibert)
 See |os_beos.txt|.

Macintosh GUI version

added-Mac

Vim can now be used on the Macintosh. (Dany St-Amant)
 It has not been tested much yet, be careful!
 See |os_mac.txt|.

More Vi compatible

more-compatible

There is now a real Ex mode. Started with the "Q" command, or by calling the executable "ex" or "gex". |Ex-mode|

Always allow multi-level undo, also in Vi compatible mode. When the 'u' flag in 'coptions' is included, CTRL-R is used for repeating the undo or redo (like "." in Nvi).

Read input from stdin

read-stdin

When using the "-" command-line argument, Vim reads its text input from stdin.
 This can be used for putting Vim at the end of a pipe: >
 grep "^a.*" *.c | vim -
 See |--|.

Regular expression patterns

added-regexp

Added specifying a range for the number of matches of an atom: "{a,b}". |/{|
 Added the "shortest match" regexp "{-}" (Webb).
 Added "\s", matches a white character. Can replace "[\t]". |/{s|
 Added "\S", matches a non-white character. Can replace "[^ \t]". |/{S|

Overloaded tags

tag-overloaded

When using a language like C++, there can be several tags for the same tagname. Commands have been added to be able to jump to any of these overloaded tags:

```
|:tselect|    List matching tags, and jump to one of them.
|:stselect|   Idem, and split window.
|g_CTRL-]|   Do ":tselect" with the word under the cursor.
```

After ":ta {tagname}" with multiple matches:

```
|:tnext|      Go to next matching tag.
|:tprevious|  Go to previous matching tag.
|:trewind|    Go to first matching tag.
|:tlast|      Go to last matching tag.
```

The ":tag" command now also accepts wildcards. When doing command-line completion on tags, case-insensitive matching is also available (at the end).

New commands

new-commands

```
|:amenu|      Define menus for all modes, inserting a CTRL-O for Insert
              mode, ESC for Visual and CTRL-C for Cmdline mode. "amenu" is
              used for the default menus and the Syntax menu.

|:augroup|     Set group to be used for following autocommands. Allows the
              grouping of autocommands to enable deletion of a specific
              group.

|:crewind|     Go to first error.
|:clast|       Go to last error.

|:doautoall|   Execute autocommands for all loaded buffers.

|:echo|        Echo its argument, which is an expression. Can be used to
              display messages which include variables.

|:execute|     Execute its argument, which is an expression. Can be used to
              built up an Ex command with anything.

|:hide|        Works like ":close".

|:if|          Conditional execution, for built-in script language.

|:intro|       Show introductory message. This is always executed when Vim
              is started without file arguments.

|:let|         Assign a value to an internal variable.

|:omap|        Map only in operator-pending mode. Makes it possible to map
              text-object commands.

|:redir|       Redirect output of messages to a file.

|:update|      Write when buffer has changed.

|:while|       While-loop for built-in script language.
```

Visual mode:

```
|v_0|         "0" in Visual block mode, moves the cursor to the other corner
              horizontally.
|v_D|         "D" in Visual block mode deletes till end of line.
```

Insert mode:
|i_CTRL-| Triggers abbreviation, without inserting any character.

New options *added-options*

'background' Used for selecting highlight color defaults. Also used in "syntax.vim" for selecting the syntax colors. Often set automatically, depending on the terminal used.

'complete' Specifies how Insert mode completion works.

'eventignore' Makes it possible to ignore autocommands temporarily.

'fileformat' Current file format. Replaces 'textmode'.
 'fileformats' Possible file formats. Replaces 'textauto'.
 New is that this also supports Macintosh format: A single <CR> separates lines.
 The default for 'fileformats' for MS-DOS, Win32 and OS/2 is "dos,unix", also when 'compatible' set. Unix type files didn't work anyway when 'fileformats' was empty.

'guicursor' Set the cursor shape and blinking in various modes.
 Default is to adjust the cursor for Insert and Replace mode, and when an operator is pending. Blinking is default on.

'fkmap' Farsi key mapping.

'hlsearch' Highlight all matches with the last used search pattern.

'hkmapp' Phonetic Hebrew mapping. (Ilya Dogolazky)

'iconstring' Define the name of the icon, when not empty. (Version 5.2: the string is used literally, a newline can be used to make two lines.)

'lazyredraw' Don't redraw the screen while executing macros, registers or other not typed commands.

'makeef' Errorfile to be used for ":make". "##" is replaced with a unique number. Avoids that two Vim sessions overwrite each others errorfile. The Unix default is "/tmp/vim##.err"; for Amiga "t:vim##.Err, for others "vim##.err".

'matchtime' 1/10s of a second to show a matching paren, when 'showmatch' is set. Like Nvi.

'mousehide' Hide mouse pointer in GUI when typing text.

'nrformats' Defines what bases Vim will consider for numbers when using the CTRL-A and CTRL-X commands. Default: "hex,octal".

'shellxquote' Add extra quotes around the whole shell command, including redirection.

'softtabstop' Make typing behave like tabstop is set at this value, without changing the value of 'tabstop'. Makes it more easy to keep 'ts' at 8, while still getting four spaces for a <Tab>.

'titlestring' String for the window title, when not empty. (Version 5.2: this string is used literally, a newline can be used to make

two lines.)

'verbose' Level of verbosity. Makes it possible to show which .vimrc, .exrc, .viminfo files etc. are used for initializing. Also to show autocommands that are being executed. Can also be set by using the "-V" command-line argument.

New command-line arguments

added-cmdline-args

```
-----
|-U|           Set the gvimrc file to be used. Like "-u" for the vimrc.
|-V|           Set the 'verbose' option. E.g. "vim -V10".
|-N|           Start in non-compatible mode.
|-C|           Start in compatible mode.
|-Z|           Start in restricted mode, disallow shell commands. Can also
               be done by calling the executable "rvim".
|-h|           Show usage information and exit.
```

Various additions

added-various

Added support for SNIFF+ connection (submitted by Toni Leherbauer). Vim can be used as an editor for SNIFF. No documentation available...

For producing a bug report, the bugreport.vim script has been included. Can be used with ":so \$VIMRUNTIME/bugreport.vim", which creates the file "bugreport.txt" in the current directory. |bugs|

Added range to ":normal" command. Now you can repeat the same command for each line in the range. |:normal-range|

Included support for the Farsi language (Shiran). Only when enabled at compile time. See |farsi|.

IMPROVEMENTS

improvements-5

Performance:

- When 'showcmd' was set, mappings would execute much more slowly because the output would be flushed very often. Helps a lot when executing the "life" macros with 'showcmd' set.
- Included patches for binary searching in tags file (David O'Neill). Can be disabled by resetting the 'tagbsearch' option.
- Don't update the ruler when repeating insert (slowed it down a lot).
- For Unix, file name expansion is now done internally instead of starting a shell for it.
- Expand environment variables with expand_env(), instead of calling the shell. Makes ":so \$VIMRUNTIME/syntax/syntax.vim" a LOT faster.
- Reduced output for cursor positioning: Use CR-LF for moving to first few columns in next few lines; Don't output CR twice when using termios.
- Optimized cursor positioning. Use CR, BS and NL when it's shorter than absolute cursor positioning.
- Disable redrawing while repeating insert "1000ii<Esc>".
- Made "d\$" or "D" for long lines a lot faster (delete all characters at once, instead of one by one).

- Access option table by first letter, instead of searching from start.
- Made setting special highlighting attributes a lot faster by using `highlight_attr[]`, instead of searching in the 'highlight' string.
- Don't show the mode when redrawing is disabled.
- When setting an option, only redraw the screen when required.
- Improved performance of Ex commands by using a lookup table for the first character.

Options:

```
'cinoptions'    Added 'g' flag, for C++ scope declarations.
'cproptions'    Added 'E' flag: Disallow yanking, deleting, etc. empty text
                area. Default is to allow empty yanks. When 'E' is included,
                "y$" in an empty line now is handled as an error (Vi
                compatible).
                Added 'j' flag: Only add two spaces for a join after a '.',
                not after a '?' or '!'.
                Added 'A' flag: don't give ATTENTION message.
                Added 'L' flag: When not included, and 'list' is set,
                'textwidth' formatting works like 'list' is not set.
                Added 'W' flag: Let ":w!" behave like Vi: don't overwrite
                readonly files, or a file owned by someone else.
'highlight'     Added '@' flag, for '@' characters after the last line on the
                screen, and '$' at the end of the line when 'list' is set.
                Added 'i' flag: Set highlighting for 'incsearch'. Default
                uses "IncSearch" highlight group, which is linked to "Visual".
                Disallow 'h' flag in 'highlight' (wasn't used anymore since
                3.0).
'guifont'       Win32 GUI only: When set to "*" brings up a font requester.
'guifty'        Default on, because so many people need it.
'path'          Can contain wildcards, and "*" for searching a whole tree.
'shortmess'     Added 'I' flag to avoid the intro message.
'viminfo'       Added '%' flag: Store buffer list in viminfo file.
```

- Increased defaults for 'maxmem' and 'maxmemtot' for Unix and Win32. Most machines have much more RAM now that prices have dropped.
- Implemented ":set all&", set all options to their default value. |:set|

Swap file:

- Don't create a swap file for a readonly file. Then create one on the first change. Also create a swapfile when the amount of memory used is getting too high. |swap-file|
- Make swap file "hidden", if possible. On Unix this is done by prepending a dot to the swap file name. When long file names are used, the DJGPP and Win32 versions also prepend a dot, in case a file on a mounted Unix file system is edited. |:swapname| On MSDOS the hidden file attribute is NOT set, because this causes problems with share.exe.
- 'updatecount' always defaults to non-zero, also for Vi compatible mode. This means there is a swap file, which can be used for recovery.

Tags:

- Included ctags 2.0 (Darren Hiebert). The syntax for static tags changed from


```
{tag}:{fname}    {fname} {command}
```

 to


```
{tag}    {fname} {command};"    file:
```

 Which is both faster to parse, shorter and Vi compatible. The old format is also still accepted, unless disabled in `src/feature.h` (see `OLD_STATIC_TAGS`). |tags-file-format|
- Completion of tags now also includes static tags for other files, at the end.
- Included "shtags" from Stephen Riehm.
- When finding a matching tag, but the file doesn't exist, continue searching

- for another match. Helps when using the same tags file (with links) for different versions of source code.
- Give a tag with a global match in the current file a higher priority than a global match in another file.

Included xxd version V1.8 (Juergen Weigert).

Autocommands:

- VimLeave autocommands are executed after writing the viminfo file, instead of before. |VimLeave|
- Allow changing autocommands while executing them. This allows for self-modifying autocommands. (idea from Goldberg)
- When using autocommands with two or more patterns, could not split ":if/endif" over two lines. Now all matching autocommands are executed in one do_cmdline().
- Autocommands no longer change the command repeated with ".".
- Search patterns are restored after executing autocommands. This avoids that the 'hlsearch' highlighting is messed up by autocommands.
- When trying to execute an autocommand, also try matching the pattern with the short file name. Helps when short file name is different from full file name (expanded symbolic links). |autocmd-patterns|
- Made the output of ":autocmd" shorter and look better.
- Expand <sf> in an ":autocmd" when it is defined. |<sf>|
- Added "nested" flag to ":autocmd", allows nesting. |autocmd-nested|
- Added [group] argument to ":autocmd". Overrides the currently set group. |autocmd-groups|
- new events:

BufUnload	before a buffer is unloaded
BufDelete	before a buffer is deleted from the buffer list
FileChangedShell	when a file's modification time has changed after executing a shell command
User	user-defined autocommand
- When 'modified' was set by a BufRead* autocommand, it was reset again afterwards. Now the ":set modified" is remembered.

GUI:

- Improved GUI scrollbar handling when redrawing is slower than the scrollbar events are generated.
- "vim -u NONE" now also stops loading the .gvimrc and other GUI inits. |-u| Use "-U" to use another gvimrc file. |-U|
- Handle CTRL-C for external command, also for systems where "setsid()" is supported.
- When starting the GUI, restrict the window size to the screen size.
- The default menus are read from \$VIMRUNTIME/menu.vim. This allows for a customized default menu. |menu.vim|
- Improved the default menus. Added File/Print, a Window menu, Syntax menu, etc.
- Added priority to the ":menu" command. Now each menu can be put in a place where you want it, independent of the order in which the menus are defined. |menu-priority|

Give a warning in the intro screen when running the Win32 console version on Windows 95 because there are problems using this version under Windows 95. |win32-problems|

Added 'e' flag for ":substitute" command: Don't complain when not finding a match (Campbell). |:s|

When using search commands in a mapping, only the last one is kept in the history. Avoids that the history is trashed by long mappings.

Ignore characters after "ex", "view" and "gvim" when checking startup mode.

Allows the use of "gvim5" et. al. |gvim| "gview" starts the GUI in readonly mode. |gview|

When resizing windows, the cursor is kept in the same relative position, if possible. (Webb)

":all" and ":ball" no longer close and then open a window for the same buffer. Avoids losing options, jumplist, and other info.

"-f" command-line argument is now ignored if Vim was compiled without GUI. |-f|

In Visual block mode, the right mouse button picks up the nearest corner.

Changed default mappings for DOS et al. Removed the DOS-specific mappings, only use the Windows ones. Added Shift-Insert, Ctrl-Insert, Ctrl-Del and Shift-Del.

Changed the numbers in the output of ":jumps", so you can see where {count} CTRL-O takes you. |:jumps|

Using "~" for \$HOME now works for all systems. |\$HOME|

Unix: Besides using CTRL-C, also use the INTR character from the tty settings. Somebody has INTR set to DEL.

Allow a <LF> in a ":help" command argument to end the help command, so another command can follow.

Doing "%" on a line that starts with " #if" didn't jump to matching "#else". Don't recognize "#if", "#else" etc. for '%' when 'cpo' contains the '%' flag. |%|

Insert mode expansion with "CTRL-N", "CTRL-P" and "CTRL-X" improved |ins-completion|:

- 'complete' option added.
- When 'nowrapscan' is set, and no match found, report the searched direction in the error message.
- Repeating CTRL-X commands adds following words/lines after the match.
- When adding-expansions, accept single character matches.
- Made repeated CTRL-X CTRL-N not break undo, and "." repeats the whole insertion. Also fixes not being able to backspace over a word that has been inserted with CTRL-N.

When copying characters in Insert mode from previous/next line, with CTRL-E or CTRL-Y, 'textwidth' is no longer used. |i_CTRL-E|

Commands that move in the arglist, like ":n" and ":rew", keep the old cursor position of the file (this is mostly Vi compatible).

Vim now remembers the '<' and '>' marks for each buffer. This fixes a problem that a line-delete in one buffer invalidated the '<' and '>' marks in another buffer. |'<|

For MSDOS, Unix and OS/2: When \$VIM not set, use the path from the executable. When using the executable path for \$VIM, remove "src/" when present. Should make Vim find the docs and syntax files when it is run directly after compiling. |\$VIM|

When quitting Visual mode with <Esc>, the cursor is put at start of the Visual area (like after executing an operator).

Win32 and Unix version: Removed 1100 character limit on external commands.

Added possibility to include a space in a ":edit +command" argument, by putting a backslash before it. |+cmd|

After recovery, BufReadPost autocommands are applied. |:recover|

Added color support for "os2ansi", OS/2 console. (Slootman)

Allow "%:p:h" when % is empty. |:_%|

Included "<sfile>": file name from the ":source" command. |<sfile>|

Added "<Bslash>" special character. Helps for avoiding multiple backslashes in mappings and menus.

In a help window, a double-click jumps to the tag under the cursor (like CTRL-]).

<C-Left> and <C-Right> now work like <S-Left> and <S-Right>, move a word forward/backward (Windows compatible). |<C-Left>|

Removed the requirement for a ":version" command in a .vimrc file. It wasn't used for anything. You can use ":if" to handle differences between versions. |:version|

For MS-DOS, Win32 and OS/2: When comparing file names for autocommands, don't make a difference between '/' and '\' for path separator.

New termcap options:

"mb": blink. Can only be used by assigning it to one of the other highlight options. |t_mb|

"bc": backspace character. |t_bc|

"nd": Used for moving the cursor right in the GUI, to avoid removing one line of pixels from the last bold character. |t_nd|

"xs": highlighting not erased by overwriting, for hpterm. Combined with 'weirdinvert'. Visual mode works on hpterm now. |t_xs|

Unix: Set time of patch and backup file same as original file. (Hiebert).

Amiga: In QuickFix mode no longer opens another window. Shell commands can be used now.

Added decmouse patches from David Binette. Can now use Dec and Netterm mouse. But only when enabled at compile time.

Added '#' register: Alternate file name |quote#|. Display '#' register with ":dis" command. |:display|

Removed ':' from 'isfname' default for Unix. Check for "://" in a file name anyway. Also check for ":\\", for MS-DOS.

Added count to "K"keyword command, when 'keywordprg' is "man", is inserted in the man command. "2K" results in "!man 2 <word>". |K|

When using "gf" on a relative path name, remove "../" from the file name, like it's done for file names in the tags file. |gf|

When finishing recording, don't make the recorded register the default put register.

When using "!!", don't put ":5,5!" on the command-line, but ":.!". And some

other enhancements to replace the line number with "." or "\$" when possible.

MSDOS et al.: Renamed \$VIM/viminfo to \$VIM/_viminfo. It's more consistent:
.vimrc/_vimrc and .viminfo/_viminfo

For systems where case doesn't matter in file names (MSDOS, Amiga), ignore case while sorting file names. For buffer names too.

When reading from stdin doesn't work, read from stderr (helps for "foo | xargs vim").

32 bit MS-DOS version: Replaced csdpmi3 by csdpmi4.

Changed <C-Left> and <C-Right> to skip a WORD instead of a word.

Warning for changed modified time when overwriting a file now also works on other systems than Unix.

Unix: Changed the defaults for configure to be the same as the defaults for Makefile: include GUI, Perl, and Python.

Some versions of Motif require "-lXpm". Added check for this in configure.

Don't add "-L/usr/lib" to the link line, causes problems on a few systems.

```
=====
                                COMPILE TIME CHANGES          *compile-changes-5*
```

When compiling, allow a choice for minimal, normal or maximal features in an easy way, by changing a single line in src/feature.h.

The DOS16 version has been compiled with minimal features to avoid running out of memory too quickly.

The Win32, DJGPP, and OS/2 versions use maximal features, because they have enough memory.

The Amiga version is available with normal and maximal features.

Added "make test" to Unix version Makefile. Allows for a quick check if most "normal" commands work properly. Also tests a few specific commands.

Added setlocale() with codepage support for DJGPP version.

autoconf:

- Added autoconf check for -lXdmcp.
- Included check for -lXmu, no longer needed to edit the Makefile for this.
- Switched to autoconf 2.12.
- Added configure check for <poll.h>. Seems to be needed when including Perl on Linux?
- term lib is now checked before termcap.
- Added configure check for strncasecmp(), stricmp() and strnicmp(). Added vim_stricmp() for when there's no library function for stricmp().
- Use "datadir" in configure, instead of our own check for HELPDIR.

Removed "make proto" from Makefile.manx. Could not make it work without a lot of #ifdefs.

Removed "proto/" from paths in proto.h. Needed for the Mac port.

Drastically changed Makefile.mint. Now it includes the Unix Makefile.

Added support for Dos16 in Makefile.b32 (renamed Makefile.b32 to Makefile.bor)

All source files are now edited with a tabstop of 8 instead of 4, which is

better when debugging and using other tools. 'softtabstop' is set to 4, to make editing easier.

Unix: Added "link.sh" script, which removes a few unnecessary libraries from the link command.

Don't use HPUX digraphs by default, but only when HPUX_DIGRAPHS is defined.
|digraphs-default|

```
=====
                                BUG FIXES                                *bug-fixes-5*
```

Note: Some of these fixes may only apply to test versions which were created after version 4.6, but before 5.0.

When doing ":bdel", try going to the next loaded buffer. Don't rewind to the start of the buffer list.

mch_isdir() for Unix returned TRUE for "" on some systems.

Win32: 'shell' set to "mksnt/sh.exe" breaks ":@" commands. Don't use backslashes in the temp file names.

On linux, with a FAT file system, could get spurious "file xxx changed since editing started" messages, because the time is rounded off to two seconds unexpectedly.

Crash in GUI, when selecting a word (double click) and then extend until an empty line.

For systems where isdigit() can't handle characters > 255, get_number() caused a crash when moving the mouse during the prompt for recovery.

In Insert mode, "CTRL-O P" left the cursor on the last inserted character. Now the cursor is left after the last putted character.

When quickfix found an error type other than 'e' or 'w', it was never printed.

A setting for 'errorfile' in a .vimrc overruled the "-q errorfile" argument.

Some systems create a file when generating a temp file name. Filtering would then create a backup file for this, which was never deleted. Now no backup file is made when filtering.

simplify_filename() could remove a ".." after a link, resulting in the wrong file name. Made simplify_filename also work for MSDOS. Don't use it for Amiga, since it doesn't have "../".

otherfile() was unreliable when using links. Could think that reading/writing was for a different file, when it was the same.

Pasting with mouse in Replace mode didn't replace anything.

Window height computed wrong when resizing a window with an autocommand (could cause a crash).

":s!foo!bar!" wasn't possible (Vi compatible).

do_bang() freed memory twice when called recursively, because of autocommands (test11). Thanks to Electric Fence!

"v\$d" on an empty line didn't remove the "-- VISUAL --" mode message from the command-line, and inverted the cursor.

":mkexrc" didn't check for failure to open the file, causing a crash. (Felderhoff).

Win32 mch_write() wrote past fixed buffer, causing terminal keys no longer to be recognized. Both console and GUI version.

Athena GUI: Crash when removing a menu item. Now Vim doesn't crash, but the reversing of the menu item is still wrong.

Always reset 'list' option for the help window.

When 'scrolloff' is non-zero, a 'showmatch' could cause the shown match to be in the wrong line and the window to be scrolled (Acevedo).

After ":set all&", 'lines' and 'ttytype' were still non-default, because the defaults never got set. Now the defaults for 'lines' and 'columns' are set after detecting the window size. 'term' and 'ttytype' defaults are set when detecting the terminal type.

For (most) non-Unix systems, don't add file names with illegal characters when expanding. Fixes "cannot open swapfile" error when doing ":e *.burp", when there is no match.

In X11 GUI, drawing part of the cursor obscured the text. Now the text is drawn over the cursor, like when it fills the block. (Seibert)

when started with "-c cmd -q errfile", the cursor would be left in line 1. Now a ":cc" is done after executing "cmd".

":ilist" never ignored case, even when 'ignorecase' set.

"vim -r file" for a readonly file, then making a change, got ATTENTION message in insert mode, display mixed up until <Esc> typed. Also don't give ATTENTION message after recovering a file.

The abbreviation ":ab #i #include" could not be removed.

CTRL-L completion (longest common match) on command-line didn't work properly for case-insensitive systems (MS-DOS, Windows, etc.). (suggested by Richard Kilgore).

For terminals that can hide the cursor ("vi" termcap entry), resizing the window caused the cursor to disappear.

Using an invalid mark in an Ex address didn't abort the command.

When 'smarttab' set, would use 'shiftround' when inserting a TAB after a space. Now it always rounds to a tabstop.

Set '[' and ']' marks for ":copy", ":move", ":append", ":insert", ":substitute" and ":change". (Acevedo).

"d\$" in an empty line still caused an error, even when 'E' is not in 'coptions'.

Help files were stored in the viminfo buffer list without a path.

GUI: Displaying cursor was not synchronized with other displaying. Caused several display errors. For example, when the last two lines in the file

start with spaces, "dd" on the last line copied text to the (then) last line.

Win32: Needed to type CTRL-SHIFT-- to get CTRL-__.

GUI: Moving the cursor forwards over bold text would remove one column of bold pixels.

X11 GUI: When a bold character in the last column was scrolled up or down, one column of pixels would not be copied.

Using <BS> to move the cursor left can sometimes erase a character. Now use "le" termcap entry for this.

Keyword completion with regexp didn't work. e.g., for "b.*crat".

Fixed: With CTRL-O that jumps to another file, cursor could end up just after the line.

Amiga: '\$' was missing from character recognized as wildcards, causing \$VIM sometimes not to be expanded.

":change" didn't adjust marks for deleted lines.

":help [range]" didn't work. Also for [pattern], [count] and [quotex].

For 'cindent'ing, typing "class::method" doesn't align like a label when the second ':' is typed.

When inserting a CR with 'cindent' set (and a bunch of other conditions) the cursor went to a wrong location.

'cindent' was wrong for a line that ends in '}'.

'cindent' was wrong after "else {".

While editing the cmdline in the GUI, could not use the mouse to select text from the command-line itself.

When deleting lines, marks in tag stack were only adjusted for the current window, not for other windows on the same buffer.

Tag guessing could find a function "some_func" instead of the "func" we were looking for.

Tags file name relative to the current file didn't work.

":g/pat2/s//pat2/g", causing the number of subs to be reported, used to cause a scroll up. Now you no longer have to hit <CR>.

X11 GUI: Selecting text could cause a crash.

32 bit DOS version: CTRL-C in external command killed Vim. When SHELL is set to "sh.exe", external commands didn't work. Removed using of command.com, no longer need to set 'shellquote'.

Fixed crash when using ":g/pat/i".

Fixed (potential) crash for X11 GUI, when using an X selection. Was giving a pointer on the stack to a callback function, now it's static.

Using "#" and "*" with an operator didn't work. E.g. "c#".

Command-line expansion didn't work properly after " :*". (Acevedo)

Setting 'weirdinvert' caused highlighting to be wrong in the GUI.

":e +4 #" didn't work, because the "4" was in unallocated memory (could cause a crash).

Cursor position was wrong for ":e #", after ":e #" failed, because of changes to the buffer.

When doing ":buf N", going to a buffer that was edited with ":view", the readonly flag was reset. Now make a difference between ":e file" and ":buf file": Only set/reset 'ro' for the first one.

Avoid |hit-enter| prompt when not able to write viminfo on exit.

When giving error messages in the terminal where the GUI was started, GUI escape codes would be written to the terminal. In an xterm this could be seen as a '\$' after the message.

Mouse would not work directly after ":gui", because full_screen isn't set, which causes starttermcap() not to do its work.

'incsearch' did not scroll the window in the same way as the actual search. When 'nowrap' set, incsearch didn't show a match when it was off the side of the screen. Now it also shows the whole match, instead of just the cursor position (if possible).

":unmap", ":unab" and ":unmenu" did not accept a double quote, it was seen as the start of a comment. Now it's Vi compatible.

Using <Up><Left><Left><Up> in the command-line, when there is no previous cmdline in the history, inserted a NUL on the command-line.

"i<Esc>" when on a <Tab> in column 0 left the cursor in the wrong place.

GUI Motif: When adding a lot of menu items, the menu bar goes into two rows. Deleting menu items, reducing the number of rows, now also works.

With ":g/pat/s//foo/c", a match in the first line was scrolled off of the screen, so you could not see it.
When using ":s//c", with 'nowrap' set, a match could be off the side of the screen, so you could not see it.

When 'helpfile' was set to a fixed, non-absolute path in feature.h, Vim would crash. mch_Fullname can now handle file names in read-only memory. (Lottem)

When using CTRL-A or CTRL-@ in Insert mode, there could be strange effects when using CTRL-D next. Also, when repeating inserted text that included "0 CTRL-D" or "^ CTRL-D" this didn't work. (Acevedo)
Using CTRL-D after using CTRL-E or CTRL-Y in Insert mode that inserted a '0' or '^', removed the '0' or '^' and more indent.

The command "2".p" caused the last inserted text to be executed as commands. (Acevedo)

Repeating the insert of "CTRL-V 048" resulted in "^@" to be inserted.

Repeating Insert completion could fail if there are special characters in the text. (Acevedo)

":normal /string<CR>" caused the window to scroll. Now all ":normal" commands are executed without scrolling messages.

Redo of CTRL-E or CTRL-Y in Insert mode interpreted special characters as

commands.

Line wrapping for 'tw' was done one character off for insert expansion inserts.

buffer_exists() function didn't work properly for buffer names with a symbolic link in them (e.g. when using buffer_exists(#)).

Removed the "MOTIF_COMMENT" construction from Makefile. It now works with FreeBSD make, and probably with NeXT make too.

Matching the 'define' and 'include' arguments now honor the settings for 'ignorecase'. (Acevedo)

When one file shown in two windows, Visual selection mixed up cursor position in current window and other window.

When doing ":e file" from a help file, the 'isk' option wasn't reset properly, because of a modeline in the help file.

When doing ":e!", a cursor in another window on the same buffer could become invalid, leading to "ml_get: invalid lnum" errors.

Matching buffer name for when expanded name has a different path from not expanded name (Brugnara).

Normal mappings didn't work after an operator. For example, with ":map Q gq", "QQ" didn't work.

When ":make" resulted in zero errors, a "No Errors" error message was given (which breaks mappings).

When ":sourcing" a file, line length was limited to 1024 characters. CTRL-V before <EOL> was not handled Vi compatible. (Acevedo)

Unexpected exit for X11 GUI, caused by SAVE_YOURSELF event. (Heimann)

CTRL-X CTRL-I only found one match per line. (Acevedo)

When using an illegal CTRL-X key in Insert mode, the CTRL-X mode message was stuck.

Finally managed to ignore the "Quit" menu entry of the Window manager! Now Vim only exists when there are no changed buffers.

Trying to start the GUI when \$DISPLAY is not set resulted in a crash.

When \$DISPLAY is not set and gvim starts vim, title was restored to "Thanks for flying Vim".

When \$DISPLAY not set, starting "gvim" (dropping back to vim) and then selecting text with the mouse caused a crash.

"J", with 'joinspaces' set, on a line ending in ". ", caused one space too many to be added. (Acevedo)

In insert mode, a CTRL-R {regname} which didn't insert anything left the '"' on the screen.

":z10" didn't work. (Clapp)

"Help *" didn't work.

Renamed a lot of functions, to avoid clashes with POSIX name space.

When adding characters to a line, making it wrap, the following lines were sometimes not shifted down (e.g. after a tag jump).

CTRL-E, with 'so' set and cursor on last line, now does not move cursor as long as the last line is on the screen.

When there are two windows, doing "^W+^W-" in the bottom window could cause the status line to be doubled (not redrawn correctly).

This command would hang: ":n `cat`". Now connect stdin of the external command to /dev/null, when expanding.

Fixed lalloc(0,) error for ":echo %:e:r". (Acevedo)

The "+command" argument to ":split" didn't work when there was no file name.

When selecting text in the GUI, which is the output of a command-line command or an external command, the inversion would sometimes remain.

GUI: "-mh 70" argument was broken. Now, when menuheight is specified, it is not changed anymore.

GUI: When using the scrollbar or mouse while executing an external command, this caused garbage characters.

Showmatch sometimes jumped to the wrong position. Was caused by a call to findmatch() when redrawing the display (when syntax highlighting is on).

Search pattern "\{(a *)\}" did not work correctly, also matched "a a". Problem with brace_count not being decremented.

Wildcard expansion added too many non-matching file names.

When 'iskeyword' contains characters like '~', "*" and "#" didn't work properly. (Acevedo)

On Linux, on a FAT file system, modification time can change by one second. Avoid a "file has changed" warning for a one second difference.

When using the page-switching in an xterm, Vim would position the cursor on the last line of the window on exit. Also removed the cursor positioning for ":!" commands.

":g/pat/p" command (partly) overwrote the command. Now the output is on a separate line.

With 'ic' and 'scs' set, a search for "Keyword", ignore-case matches were highlighted too.

"^" on a line with only white space, put cursor beyond the end of the line.

When deleting characters before where insertion started ('bs' == 2), could not use abbreviations.

CTRL-E at end of file puts cursor below the file, in Visual mode, when 'so' is non-zero. CTRL-E didn't work when 'so' is big and the line below the window wraps. CTRL-E, when 'so' is non-zero, at end of the file, caused jumping up-down.

":retab" didn't work well when 'list' is set.

Amiga: When inserting characters at the last line on the screen, causing it

to wrap, messed up the display. It appears that a '\n' on the last line doesn't always cause a scroll up.

In Insert mode "`0<C-D><C-D>`" deleted an extra character, because Vim thought that the "`0`" was still there. (Acevedo)

"`z{count}l`" ignored the count. Also for "`zh`" et. al. (Acevedo)

"`S`" when '`autoindent`' is off didn't delete leading white space.

"`/<Tab>`" landed on the wrong character when '`incsearch`' is set.

Asking a yes/no question could cause a `|hit-enter|` prompt.

When the file consists of one long line (>4100 characters), making changes caused various errors and a crash.

DJGPP version could not save long lines (>64000) for undo.

"`yw`" on the last char in the file didn't work. Also fixed "`6x`" at the end of the line. "`6X`" at the start of a line fails, but does not break a mapping. In general, a movement for an operator doesn't beep or flush a mapping, but when there is nothing to operate on it beeps (this is Vi compatible).

"`m'`" and "`m``" now set the `'` mark at the cursor position.

Unix: Resetting of signals for external program didn't work, because `SIG_DFL` and `NULL` are the same! For "`!!yes|dd count=1|`", the yes command kept on running.

Partly fixed: Unix GUI: Typeahead while executing an external command was lost. Now it's not lost while the command is producing output.

Typing `<S-Tab>` in Insert mode, when it isn't mapped, inserted "`<S-Tab>`". Now it works like a normal `<Tab>`, just like `<C-Tab>` and `<M-Tab>`.

Redrawing ruler didn't check for old value correctly (caused UMR warnings in Purify).

Negative array index in `finish_viminfo_history()`.

"`:g/^/d|mo $`" deleted all the lines. The "`:move`" command now removes the global mark from the moved lines.

Using "`vG`" while the last line in the window is a "`@`" line, didn't update correctly. Just the "`v`" showed "`~`" lines.

"`daw`" on the last char of the file, when it's a space, moved the cursor beyond the end of the line.

When '`hlsearch`' was set or reset, only the current buffer was redrawn, while this affects all windows.

`CTRL-^`, positioning the cursor somewhere from 1/2 to 1 1/2 screen down the file, put the cursor at the bottom of the window, instead of halfway.

When scrolling up for "`:append`" command, not all windows were updated correctly.

When '`hlsearch`' is set, and an auto-indent is highlighted, pressing `<Esc>` didn't remove the highlighting, although the indent was deleted.

When 'ru' set and 'nosc', using "\$j" showed a wrong ruler.

Under Xfree 3.2, Shift-Tab didn't work (wrong keysym is used).

Mapping <S-Tab> didn't work. Changed the key translations to use the shortest key code possible. This makes the termcode translations and mappings more consistent. Now all modifiers work in all combinations, not only with <Tab>, but also with <Space>, <CR>, etc.

For Unix, restore three more signals. And Vim catches SIGINT now, so CTRL-C in Ex mode doesn't make Vim exit.

"a5Y" yanked 25 lines instead of 5.

"vrxxx<Esc>" in an empty line could not be undone.

A CTRL-C that breaks ":make" caused the errorfile not to be read (annoying when you want to handle what ":make" produced so far).

":0;/pat" didn't find "pat" in line 1.

Search for "/test/s+1" at first char of file gave bottom-top message, or didn't work at all with 'nowrapscan'.

Bug in viminfo history. Could cause a crash on exit.

":print" didn't put cursor on first non-blank in line.

":0r !cat </dev/null" left cursor in line zero, with very strange effects.

With 'showcmd' set and 'timeoutlen' set to a few seconds, trick to position the cursor leftwards didn't work.

AIX stty settings were restored to cs5 instead of cs8 (Winn).

File name completion didn't work for "zsh" versions that put spaces between file names, instead of NULs.

Changed "XawChain*" to "XtChain*", should work for more systems.

Included quite a few fixes for rightleft mode (Lottem).

Didn't ask to |hit-enter| when GUI is started and error messages are printed.

When trying to edit a file in a non-existent directory, ended up with editing "No file".

"gqap" to format a paragraph did too much redrawing.

When 'hlsearch' set, only the current window was updated for a new search pattern.

Sometimes error messages on startup didn't cause a |hit-enter| prompt, because of autocommands containing an empty line.

Was possible to select part of the window in the border, below the command line.

'< and '> marks were not at the correct position after linewise Visual selection.

When translating a help argument to "CTRL-x", prepend or append a '_', when

applicable.

Blockwise visual mode wasn't correct when moving vertically over a special character (displayed as two screen characters).

Renamed "struct option" to "struct vimoption" to avoid name clash with GNU getopt().

":abclear" didn't work (but ":iabclear" and ":cabclear" did work).

When 'nowrap' used, screen wasn't always updated correctly.

"vim -c split file" displayed extra lines.

After starting the GUI, searched the termcap for a "gui" term.

When 'hls' used, search for "^\$" caused a hang.

When 'hls' was set, an error in the last regexp caused trouble.

Unix: Only output an extra <EOL> on exit when outputted something in the alternate screen, or when there is a message that needs to be cleared.

"/a{" did strange things, depending on previous search.

"c}" only redrew one line (with -u NONE).

For mappings, CTRL-META-A was shown as <M-^A> instead of <MC-A>, while :map only accepts <MC-A>. Now <M-C-A> is shown.

Unix: When using full path name in a tags file, which contains a link, and 'hidden' set and jumping to a tag in the current file, would get bogus ATTENTION message. Solved by always expanding file names, even when starting with '/'.

'hlsearch' highlighting of special characters (e.g., a TAB) didn't highlight the whole thing.

"r<CR>" didn't work correctly on the last char of a line.

Sometimes a window resize or other signal caused an endless loop, involving set_winsize().

"vim -r" didn't work, it would just hang (using tgetent() while 'term' is empty).

"gk" while 'nowrap' set moved two lines up.

When windows are split, a message that causes a scroll-up messed up one of the windows, which required a CTRL-L to be typed.

Possible endless loop when using shell command in the GUI.

Menus defined in the .vimrc were removed when GUI started.

Crash when pasting with the mouse in insert mode.

Crash with ":unmenu *" in .gvimrc for Athena.

"5>>" shifted 5 lines 5 times, instead of 1 time.

CTRL-C when getting a prompt in ":global" didn't interrupt.

When 'so' is non-zero, and moving the scrollbar completely to the bottom, there was a lot of flashing.

GUI: Scrollbar ident must be long for DEC Alpha.

Some functions called vim_regcomp() without setting reg_magic, which could lead to unpredictable magicness.

Crash when clicking around the status line, could get a selection with a backwards range.

When deleting more than one line characterwise, the last character wasn't deleted.

GUI: Status line could be overwritten when moving the scrollbar quickly (or when 'wd' is non-zero).

An ESC at the end of a ":normal" command caused a wait for a terminal code to finish. Now, a terminal code is not recognized when its start comes from a mapping or ":normal" command.

Included patches from Robert Webb for GUI. Layout of the windows is now done inside Vim, instead of letting the layout manager do this. Makes Vim work with Lesstif!

UMR warning in set_expand_context().

Memory leak: b_winlnum list was never freed.

Removed TIOCLSET/TIOCLGET code from os_unix.c. Was changing some of the terminal settings, and looked like it wasn't doing anything good. (suggested by Juergen Weigert).

Ruler overwrote "is a directory" message. When starting up, and 'cmdheight' set to > 1, first message could still be in the last line.

Removed prototype for putenv() from proto.h, it's already in osdef2.h.in.

In replace mode, when moving the cursor and then backspacing, wrong characters were inserted.

Win32 GUI was checking for a CTRL-C too often, making it slow.

Removed mappings for MS-DOS that were already covered by commands.

When visually selecting all lines in a file, cursor at last line, then "J". Gave ml_get errors. Was a problem with scrolling down during redrawing.

When doing a linewise operator, and then an operator with a mouse click, it was also linewise, instead of characterwise.

When 'list' is set, the column of the ruler was wrong.

Spurious error message for "/\ (b\+)*".

When visually selected many lines, message from ":w file" disappeared when redrawing the screen.

":set <M-b>=^[b", then insert "^[b", waited for another character. And then inserted "<M-b>" instead of the real <M-b> character. Was trying to insert K_SPECIAL x NUL.

CTRL-W] didn't use count to set window height.

GUI: "-font" command-line argument didn't override 'guifont' setting from .gvimrc. (Acevedo)

GUI: clipboard wasn't used for "*y". And some more Win32/X11 differences fixed for the clipboard (Webb).

Jumping from one help file to another help file, with 'compatible' set, removed the 'help' flag from the buffer.

File-writable bit could be reset when using ":w!" for a readonly file.

There was a wait for CTRL-O n in Insert mode, because the search pattern was shown.

Reduced wait, to allow reading a message, from 10 to 3 seconds. It seemed nothing was happening.

":recover" found same swap file twice.

GUI: "*yy only worked the second time (when pasting to an xterm)."

DJGPP version (dos32): The system flags were cleared.

Dos32 version: Underscores were sometimes replaced with y-umlaut (Levin).

Version 4.1 of ncurses can't handle tputs("", ..). Avoid calling tputs() with an empty string.

<S-Tab> in the command-line worked like CTRL-P when no completion started yet. Now it does completion, last match first.

Unix: Could get annoying "can't write viminfo" message after doing "su". Now the viminfo file is overwritten, and the user set back to the original one.

":set term=builtin_gui" started the GUI in a wrong way. Now it's not allowed anymore. But "vim -T gui" does start the GUI correctly now.

GUI: Triple click after a line only put last char in selection, when it is a single character word.

When the window is bigger than the screen, the scrolling up of messages was wrong (e.g. ":vers", ":hi"). Also when the bottom part of the window was obscured by another window.

When using a wrong option only an error message is printed, to avoid that the usage information makes it scroll off the screen.

When exiting because of not being able to read from stdin, didn't preserve the swap files properly.

Visual selecting all chars in more than one line, then hit "x" didn't leave an empty line. For one line it did leave an empty line.

Message for which autocommand is executing messed up file write message (for FileWritePost event).

"vim -h" included "-U" even when GUI is not available, and "-l" when lisp is not available.

Crash for ":he <C-A>" (command-line longer than screen).

":s/this/that/gc", type "y" two times, then undo, did reset the modified option, even though the file is still modified.

Empty lines in a tags file caused a ":tag" to be aborted.

When hitting 'q' at the more prompt for ":menu", still scrolled a few lines.

In an xterm that uses the bold trick a single row of characters could remain after an erased bold character. Now erase one extra char after the bold char, like for the GUI.

":pop!" didn't work.

When the reading a buffer was interrupted, ":w" should not be able to overwrite the file, ":w!" is required.

":cf%" caused a crash.

":gui longfilename", when forking is enabled, could leave part of the longfilename at the shell prompt.

=====

VERSION 5.1

version-5.1

Improvements made between version 5.0 and 5.1.

This was mostly a bug-fix release, not many new features.

Changed

changed-5.1

The expand() function now separates file names with <NL> instead of a space. This avoids problems for file names with embedded spaces. To get the old result, use substitute(expand(foo), "\n", " ", "g").

For Insert-expanding dictionaries allow a backslash to be used for wildchars. Allows expanding "ze\kra", when 'isk' includes a backslash.

New icon for the Win32 GUI.

":tag", ":tselect" etc. only use the argument as a regexp when it starts with '/'. Avoids that ":tag xx~" gives an error message: "No previous sub.regexp". Also, when the :tag argument contained wildcard characters, it was not Vi compatible.

When using '/', the argument is taken literally too, with a higher priority, so it's found before wildcard matches.

Only when the '/' is used are matches with different case found, even though 'ignorecase' isn't set.

Changed "g^]" to only do ":tselect" when there is more than one matching tag.

Changed some of the default colors, because they were not very readable on a dark background.

A character offset to a search pattern can move the cursor to the next or previous line. Also fixes that "/pattern/e+2" got stuck on "pattern" at the end of a line.

Double-clicks in the status line do no longer start Visual mode. Dragging a status line no longer stops Visual mode.

Perl interface: Buffers() and Windows() now use more logical arguments, like

they are used in the rest of Vim (Moore).

Init '"' mark to the first character of the first line. Makes it possible to use '"' in an autocommand without getting an error message.

Added *added-5.1*

"shell_error" internal variable: result of last shell command.

":echohl" command: Set highlighting for ":echo".

'S' flag in 'highlight' and StatusLineNC highlight group: highlighting for status line of not-current window. Default is to use bold for current window.

Added buffer_name() and buffer_number() functions (Aaron).
Added flags_argument "g" to substitute() function (Aaron).
Added winheight() function.

Win32: When an external command starts with "start ", no console is opened for it (Aaron).

Win32 console: Use termcap codes for bold/reverse based on the current console attributes.

Configure check for "strip". (Napier)

CTRL-R CTRL-R x in Insert mode: Insert the contents of a register literally, instead of as typed.

Made a few "No match" error messages more informative by adding the pattern that didn't match.

"make install" now also copies the macro files.

tools/tcltags, a shell script to generate a tags file from a TCL file.

--with-tlib" setting for configure. Easy way to use termlib: "./configure --with-tlib=termlib".

'u' flag in 'cino' for setting the indent for contained () parts.

When Win32 OLE version can't load the registered type library, ask the user if he wants to register Vim now. (Erhardt)

Win32 with OLE: When registered automatically, exit Vim.

Included VisVim 1.1b, with a few enhancements and the new icon (Heiko Erhardt).

Added patch from Vince Negri for Win32s support. Needs to be compiled with VC 4.1!

Perl interface: Added \$curbuf. Rationalized Buffers() and Windows(). (Moore) Added "group" argument to Msg().

Included Perl files in DOS source archive. Changed Makefile.bor and Makefile.w32 to support building a Win32 version with Perl included.

Included new Makefile.w32 from Ken Scott. Now it's able to make all Win32 versions, including OLE, Perl and Python.

Added CTRL-W g] and CTRL-W g ^]: split window and do g] or g^].

Added "g]" to always do ":tselect" for the ident under the cursor.

Added ":tjump" and ":stjump" commands.

Improved listing of ":tselect" when tag names are a bit long.

Included patches for the Macintosh version. Also for Python interface.
(St-Amant)

":buf foo" now also restores cursor column, when the buffer was used before.

Adjusted the Makefile for different final destinations for the syntax files and scripts (for Debian Linux).

Amiga: \$VIM can be used everywhere. When \$VIM is not defined, "VIM:" is used. This fixes that "VIM:" had to be assigned for the help files, and \$VIM set for the syntax files. Now either of these work.

Some xterms send vt100 compatible function keys F1-F4. Since it's not possible to detect this, recognize both type of keys and translate them to <F1> - <F4>.

Added "VimEnter" autocommand. Executed after loading all the startup stuff.

BeOS version now also runs on Intel CPUs (Seibert).

Fixed

fixed-5.1

":ts" changed position in the tag stack when cancelled with <CR>.

":ts" changed the cursor position for CTRL-T when cancelled with <CR>.

":tn" would always jump to the second match. Was using the wrong entry in the tag stack.

Doing "tag foo", then ":tselect", overwrote the original cursor position in the tag stack.

"make install" changed the vim.1 manpage in a wrong way, causing "doc/doc" to appear for the documentation files.

When compiled with MAX_FEAT, xterm mouse handling failed. Was caused by DEC mouse handling interfering.

Was leaking memory when using selection in X11.

CTRL-D halfway a command-line left some characters behind the first line(s) of the listing.

When expanding directories for ":set path=", put two extra backslashes before a space in a directory name.

When 'lisp' set, first line of a function would be indented. Now its indent is set to zero. And use the indent of the first previous line that is at the same () level. Added test33.

"so<Esc>u" in an empty file didn't work.

DOS: "seek error in swap file write" errors, when using DOS 6.2 share.exe, because the swap file was made hidden. It's no longer hidden.

":global" command would sometimes not execute on a matching line. Happened when a data block is full in ml_replace().

For AIX use a tgetent buffer of 2048 bytes, instead of 1024.

Win32 gvim now only sets the console size for external commands to 25x80 on Windows 95, not on NT.

Win32 console: Dead key could cause a crash, because of a missing "WINAPI" (Deshpande).

The right mouse button started Visual mode, even when 'mouse' is empty, and in the command-line, a left click moved the cursor when 'mouse' is empty. In Visual mode, 'n' in 'mouse' would be used instead of 'v'.

A blinking cursor or focus change cleared a non-Visual selection.

CTRL-Home and CTRL-End didn't work for MS-DOS versions.

Could include NUL in 'iskeyword', causing a crash when doing insert mode completion.

Use _dos_commit() to flush the swap file to disk for MSDOS 16 bit version.

In mappings, CTRL-H was replaced by the backspace key code. This caused problems when it was used as text, e.g. ":map _U :%s/.^H//g<CR>".

":set t_Co=0" was not handled like a normal term. Now it's translated into ":set t_Co=", which works.

For ":syntax keyword" the "transparent" option did work, although not mentioned in the help. But synID() returned wrong name.

"ggG" in a file with one-word-per-line (e.g. a dictionary) was very slow and not interruptible.

"gg" operator inserted screen lines in the wrong situation. Now screen lines are inserted or deleted when this speeds up displaying.

cindent was wrong when an "if" contained "(".

'r' flag in 'viminfo' was not used for '%'. Could get files in the buffer list from removable media.

Win32 GUI with OLE: if_ole_vc.mak could not be converted into a project. Hand-edited to fix this...

With 'nosol' set, doing "\$kdw" below an empty line positioned the cursor at the end of the line.

Dos32 version changed "\dir\file" into "/dir/file", to work around a DJGPP bug. That bug appears to have been fixed, therefore this translation has been removed.

"/^*" didn't work (find '*' in first column).

"<afile>" was not always set for autocommands. E.g., for ":au BufEnter * let &tags = expand("<afile>:p:h") . "/"&tags".

In an xterm, the window may be a child of the outer xterm window. Use the parent window when getting the title and icon names. (Smith)

When starting with "gvim -bg black -fg white", the value of 'background' is only set after reading the .gvimrc file. This causes a ":syntax on" to use

the wrong colors. Now allow using ":gui" to open the GUI window and set the colors. Previously ":gui" in a gvimrc crashed Vim.

tempname() returned the same name all the time, unless the file was actually created. Now there are at least 26 different names.

File name used for <afile> was sometimes full path, sometimes file name relative to current directory.

When 'background' was set after the GUI window was opened, it could change colors that were set by the user in the .gvimrc file. Now it only changes colors that have not been set by the user.

Ignore special characters after a CSI in the GUI version. These could be interpreted as special characters in a wrong way. (St-Amant)

Memory leak in farsi code, when using search or ":s" command. Farsi string reversing for a mapping was only done for new mappings. Now it also works for replacing a mapping.

Crash in Win32 when using a file name longer than _MAX_PATH. (Aaron)

When BufDelete autocommands were executed, some things for the buffer were already deleted (esp. Perl stuff).

Perl interface: Buffer specific items were deleted too soon; fixes "screen no longer exists" messages. (Moore)

The Perl functions didn't set the 'modified' flag.

link.sh did not return an error on exit, which may cause Vim to start installing, even though there is no executable to install. (Riehm)

Vi incompatibility: In Vi "." redoes the "y" command. Added the 'y' flag to 'coptions'. Only for 'compatible' mode.

":echohl" defined a new group, when the argument was not an existing group.

"syn on" and ":syn off" could move the cursor, if there is a hidden buffer that is shorter than the current cursor position.

The " mark was not set when doing ":b file".

When a "nextgroup" is used with "skipwhite" in syntax highlighting, space at the end of the line made the nextgroup also be found in the next line.

":he g<CTRL-D>", then ":" and backspace to the start didn't redraw.

X11 GUI: "gvim -rv" reversed the colors twice on Sun. Now Vim checks if the result is really reverse video (background darker than foreground).

"cat link.sh | vim -" didn't set syntax highlighting.

Win32: Expanding "file.sw?" matched ".file.swp". This is an error of FindnextFile() that we need to work around. (Kilgore)

"ggq" gave an "Invalid lnum" error on the last line. Formatting with "gq" didn't format the first line after a change of comment leader.

There was no check for out-of-memory in win_alloc().

"vim -h" didn't mention "-register" and "-unregister" for the OLE version.

Could not increase 'cmdheight' when the last window is only one line. Now other windows are also made smaller, when necessary.

Added a few {} to avoid "suggest braces around" warnings from gcc 2.8.x.
Changed return type of main() from void to int. (Nam)

Using '~' twice in a substitute pattern caused a crash.

"syn on" and ":syn off" could scroll the window, if there is a hidden buffer that is shorter than the current cursor position.

":if 0 | if 1 | endif | endif" didn't work. Same for ":while" and "elseif".

With two windows on modified files, with 'autowrite' set, cursor in second window, ":qa" gave a warning for the file in the first window, but then auto-wrote the file in the second window. (Webb)

Win32 GUI scrollbar could only handle 32767 lines. Also makes the intellimouse wheel use the configurable number of scrolls. (Robinson)

When using 'patchmode', and the backup file is on another partition, the file copying messed up the write-file message.

GUI X11: Alt-Backspace and Alt-Delete didn't work.

"`0" could put the cursor after the last character in the line, causing trouble for other commands, like "i".

When completing tags in insert mode with ^X^], some matches were skipped, because the compare with other tags was wrong. E.g., when "mnuFileSave" was already there, "mnuFile" would be skipped. (Negri)

When scrolling up/down, a syntax item with "keepend" didn't work properly. Now the flags are also stored for the syntax state at the start of each line.

When 'ic' was changed while 'hlsearch' is on, there was no redraw to show the effect.

Win32 GUI: Don't display "No write since last chance" in a message box, but in the Vim window.

=====

VERSION 5.2

version-5.2

Improvements made between version 5.1 and 5.2.

Long lines editable

long-lines

A single long line that doesn't fit in the window doesn't show a line of @@@ anymore. Redrawing starts at a character further on in the line, such that the text around the cursor can be seen. This makes it possible to edit these long lines when wrapping is on.

File browser added

file-browser-5.2

The Win32, Athena and Motif GUI bring up a file requester if the user asks to

":browse" for the ":e", ":w", ":r", ":so", ":redirect" and ":mkexrc/vimrc/vsess" commands. ":browse e /foo/bar" opens the requester in the /foo/bar directory, so you can have nice mapping rhs's like ":browse so \$vim/macros". If no initial dir specified for ":browse e", can be compiled to either begin in the current directory, or that of the current buffer. (Negri and Kahn)

Added the 'browse' option, with value "current", "last" or "buffer". Tells whether a browse dialog starts in last used dir, dir of current buffer, or current dir. ":browse w" is unaffected.

The default menus have been changed to use the ":browse" command.

Dialogs added

dialogs-added

Added the ":confirm" command. Works on ":e", ":q", ":w", ":cl". Win32, Athena and Motif GUI uses a window-dialog. All other platforms can use prompt in command-line. ":confirm qa" offers a choice to save all modified files.

confirm() function: allows user access to the confirm engine.

Added 'v' flag to 'guioptions'. When included, a vertical button layout is always used for the Win32 GUI dialog. Otherwise, a horizontal layout is preferred.

Win32 GUI: ":promptfind" and ":promptrepl" pop up a dialog to find/replace. To be used from a menu entry. (Negri)

Popup menu added

popup-menu-added

When the 'mousemodel' option is set to "popup", the right mouse button displays the top level menu headed with "PopUp" as pop-up context menu. The "PopUp" menu is not displayed in the normal menu bar. This currently only works for Win32 and Athena GUI.

Select mode added

new-Select-mode

A new mode has been added: "Select mode". It is like Visual mode, but typing a printable character replaces the selection.

- CTRL-G can be used to toggle between Visual mode and Select mode.
- CTRL-O can be used to switch from Select mode to Visual mode for one command.
- Added 'selectmode' option: tells when to start Select mode instead of Visual mode.
- Added 'mousemodel' option: Change use of mouse buttons.
- Added 'keymodel' option: tells to use shifted special keys to start a Visual or Select mode selection.
- Added ":behave". Can be used to quickly set 'selectmode', 'mousemodel' and 'keymodel' for MS-Windows and xterm behavior.
- The xterm-like selection is now called modeless selection.
- Visual mode mappings and menus are used in Select mode. They automatically switch to Visual mode first. Afterwards, reselect the area, unless it was deleted. The "gV" command can be used in a mapping to skip the reselection.
- Added the "gh", "gH" and "g^H" commands: start Select (highlight) mode.
- Backspace in Select mode deletes the selected area.

"mswin.vim" script. Sets behavior mostly like MS-Windows.

Session files added

new-session-files

":mks[ession]" acts like "mkvimrc", but also writes the full filenames of the currently loaded buffers and current directory, so that :so'ing the file re-loads those files and cd's to that directory. Also stores and restores windows. File names are made relative to session file.
The 'sessionoptions' option sets behavior of ":mksession". (Negri)

User defined functions and commands

new-user-defined

Added user defined functions. Defined with ":function" until ":endfunction". Called with "Func()". Allows the use of a variable number of arguments. Included support for local variables "l:name". Return a value with ":return". See |:function|. Call a function with ":call". When using a range, the function is called for each line in the range. |:call|
"macros/justify.vim" is an example of using user defined functions.
User functions do not change the last used search pattern or the command to be redone with ".".
'maxfuncdepth' option. Restricts the depth of function calls. Avoids trouble (crash because of out-of-memory) when a function uses endless recursion.

User definable Ex commands: ":command", ":delcommand" and ":comclear". (Moore) See |user-commands|.

New interfaces

interfaces-5.2

Tcl interface. (Wilken) See |tcl|. Uses the ":tcl", ":tcldo" and "tclfile" commands.

Cscope support. (Kahn) (Sekera) See |cscope|. Uses the ":cscope" and ":cstag" commands. Uses the options 'cscopeprg', 'cscopetag', 'cscopetagorder' and 'cscopeverbose'.

New ports

ports-5.2

Amiga GUI port. (Nielsen) Not tested much yet!

RISC OS version. (Thomas Leonard) See |riscos|. This version can run either with a GUI or in text mode, depending upon where it is invoked.
Deleted the "os_archie" files, they were not working anyway.

Multi-byte support

new-multi-byte

MultiByte support for Win32 GUI. (Baek)
The 'fileencoding' option decides how the text in the file is encoded. ":ascii" works for multi-byte characters. Multi-byte characters work on Windows 95, even when using the US version. (Aaron)
Needs to be enabled in feature.h.
This has not been tested much yet!

New functions

new-functions-5.2

browse()	puts up a file requester when available. (Negri)
escape()	escapes characters in a string with a backslash.
fnamemodify()	modifies a file name.
input()	asks the user to enter a line. (Aaron) There is a separate history for lines typed for the input() function.
argc()	
argv()	can be used to access the argument list.
winbufnr()	buffer number of a window. (Aaron)
winnr()	window number. (Aaron)
matchstr()	Return matched string.
setline()	Set a line to a string value.

New options

new-options-5.2

'allowrevins'	Enable the CTRL-_ command in Insert and Command-line mode.
'browse' 'browsedir'	Tells in which directory a browse dialog starts.
'confirm'	when set, :q :w and :e commands always act as if ":confirm" is used. (Negri)
'cscopeprg'	
'cscopetag'	
'cscopetagorder'	
'cscopeverbose'	Set the cscope behavior.
'filetype'	RISC-OS specific type of file.
'grepformat'	
'grep' 'grep'prg'	For the :grep command.
'keymodel'	Tells to use shifted special keys to start a Visual or Select mode selection.
'listchars'	Set character to show in 'list' mode for end-of-line, tabs and trailing spaces. (partly by Smith) Also sets character to display if a line doesn't fit when 'nowrap' is set.
'matchpairs'	Allows matching '<' with '>', and other single character pairs.
'mousefocus'	Window focus follows mouse (partly by Terhaar). Changing the focus with a keyboard command moves the pointer to that window. Also move the pointer when changing the window layout (split window, change window height, etc.).
'mousemodel'	Change use of mouse buttons.
'selection'	When set to "inclusive" or "exclusive", the cursor can go one character past the end of the line in Visual or Select mode. When set to "old" the old behavior is used. When "inclusive", the character under the cursor is included in the operation. When using "exclusive", the new "ve" entry of 'guicursor' is used. The default is a vertical bar.
'selectmode'	Tells when to start Select mode instead of Visual mode.
'sessionoptions'	Sets behavior of ":mksession". (Negri)
'showfulltag'	When completing a tag in Insert mode, show the tag search pattern (tidied up) as a choice as well (if there is one).
'swapfile'	Whether to use a swap file for a buffer.
'syntax'	When it is set, the syntax by that name is loaded. Allows for setting a specific syntax from a modeline.
'tterm'	Allows using xterm mouse codes for terminals which name doesn't start with "xterm".
'wildignore'	List of patterns for files that should not be completed at all.
'wildmode'	Can be used to set the type of expansion for 'wildchar'. Replaces the CTRL-T command for command line completion.

Don't beep when listing all matches.

'winaltkeys' Win32 and Motif GUI. When "yes", ALT keys are handled entirely by the window system. When "no", ALT keys are never used by the window system. When "menu" it depends on whether a key is a menu shortcut.

'winminheight' Minimal height for each window. Default is 1. Set to 0 if you want zero-line windows. Scrollbar is removed for zero-height windows. (Negri)

New Ex commands

new-ex-commands-5.2

```
-----
|:badd|          Add file name to buffer list without side effects.  (Negri)
|:behave|        Quickly set MS-Windows or xterm behavior.
|:browse|        Use file selection dialog.
|:call|          Call a function, optionally with a range.
|:cnewer|
|:colder|        To access a stack of quickfix error lists.
|:comclear|      Clear all user-defined commands.
|:command|       Define a user command.
|:continue|      Go back to ":while".
|:confirm|       Ask confirmation if something unexpected happens.
|:cscope|        Execute cscope command.
|:cstag|         Use cscope to jump to a tag.
|:delcommand|    Delete a user-defined command.
|:delfunction|   Delete a user-defined function.
|:endfunction|   End of user-defined function.
|:function|      Define a user function.
|:grep|          Works similar to ":make". (Negri)
|:mksession|     Create a session file.
|:nohlsearch|    Stop 'hlsearch' highlighting for a moment.
|:Print|         This is Vi compatible. Does the same as ":print".
|:promptfind|    Search dialog (Win32 GUI).
|:promptrepl|    Search/replace dialog (Win32 GUI).
|:return|        Return from a user-defined function.
|:simalt|        Win32 GUI: Simulate alt-key pressed. (Negri)
|:smagic|        Like ":substitute", but always use 'magic'.
|:snomagic|      Like ":substitute", but always use 'nomagic'.
|:tcl|           Execute TCL command.
|:tcldo|         Execute TCL command for a range of lines.
|:tclfile|       Execute a TCL script file.
|:tearoff|       Tear-off a menu (Win32 GUI).
|:tmenu|
|:tunmenu|       Win32 GUI: menu tooltips. (Negri)
|:star| :*       Execute a register.
```

Changed

changed-5.2

Renamed functions:

```
buffer_exists()  -> bufexists()
buffer_name()    -> bufname()
buffer_number()  -> bufnr()
file_readable()  -> filereadable()
highlight_exists() -> hlexists()
highlightID()    -> hlID()
last_buffer_nr() -> bufnr("$")
```

The old ones are still there, for backwards compatibility.

The CTRL-`_` command in Insert and Command-line mode is only available when the new 'allowrevins' option is set. Avoids that people who want to type SHIFT-`_` accidentally enter reverse Insert mode, and don't know how to get out.

When a file name path in `":tselect"` listing is too long, remove a part in the middle and put `"..."` there.

Win32 GUI: Made font selector appear inside Vim window, not just any odd place. (Negri)

`":bn"` skips help buffers, unless currently in a help buffer. (Negri)

When there is a status line and only one window, don't show `'^'` in the status line of the current window.

`":*"` used to be used for `"'<','>'"`, the Visual area. But in Vi it's used as an alternative for `":@"`. When 'coptions' includes '*' this is Vi compatible.

When 'insertmode' is set, using CTRL-O to execute a mapping will work like 'insertmode' was not set. This allows "normal" mappings to be used even when 'insertmode' is set.

When 'mouse' was set already (e.g., in the .vimrc file), don't automatically set 'mouse' when the GUI starts.

Removed the 'N', 'I' and 'A' flags from the 'mouse' option.

Renamed "toggle option" to "boolean option". Some people thought that `":set xyz"` would toggle 'xyz' on/off each time.

The internal variable "shell_error" contains the error code from the shell, instead of just 0 or 1.

When inserting or replacing, typing CTRL-V CTRL-`<CR>` used to insert `"<C-CR>"`. That is not very useful. Now the CTRL key is ignored and a `<CR>` is inserted. Same for all other "normal" keys with modifiers. Mapping these modified key combinations is still possible.

In Insert mode, `<C-CR>` and `<S-Space>` can be inserted by using CTRL-K and then the special character.

Moved "quotes" file to doc/quotes.txt, and "todo" file to doc/todo.txt. They are now installed like other documentation files.

`winheight()` function returns -1 for a non-existing window. It used to be zero, but that is a valid height now.

The default for 'selection' is "inclusive", which makes a difference when using `"$"` or the mouse to move the cursor in Visual mode.

`":q!"` does not exit when there are changed buffers which are hidden. Use `":qa!"` to exit anyway.

Disabled the Perl/Python/Tcl interfaces by default. Not many people use them and they make the executable a lot bigger. The internal scripting language is now powerful enough for most tasks.

The strings from the 'titlestring' and 'iconstring' options are used untranslated for the Window title and icon. This allows for including a `<CR>`. Previously a `<CR>` would be shown as `"^M"` (two characters).

When a mapping is started in Visual or Select mode which was started from Insert mode (the mode shows "(insert) Visual"), don't return to Insert mode

until the mapping has ended. Makes it possible to use a mapping in Visual mode that also works when the Visual mode was started from Select mode.

Menus in \$VIMRUNTIME/menu.vim no longer overrule existing menus. This helps when defining menus in the .vimrc file, or when sourcing mswin.vim.

Unix: Use /var/tmp for .swp files, if it exists. Files there survive a reboot (at least on Linux).

Added

added-5.2

--with-motif-lib configure argument. Allows for using a static Motif library.

Support for mapping numeric keypad +, -, *, / keys. (Negri)
When not mapped, they produce the normal character.

Win32 GUI: When directory dropped on Gvim, cd there and edit new buffer. (Negri)

Win32 GUI: Made CTRL-Break work as interrupt, so that CTRL-C can be used for mappings.

In the output of ":map", highlight the "*" to make clear it's not part of the rhs. (Roemer)

When showing the Visual area, the cursor is not switched off, so that it can be located. The Visual area is now highlighted with a grey background in the GUI. This makes the cursor visible when it's also reversed.

Win32: When started with single full pathname (e.g. via double-clicked file), cd to that file's directory. (Negri)

Win32 GUI: Tear-off menus, with ":tearoff <menu-name>" command. (Negri)
't' option to 'guioptions': Add tearoff menu items for Win32 GUI and Motif. It's included by default.

Win32 GUI: tearoff menu with submenus is indicated with a ">". (Negri)

Added ^Kaa and ^KAA digraphs.
Added "euro" symbol to digraph.c. (Corry)

Support for Motif menu shortcut keys, using '&' like MS-Windows (Ollis).
Other GUIs ignore '&' in a menu name.

DJGPP: Faster screen updating (John Lange).

Clustering of syntax groups ":syntax cluster" (Bigham).
Including syntax files: ":syntax include" (Bigham).

Keep column when switching buffers, when 'nosol' is set (Radics).

Number function for Perl interface.

Support for Intellimouse in Athena GUI. (Jensen)

":sleep" also accepts an argument in milliseconds, when "m" is used.

Added 'p' flag in 'guioptions': Install callbacks for enter/leave window events. Makes cursor blinking work for Terhaar, breaks it for me.

--help" and "--version" command-line arguments.

Non-text in ":list" output is highlighted with NonText.

Added text objects: "i(" and "i)" as synonym for "ib". "i{" and "i}" as synonym for "iB". New: "i<" and "i>", to select <thing>. All this also for "a" objects.

'O' flag in 'shortmess': message for reading a file overwrites any previous message. (Negri)

Win32 GUI: 'T' flag in 'guioptions': switch toolbar on/off.
Included a list with self-made toolbar bitmaps. (Negri)

Added menu priority for sub-menus. Implemented for Win32 and Motif GUI.
Display menu priority with ":menu" command.
Default and Syntax menus now include priority for items. Allows inserting menu items in between the default ones.

When the 'number' option is on, highlight line numbers with the LineNr group.

"Ignore" highlight group: Text highlighted with this is made blank. It is used to hide special characters in the help text.

Included Exuberant Ctags version 2.3, with C++ support, Java support and recurse into directories. (Hiebert)

When a tags file is not sorted, and this is detected (in a simplistic way), an error message is given.

":unlet" accepts a "!", to ignore non-existing variables, and accepts more than one argument. (Roemer)
Completion of variable names for ":unlet". (Roemer)

When there is an error in a function which is called by another function, show the call stack in the error message.

New file name modifiers:
":.": reduce file name to be relative to current dir.
":~": reduce file name to be relative to home dir.
":s?pat?sub?": substitute "pat" with "sub" once.
":gs?pat?sub?": substitute "pat" with "sub" globally.

New configure arguments: --enable-min-features and --enable-max-features.
Easy way to switch to minimum or maximum features.

New compile-time feature: modify_fname. For file name modifiers, e.g, "%:p:h". Can be disabled to save some code (16 bit DOS).

When using whole-line completion in Insert mode, and 'cindent' is set, indent the line properly.

MSDOS and Win32 console: 'guicursor' sets cursor thickness. (Negri)

Included new set of Farsi fonts. (Shiran)

Accelerator text now also works in Motif. All menus can be defined with & for mnemonic and TAB for accelerator text. They are ignored on systems that don't support them.

When removing or replacing a menu, compare the menu name only up to the <Tab> before the mnemonic.

'i' and 'I' flags after ":substitute": ignore case or not.

"make install" complains if the runtime files are missing.

Unix: When finding an existing swap file that can't be opened, mention the owner of the file in the ATTENTION message.

The 'i', 't' and 'k' options in 'complete' now also print the place where they are looking for matches. (Acevedo)

"gJ" command: Join lines without inserting a space.

Setting 'keywordprg' to "man -s" is handled specifically. The "-s" is removed when no count given, the count is added otherwise. Configure checks if "man -s 2 read" works, and sets the default for 'keywordprg' accordingly.

If you do a ":bd" and there is only one window open, Vim tries to move to a buffer of the same type (i.e. non-help to non-help, help to help), for consistent behavior to :bnext/:bprev. (Negri)

Allow "<Nop>" to be used as the rhs of a mapping. ":map xx <Nop>", maps "xx" to nothing at all.

In a ":menu" command, "<Tab>" can be used instead of a real tab, in the menu path. This makes it more easy to type, no backslash needed.

POSIX compatible character classes for regexp patterns: [:alnum:], [:alpha:], [:blank:], [:cntrl:], [:digit:], [:graph:], [:lower:], [:print:], [:punct:], [:space:], [:upper:] and [:xdigit:]. (Briscoe)

regexp character classes (for fast syntax highlight matching):

digits:	\d [0-9]	\D not digit (Roemer)
hex:	\x [0-9a-fA-F]	\X not hex
octal:	\o [0-7]	\O not octal
word:	\w [a-zA-Z0-9_]	\W not word
head:	\h [a-zA-Z_]	\H not head
alphanumeric:	\a [a-zA-Z]	\A not alphanumeric
lowercase:	\l [a-z]	\L not lowercase
uppercase:	\u [A-Z]	\U not uppercase

":set" now accepts "+=", "|^=" and "-=": add or remove parts of a string option, add or subtract a number from a number option. A comma is automatically inserted or deleted for options that are a comma separated list.

Filetype feature, for autocommands. Uses a file type instead of a pattern to match a file. Currently only used for RISC OS. (Leonard)

In a pattern for an autocommand, environment variables can be used. They are expanded when the autocommand is defined.

"BufFilePre" and "BufFilePost" autocommand events: Before and after applying the ":file" command to change the name of a buffer.

"VimLeavePre" autocommand event: before writing the .viminfo file.

For autocommands argument: <abuf> is buffer number, like <afile>.

Made syntax highlighting a bit faster when scrolling backwards, by keeping more syncing context.

Win32 GUI: Made scrolling faster by avoiding a redraw when deleting or inserting screen lines.

GUI: Made scrolling faster by not redrawing the scrollbar when the thumb moved

less than a pixel.

Included ":highlight" in bugreport.vim.

Created install.exe program, for simplistic installation on DOS and MS-Windows.

New register: '_', the black hole. When writing to it, nothing happens. When reading from it, it's always empty. Can be used to avoid a delete or change command to modify the registers, or reduce memory use for big changes.

CTRL-V xff enters character by hex number. CTRL-V o123 enters character by octal number. (Aaron)

Improved performance of syntax highlighting by skipping check for "keepend" when there isn't any.

Moved the mode message ("-- INSERT --") to the last line of the screen. When 'cmdheight' is more than one, messages will remain readable.

When listing matching files, they are also sorted on 'suffixes', such that they are listed in the same order as CTRL-N retrieves them.

synIDattr() takes a third argument (optionally), which tells for which terminal type to get the attributes for. This makes it possible to run 2html.vim outside of gvim (using color names instead of #RRGGBB).

Memory profiling, only for debugging. Prints at exit, and with "g^A" command. (Kahn)

DOS: When using a file in the current drive, remove the drive name: "A:\dir\file" -> "\dir\file". This helps when moving a session file on a floppy from "A:\dir" to "B:\dir".

Increased number of remembered jumps from 30 to 50 per window.

Command to temporarily disable 'hls' highlighting until the next search: ":nohlsearch".

"gp" and "gP" commands: like "p" and "P", but leave the cursor just after the inserted text. Used for the CTRL-V command in MS-Windows mode.

Fixed

fixed-5.2

Win32 GUI: Could draw text twice in one place, for fake-bold text. Removed this, Windows will handle the bold text anyway. (Negri)

patch 5.1.1: Win32s GUI: pasting caused a crash (Negri)

patch 5.1.2: When entering another window, where characters before the cursor have been deleted, could have a cursor beyond the end of the line.

patch 5.1.3: Win32s GUI: Didn't wait for external command to finish. (Negri)

patch 5.1.4: Makefile.w32 can now also be used to generate the OLE version (Scott).

patch 5.1.5: Crashed when using syntax highlighting: cursor on a line that doesn't fit in the window, and splitting that line in two.

patch 5.1.6: Visual highlighting bug: After ":set nowrap", go to end of line (so that the window scrolls horizontally), ":set wrap". Following Visual selection was wrong.

patch 5.1.7: When 'tagbsearch' off, and 'ignorecase' off, still could do binary searching.

patch 5.1.8: Win32 GUI: dragging the scrollbar didn't update the ruler.

patch 5.1.9: Using ":gui" in .vimrc, caused xterm cursor to disappear.

patch 5.1.10: A CTRL-N in Insert mode could cause a crash, when a buffer without a name exists.

patch 5.1.11: "make test" didn't work in the shadow directory. Also adjusted "make shadow" for the links in the ctags directory.

patch 5.1.12: "buf 123foo" used "123" as a count, instead as the start of a buffer name.

patch 5.1.13: When completing file names on the command-line, reallocating the command-line may go wrong.

patch 5.1.14: ":[nvci]unmenu" removed menu for all modes, when full menu patch specified.

Graceful handling of NULLs in drag-dropped file list. Handle passing NULL to Fullname_save(). (Negri)

Win32: ":!start" to invoke a program without opening a console, swapping screens, or waiting for completion in either console or gui version, e.g. you can type ":!start winfile". ALSO fixes "can't delete swapfile after spawning a shell" bug. (enhancement of Aaron patch) (Negri)

Win32 GUI: Fix CTRL-X default keymapping to be more Windows-like. (Negri)

Shorten filenames on startup. If in /foo/bar, entering "vim ../bar/bang.c" displays "bang.c" in status bar, not "/foo/bar/bang.c" (Negri)

Win32 GUI: No copy to Windows clipboard when it's not desired.

Win32s: Fix pasting from clipboard - made an assumption not valid under Win32s. (Negri)

Win32 GUI: Speed up calls to gui_mch_draw_string() and cursor drawing functions. (Negri)

Win32 GUI: Middle mouse button emulation now works in GUI! (Negri)

Could skip messages when combining commands in one line, e.g.:
":echo "hello" | write".

Perl interpreter was disabled before executing VimLeave autocommands. Could not use ":perl" in them. (Aaron)

Included patch for the Intellimouse (Aaron/Robinson).

Could not set 'ls' to one, when last window has only one line. (Mitterand)

Fixed a memory leak when removing menus.

After ":only" the ruler could overwrite a message.

Dos32: removed changing of `__system_flags`. It appears to work better when it's left at the default value.

`p_aleph` was an `int` instead of `along`, caused trouble on systems where `sizeof(int) != sizeof(long)`. (Schmidt)

Fixed enum problems for Ultrix. (Seibert)

Small redraw problem: `"dd"` on last line in file cleared wrong line.

Didn't interpret `"cmd | endif"` when `"cmd"` starts with a range. E.g. `"if 0 | .d | endif"`.

Command `"+"` on the last line of the file caused `ml_get` errors.

Memory underrun in `eval_vars()`. (Aaron)

Don't rename files in a difficult way, except on Windows 95 (was also done on Windows NT).

Win32 GUI: An external command that produces an error code put the error message in a dialog box. had to close the window and close the dialog. Now the error code is displayed in the console. (Negri)

`"comctl32.lib"` was missing from the GUI libraries in `Makefile.w32`. (Battle)

In Insert mode, when entering a window in Insert mode, allow the cursor to be one char beyond the text.

Renamed machine dependent `rename()` to `mch_rename()`. Define `mch_rename()` to `rename()` when it works properly.

Rename `vim_chdir()` to `mch_chdir()`, because it's machine dependent.

When using an arglist, and editing file 5 of 4, `":q"` could cause `"-1 more files to edit"` error.

In `if_python.c`, `VimCommand()` caused an assertion when a `do_cmdline()` failed. Moved the `Python_Release_Vim()` to before the `VimErrorCheck()`. (Harkins)

Give an error message for an unknown argument after `--`. E.g. for `"vim --xyz"`.

The `FileChangedShell` autocommand didn't set `<infile>` to the name of the changed file.

When doing `":e file"`, causing the attention message, there sometimes was no hit-enter prompt. Caused by empty line or `"endif"` at end of sourced file.

A large number of patches for the VMS version. (Hunsaker)

When CTRL-L completion (find longest match) results in a shorter string, no completion is done (happens with `":help"`).

Crash in Win32 GUI version, when using an `Ex "@"` command, because `LinePointers[]` was used while not initialized.

Win32 GUI: allow mapping of Alt-Space.

Output from `"vim -h"` was sent to `stderr`. Sending it to `stdout` is better, so one can use `"vim -h | more"`.

In command-line mode, ":vi[!]" should reload the file, just like ":e[!]"
In Ex mode, ":vi" stops Ex mode, but doesn't reload the file. This is Vi compatible.

When using a ":set ls=1" in the .gvimrc file, would get a status line for a single window. (Robinson)

Didn't give an error message for ":set ai,xx". (Roemer)
Didn't give an error message for ":set ai?xx", ":set ai&xx", ":set ai!xx".

Non-Unix systems: That a file exists but is unreadable is recognized as "new file". Now check for existence when file can't be opened (like Unix).

Unix: osdef.sh didn't handle declarations where the function name is at the first column of the line.

DJGPP: Shortening of file names didn't work properly, because get_cwd() returned a path with backslashes. (Negri)

When using a 'comments' part where a space is required after the middle part, always insert a space when starting a new line. Helps for C comments, below a line with "/****".

Replacing path of home directory with "~/ " could be wrong for file names with embedded spaces or commas.

A few fixes for the Sniff interface. (Leherbauer)

When asking to hit 'y' or 'n' (e.g. for ":3,ld"), using the mouse caused trouble. Same for ":s/x/y/c" prompt.

With 'nowrap' and 'list', a Tab halfway on the screen was displayed as blanks, instead of the characters specified with 'listchars'. Also for other characters that take more than one screen character.

When setting 'guifont' to an unknown font name, the previous font was lost and a default font would be used. (Steed)

DOS: Filenames in the root directory didn't get shortened properly. (Negri)

DJGPP: making a full path name out of a file name didn't work properly when there is no _fullpath() function. (Negri)

Win32 console: ":sh" caused a crash. (Negri)

Win32 console: Setting 'lines' and/or 'columns' in the _vimrc failed miserably (could hang Windows 95). (Negri)

Win32: The change-drive function was not correct, went to the wrong drive. (Tsindlekht)

GUI: When editing a command line in Ex mode, Tabs were sometimes not backspaced properly, and unprintable characters were displayed directly. non-GUI can still be wrong, because a system function is called for this.

":set" didn't stop after an error. For example ":set no ai" gave an error for "no", but still set "ai". Now ":set" stops after the first error.

When running configure for ctags, \$LD_FLAGS wasn't passed to it, causing trouble for IRIX.

"@%" and "@#" when file name set gave an error message. Now they just return an empty string. (Steed)

CTRL-X and CTRL-A didn't work correctly with negative hex and octal numbers. (Steed)

":echo" always started with a blank.

Updating GUI cursor shape didn't always work (e.g., when blinking is off).

In silent Ex mode ("ex -s" or "ex <file") ":s///p" didn't print a line. Also a few other commands that explicitly print a text line didn't work. Made this Vi compatible.

Win32 version of _chdrive() didn't return correct value. (Tsindlekht)

When using 't' in 'complete' option, no longer give an error message for a missing tags file.

Unix: tgoto() can return NULL, which was not handled correctly in configure.

When doing ":help" from a buffer where 'binary' is set, also edited the help file in binary mode. Caused extra ^Ms for DOS systems.

Cursor position in a file was reset to 1 when closing a window.

":!ls" in Ex mode switched off echo.

When doing a double click in window A, while currently in window B, first click would reset double click time, had to click three times to select a word.

When using <F11> in mappings, ":mkexrc" produced an exrc file that can't be used in Vi compatible mode. Added setting of 'cpo' to avoid this. Also, add a CTRL-V in front of a '<', to avoid a normal string to be interpreted as a special key name.

Gave confusing error message for ":set guifont=-*-lucida-*": first "font is not fixed width", then "Unknown font".

Some options were still completely left out, instead of included as hidden options.

While running the X11 GUI, ignore SIGHUP signals. Avoids a crash after executing an external command (in rare cases).

In os_unixx.h, signal() was defined to sigset(), while it already was.

Memory leak when executing autocommands (was reported as a memory leak in syntax highlighting).

Didn't print source of error sometimes, because pointers were the same, although names were different.

Avoid a number of UMR errors from Purify (third argument to open()).

A swap file could still be created just after setting 'updatecount' to zero, when there is an empty buffer and doing ":e file". (Kutschera)

Test 35 failed on 64 bit machines. (Schild)

With "p" and "P" commands, redrawing was slow.

Awk script for html documentation didn't work correctly with AIX awk.
 Replaced "[,.);\]" with "[] ,.);". (Briscoe)
 The makehtml.awk script had a small problem, causing extra lines to be inserted. (Briscoe)

"ggqq" could not be repeated. Repeating for "gugu" and "gUgU" worked in a wrong way. Also made "gqq" work to be consistent with "guu".

C indent was wrong after "case ':':".

":au BufReadPre *.c put": Line from put text was deleted, because the buffer was still assumed to be empty.

Text pasted with the Edit/Paste menu was subject to 'textwidth' and 'autoindent'. That was inconsistent with using the mouse to paste. Now "*p is used.

When using CTRL-W CTRL-] on a word that's not a tag, and then CTRL-] on a tag, window was split.

":ts" got stuck on a tags line that has two extra fields.

In Insert mode, with 'showmode' on, <C-O><C-G> message was directly overwritten by mode message, if preceded with search command warning message.

When putting the result of an expression with "<expr>p, newlines were inserted like ^@ (NUL in the file). Now the string is split up in lines at the newline.

putenv() was declared with "const char *" in pty.c, but with "char *" in osdef2.h.in. Made the last one also "const char *".

":help {word}", where +{word} is a feature, jumped to the feature list instead of where the command was explained. E.g., ":help browse", ":help autocmd".

Using the "\<xx>" form in an expression only got one byte, even when using a special character that uses several bytes (e.g., "\<F9>").
 Changed "\<BS>" to produce CTRL-H instead of the special key code for the backspace key. "\" produces 0x7f.

":mkvimrc" didn't write a command to set 'compatible' or 'nocompatible'.

The shell syntax didn't contain a "syn sync maxlines" setting. In a long file without recognizable items, syncing took so long it looked like Vim hangs. Added a maxlines setting, and made syncing interruptible.

The "gs" command didn't flush output before waiting.

Memory leaks for:

```
":if 0 | let a = b . c | endif"
"let a = b[c]"
":so {file}" where {file} contains a ":while"
```

GUI: allocated fonts were never released. (Leonard)

Makefile.bor:

- Changed \$(DEFINES) into a list of "-D" options, so that it can also be used for the resource compiler. (not tested!)
- "bcc.cfg" was used for all configurations. When building for another configuration, the settings for the previous one would be used. Moved "bcc.cfg" to the object directory. (Geddes)

- Included targets for vimrun, install, ctags and xxd. Changed the default to use the Borland DLL Runtime Library, makes Vim.exe a log smaller. (Aaron)

"2*" search for the word under the cursor with "2" prepended. (Leonard)

When deleting into a specific register, would still overwrite the non-Win32 GUI selection. Now ""x"*P works.

When deleting into the "" register, would write to the last used register. Now ""x always writes to the unnamed register.

GUI Athena: A submenu with a '.' in it didn't work. E.g.,
":amenu Syntax.XY\Z.foo lll".

When first doing ":tag foo" and then ":tnext" and/or ":tselect" the order of matching tags could change, because the current file is different. Now the existing matches are kept in the same order, newly found matches are added after them, not matter what the current file is.

":ta" didn't find the second entry in a tags file, if the second entry was longer than the first one.

When using ":set si tw=7" inserting "foo {^P}" made the "}" inserted at the wrong position. can_si was still TRUE when the cursor is not in the indent of the line.

Running an external command in Win32 version had the problem that Vim exits when the X on the console is hit (and confirmed). Now use the "vimrun" command to start the external command indirectly. (Negri)

Win32 GUI: When running an external filter, do it in a minimized DOS box. (Negri)

":let" listed variables without translation into printable characters.

Win32 console: When resizing the window, switching back to the old size (when exiting or executing an external command) sometimes failed. (Negri)
This appears to also fix a "non fixable" problem:
Win32 console in NT 4.0: When running Vim in a cmd window with a scrollbar, the scrollbar disappeared and was not restored when Vim exits. This does work under NT 3.51, it appears not to be a Vim problem.

When executing BufDelete and BufUnload autocommands for a buffer without a name, the name of the current buffer was used for <afile>.

When jumping to a tag it reported "tag 1 of >2", while in fact there could be only two matches. Changed to "tag 1 of 2 or more".

":tjump tag" did a linear search in the tags file, which can be slow.

Configure didn't find "LibXm.so.2.0", a Xm library with a version number.

Win32 GUI: When using a shifted key with ALT, the shift modifier would remain set, even when it was already used by changing the used key. E.g., "<M-S-9>" resulted in "<M-S-(>", but it should be "<M-(>". (Negri)

A call to ga_init() was often followed by setting growsize and itemsize. Created ga_init2() for this, which looks better. (Aaron)

Function filereadable() could call fopen() with an empty string, which might be illegal.

X Windows GUI: When executing an external command that outputs text, could write one character beyond the end of a buffer, which caused a crash. (Kohan)

When using "*" or "#" on a string that includes '/' or '?' (when these are included in 'isk'), they were not escaped. (Parmelan)

When adding a ToolBar menu in the Motif GUI, the submenu_id field was not cleared, causing random problems.

When adding a menu, the check if this menu (or submenu) name already exists didn't compare with the simplified version (no mnemonic or accelerator) of the new menu. Could get two menus with the same name, e.g., "File" and "&File".

Breaking a line because of 'textwidth' at the last line in the window caused a redraw of the whole window instead of a scroll. Speeds up normal typing with 'textwidth' a lot for slow terminals.

An invalid line number produced an "invalid range" error, even when it wasn't to be executed (inside "if 0").

When the unnamed, first buffer is re-used, the "BufDelete" autocommand was not called. It would stick in a buffer list menu.

When doing "%" on the NUL after the line, a "{" or "}" in the last character of the line was not found.

The Insert mode menu was not used for the "s" command, the Operator-pending menu was used instead.

With 'compatible' set, some syntax highlighting was not correct, because of using "[\t]" for a search pattern. Now use the regexps for syntax highlighting like the 'coptions' option is empty (as was documented already).

When using "map <M-Space> ms" or "map <Space> sss" the output of ":map" didn't show any lhs for the mapping (if 'isprint' includes 160). Now always use <Space> and <M-Space>, even when they are printable.

Adjusted the Syntax menu, so that the lowest entry fits on a small screen (for Athena, where menus don't wrap).

When using CTRL-E or CTRL-Y in Insert mode for characters like 'o', 'x' and digits, repeating the insert didn't work.

The file "tools/ccfilter.README.txt" could not be unpacked when using short file names, because of the two dots. Renamed it to "tools/ccfilter_README.txt".

For a dark 'background', using Blue for Directory and SpecialKey highlight groups is not very readable. Use Cyan instead.

In the function uc_scan_attr() in ex_docmd.c there was a goto that jumped into a block with a local variable. That's illegal for some compilers.

Win32 GUI: There was a row of pixels at the bottom of the window which was not drawn. (Aaron)

Under DOS, editing "filename/" created a swap file of "filename/.swp". Should be "filename/_swp".

Win32 GUI: pointer was hidden when executing an external command.

When 'so' is 999, "J" near the end of the file didn't redisplay correctly.

":0a" inserted after the first line, instead of before the first line.

Unix: Wildcard expansion didn't handle single quotes and {} patterns. Now
 ":file 'window.c'" removes the quotes and ":e 'main*.c'" works (literal '*').
 ":file {o}{n}{e}" now results in file name "one".

Memory leak when setting a string option back to its default value.

```
=====
VERSION 5.3                                     *version-5.3*
```

Version 5.3 was a bug-fix version of 5.2. There are not many changes.
 Improvements made between version 5.2 and 5.3:

```
Changed                                         *changed-5.3*
```

Renamed "IDE" menu to "Tools" menu.

```
Added                                         *added-5.3*
```

Win32 GUI: Give a warning when Vim is activated, and one of the files changed
 since editing started. (Negri)

```
Fixed                                         *fixed-5.3*
```

5.2.1: Win32 GUI: space for external command was not properly allocated, could
 cause a crash. (Aaron) This was the reason to bring out 5.3 quickly after
 5.2.

5.2.2: Some commands didn't complain when used without an argument, although
 they need one: ":badd", ":browse", ":call", ":confirm", ":behave",
 ":delfunction", ":delcommand" and ":tearoff".
 ":endfunction" outside of a function gave wrong error message: "Command not
 implemented". Should be ":endfunction not inside a function".

5.2.3: Win32 GUI: When gvim was installed in "Program files", or another path
 with a space in it, executing external commands with vimrun didn't work.

5.2.4: Pasting with the mouse in Insert mode left the cursor on the last
 pasted character, instead of behind it.

5.2.5: In Insert mode, cursor after the end of the line, a shift-cursor-left
 didn't include the last character in the selection.

5.2.6: When deleting text from Insert mode (with "<C-O>D" or the mouse), which
 includes the last character in the line, the cursor could be left on the last
 character in the line, instead of just after it.

5.2.7: Win32 GUI: scrollbar was one pixel too big.

5.2.8: Completion of "PopUp" menu showed the derivatives "PopUpC", "PopUPi",
 etc. ":menu" also showed these.

5.2.9: When using two input() functions on a row, the prompt would not be
 drawn in column 0.

5.2.10: A loop with input() could not be broken with CTRL-C.

5.2.11: ":call asdf" and ":call asdf(" didn't give an error message.

5.2.12: Recursively using ":normal" crashes Vim after a while. E.g.:
":map gq :normal gq<CR>"

5.2.13: Syntax highlighting used 'iskeyword' from wrong buffer. When using ":help", then "/\k*" in another window with 'hlsearch' set.

5.2.14: When using ":source" from a function, global variables would not be available unless "g:" was used.

5.2.15: XPM files can have the extension ".pm", which is the same as for Perl modules. Added "syntax/pmfile.vim" to handle this.

5.2.16: On Win32 and Amiga, "echo expand("%:p:h")" removed one dirname in an empty buffer. mch_Fullname() didn't append a slash at the end of a directory name.

Should include the character under the cursor in the Visual area when using 'selection' "exclusive". This wasn't done for "%", "e", "E", "t" and "f".

""p would always put register 0, instead of the unnamed (last used) register. Reverse the change that ""x doesn't write in the unnamed (last used) register. It would always write in register 0, which isn't very useful. Use "-x for the paste mappings in Visual mode.

When there is one long line on the screen, and 'showcmd' is off, "0\$" didn't redraw the screen.

Win32 GUI: When using 'mousehide', the pointer would flicker when the cursor shape is changed. (Negri)

When cancelling Visual mode, and the cursor moves to the start, the wanted column wasn't set, "k" or "j" moved to the wrong column.

When using ":browse" or ":confirm", was checking for a comment and separating bar, which can break some commands.

Included fixes for Macintosh. (Kielhorn)

=====

VERSION 5.4

version-5.4

Version 5.4 adds new features, useful changes and a lot of bug fixes.

Runtime directory introduced

new-runtime-dir

The distributed runtime files are now in \$VIMRUNTIME, the user files in \$VIM. You normally don't set \$VIMRUNTIME but let Vim find it, by using \$VIM/vim{version}, or use \$VIM when that doesn't exist. This allows for separating the user files from the distributed files and makes it more easy to upgrade to another version. It also makes it possible to keep two versions of Vim around, each with their own runtime files.

In the Unix distribution the runtime files have been moved to the "runtime" directory. This makes it possible to copy all the runtime files at once, without the need to know what needs to be copied.

The archives for DOS, Windows, Amiga and OS/2 now have an extra top-level "vim" directory. This is to make clear that user-modified files should be put here. The directory that contains the executables doesn't have '-' or '.' characters. This avoids strange extensions.

The \$VIM and \$VIMRUNTIME variables are set when they are first used. This allows them to be used by Perl, for example.

The runtime files are also found in a directory called "\$VIM/runtime". This helps when running Vim after just unpacking the runtime archive. When using an executable in the "src" directory, Vim checks if "vim54" or "runtime" can be added after removing it. This make the runtime files be found just after compiling.

A default for \$VIMRUNTIME can be given in the Unix Makefile. This is useful if \$VIM doesn't point to above the runtime directory but to e.g., "/etc/".

Filetype introduced

new-filetype-5.4

Syntax files are now loaded with the new FileType autocommand. Old "mysyntaxfile" files will no longer work. |filetypes|

The scripts for loading syntax highlighting have been changed to use the new Syntax autocommand event.

This combination of Filetype and Syntax events allows tuning the syntax highlighting a bit more, also when selected from the Syntax menu. The FileType autocommand can also be used to set options and mappings specifically for that type of file.

The "\$VIMRUNTIME/filetype.vim" file is not loaded automatically. The ":filetype on" command has been added for this. ":syntax on" also loads it.

The 'filetype' option has been added. It is used to trigger the FileType autocommand event, like the 'syntax' option does for the Syntax event.

":set syntax=OFF" and ":set syntax=ON" can be used (in a modeline) to switch syntax highlighting on/off for the current file.

The Syntax menu commands have been moved to \$VIMRUNTIME/menu.vim. The Syntax menu is included both when ":filetype on" and when ":syntax manual" is used.

Renamed the old 'filetype' option to 'osfiletype'. It was only used for RISCOS. 'filetype' is now used for the common file type.

Added the ":syntax manual" command. Allows manual selection of the syntax to be used, e.g., from a modeline.

Vim script line continuation

new-line-continuation

When an Ex line starts with a backslash, it is concatenated to the previous line. This avoids the need for long lines. |line-continuation| (Roemer)
Example: >

```
if has("dialog_con") ||
  \ has("dialog_gui")
  :let result = confirm("Enter your choice",
    \ "&Yes\n&No\n&Maybe",
    \ 2)
```

endif

Improved session files

improved-sessions

New words for 'sessionoptions':

- "help" Restore the help window.
- "blank" Restore empty windows.
- "winpos" Restore the Vim window position. Uses the new ":winpos" command
- "buffers" Restore hidden and unloaded buffers. Without it only the buffers in windows are restored.
- "slash" Replace backward by forward slashes in file names.
- "globals" Store global variables.
- "unix" Use unix file format (<NL> instead of <CR><NL>)

The ":mksession" and 'sessionoptions' are now in the +mksession feature.

The top line of the window is also restored when using a session file.

":mksession" and ":mkvimrc" don't store 'fileformat', it should be detected when loading a file.

(Most of this was done by Vince Negri and Robert Webb)

Autocommands improved

improved-autocmds-5.4

New events:

- | | |
|-------------|--|
| FileType | When the file type has been detected. |
| FocusGained | When Vim got input focus. (Negri) |
| FocusLost | When Vim lost input focus. (Negri) |
| BufCreate | Called just after a new buffer has been created or has been renamed. (Madsen) |
| CursorHold | Triggered when no key has been typed for 'updatetime'. Can be used to do something with the word under the cursor. (Negri)
Implemented CursorHold autocommand event for Unix. (Zellner)
Also for Amiga and MS-DOS. |
| GUIEnter | Can be used to do something with the GUI window after it has been created (e.g., a ":winpos 100 50"). |
| BufHidden | When a buffer becomes hidden. Used to delete the option-window when it becomes hidden. |

Also trigger |BufDelete| just before a buffer is going to be renamed. (Madsen)

The "<amatch>" pattern can be used like "<afile>" for autocommands, except that it is the matching value for the FileType and Syntax events.

When ":let @/ = <string>" is used in an autocommand, this last search pattern will be used after the autocommand finishes.

Made loading autocommands a bit faster. Avoid doing strlen() on each exiting pattern for each new pattern by remembering the length.

Encryption

new-encryption

Files can be encrypted when writing and decrypted when reading. Added the 'key' option, "-x" command line argument and ":X" command. |encryption| (based

on patch from Mohsin Ahmed)

When reading a file, there is an automatic detection whether it has been crypted. Vim will then prompt for the key.

Note that the encryption method is not compatible with Vi. The encryption is not unbreakable. This allows it to be exported from the US.

GTK GUI port

new-GTK-GUI

New GUI port for GTK+. Includes a toolbar, menu tearoffs, etc. |gui-gtk|
Added the |:helpfind| command. (Kahn and Dalecki)

Menu changes

menu-changes-5.4

Menus can now also be used in the console. It is enabled by the new 'wildmenu' option. This shows matches for command-line completion like a menu. This works as a minimal file browser.

The new |:emenu| command can be used to execute a menu item.

Uses the last status line to list items, or inserts a line just above the command line. (Negri)

The 'wildcharx' option can be used to trigger 'wildmenu' completion from a mapping.

When compiled without menus, this can be detected with has("menu"). Also show this in the ":version" output. Allow compiling GUI versions without menu support. Only include toolbar support when there is menu support.

Moved the "Window" menu all the way to the right (priority 70). Looks more familiar for people working with MS-Windows, shouldn't matter for others.

Included "Buffers" menu. Works with existing autocommands and functions. It can be disabled by setting the "no_buffers_menu" variable. (Aaron and Madsen)

Win32 supports separators in a menu: "-.*-". (Geddes)

Menu separators for Motif now work too.

Made Popup menu for Motif GUI work. (Madsen)

'M' flag in 'guioptions': Don't source the system menu.

All the menu code has been moved from gui.c to menu.c.

Viminfo improved

improved-viminfo

New flags for 'viminfo':

'!' Store global variables in the viminfo file if they are in uppercase letters. (Negri)

'h' Do ":nohlsearch" when loading a viminfo file.

Store search patterns in the viminfo file with their offset, magic, etc. Also store the flag whether 'hlsearch' highlighting is on or off (which is not used if the 'h' flag is in 'viminfo').

Give an error message when setting 'viminfo' without commas.

Various new commands

new-commands-5.4

Operator |g?|: rot13 encoding. (Negri)

|zH| and |zL| commands: Horizontal scrolling by half a page.
|gm| move cursor to middle of screen line. (Ideas by Campbell)

Operations on Visual blocks: |v_b_I|, |v_b_A|, |v_b_c|, |v_b_C|, |v_b_r|,
|v_b_<| and |v_b_>|. (Kelly)

New command: CTRL-\ CTRL-N, which does nothing in Normal mode, and goes to Normal mode when in Insert or Command-line mode. Can be used by VisVim or other OLE programs to make sure Vim is in Normal mode, without causing a beep.
|CTRL-_CTRL-N|

":cscope kill" command to use the connection filename. |:cscope| (Kahn)

|:startinsert| command: Start Insert mode next.

|:history| command, to show all four types of histories. (Roemer)

|[m|, |[M|, |]m| and |]M| commands, for jumping backward/forward to start/end of method in a (Java) class.

":@*" executes the * register. |:@| (Acevedo)

|go| and |:goto| commands: Jump to byte offset in the file.

|gR| and |gr| command: Virtual Replace mode. Replace characters without changing the layout. (Webb)

":cd -" changes to the directory from before the previous ":cd" command.
|:cd-| (Webb)

Tag preview commands |:ptag|. Shows the result of a ":tag" in a dedicated window. Can be used to see the context of the tag (e.g., function arguments). (Negri)

|:pclose| command, and CTRL-W CTRL-Z: Close preview window. (Moore)

'previewheight' option, height for the preview window.

Also |:ppop|, |:ptnext|, |:ptprevious|, |:ptNext|, |:ptrewind|, |:ptlast|.

|:find| and |:sfind| commands: Find a file in 'path', (split window) and edit it.

The |:options| command opens an option window that shows the current option values. Or use ":browse set" to open it. Options are grouped by function. Offers short help on each option. Hit <CR> to jump to more help. Edit the option value and hit <CR> on a "set" line to set a new value.

Various new options

new-options-5.4

Scroll-binding: 'scrollbind' and 'scrollopt' options. Added |:syncbind| command. Makes windows scroll the same amount (horizontally and/or vertically). (Ralston)

'conskey' option for MS-DOS. Use direct console I/O. This should work with telnet (untested!).

'statusline' option: Configurable contents of the status line. Also allows showing the byte offset in the file. Highlighting with %l* to %9*, using the new highlight groups User1 to User9. (Madsen)

'rulerformat' option: Configurable contents of the ruler, like 'statusline'. (Madsen)

'write' option: When off, writing files is not allowed. Avoids overwriting a file even with ":w!". The |m| command line option resets 'write'.

'clipboard' option: How the clipboard is used. Value "unnamed": Use unnamed register like "*". (Cortopassi) Value "autoselect": Like what 'a' in 'guioptions' does but works in the terminal.

'guifontset' option: Specify fonts for the +fontset feature, for the X11 GUI versions. Allows using normal fonts when vim is compiled with this feature. (Nam)

'guiheadroom' option: How much room to allow above/below the GUI window. Used for Motif, Athena and GTK.

Implemented 'tagstack' option: When off, pushing tags onto the stack is disabled (Vi compatible). Useful for mappings.

'shellslash' option. Only for systems that use a backslash as a file separator. This option will use a forward slash in file names when expanding it. Useful when 'shell' is sh or csh.

'pastetoggle' option: Key sequence that toggles 'paste'. Works around the problem that mappings don't work in Insert mode when 'paste' is set.

'display' option: When set to "lastline", the last line fills the window, instead of being replaced with "@" lines. Only the last three characters are replaced with "@@@", to indicate that the line has not finished yet.

'switchbuf' option: Allows re-using existing windows on a buffer that is being jumped to, or split the window to open a new buffer. (Roemer)

'titleold' option. Replaces the fixed string "Thanks for flying Vim", which is used to set the title when exiting. (Schild)

Vim scripts

new-script-5.4

The |exists()| function can also check for existence of a function. (Roemer)
An internal function is now found with a binary search, should be a bit faster. (Roemer)

New functions:

- |getwinposx()| and |getwinposy()|: get Vim window position. (Webb)
- |histnr()|, |histadd()|, |histget()| and |histdel()|: Make history available. (Roemer)
- |maparg()|: Returns rhs of a mapping. Based on a patch from Vikas.
- |mapcheck()|: Check if a map name matches with an existing one.
- |visualmode()|: Return type of last Visual mode. (Webb)
- |libcall()|: Call a function in a library. Currently only for Win32. (Negri)
- |bufwinnr()|: find window that contains the specified buffer. (Roemer)
- |bufloaded()|: Whether a buffer exists and is loaded.

- `|localtime()|` and `|getftime()|`: wall clock time and last modification time of a file (Webb)
- `|glob()|`: expand file name wildcards only.
- `|system()|`: get the raw output of an external command. (based on a patch from Aaron).
- `|strtrans()|`: Translate String into printable characters. Used for 2html.vim script.
- `|append()|`: easy way to append a line of text in a buffer.

Changed functions:

- Optional argument to `|strftime()|` to give the time in seconds. (Webb)
- `|expand()|` now also returns names for files that don't exist.

Allow numbers in the name of a user command. (Webb)

Use "v:" for internal Vim variables: "v:errmsg", "v:shell_error", etc. The ones from version 5.3 can be used without "v:" too, for backwards compatibility.

New variables:

"v:warningmsg" and "v:statusmsg" internal variables. Contain the last given warning and status message. `|v:warningmsg|` `|v:statusmsg|` (Madsen)
 "v:count1" variable: like "v:count", but defaults to one when no count is used. `|v:count1|`

When compiling without expression evaluation, "if 1" can be used around the not supported commands to avoid it being executed. Works like in Vim 4.x. Some of the runtime scripts gave errors when used with a Vim that was compiled with minimal features. Now "if 1" is used around code that is not always supported.

When evaluating an expression with `&&` and `||`, skip the parts that will not influence the outcome. This makes it faster and avoids error messages. (Webb)
 Also optimized the skipping of expressions inside an "if 0".

Avoid hit-enter prompt

avoid-hit-enter

Added 'T' flag to 'shortmess': Truncate all messages that would cause the hit-enter prompt (unless that would happen anyway).
 The 'O' flag in 'shortmess' now also applies to quickfix messages, e.g., from the ":cn" command.

The default for 'shortmess' is now "filnxtTo0", to make most messages fit on the command line, and not cause the hit-enter prompt.

Previous messages can be viewed with the new `|:messages|` command.

Some messages are shown fully, even when 'shortmess' tells to shorten messages, because the user is expected to want to see them in full: CTRL-G and some quickfix commands.

Improved quickfix

improved-quickfix

Parse change-directory lines for gmake: "make[1]: Entering directory 'name'".
 Uses "%D" and "%X" in 'errorformat'.
 Also parse "Making {target} in {dir}" messages from make. Helps when not using GNU make. (Schandl)

Use 'isfname' for "%f" in 'errorformat'.

Parsing of multi-line messages. |errorformat-multi-line|

Allow a range for the |:clist| command. (Roemer)

Support for "global" file names, for error formats that output the file name once for several errors. (Roemer)

|:cnfile| jumps to first error in next file.

"\$*" in 'makeprg' is replaced by arguments to ":make". (Roemer)

Regular expressions

regexp-changes-5.4

In a regexp, a '\$' before "\)" is also considered to be an end-of-line. |/\$|
In patterns "^" after "\|" or "\(" is a start-of-line. |/^| (Robinson)

In a regexp, in front of "\)" and "\|" both "\$" and "\\$" were considered end-of-line. Now use "\$" as end-of-line and "\\$" for a literal dollar. Same for '^' after "\(" and "\|". |/\\$| |/\^|

Some search patterns can be extremely slow, even though they are not really illegal. For example: "\([^a-z]\+\\)\+Q". Allow interrupting any regexp search with CTRL-C.

Register "/: last search string (read-only). (Kohan) Changed to use last used search pattern (like what 'hlsearch' uses). Can set the search pattern with ":let @/ = {expr}".

Added character classes to search patterns, to avoid the need for removing the 'l' flag from 'coptions': |[:tab:|], |[:return:|], |[:backspace:|] and |[:escape:|].

By adding a '?' after a comparative operator in an expression, the comparison is done by ignoring case. |expr-==?|

Other improvements made between version 5.3 and 5.4

Changed

changed-5.4

Unix: Use \$TMPDIR for temporary files, if it is set and exists.

Removed "Empty buffer" message. It isn't useful and can cause a hit-enter prompt. (Negri)

"ex -" now reads commands from stdin and works in silent mode. This is to be compatible with the original "ex" command that is used for scripts.

Default range for ":tclldo" is the whole file.

Cancelling Visual mode with ESC moved the cursor. There appears to be no reason for this. Now leave the cursor where it is.

The ":grep" and ":make" commands see " as part of the arguments, instead of the start of a comment.

In expressions the "`~`" and "`!~`" operators no longer are affected by '`ignorecase`'.

Renamed `vimrc_example` to `vimrc_example.vim` and `gvimrc_example` to `gvimrc_example.vim`. Makes them being recognized as vim scripts.

"`gd`" no longer starts searching at the end of the previous function, but at the first blank line above the start of the current function. Avoids that using "`gd`" in the first function finds global a variable.

Default for '`complete`' changed from "`.,b`" to "`.,w,b,u,t,i`". Many more matches will be found, at the cost of time (the search can be interrupted).

It is no longer possible to set '`shell*`' options from a modeline. Previously only a warning message was given. This reduces security risks.

The ordering of the index of documentation files was changed to make it more easy to find a subject.

On MS-DOS and win32, when `$VIM` was not set, `$HOME` was used. This caused trouble if `$HOME` was set to e.g., "`C:\`" for some other tool, the runtime files would not be found. Now use `$HOME` only for `_vimrc`, `_gvimrc`, etc., not to find the runtime file.

When '`tags`' is "`./{fname}`" and there is no file name for the current buffer, just use it. Previously it was skipped, causing "`vim -t {tag}`" not to find many tags.

When trying to select text in the '`scrolloff`' area by mouse dragging, the resulting scrolling made this difficult. Now '`scrolloff`' is temporarily set to 0 or 1 to avoid this. But still allow scrolling in the top line to extend to above the displayed text.

Default for '`comments`' now includes "`sl:/*,mb: *,ex:*/`", to make javadoc comments work. Also helps for C comments that start with "`/*****`".

CTRL-X CTRL-J Insert mode tag expansion tried to expand to all tags when used after a non-ID character, which can take a very long time. Now limit this to 200 matches. Also used for command-line tag completion.

The OS/2 distribution has been split in two files. It was too big to fit on a floppy. The same runtime archive as for the PC is now used.

In the documentation, items like `<a-z>` have been replaced with `{a-z}` for non-optional arguments. This avoids confusion with key names: `<C-Z>` is a CTRL-Z, not a character between C and Z, that is `{C-Z}`.

Added

added-5.4

Color support for the `iris-ansi` builtin termcap entry. (Tubman)

Included `VisVim` version 1.3a. (Erhardt)

Win32 port for `SNiFF+` interface. (Leherbauer)

Documentation file for sniff interface: `if_sniff.txt`. (Leherbauer)

Included the "`SendToVim`" and "`OpenWithVim`" programs in the `OleVim` directory. To be used with the OLE version of `gvim` under MS-Windows. (Schaller)

Included Exuberant Ctags version 3.2.4 with Eiffel support. (Hiebert)

When a file that is being edited is deleted, give a warning (like when the time stamp changed).

Included newer versions of the HTML-generating Awk and Perl scripts. (Colombo)

Linux console mouse support through "gpm". (Tsindlekht)

Security fix: Disallow changing 'secure' and 'exrc' from a modeline. When 'secure' is set, give a warning for changing options that contain a program name.

Made the Perl interface work with Perl 5.005 and threads. (Verdoolaeye)

When giving an error message for an ambiguous mapping, include the offending mapping. (Roemer)

Command line editing:

- Command line completion of mappings. (Roemer)
- Command line completion for ":function", ":delfunction", ":let", ":call", ":if", etc. (Roemer)
- When using CTRL-D completion for user commands that have "-complete=tag_listfiles" also list the file names. (Madsen)
- Complete the arguments of the ":command" command. (Webb)
- CTRL-R . in command line inserts last inserted text. CTRL-F, CTRL-P, CTRL-W and CTRL-A after CTRL-R are used to insert an object from under the cursor. (Madsen)

Made the text in uganda.txt about copying Vim a bit more clear.

Updated the Vim tutor. Added the "vimtutor" command, which copies the tutor and starts Vim on it. "make install" now also copies the tutor.

In the output of ":clist" the current entry is highlighted, with the 'i' highlighting (same as used for 'incsearch').

For the ":clist" command, you can scroll backwards with "b" (one screenful), "u" (half a screenful) and "k" (one line).

Multi-byte support:

- X-input method for multi-byte characters. And various fixes for multi-byte support. (Nam)
- Hangul input method feature: |hangul|. (Nam)
- Cleaned up configuration of multi-byte support, XIM, fontset and Hangul input. Each is now configurable separately.
- Changed check for GTK_KEYBOARD to HANGUL_KEYBOARD_TYPE. (Nam)
- Added doc/hangulin.txt: Documentation for the Hangul input code. (Nam)
- XIM support for GTK+. (Nam)
- First attempt to include support for SJIS encoding. (Nagano)
- When a double-byte character doesn't fit at the end of the line, put a "~" there and print it on the next line.
- Optimize output of multi-byte text. (Park)
- Win32 IME: preedit style is like over-the-spot. (Nagano)
- Win32 IME: IME mode change now done with ImmSetOpenStatus. (Nagano)
- GUI Athena: file selection dialog can display multi-byte characters. (Nagano)
- Selection reply for XA_TEXT as XA_STRING. (Nagano)

"runtime/macros/diffwin.vim". Mappings to make a diff window. (Campbell)

Added ".obj" to the 'suffixes' option.

Reduced size of syntax/synload.vim by using the ":SynAu" user command.
Automated numbering of Syntax menu entries in menu.vim.
In the Syntax menu, insert separators between syntax names that start with a different letter. (Geddes)

Xterm:

- Clipboard support when using the mouse in an xterm. (Madsen)
- When using the xterm mouse, track dragging of the mouse. Use xterm escape sequences when possible. It is more precise than other methods, but requires a fairly recent xterm version. It is enabled with "xterm2" in 'ttymouse'. (Madsen)
- Check xterm patch level, to set the value of 'ttymouse'. Has only been added to xterm recently (patch level > 95). Uses the new 't_RV' termcap option. Set 'ttymouse' to "xterm2" when a correct response is recognized. Will make xterm mouse dragging work better.
- Support for shifted function keys on xterm. Changed codes for shifted cursor keys to what the xterm actually produces. Added codes for shifted <End> and <Home>.
- Added 't_WP' to set the window position in pixels and 't_WS' to set the window size in characters. Xterm can now move (used for ":winpos") and resize (use for ":set lines=" and ":set columns=").

X11:

- When in Visual mode but not owning the selection, display the Visual area with the VisualNOS group to show this. (Madsen)
- Support for requesting the type of clipboard support. Used for AIX and dtterm. (Wittig)
- Support compound_text selection (even when compiled without multi-byte).

Swap file:

- New variation for naming swap files: Replace path separators into %, place all swap files in one directory. Used when a name in 'dir' ends in two path separators. (Madsen)
- When a swap file is found, show whether it contains modifications or not in the informative message. (Madsen)
- When dialogs are supported, use a dialog to ask the user what to do when a swapfile already exists.

"popup_setpos" in 'mousemodel' option. Allows for moving the cursor when using the right mouse button.

When a buffer is deleted, the selection for which buffer to display instead now uses the most recent entry from the jump list. (Madsen)

When using CTRL-O/CTRL-I, skip deleted buffers.

A percentage is shown in the ruler, when there is room.

Used autoconf 1.13 to generate configure.

Included get_lisp_indent() from Dirk van Deun. Does better Lisp indenting when 'p' flag in 'coptions' is not included.

Made the 2html.vim script quite a bit faster. (based on ideas from Geddes)

Unix:

- Included the name of the user that compiled Vim and the system name it was compiled on in the version message.
- "make install" now also installs the "tools" directory. Makes them available for everybody.
- "make check" now does the same as "make test". "make test" checks for Visual block mode shift, insert, replace and change.

- Speed up comparing a file name with existing buffers by storing the device/inode number with the buffer.
- Added configure arguments "--disable-gtk", "--disable-motif" and "--disable-athena", to be able to disable a specific GUI (when it doesn't work).
- Renamed the configure arguments for disabling the check for specific GUIs. Should be clearer now. (Kahn)
- On a Digital Unix system ("OSF1") check for the curses library before termcap and termcap. (Schild)
- "make uninstall_runtime" will only delete the version-specific files. Can be used to delete the runtime files of a previous version.

Macintosh: (St-Amant)

- Dragging the scrollbar, like it's done for the Win32 GUI. Moved common code from gui_w32.c to gui.c
- Added dialogs and file browsing.
- Resource fork preserved, warning when it will be lost.
- Copy original file attributes to newly written file.
- Set title/notitle bug solved.
- Filename completion improved.
- Grow box limit resize to a char by char size.
- Use of rgb.txt for more colors (but give back bad color).
- Apple menu works (beside the about...).
- Internal border now vim compliant.
- Removing a menu doesn't crash anymore.
- Weak-linking of Python 1.5.1 (only on PPC). Python is supported when the library is available.
- If an error is encountered when sourcing the users .vimrc, the alert box now shows right away with the OK button defaulted. There's no more "Delete"-key sign at the start of each line
- Better management of environment variables. Now \$VIM is calculated only once, not regenerated every time it is used.
- No more CPU hog when in background.
- In a sourced Vim script the Mac file format can be recognized, just like DOS file format is.

When both "unix" and "mac" are present in 'fileformats', prefer "mac" format when there are more CR than NL characters.

When using "mac" fileformat, use CR instead of a NL, because NL is used for NUL. Will preserve all characters in a file. (Madsen)

The DOS install.exe now contains checks for an existing installation. It avoids setting \$VIM and \$PATH again.

The install program for Dos/Windows can now install Vim in the popup menu, by adding two registry keys.

Port to EGCS/mingw32. New Makefile.ming. (Aaron)

DOS 16 bit: Don't include cursor shape stuff. Save some bytes.

TCL support to Makefile.w32. (Duperval)

OS/2: Use argv[0] to find runtime files.

When using "gf" to go to a buffer that has already been used, jump to the line where the cursor last was.

Colored the output of ":tselect" a bit more. Different highlighting between tag name and file name. Highlight field name ("struct:") separately from argument.

Backtick expansion for non-Unix systems. Based on a patch from Aaron.

Allows the use of things like `":n `grep -l test *.c`" and "echo expand(`ls m*`)".`

Check for the 'complete' option when it is set. (Acevedo)
 'd' flag in 'complete' searches for defined names or macros.
 While searching for Insert mode completions in include files and tags files, check for typeahead, so that you can use matches early. (Webb)
 The '.' flag in 'complete' now scans the current buffer completely, ignoring 'nowrapscan'. (Webb)

Added '~' flag to 'whichwrap'. (Acevedo)

When ending the Visual mode (e.g., with ESC) don't grab ownership of the selection.

In a color terminal, "fg" and "bg" can be used as color names. They stand for the "Normal" colors.

A few cscope cleanups. (Kahn)

Included changed vimspell.sh from Schemenauer.

Concatenation of strings in an expression with "." is a bit faster. (Roemer)

The ":redir" command can now redirect to a register: ":redir @r". (Roemer)

Made the output of ":marks" and ":jumps" look similar. When the mark is in the current file, show the text at the mark. Also for ":tags".

When configure finds ftello() and fseeko(), they are used in tag.c (for when you have extremely big tags files).

Configure check for "-F0limit,2000" argument for the compiler. (Borsenkow)

GUI:

- When using ":gui" in a non-GUI Vim, give a clear error message.
- "gvim -v" doesn't start the GUI (if console support is present).
- When in Ex mode, use non-Visual selection for the whole screen.
- When starting with "gvim -f" and using ":gui" in the .gvimrc file, Vim forked anyway. Now the "-f" flag is remembered for ":gui". Added "gui -b" to run gvim in the background anyway.

Motif GUI:

- Check for "-lXp" library in configure (but it doesn't work yet...).
- Let configure check for Lesstif in "/usr/local/Lesstif/Motif*". Changed the order to let a local Motif version override a system standard version.

Win32 GUI:

- When using "-register" or "-unregister" in the non-OLE version, give an error message.
- Use GTK toolbar icons. Make window border look better. Use sizing handles on the lower left&right corners of the window. (Negri)
- When starting an external command with ":%start" and the command can not be executed, give an error message. (Webb)
- Use sizing handles for the grey rectangles below the scrollbars. Can draw toolbar in flat mode now, looks better. (Negri)
- Preparations for MS-Windows 3.1 addition. Mostly changing WIN32 to MSWIN and USE_GUI_WIN32 to USE_GUI_MSWIN. (Negri)

Avoid allocating the same string four times in buflist_findpat(). (Williams)

Set title and icon text with termcap options 't_ts', 't_fs', 't_IS' and

't_IE'. Allows doing this on any terminal that supports setting the title and/or icon text. (Schild)

New 'x' flag in 'comments': Automatically insert the end part when its last character is typed. Helps to close a /* */ comment in C. (Webb)

When expand() has a second argument which is non-zero, don't use 'suffixes' and 'wildignore', return all matches.

'O' flag in 'coptions' When not included, Vim will not overwrite a file, if it didn't exist when editing started but it does exist when the buffer is written to the file. The file must have been created outside of Vim, possibly without the user knowing it. When this is detected after a shell command, give a warning message.

When editing a new file, CTRL-G will show [New file]. When there were errors while reading the file, CTRL-G will show [Read errors].

":wall" can now use a dialog and file-browsing when needed.

Grouped functionality into new features, mainly to reduce the size of the minimal version:

```
+linebreak:      'showbreak', 'breakat' and 'linebreak'
+visualextra:    "I"nsert and "A"ppend in Visual block mode, "c"hange all lines
                  in a block, ">" and "<": Shifting a block, "r": Replacing a
                  Visual area with one character.
+comments:       'comments'
+cmdline_info:   'ruler' and 'showcmd'. Replaces +showcmd.
"+title"         Don't add code to set title or icon for MSDOS, this was not
                  possible anyway.
+cmdline_compl  Disable commandline completion at compile time, except for
                  files, directories and help items.
```

Moved features from a list of function calls into an array. Should save a bit of space.

While entering the body of a function, adjust indent according to "if" and "while" commands.

VMS: Adjusted os_vms.mms a bit according to suggestions from Arpadffy.

The flags in the 'comments' option can now include an offset. This makes it possible to align "/*", "/* xxx" and "/*" comments with the same 'comments' setting. The default value for 'comments' uses this.
Added 'O' flag: Don't use this part for the "O" command. Useful for "set com=s0:* \ -,m0:* \ \ ,ex0:*/"

FileType autocommands recognize ".bak", ".orig" and "~" extensions and remove them to find the relevant extension.

The tutorial for writing a Vim script file has been extended.

Some more highlighting in help files, for items that are not typed literally.

Can use "CTRL-W CTRL-G" like "CTRL-W g".

"make test" for OS/2.

Adjusted configure to automatically use the GUI for BeOS.

5.3.1: When using an autocommand for BufWritePre that changes the name of the buffer, freed memory would be used. (Geddes)

Mac: Compiler didn't understand start of skip_class_name().

Win32 GUI:

- When cancelling the font requester, don't give an error message.
- When a tearoff-menu is open and its menu is deleted, Vim could crash. (Negri)
- There was a problem on Windows 95 with (un)maximizing the window. (Williams)
- when 'mousehide' is set, the mouse would stay hidden when a menu is dropped with the keyboard. (Ralston)
- The tempname() function already created the file. Caused problems when using ":w". Now the file is deleted.
- Cursor disappeared when ending up in the top-left character on the screen after scrolling. (Webb)
- When adding a submenu for a torn-off menu, it was not updated.
- Menu tooltip was using the toolbar tooltip. (Negri)
- Setting 'notitle' didn't remove the title. (Steed)
- Using ":%start cmd" scrolled the screen one line up, and didn't wait for return when the command wasn't found.

Cscope interface: Sorting of matches was wrong. Starting the interface could fail. (Kahn)

Motif GUI: Could not compile with Motif 1.1, because some tear-off functionality was not in #ifdefs.

Configure could sometimes not compile or link the test program for sizeof(int) properly. This caused alignment problems for the undo structure allocations. Added a safety check that SIZEOF_INT is not zero.

Added configure check to test if strings.h can be included after string.h. Some systems can't handle it.

Some systems need both string.h and strings.h included. Adjusted vim.h for that. Removed including string.h from os_unixx.h, since it's already in vim.h. (Savage)

AIX: defining _NO_PROTO in os_unix.h causes a conflict between string.h and strings.h, but after the configure check said it was OK. Also define _NO_PROTO for AIX in the configure check. (Winn)

When closing a window with CTRL-W c, the value of 'hidden' was not taken into account, the buffer was always unloaded. (Negri)

Unix Makefile: "make install" always tried to rename an older executable and remove it. This caused an error message when it didn't exit. Added a check for the existence of an old executable.

The command line for "make install" could get too long, because of the many syntax files. Now first do a "cd" to reduce the length.

On RISCOS and MSDOS, reading a file could fail, because the short filename was used, which can be wrong after a ":%cd".

In the DOS versions, the wrong install.exe was included (required Windows). Now the install.exe version is included that is the same as the Vim version. This also supports long file names where possible.

When recording, and stopping while in Insert mode with CTRL-O q, the CTRL-O would also be recorded.

32bit DOS version: "vim \file", while in a subdirectory, resulted in "new file" for "file" in the local directory, while "\file" did exist. When "file" in the current directory existed, this didn't happen.

MSDOS: Mouse could not go beyond 80 columns in 132 columns mode. (Young)

"make test" failed in the RedHat RPM, because compatible is off by default.

In Insert mode <C-O><C-W><C-W> changes to other window, but the status bars were not updated until another character was typed.

MSDOS: environment options in lowercase didn't work, although they did in the Win32 versions. (Negri)

After ":nohlsearch", a tag command switched highlighting back on.

When using "append" command as the last line in an autocommand, Vim would crash.

RISCOS: The scroll bumpers (?) were not working properly. (Leonard)

"zl" and "zh" could move the cursor, but this didn't set the column in which e.g., "k" would move the cursor.

When doing ":set all&" the value of 'scroll' was not set correctly. This caused an error message when later setting any other number option.

When 'hlsearch' highlighting has been disabled with ":nohlsearch", incremental searching would switch it back on too early.

When listing tags for ":tselect", and using a non-search command, and the last character was equal to the first (e.g., "99"), the last char would not be shown.

When searching for tags with ":tag" Vim would assume that all matches had been found when there were still more (e.g. from another tags file).

Win32: Didn't recognize "c:\" (e.g., in tags file) as absolute path when upper/lowercase was different.

Some xterms (Debian) send <Esc>OH for HOME and <Esc>OF for END. Added these to the builtin-xterm.

In ex mode, any CR was seen as the end of the line. Only a NL should be handled that way. broke ":s/foo/some^Mtext/".

In menu.vim, a vmenu was used to override an amenu. That didn't work, because the system menu file doesn't overwrite existing menus. Added explicit vunmenu to solve this.

Configure check for terminal library could find a library that doesn't work at runtime (Solaris: shared library not found). Added a check that a program with tgoto() can run correctly.

Unix: "echo -n" in the Makefile doesn't work on all systems, causing errors compiling pathdef.c. Replaced it with "tr".

Perl: DO_JOIN was redefined by Perl. Undefined it in the perl files.

Various XIM and multi-byte fixes:

- Fix user cannot see his language while he is typing his language with

- off-the-spot method. (Nagano)
- Fix preedit position using text/edit area (using gui.wid). (Nagano)
- remove 'fix dead key' codes. It was needed since XNFocusWindow was "x11_window", XNFocusWindow is now gui.wid. (Nagano)
- Remove some compile warnings and fix typos. (Namsh)
- For status area, check the gtk+ version while Vim runs. I believe it is better than compile time check. (Namsh)
- Remove one FIXME for gtk+-xim. (Namsh)
- XIM: Dead keys didn't work for Czech. (Vyskovsky)
- Multibyte: If user input only 3byte such as mbl_mb2_eng or eng_mbl_mb2 VIM could convert it to special character. (Nam)
- Athena/Motif with XIM: fix preedit area. (Nam)
- XIM: Composed strings were sometimes ignored. Vim crashed when compose string was longer than 256 bytes. IM's geometry control is fixed. (Nam, Nagano)
- Win32 multi-byte: hollowed cursor width on a double byte char was wrong. (Nagano)
- When there is no GUI, selecting XIM caused compilation problems. Automatically disable XIM when there is no GUI in configure.
- Motif and Athena: When compiled with XIM, but the input method was not enabled, there would still be a status line. Now the status line is gone if the input method doesn't work. (Nam)

Win32: tooltip was not removed when selecting a parent menu (it was when selecting a menu entry). (Negri)

Unix with X: Some systems crash on exit, because of the XtCloseDisplay() call. Removed it, it should not be necessary when exiting.

Win32: Crash on keypress when compiled with Borland C++. (Aaron)

When checking for Motif library files, prefer the same location as the include files (with "include" replaced with "lib") above another entry.

Athena GUI: Changed "XtOffset()" in gui_at_fs.c to "XtOffsetOf()", like it's used in gui_x11.c.

Win32: When testing for a timestamp of a file on floppy, would get a dialog box when the floppy has been removed. Now return with an error. (Negri)

Win32 OLE: When forced to come to the foreground, a minimized window was still minimized, now it's restored. (Zivkov)

There was no check for a positive 'shiftwidth'. A negative value could cause a hangup, a zero value a crash.

Athena GUI: horizontal scrollbar wasn't updated correctly when clicking right or left of the thumb.

When making a Visual-block selection in one window, and trying to scroll another, could cause errors for accessing non-existent line numbers.

When 'matchpairs' contains "`:'", jumping from the ` to the ' didn't work properly.

Changed '\'"' to '"' to make it compatible with old C compilers.

The command line expansion for mappings caused a script with a TAB between lhs and rhs of a map command to fail. Assume the TAB is to separate lhs and rhs when there are no mappings to expand.

When editing a file with very long lines with 'scrolloff' set, "j" would

sometimes end up in a line which wasn't displayed.

When editing a read-only file, it was completely read into memory, even when it would not fit. Now create a swap file for a read-only file when running out of memory while reading the file.

When using `":set cino={s,e-s"`, a line after `}` else `{` was not indented properly. Also added a check for this in `test3.in`.

The Hebrew mapping for the command line was remembered for the next command line. That isn't very useful, a command is not Hebrew. (Kol)

When completing file names with embedded spaces, like `"Program\ files"`, this didn't work. Also for user commands. Moved `backslash_half()` down to `mch_expandpath()`.

When using `"set mouse=a"` in Ex mode, mouse events were handled like typed text. Then typing `"quit"` screwed up the mouse behavior of the xterm.

When repeating an insert with `."` that contains a CTRL-Y, a number 5 was inserted as `"053"`.

Yanking a Visual area, with the cursor past the line, didn't move the cursor back onto the line. Same for `"~"`, `"u"`, `"U"` and `"g?"`

Win32: Default for `'grepgrg'` could be `"findstr /n"` even though there is no `findstr.exe` (Windows 95). Check if it exists, and fall back to `"grep -n"` if it doesn't.

Because `gui_mouse_moved()` inserted a leftmouse click in the input buffer, remapping a leftmouse click caused strange effects. Now Insert another code in the input buffer. Also insert a leftmouse release, to avoid the problem with `":map <LeftMouse> l"` that the next release is seen as the release for the focus click.

With `'wrap'` on, when using a line that doesn't fit on the screen, if the start of the Visual area is before the start of the screen, there was no highlighting. Also, `'showbreak'` doesn't work properly.

DOS, Win32: A pattern `"[0-9]\+"` didn't work in autocommands.

When creating a swap file for a buffer which isn't the current buffer, could get a mixup of short file name, resulting in a long file name when a short file name was required. `makeswapname()` was calling `modname()` instead of `buf_modname()`.

When a function caused an error, and the error message was very long because of recursiveness, this would cause a crash.

`'suffixes'` were always compared with matching case. For MS-DOS, Win32 and OS/2 case is now ignored.

The use of `CHARBITS` in `regexp.c` didn't work on some Linux. Don't use it.

When generating a script file, `'cpo'` was made empty. This caused backslashes to disappear from mappings. Set it to `"B"` to avoid that.

Lots of typos in the documentation. (Campbell)

When editing an existing (hidden) buffer, jump to the last used cursor position. (Madsen)

On a Sun the xterm screen was not restored properly when suspending. (Madsen)

When \$VIMINIT is processed, 'nocompatible' was only set after processing it.

Unix: Polling for a character wasn't done for GPM, Sniff and Xterm clipboard all together. Cleaned up the code for using select() too.

When executing external commands from the GUI, some typeahead was lost. Added some code to regain as much typeahead as possible.

When the window height is 5 lines or fewer, <PageDown> didn't use a one-line overlap, while <PageUp> does. Made sure that <PageUp> uses the same overlap as <PageDown>, so that using them both always displays the same lines.

Removed a few unused functions and variables (found with lint).

Dictionary completion didn't use 'infercase'. (Raul)

Configure tests failed when the Perl library was not in LD_LIBRARY_PATH. Don't use the Perl library for configure tests, add it to the linker line only when linking Vim.

When using ncurses/terminfo, could get a 't_Sf' and 't_Sb' termcap entry that has "%d" instead of "%p1%d". The light background colors didn't work then.

GTK GUI with ncurses: Crashed when starting up in tputs(). Don't use tputs() when the GUI is active.

Could use the ":let" command to set the "count", "shell_error" and "version" variables, but that didn't work. Give an error message when trying to set them.

On FreeBSD 3.0, tclsh is called tclsh8.0. Adjusted configure.in to find it.

When Vim is linked with -lncurses, but python uses -ltermcap, this causes trouble: "OOPS". Configure now removes the -ltermcap.

:@ and :* didn't work properly, because the " was recognized as the start of a comment.

Win32s GUI: Minimizing the console where a filter command runs in caused trouble for detecting that the filter command has finished. (Negri)

After executing a filter command from an xterm, the mouse would be disabled. It would work again after changing the mode.

Mac GUI: Crashed in newenv(). (St-Amant)

The menus and mappings in mswin.vim didn't handle text ending in a NL correctly. (Acevedo)

The ":k" command didn't check if it had a valid argument or extra characters. Now give a meaningful error message. (Webb)

On SGI, the signal function doesn't always have three arguments. Check for struct sigcontext to find out. Might still be wrong...

Could crash when using 'hlsearch' and search pattern is "^".

When search patterns were saved and restored, status of no_hlsearch was not also saved and restored (from ":nohlsearch" command).

When using `setline()` to make a line shorter, the cursor position was not adjusted.

MS-DOS and Win95: When trying to edit a file and accidentally adding a slash or backslash at the end, the file was deleted. Probably when trying to create the swap file. Explicitly check for a trailing slash or backslash before trying to read a file.

X11 GUI: When starting the GUI failed and received a deadly signal while setting the title, would lock up when trying to exit, because the title is reset again. Avoid using `mch_settitle()` recursively.

X11 GUI: When starting the GUI fails, and then trying it again, would crash, because `argv[]` has been freed and `x11_display` was reset to `NULL`.

Win32: When `$HOME` was set, would put "`~user`" in the swap file, which would never compare with a file name, and never cause the attention message. Put the full path in the swap file instead.

Win32 console: There were funny characters at the end of the "`vim -r`" swap files message (direct output of `CR CR LF`).

DOS 32 bit: "`vim -r`" put the text at the top of the window.

GUI: With '`mousefocus`' set, got mouse codes as text with "`!sleep 100`" or "`Q`".

Motif and Win32 GUI: When changing '`guifont`' to a font of the same size the screen wasn't redrawn.

Unix: When using "`:make`", jumping to a file `b.c`, which is already open as a symbolic link `a.c`, opened a new buffer instead of using the existing one.

Inserting text in the current buffer while sourcing the `.vimrc` file would cause a crash or hang. The memfile for the current buffer was never allocated. Now it's allocated as soon as something is written in the buffer.

DOS 32 bit: "`lightblue`" background worked for text, but not drawn parts were black.

DOS: Colors of console were not restored upon exiting.

When recording, with '`cmdheight`' set to 2 and typing `Esc>` in Insert mode caused the "recording" message to be doubled.

Spurious "file changed" messages could happen on Windows. Now tolerate a one second difference, like for Linux.

GUI: When returning from Ex mode, scrollbars were not updated.

Win32: Copying text to the clipboard containing a `<CR>`, pasting it would replace it with a `<NL>` and drop the next character.

Entering a double byte character didn't work if the second byte is in `[xXo0]`. (Eric Lee)

`vim_realloc` was both defined and had a prototype in `proto/misc2.pro`. Caused conflicts on Solaris.

A pattern in an autocommand was treated differently on DOS et al. than on Unix. Now it's the same, also when using backslashes.

When using `<Tab>` twice for command line completion, without a match, the `<Tab>`

would be inserted. (Negri)

Bug in MS-Visual C++ 6.0 when compiling ex_docmd.c with optimization. (Negri)

Testing the result of mktemp() for failure was wrong. Could cause a crash. (Peters)

GUI: When checking for a ".gvimrc" file in the current directory, didn't check for a "_gvimrc" file too.

Motif GUI: When using the popup menu and then adding an item to the menu bar, the menu bar would get very high.

Mouse clicks and special keys (e.g. cursor keys) quit the more prompt and dialogs. Now they are ignored.

When at the more-prompt, xterm selection didn't work. Now use the 'r' flag in 'mouse' also for the more-prompt.

When selecting a Visual area of more than 1023 lines, with 'guioptions' set to "a", could mess up the display because of a message in free_yank(). Removed that message, except for the Amiga.

Moved auto-selection from ui_write() to the screen update functions. Avoids unexpected behavior from a low-level function. Also makes the different feedback of owning the selection possible.

Vi incompatibility: Using "i<CR>" in an indent, with 'ai' set, used the original indent instead of truncating it at the cursor. (Webb)

":echo x" didn't stop at "q" for the more prompt.

Various fixes for Macintosh. (St-Amant)

When using 'selectmode' set to "exclusive", selecting a word and then using CTRL-] included the character under the cursor.

Using ":let a:name" in a function caused a crash. (Webb)

When using ":append", an empty line didn't scroll up.

DOS etc.: A file name starting with '!' didn't work. Added '!' to default for 'isfname'.

BeOS: Compilation problem with prototype of skip_class_name(). (Price)

When deleting more than one line, e.g., with "de", could still use "U" command, which didn't work properly then.

Amiga: Could not compile ex_docmd.c, it was getting too big. Moved some functions to ex_cmds.c.

The expand() function would add a trailing slash for directories.

Didn't give an error message when trying to assign a value to an argument of a function. (Webb)

Moved including sys/ptem.h to after termios.h. Needed for Sinix.

OLE interface: Don't delete the object in CVimCF::Release() when the reference count becomes zero. (Cordell)

VisVim could still crash on exit. (Erhardt)

"case a: case b:" (two case statements in one line) aligned with the second case. Now it uses one 'sw' for indent. (Webb)

Font initialisation wasn't right for Athena/Motif GUI. Moved the call to highlight_gui_started() gui_mch_init() to gui_mch_open(). (Nam)

In Replace mode, backspacing over a TAB before where the replace mode started while 'sts' is different from 'ts', would delete the TAB.

Win32 console: When executing external commands and switching between the two console screens, Vim would copy the text between the buffers. That caused the screen to be messed up for backtick expansion.

":winpos -1" then ":winpos" gave wrong error message.

Windows commander creates files called c:\tmp\swc\abc.txt. Don't remove the backslash before the \$. Environment variables were not expanded anyway, because of the backslash before the dollar.

Using "-=" with ":set" could remove half a part when it contains a "\", ". E.g., ":set path+=a\\,b" and then "set path-=b" removed ",b".

When Visually selecting lines, with 'selection' set to "inclusive", including the last char of the line, "<<" moved an extra line. Also for other operators that always work on lines.

link.sh changed "-lnsl_s" to "_s" when looking for "nsl" to be removed. Now it only remove whole words.

When jumped to a mark or using "fz", and there is an error, the current column was lost. E.g. when using "\$fzj".

The "g CTRL-G" command could not be interrupted, even though it can take a long time.

Some terminals do have <F4> and <xF4>. <xF4> was always interpreted as <F4>. Now map <xF4> to <F4>, so that the user can override this.

When compiling os_win32.c with MIN_FEAT the apply_autocmds() should not be used. (Aaron)

This autocommand looped forever: ":au FileChangedShell * nested e <afile>" Now FileChangeShell never nests. (Roemer)

When evaluating an ":elseif" that was not going to matter anyway, ignore errors. (Roemer)

GUI Lesstif: Tearoff bar was the last item, instead of the first.

GUI Motif: Colors of tear-off widgets was wrong when 't' flag added to 'guioptions' afterwards. When 't' flag in 'guioptions' is excluded, would still get a tearoff item in a new menu.

An inode number can be "long long". Use ino_t instead of long. Added configure check for ino_t.

Binary search for tags was using a file offset "long" instead of "off_t".

Insert mode completion of tags was not using 'ignorecase' properly.

In Insert mode, the <xFn> keys were not properly mapped to <Fn> for the

default mappings. Also caused errors for ":mkvimrc" and ":mksession".

When jumping to another window while in Insert mode, would get the "warning: changing readonly file" even when not making a change.

A '(' or '{' inside a trailing "/*" comment would disturb C-indenting. When using two labels below each other, the second one was not indented properly. Comments could mess up C-indenting in many places. (Roemer)

Could delete or redefine a function while it was being used. Could cause a crash.

In a function it's logical to prepend "g:" to a system variable, but this didn't work. (Roemer)

Hangul input: Buffer would overflow when user inputs invalid key sequence. (Nam)

When BufLoad or BufEnter autocommands change the topline of the buffer in the window, it was overruled and the cursor put halfway the window. Now only put the cursor halfway if the autocommands didn't change the topline.

Calling exists("&option") always returned 1. (Roemer)

Win32: Didn't take actually available memory into account. (Williams)

White space after an automatically inserted comment leader was not removed when 'ai' is not set and <CR> hit just after inserting it. (Webb)

A few menus had duplicated accelerators. (Roemer)

Spelling errors in documentation, quite a few "the the". (Roemer)

Missing prototypes for Macintosh. (Kielhorn)

Win32: When using 'shellquote' or 'shellxquote', the "!start cmd" wasn't executed in a disconnected process.

When resizing the window, causing a line before the cursor to wrap or unwrap, the cursor was displayed in the wrong position.

There was quite a bit of dead code when compiling with minimal features.

When doing a ":%s///" command that makes lines shorter, such that lines above the final cursor position no longer wrap, the cursor position was not updated.

get_id_list() could allocate an array one too small, when a "contains=" item has a wildcard that matches a group name that is added just after it. E.g.: "contains=a.*b,axb". Give an error message for it.

When yanking a Visual area and using the middle mouse button -> crash. When clipboard doesn't work, now make "*" always use "".

Win32: Using ":buf a\ b\file" didn't work, it was interpreted as "ab\file".

Using ":ts ident", then hit <CR>, with 'cmdheight' set to 2: command line was not cleared, the tselect prompt was on the last but one line.

mksession didn't restore the cursor column properly when it was after a tab. Could not get all windows back when using a smaller terminal screen. Didn't restore all windows when "winsize" was not in 'sessionoptions'. (Webb)

Command line completion for ":buffer" depended on 'ignorecase' for Unix, but

not for DOS et al. Now don't use 'ignorecase', but let it depend on whether file names are case sensitive or not (like when expanding file names).

Win32 GUI: (Negri)

- Redrawing the background caused flicker when resizing the window. Removed `_OnEraseBG()`. Removed `CS_HREDRAW` and `CS_VREDRAW` flags from the `sndclass.style`.
- Some parts of the window were drawn in grey, instead of using the color from the user color scheme.
- Dropping a file on `gvim` didn't activate the window.
- When there is no menu ('guioptions' excludes 'm'), never use the ALT key for it.

GUI: When resizing the window, would make the window height a bit smaller. Now round off to the nearest char cell size. (Negri)

In Vi the `)` and `(` commands don't stop at a single space after a dot. Added 'J' flag in 'coptions' to make this behave Vi compatible. (Roemer)

When saving a session without any buffers loaded, there would be a `:normal` command without arguments in it. (Webb)

Memory leaks fixed: (Madsen)

- `eval.c`: forgot to release `func` structure when `func` deleted
- `ex_docmd.c`: forgot to release string after `"<sfile>"`
- `misc1.c`: leak when completion pattern had no matches.
- `os_unix.c`: forgot to release `regexp` after file completions

Could crash when using a buffer without a name. (Madsen)

Could crash when doing file name completion, because of `backslash_half()`. (Madsen)

`:@a` would do mappings on register a, which is not Vi compatible. (Roemer)

`:g/foo.*()/s/foobar/_&/gc` worked fine, but then `"n"` searched for "foobar" and displayed `"/foo.*()"`. (Roemer)

OS/2: `get_cmd_output()` was not included. Didn't check for `$VIM/.vimrc` file.

Command line completion of options didn't work after `"+="` and `"-="`.

Unix configure: Test for `memmove()/bcopy()/memcpy()` tried redefining these functions, which could fail if they are defined already. Use `mch_memmove()` to redefine.

Unix: `:let a = expand("`xterm`&")` started an xterm asynchronously, but `:let a = expand("`xterm&`")` generated an error message, because the redirection was put after the `'&'`.

Win32 GUI: Dialog buttons could not be selected properly with cursor keys, when the default is not the first button. (Webb)

The "File has changed since editing started" (when regaining focus) could not always be seen. (Webb)

When starting with "ex filename", the file message was overwritten with the "entering Ex mode" message.

Output of `:tselect` listed name of file directly from the tags file. Now it is corrected for the position of the tags file.

When 'backspace' is 0, could backspace over autoindent. Now it is no longer

allowed (Vi compatible).

In Replace mode, when 'noexpandtab' and 'smarttab' were set, and inserting Tabs, backspacing didn't work correctly for Tabs inserted at the start of the line (unless 'sts' was set too). Also, when replacing the first non-blank after which is a space, rounding the indent was done on the first non-blank instead of on the character under the cursor.

When 'sw' at 4, 'ts' at 8 and 'smarttab' set: When a tab was appended after four spaces (they are replaced with a tab) couldn't backspace over the tab.

In Insert mode, with 'bs' set to 0, couldn't backspace to before autoindent, even when it was removed with CTRL-D.

When repeating an insert command where a <BS>, <Left> or other key causes an error, would flush buffers and remain in Insert mode. No longer flush buffers, only beep and continue with the insert command.

Dos and Win32 console: Setting t_me didn't work to get another color. Made this works backwards compatible.

For Turkish (LANG = "tr") uppercase 'i' is not an 'I'. Use ASCII uppercase translation in vim_strup() to avoid language problems. (Komur)

Unix: Use usleep() or nanosleep() for mch_delay() when available. Hopefully this avoids a hangup in select(0, ..) for Solaris 2.6.

Vim would crash when using a script file with 'let &sp = "| tee"', starting vim with "vim -u test", then doing ":set sp=". The P_WAS_SET flag wasn't set for a string option, could cause problems with any string option.

When using "cmd | vim -", stdin is not a terminal. This gave problems with GPM (Linux console mouse) and when executing external commands. Now close stdin and re-open it as a copy of stderr.

Syntax highlighting: A "nextgroup" item was not properly stored in the state list. This caused missing of next groups when not redrawing from start to end, but starting halfway.

Didn't check for valid values of 'ttymouse'.

When executing an external command from the GUI, waiting for the child to terminate might not work, causing a hang. (Parmelan)

"make uninstall" didn't delete the vimrc_example.vim and gvimrc_example.vim files and the vimtutor.

Win32: "expand("%p:h)") with no buffer name removed the directory name. "fnamemodify("", ":p)" did not add a trailing slash, fname_case() removed it.

Fixed: When 'hlsearch' was set and the 'c' flag was not in 'coptions': highlighting was not correct. Now overlapping matches are handled correctly.

Athena, Motif and GTK GUI: When started without focus, cursor was shown as if with focus.

Don't include 'shellpipe' when compiled without quickfix, it's not used.
Don't include 'dictionary' option when compiled without the +insert_expand feature.
Only include the 'shelltype' option for the Amiga.

When making a change to a line, with 'hlsearch' on, causing it to wrap, while

executing a register, the screen would not be updated correctly. This was a generic problem in `update_screenline()` being called while `must_redraw` is `VALID`.

Using `":bdelete"` in a `BufUnload` autocommand could cause a crash. The window height was added to another window twice in `close_window()`.

Win32 GUI: When removing a menu item, the tearoff wasn't updated. (Negri)

Some performance bottlenecks removed. Allocating memory was not efficient. For Win32 checking for available memory was slow, don't check it every time now. On NT obtaining the user name takes a long time, cache the result (for all systems).

`fnamemodify()` with an argument `":~:."` or `":::~~"` didn't work properly.

When editing a new file and exiting, the marks for the buffer were not saved in the `viminfo` file.

`":confirm only"` didn't put up a dialog.

These text objects didn't work when 'selection' was "exclusive": `va(vi(va{ vi{ va< vi< vi[va[`.

The dialog for writing a readonly file didn't have a valid default. (Negri)

The line number used for error messages when sourcing a file was reset when modelines were inspected. It was wrong when executing a function.

The file name and line number for an error message wasn't displayed when it was the same as for the last error, even when this was long ago. Now reset the name/lnum after a hit-enter prompt.

In a session file, a "%" in a file name caused trouble, because `fprintf()` was used to write it to the file.

When skipping statements, a mark in an address wasn't skipped correctly: `"ka|if 0|'ad|else|echo|endif"`. (Roemer)

`":wall"` could overwrite a not-edited file without asking.

GUI: When `$DISPLAY` was not set or starting the GUI failed in another way, the console mode then started with wrong colors and skipped initializations. Now do an early check if the GUI can be started. Don't source the `menu.vim` or `gvimrc` when it will not. Also do normal terminal initializations if the GUI might not start.

When using a `BufEnter` autocommand to position the cursor and scroll the window, the cursor was always put at the last used line and halfway the window anyhow.

When 'wildmode' was set to "longest,list:full", `":e *.c<Tab><Tab>"` didn't list the matches. Also avoid that listing after a "longest" lists the wrong matches when the first expansion changed the string in front of the cursor.

When using `":insert"`, `":append"` or `":change"` inside a while loop, was not able to break out of it with a CTRL-C.

Win32: `":e ."` took an awful long time before an error message when used in `"C:\"`. Was caused by adding another backslash and then trying to get the full name for `"C:\\"`.

":winpos -10 100" was working like ":winpos -10 -10", because a pointer was not advanced past the '-' sign.

When obtaining the value of a hidden option, would give an error message. Now just use a zero value.

OS/2: Was using argv[0], even though it was not a useful name. It could be just "vim", found in the search path.

Xterm: ":set columns=78" didn't redraw properly (when lines wrap/unwrap) until after a delay of 'updatetime'. Didn't check for the size-changed signal.

'scrollbind' didn't work in Insert mode.

Horizontal scrollbinding didn't always work for "0" and "\$" commands (e.g., when 'showcmd' was off).

When compiled with minimal features but with GUI, switching on the mouse in an xterm caused garbage, because the mouse codes were not recognized. Don't enable the mouse when it can't be recognized. In the GUI it also didn't work, the arguments to the mouse code were not interpreted.

When 'showbreak' used, in Insert mode, when the cursor is just after the last character in the line, which is also the in the rightmost column, the cursor position would be like the 'showbreak' string is shown, but it wasn't.

Autocommands could move the cursor in a new file, so that CTRL-W i didn't show the right line. Same for when using a filemark to jump to another file.

When redefining the argument list, the title used for other windows could be showing the wrong info about the position in the argument list. Also update this for a ":split" command without arguments.

When editing file 97 of 13, ":Next" didn't work. Now it goes to the last file in the argument list.

Insert mode completion (for dictionaries or included files) could not be interrupted by typing an <Esc>. Could get hit-enter prompt after line completion, or whenever the informative message would get too long.

When using the ":edit" command to re-edit the same file, an autocommand to jump to the last cursor position caused the cursor to move. Now set the last used cursor position to avoid this.

When 'comments' has a part that starts with white space, formatting the comment didn't work.

At the ":tselect" prompt Normal mode mappings were used. That has been disabled.

When 'selection' is not "old", some commands still didn't allow the cursor past the end-of-line in Visual mode.

Athena: When a menu was deleted, it would appear again (but not functional) when adding another menu. Now they don't reappear anymore (although they are not really deleted either).

Borland C++ 4.x had an optimizer problem in fill_breakat_flags(). (Negri)

"ze" didn't work when 'number' was on. (Davis)

Win32 GUI: Intellimouse code didn't work properly on Windows 98. (Robinson)

A few files were including proto.h a second time, after vim.h had already done that, which could cause problems with the vim_realloc() macro.

Win32 console: <M-x> or ALT-x was not recognized. Also keypad '+', '-' and '*'. (Negri)

MS-DOS: <M-x> didn't work, produced a two-byte code. Now the alphabetic and number keys work. (Negri)

When finding a lot of matches for a tag completion, the check for avoiding double matches could take a lot of time. Add a line_breakcheck() to be able to interrupt this. (Deshpande)

When the command line was getting longer than the screen, the more-prompt would be given regularly, and the cursor position would be wrong. Now only show the part of the command line that fits on the screen and force the cursor to be positioned on the visible part. There can be text after the cursor which isn't editable.

At the more prompt and with the console dialog, a cursor key was interpreted as <Esc> and OA. Now recognize special keys in get_keystroke(). Ignore mouse and scrollbar events.

When typing a BS after inserting a middle comment leader, typing the last char of the end comment leader still changed it into the end comment leader. (Webb)

When a file system is full, writing to a swap file failed. Now first try to write one block to the file. Try next entry in 'dir' if it fails.

When "~" is in 'whichwrap', doing "~" on last char of a line didn't update the display.

Unix: Expanding wildcards for ":file {\}" didn't work, because "\" was translated to "]" before the shell got it. Now don't remove backslashes when wildcards are going to be expanded.

Unix: ":e /tmp/\$uid" didn't work. When expanding environment variables in a file name doesn't work, use the shell to expand the file name. ":e /tmp/\$tty" still doesn't work though.

"make test" didn't always work on DOS/Windows for test30, because it depended on the external "echo" command.

The link.sh script used "make" instead of \$MAKE from the Makefile. Caused problems for generating pathdef.c when "make" doesn't work properly.

On versions that can do console and GUI: In the console a typed CSI code could cause trouble.

The patterns in expression evaluation didn't ignore the 'l' flag in 'coptions'. This broke the working of <CR> in the options window.

When 'hls' off and 'ai' on, "O<Esc>" did remove the indent, but it was still highlighted red for trailing space.

Win32 GUI: Dropping an encrypted file on a running gvim didn't work right. Vim would loop while outputting "*" characters. vgetc() was called recursively, thus it returns NUL. Added safe_vgetc(), which reads input directly from the user in this situation.

While reading text from stdin, only an empty screen was shown. Now show that Vim is reading from stdin.

The cursor shape wasn't set properly when returning to Insert mode, after using a CTRL-O /asdf command which fails. It would be OK after a few seconds. Now it's OK right away.

The 'isfname' default for DOS/Windows didn't include the '@' character. File names that contained "dir\@file" could not be edited.

Win32 console: <C-S-Left> could cause a crash when compiled with Borland or egcs. (Aaron)

Unix and VMS: "#if HAVE_DIRENT_H" caused problems for some compilers. Use "#ifdef HAVE_DIRENT_H" instead. (Jones)

When a matching tag is in the current file but has a search pattern that doesn't match, the cursor would jump to the first line.

Unix: Dependencies for pty.c were not included in Makefile. Dependency of ctags/config.h was not included (only matters for parallel make).

Removed a few Uninitialized Memory Reads (potential crashes). In do_call() calling clear_var() when not evaluating. In win32_expandpath() and dos_expandpath() calling backslash_half() past the end of a file name.

Removed memory leaks: Set_vim_var_string() never freed the value. The next_list for a syntax keyword was never freed.

On non-Unix systems, using a file name with wildcards without a match would silently fail. E.g., ":e *.sh". Now give a "No match" error message.

The life/life.mac, urm/urm.mac and hanoi/hanoi.mac files were not recognized as Vim scripts. Renamed them to *.vim.

[Note: some numbered patches are not relevant when upgrading from version 5.3, they have been removed]

Patch 5.4m.1

Problem: When editing a file with a long name, would get the hit-enter prompt, even though all settings are such that the name should be truncated to avoid that. filemess() was printing the file name without truncating it.

Solution: Truncate the message in filemess(). Use the same code as for msg_trunc_attr(), which is moved to the new function msg_may_trunc().

Files: src/message.c, src/proto/message.pro, src/fileio.c

Patch 5.4m.3

Problem: The Motif libraries were not found by configure for Digital Unix.

Solution: Add "/usr/shlib" to the search path. (Andy Kahn)

Files: src/configure.in, src/configure

Patch 5.4m.5

Problem: Win32 GUI: When using the Save-As menu entry and selecting an existing file in the file browser, would get a dialog to confirm overwriting twice. (Ed Krall)

Solution: Removed the dialog from the file browser. It would be nicer to set the "forceit" flag and skip Vim's ":confirm" dialog, but it requires quite a few changes to do that.

Files: src/gui_w32.c

Patch 5.4m.6

Problem: Win32 GUI: When reading text from stdin, e.g., "cat foo | gvim -", a message box would pop up with "-stdin-" (when exiting). (Michael

Schaap)
Solution: Don't switch off termcap mode for versions that are GUI-only.
They use another terminal to read from stdin.
Files: src/main.c, src/fileio.c

Patch 5.4m.7

Problem: Unix: running configure with --enable-gtk-check,
--enable-motif-check, --enable-athena-check or --enable-gtktest
had the reverse effect. (Thomas Koehler)
Solution: Use \$enable_gtk_check variable correctly in AC_ARG_ENABLE().
Files: src/configure.in, src/configure

Patch 5.4m.9

Problem: Multi-byte: With wrapping lines, the cursor was sometimes 2
characters to the left. Syntax highlighting was wrong when a
double-byte character was split for a wrapping line. When
'showbreak' was on the splitting also didn't work.
Solution: Adjust getvcol() and win_line(). (Chong-Dae Park)
Files: src/charset.c, src/screen.c

Patch 5.4m.11

Problem: The ":call" command didn't check for illegal trailing characters.
(Stefan Roemer)
Solution: Add the check in do_call().
Files: src/eval.c

Patch 5.4m.13

Problem: With the ":s" command:
1. When performing a substitute command, the mouse would be
disabled and enabled for every substitution.
2. The cursor position could be beyond the end of the line.
Calling line_breakcheck() could try to position the cursor,
which causes a crash in the Win32 GUI.
3. When using ":s" in a ":g" command, the cursor was not put on
the first non-white in the line.
4. There was a hit-enter prompt when confirming the substitution
and the replacement was a bit longer.
Solution: 1. Only disable/enable the mouse when asking for confirmation.
2. Always put the cursor on the first character, it is going to be
moved to the first non-blank anyway.
Don't use the cursor position in gui_mch_draw_hollow_cursor(),
get the character from the screen buffer.
3. Added global_need_beginline flag to call beginline() after ":g"
has finished all substitutions.
4. Clear the need_wait_return flag after prompting the user.
Files: src/ex_cmds.c, src/gui_w32.c

Patch 5.4m.14

Problem: When doing "vim xxx", ":opt", ":only" and then ":e xxx" we end
up with two swapfiles for "xxx". That is caused by the ":bdel"
command which is executed when unloading the option-window.
Also, there was no check if closing a buffer made the new one
invalid, this could cause a crash.
Solution: When closing a buffer causes the current buffer to be deleted,
use the new buffer to replace it. Also detect that the new buffer
has become invalid as a side effect of closing the current one.
Make autocommand that calls ":bdel" in optwin.vim nested, so that
the buffer loading it triggers also executes autocommands.
Also added a test for this in test13.
Files: runtime/optwin.vim, src/buffer.c, src/ex_cmds.c, src/globals.h
src/testdir/test13.in, src/testdir/test13.ok

Patch 5.4m.15

Problem: When using a BufEnter autocommand to reload the syntax file, conversion to HTML caused a crash. (Sung-Hyun Nam)

Solution: When using ":syntax clear" the current stack of syntax items was not cleared. This will cause memory to be used that has already been freed. Added call to invalidate_current_state() in syntax_clear().

Files: src/syntax.c

Patch 5.4m.17

Problem: When omitting a ')' in an expression it would not be seen as a failure.
When detecting an error inside (), there would be an error message for a missing ')' too.
When using ":echo 1|echo 2" there was no error message. (Roemer)
When using ":exe 1+" there was no error message.
When using ":return 1+" there was no error message.

Solution: Fix do_echo(), do_execute() and do_return() to give an error message when eval1() returns FAIL.
Fix eval6() to handle trailing ')' correctly and return FAIL when it's missing.

Files: src/eval.c

Patch 5.4m.18

Problem: When using input() from inside an expression entered with "CTRL-R =" on the command line, there could be a crash. And the resulting command line was wrong.

Solution: Added getcmdline_prompt(), which handles recursive use of getcmdline() correctly. It also sets the command line prompt.
Removed cmdline_prompt(). Also use getcmdline_prompt() for getting the crypt key in get_crypt_key().

Files: src/proto/ex_getln.pro, src/ex_getln.c, src/eval.c, src/misc2.c

Patch 5.4m.21

Problem: When starting up, the screen structures were first allocated at the minimal size, then initializations were done with Rows possibly different from screen_Rows. Caused a crash in rare situations (GTK with XIM and fontset).

Solution: Call screenalloc() in main() only after calling ui_get_winsize(). Also avoids a potential delay because of calling screenclear() while "starting" is non-zero.

Files: src/main.c

Patch 5.4m.22

Problem: In the GUI it was possible that the screen was resized and the screen structures re-allocated while redrawing the screen. This could cause a crash (hard to reproduce). The call sequence goes through update_screen() .. syntax_start() .. ui_breakcheck() .. gui_resize_window() .. screenalloc().

Solution: Set updating_screen while redrawing. If the window is resized remember the new size and handle it only after redrawing is finished.
This also fixes that resizing the screen while still redrawing (slow syntax highlighting) would not work properly.
Also disable display_hint, it was never used.

Files: src/globals.h, src/gui.c, src/screen.c, src/proto/gui.pro

Patch 5.4m.23

Problem: When using expand("<word>") when there was no word under the cursor, would get an error message. Same for <WORD> and <file>.

Solution: Don't give an error message, return an empty string.

Files: src/eval.c

Patch 5.4m.24

Problem: ":help \|" didn't find anything. It was translated to "/\|".
Solution: Translate "\|" into "\\bar". First check the table for specific translations before checking for "\x".
Files: src/ex_cmds.c

Patch 5.4m.25

Problem: Unix: When using command line completion on files that contain '''', '''' or '|' the file name could not be used.
Adding this file name to the Buffers menu caused an error message.
Solution: Insert a backslash before these three characters.
Adjust Mungename() function to insert a backslash before '|'.
Files: src/ex_getln.c, runtime/menu.vim

Patch 5.4m.26

Problem: When using a mapping of two function keys, e.g., <F1><F1>, and only the first char of the second key has been read, the mapping would not be recognized. Noticed on some Unix systems with xterm.
Solution: Add 'K' flag to 'coptions' to wait for the whole key code, even when halfway a mapping.
Files: src/option.h, src/term.c

Patch 5.4m.27

Problem: When making test33 without the lisp feature it hangs. Interrupting the execution of the script then might cause a crash.
Solution: In inchar(), after closing a script, don't use buf[] anymore. closescript() has freed typebuf[] and buf[] might be pointing inside typebuf[].
Avoid that test33 hangs when the lisp feature is missing.
Files: src/getchar.c src/testdir/test33.in

"os2" was missing from the feature list. Useful for has("os2").

BeOS:

- Included patches from Richard Offer for BeOS R4.5.
- menu code didn't work right. Crashed in the Buffers menu. The window title wasn't set. (Offer)

Patch 5.4n.3

Problem: C-indenting was wrong after " } else". The white space was not skipped. Visible when 'cino' has "+l0".
Solution: Skip white space before calling cin_iselse(). (Norbert Zeh)
Files: src/misc1.c

Patch 5.4n.4

Problem: When the 't' flag in 'coptions' is included, after a ":nohlsearch" the search highlighting would not be enabled again after a tag search. (Norbert Zeh)
Solution: When setting the new search pattern in jumpton_tag(), don't restore no_hlsearch.
Files: src/tag.c

Patch 5.4n.5

Problem: When using ":normal" from a CursorHold autocommand Vim hangs. The autocommand is executed down from vgetc(). Calling vgetc() recursively to execute the command doesn't work then.
Solution: Forbid the use of ":normal" when vgetc_busy is set. Give an error message when this happens.
Files: src/ex_docmd.c, runtime/doc/autocmd.txt

Patch 5.4n.6

Problem: "gv" could reselect a Visual that starts and/or ends past the end of a line. (Robert Webb)
Solution: Check that the start and end of the Visual area are on a valid character by calling `adjust_cursor()`.
Files: `src/normal.c`

Patch 5.4n.8

Problem: When a mark was on a non existing line (e.g., when the `.viminfo` was edited), jumping to it caused `ml_get` errors. (Alexey Marinichev).
Solution: Added `check_cursor_lnum()` in `nv_gomark()`.
Files: `src/normal.c`

Patch 5.4n.9

Problem: `":-2` moved the cursor to a negative line number. (Ralf Schandl)
Solution: Give an error message for a negative line number.
Files: `src/ex_docmd.c`

Patch 5.4n.10

Problem: Win32 GUI: At the hit-enter prompt, it was possible to scroll the text. This erased the prompt and made Vim look like it is in Normal mode, while it is actually still waiting for a `<CR>`.
Solution: Disallow scrolling at the hit-enter prompt for systems that use on the fly scrolling.
Files: `src/message.c`

Patch 5.4n.14

Problem: Win32 GUI: When using `':winsize 80 46'` and the height is more than what fits on the screen, the window size was made smaller than asked for (that's OK) and Vim crashed (that's not OK)
Solution: Call `check_winsize()` from `gui_set_winsize()` to resize the windows.
Files: `src/gui.c`

Patch 5.4n.16

Problem: Win32 GUI: The `<F10>` key both selected the menu and was handled as a key hit.
Solution: Apply `'winaltkeys'` to `<F10>`, like it is used for Alt keys.
Files: `src/gui_w32.c`

Patch 5.4n.17

Problem: Local buffer variables were freed when the buffer is unloaded. That's not logical, since options are not freed. (Ron Aaron)
Solution: Free local buffer variables only when deleting the buffer.
Files: `src/buffer.c`

Patch 5.4n.19

Problem: Doing `":e"` (without argument) in an option-window causes trouble. The mappings for `<CR>` and `<Space>` are not removed. When there is another buffer loaded, the swap file for it gets mixed up. (Steve Mueller)
Solution: Also remove the mappings at the `BufUnload` event, if they are still present. When re-editing the same file causes the current buffer to be deleted, don't try editing it. Also added a test for this situation.
Files: `runtime/optwin.vim`, `src/ex_cmds.c`, `src/testdir/test13.in`, `src/testdir/test13.ok`

Patch 5.4n.24

Problem: BeOS: configure never enabled the GUI, because `$with_x` was "no". Unix prototypes caused problems, because `Display` and `Widget` are undefined.

Freeing fonts on exit caused a crash.
 Solution: Only disable the GUI when \$with_x is "no" and \$BEOS is not "yes".
 Add dummy defines for Display and Widget in proto.h.
 Don't free the fonts in gui_exit() for BeOS.
 Files: src/configure.in, src/configure, src/proto.h, src/gui.c.

The runtime/vim48x48.xpm icon didn't have a transparent background. (Schild)

Some versions of the mingw32/egcs compiler didn't have WINBASEAPI defined.
 (Aaron)

VMS:

- mch_setenv() had two arguments instead of three.
- The system vimrc and gvimrc files were called ".vimrc" and ".gvimrc".
 Removed the dot.
- call to RealWaitForChar() had one argument too many. (Campbell)
- WaitForChar() is static, removed the prototype from proto/os_vms.pro.
- Many file accesses failed, because Unix style file names were used.
 Translate file names to VMS style by using vim_fopen().
- Filtering didn't work, because the temporary file name was generated wrong.
- There was an extra newline every 9192 characters when writing a file. Work
 around it by writing line by line. (Campbell)
- os_vms.c contained "# typedef int DESC". Should be "typedef int DESC;".
 Only mattered for generating prototypes.
- Added file name translation to many places. Made easy by defining macros
 mch_access(), mch_fopen(), mch_fstat(), mch_lstat() and mch_stat().
- Set default for 'tagbsearch' to off, because binary tag searching apparently
 doesn't work for VMS.
- make mch_get_host_name() work with /dec and /standard=vaxc. (Campbell)

Patch 5.40.2

Problem: Crash when using "gf" on "file.c://comment here". (Scott Graham)
 Solution: Fix wrong use of pointers in get_file_name_in_path().
 Files: src/window.c

Patch 5.40.3

Problem: The horizontal scrollbar was not sized correctly when 'number' is
 set and 'wrap' not set.
 Athena: Horizontal scrollbar wasn't updated when the cursor was
 positioned with a mouse click just after dragging.
 Solution: Subtract 8 from the size when 'number' set and 'wrap' not set.
 Reset gui.dragged_sb when a mouse click is received.
 Files: src/gui.c

Patch 5.40.4

Problem: When running in an xterm and \$WINDOWID is set to an illegal value,
 Vim would exit with "Vim: Got X error".
 Solution: When using the display which was opened for the xterm clipboard,
 check if xll_window is valid by trying to obtain the window title.
 Also add a check in setup_xterm_clip(), for when using X calls to
 get the pointer position in an xterm.
 Files: src/os_unix.c

Patch 5.40.5

Problem: Motif version with Lesstif: When removing the menubar and then
 using a menu shortcut key, Vim would crash. (raf)
 Solution: Disable the menu mnemonics when the menu bar is removed.
 Files: src/gui_motif.c

Patch 5.40.9

Problem: The DOS install.exe program used the "move" program. That doesn't work on Windows NT, where "move" is internal to cmd.exe.
Solution: Don't use an external program for moving the executables. Use C functions to copy the file and delete the original.
Files: src/dosinst.c

Motif and Athena obtained the status area height differently from GTK. Moved status_area_enabled from global.h to gui_x11.c and call xim_get_status_area_height() to get the status area height.

Patch 5.4p.1

Problem: When using auto-select, and the "gv" command is used, would not always obtain ownership of the selection. Caused by the Visual area still being the same, but ownership taken away by another program.
Solution: Reset the clipboard Visual mode to force updating the selection.
Files: src/normal.c

Patch 5.4p.2

Problem: Motif and Athena with XIM: Typing 3-byte <multibyte><multibyte><space> doesn't work correctly with Ami XIM.
Solution: Avoid using key_sym XK_VoidSymbol. (Nam)
Files: src/multibyte.c, src/gui_x11.c

Patch 5.4p.4

Problem: Win32 GUI: The scrollbar values were reduced for a file with more than 32767 lines. But this info was kept global for all scrollbars, causing a mixup between the windows. Using the down arrow of a scrollbar in a large file didn't work. Because of round-off errors there is no scroll at all.
Solution: Give each scrollbar its own scroll_shift field. When the down arrow is used, scroll several lines.
Files: src/gui.h, src/gui_w32.c

Patch 5.4p.5

Problem: When changing buffers in a BufDelete autocommand, there could be ml_line errors and/or a crash. (Schandl) Was caused by deleting the current buffer.
Solution: When the buffer to be deleted unexpectedly becomes the current buffer, don't delete it. Also added a check for this in test13.
Files: src/buffer.c, src/testdir/test13.in, src/testdir/test13.ok

Patch 5.4p.7

Problem: Win32 GUI: When using 'mousemodel' set to "popup_setpos" and clicking the right mouse button outside of the selected area, the selected area wasn't removed until the popup menu has gone. (Aaron)
Solution: Set the cursor and update the display before showing the popup menu.
Files: src/normal.c

Patch 5.4p.8

Problem: The generated bugreport didn't contain information about \$VIMRUNTIME and whether runtime files actually exist.
Solution: Added a few checks to the bugreport script.
Files: runtime/bugreport.vim

Patch 5.4p.9

Problem: The windows install.exe created a wrong entry in the popup menu. The "%1" was "". The full directory was included, even when the executable had been moved elsewhere. (Ott)

Solution: Double the '%' to get one from printf. Only include the path to
gvim.exe when it wasn't moved and it's not in \$PATH.
Files: src/dosinst.c

Patch 5.4p.10

Problem: Win32: On top of 5.4p.9: The "Edit with Vim" entry sometimes used
a short file name for a directory.
Solution: Change the "%1" to "%L" in the registry entry.
Files: src/dosinst.c

Patch 5.4p.11

Problem: Motif, Athena and GTK: When closing the GUI window when there is a
changed buffer, there was only an error message and Vim would not
exit.
Solution: Put up a dialog, like for ":confirm qa". Uses the code that was
already used for MS-Windows.
Files: src/gui.c, src/gui_w32.c

Patch 5.4p.12

Problem: Win32: Trying to expand a string that is longer than 256
characters could cause a crash. (Steed)
Solution: For the buffer in win32_expandpath() don't use a fixed size array,
allocate it.
Files: src/os_win32.c

MSDOS: Added "-Wall" to Makefile.djg compile flags. Function prototypes for
fname_case() and mch_update_cursor() were missing. "fd" was unused in
mf_sync(). "puiLocation" was unused in myputch(). "newcmd" unused in
mch_call_shell() for DJGPP version.

=====

VERSION 5.5

version-5.5

Version 5.5 is a bug-fix version of 5.4.

Changed

changed-5.5

The DJGPP version is now compiled with "-O2" instead of "-O4" to reduce the
size of the executables.

Moved the src/STYLE file to runtime/doc/develop.txt. Added the design goals
to it.

'backspace' is now a string option. See patch 5.4.15.

Added

added-5.5

Included Exuberant Ctags version 3.3. (Darren Hiebert)

In runtime/mswin.vim, map CTRL-Q to CTRL-V, so that CTRL-Q can be used
everywhere to do what CTRL-V used to do.

Support for decompression of bzip2 files in vimrc_example.vim.

When a patch is included, the patch number is entered in a table in version.c.
This allows skipping a patch without breaking a next one.

Support for mouse scroll wheel in X11. See patch 5.5a.14.

line2byte() can be used to get the size of the buffer. See patch 5.4.35.

The CTRL-R CTRL-O r and CTRL-R CTRL-P r commands in Insert mode are used to insert a register literally. See patch 5.4.48.

Uninstall program for MS-Windows. To be able to remove the registry entries for "Edit with Vim". It is registered to be run from the "Add/Remove programs" application. See patch 5.4.x7.

Fixed

fixed-5.5

When using vimrc_example.vim: An error message when the cursor is on a line higher than the number of lines in the compressed file. Move the autocommand for jumping to the last known cursor position to after the decompressing autocommands.

":mkexrc" and ":mksession" wrote the current value of 'textmode'. That may mark a file as modified, which causes problems. This is a buffer-specific setting, it should not affect all files.

"vim --version" wrote two empty lines.

Unix: The alarm signal could kill Vim. It is generated by the Perl alarm() function. Ignore SIGALRM.

Win32 GUI: Toolbar still had the yellow bitmap for running a Vim script.

BeOS: "tmo" must be bigtime_t, instead of double. (Seibert)

Patch 5.4.1

Problem: Test11 fails when \$GZIP is set to "-v". (Matthew Jackson)
Solution: Set \$GZIP to an empty string.
Files: src/testdir/test11.in

Patch 5.4.2

Problem: Typing <Esc> at the crypt key prompt caused a crash. (Kallingal)
Solution: Check for a NULL pointer returned from get_crypt_key().
Files: src/fileio.c

Patch 5.4.3

Problem: Python: Trying to use the name of an unnamed buffer caused a crash. (Daniel Burrows)
Solution: Check for b_fname being a NULL pointer.
Files: src/if_python.c

Patch 5.4.4

Problem: Win32: When compiled without toolbar, but the 'T' flag is in 'guioptions', there would be an empty space for the toolbar.
Solution: Add two #ifdefs where checking for the 'T' flag. (Vince Negri)
Files: src/gui.c

Patch 5.4.5

Problem: Athena GUI: Using the Buffers.Refresh menu entry caused a crash. Looks like any ":unmenu" command may cause trouble.
Solution: Disallow ":unmenu" in the Athena version. Disable the Buffers menu, because the Refresh item would not work.
Files: src/menu.c, runtime/menu.vim

Patch 5.4.6

Problem: GTK GUI: Using ":gui" in the .gvimrc file caused an error. Only happens when the GUI forks.
Solution: Don't fork in a recursive call of gui_start().
Files: src/gui.c

Patch 5.4.7

Problem: Typing 'q' at the more prompt for the ATTENTION message causes the file loading to be interrupted. (Will Day)
Solution: Reset got_int after showing the ATTENTION message.
Files: src/memline.c

Patch 5.4.8

Problem: Edit some file, ":he", ":opt": options from help window are shown, but pressing space updates from the other window. (Phillipps)
Also: When there are changes in the option-window, ":q!" gives an error message.
Solution: Before creating the option-window, go to a non-help window.
Use ":bdel!" to delete the buffer.
Files: runtime/optwin.vim

Patch 5.4.9

Just updates version.h. The real patch has been moved to 5.4.x1.
This patch is just to keep the version number correct.

Patch 5.4.10

Problem: GTK GUI: When \$DISPLAY is invalid, "gvim -f" just exits. It should run in the terminal.
Solution: Use gtk_init_check() instead of gtk_init().
Files: src/gui_gtk_x11.c

Patch 5.4.11

Problem: When using the 'S' flag in 'coptions', 'tabstop' is not copied to the next buffer for some commands, e.g., ":buffer".
Solution: When the BCO_NOHELP flag is given to buf_copy_options(), still copy the options used by do_help() when neither the "from" or "to" buffer is a help buffer.
Files: src/option.c

Patch 5.4.12

Problem: When using 'smartindent', there would be no extra indent if the current line did not have any indent already. (Hanus Adler)
Solution: There was a wrongly placed "else", that previously matched with the "if" that set trunc_line. Removed the "else" and added a check for trunc_line to be false.
Files: src/misc1.c

Patch 5.4.13

Problem: New SGI C compilers need another option for optimisation.
Solution: Add a check in configure for "-OPT:Olimit". (Chin A Young)
Files: src/configure.in, src/configure

Patch 5.4.14

Problem: Motif GUI: When the popup menu is present, a tiny window appears on the desktop for some users.
Solution: Set the menu widget ID for a popup menu to 0. (Thomas Koehler)
Files: src/gui_motif.c

Patch 5.4.15

Problem: Since 'backspace' set to 0 has been made Vi compatible, it is no longer possible to only allow deleting autoindent.
Solution: Make 'backspace' a list of parts, to allow each kind of backspacing separately.

Files: src/edit.c, src/option.c, src/option.h, src/proto/option.pro,
runtime/doc/option.txt, runtime/doc/insert.txt

Patch 5.4.16

Problem: Multibyte: Locale zh_TW.Big5 was not checked for in configure.

Solution: Add zh_TW.Big5 to configure check. (Chih-Tsun Huang)

Files: src/configure.in, src/configure

Patch 5.4.17

Problem: GUI: When started from inside gvim with ":%gvim", Vim would not start. ":%gvim -f" works fine.

Solution: After forking, wait a moment in the parent process, to give the child a chance to set its process group.

Files: src/gui.c

Patch 5.4.18

Problem: Python: The clear_history() function also exists in a library.

Solution: Rename clear_history() to clear_hist().

Files: src/ex_getln.c, src/eval.c, src/proto/ex_getln.pro

Patch 5.4.19

Problem: In a terminal with 25 lines, there is a more prompt after the ATTENTION message. When hitting 'q' here the dialog prompt doesn't appear and file loading is interrupted. (Will Day)

Solution: Don't allow quitting the printing of a message for the dialog prompt. Added the msg_noquit_more flag for this.

Files: src/message.c

Patch 5.4.20

Problem: GTK: When starting gvim, would send escape sequences to the terminal to switch the cursor off and on.

Solution: Don't call msg_start() if the GUI is expected to start.

Files: src/main.c

Patch 5.4.21

Problem: Motif: Toplevel menu ordering was wrong when using tear-off items.

Solution: Don't add one to the index for a toplevel menu.

Files: src/gui_motif.c

Patch 5.4.22

Problem: In Insert mode, <C-Left>, <S-Left>, <C-Right> and <S-Right> didn't update the column used for vertical movement.

Solution: Set curwin->w_set_curswant for those commands.

Files: src/edit.c

Patch 5.4.23

Problem: When a Visual selection is lost to another program, and then the same text is Visually selected again, the clipboard ownership wasn't regained.

Solution: Set clipboard.vmode to NUL to force regaining the clipboard.

Files: src/normal.c

Patch 5.4.24

Problem: Encryption: When using ":r file" while 'key' has already entered, the 'key' option would be messed up. When writing the file it would be encrypted with an unknown key and lost! (Brad Despres)

Solution: Don't free cryptkey when it is equal to the 'key' option.

Files: src/fileio.c

Patch 5.4.25

Problem: When 'cindent' is set, but 'autoindent' isn't, comments are not properly indented when starting a new line. (Mitterand)

Solution: When there is a comment leader for the new line, but 'autoindent' isn't set, do C-indenting.
Files: src/misc1.c

Patch 5.4.26

Problem: Multi-byte: a multi-byte character is never recognized in a file name, causing a backslash before it to be removed on Windows.
Solution: Assume that a leading-byte character is a file name character in vim_isfilec().
Files: src/charset.c

Patch 5.4.27

Problem: Entries in the PopUp[nvic] menus were added for several modes, but only deleted for the mode they were used for. This resulted in the entry remaining in the PopUp menu.
When removing a PopUp[nvic] menu, the name had been truncated, could result in greying-out the whole PopUp menu.
Solution: Remove entries for all modes from the PopUp[nvic] menus. Remove the PopUp[nvic] menu entries first, before the name is changed.
Files: src/menu.c

Patch 5.4.28

Problem: When using a BufWritePre autocommand to change 'fileformat', the new value would not be used for writing the file.
Solution: Check 'fileformat' after executing the autocommands instead of before.
Files: src/fileio.c

Patch 5.4.29

Problem: Athena GUI: When removing the 'g' flag from 'guioptions', using a menu can result in a crash.
Solution: Always grey-out menus for Athena, don't hide them.
Files: src/menu.c

Patch 5.4.30

Problem: BeOS: Suspending Vim with CTRL-Z didn't work (killed Vim). The first character typed after ":sh" goes to Vim, instead of the started shell.
Solution: Don't suspend Vim, start a new shell. Kill the async read thread when starting a new shell. It will be restarted later. (Will Day)
Files: src/os_unix.c, src/ui.c

Patch 5.4.31

Problem: GUI: When 'mousefocus' is set, moving the mouse over where a window boundary was, causes a hit-enter prompt to be finished. (Jeff Walker)
Solution: Don't use 'mousefocus' at the hit-enter prompt. Also ignore it for the more prompt and a few other situations. When an operator is pending, abort it first.
Files: src/gui.c

Patch 5.4.32

Problem: Unix: \$LDFLAGS was not passed to configure.
Solution: Pass \$LDFLAGS to configure just like \$CFLAGS. (Jon Miner)
Files: src/Makefile

Patch 5.4.33

Problem: Unix: After expanding an environment variable with the shell, the next expansion would also use the shell, even though it is not needed.
Solution: Reset "recursive" before returning from gen_expand_wildcards().
Files: src/misc1.c

Patch 5.4.34 (also see 5.4.x5)

Problem: When editing a file, and the file name is relative to a directory above the current directory, the file name was made absolute. (Gregory Margo)

Solution: Add an argument to shorten_fname() which indicates if all file names should be shortened, or only absolute names. In main() only use shorten_fname() to shorten absolute names.

Files: src/ex_docmd.c, src/fileio.c, src/main.c, src/proto/fileio.pro

Patch 5.4.35

Problem: There is no function to get the current file size.

Solution: Allow using line2byte() with the number of lines in the file plus one. This returns the offset of the line past the end of the file, which is the file size plus one.

Files: src/eval.c, runtime/doc/eval.txt

Patch 5.4.36

Problem: Comparing strings while ignoring case didn't work correctly for some machines. (Mide Steed)

Solution: vim_stricmp() and vim_strnicmp() only returned 0 or 1. Changed them to return -1 when the first argument is smaller.

Files: src/misc2.c

Patch 5.4.37 (also see 5.4.40 and 5.4.43)

Problem: Long strings from the viminfo file are truncated.

Solution: When writing a long string to the viminfo file, first write a line with the length, then the string itself in a second line.

Files: src/eval.c, src/ex_cmds.c, src/ex_getln.c, src/mark.c, src/ops.c, src/search.c, src/proto/ex_cmds.pro, runtime/syntax/viminfo.vim

Patch 5.4.38

Problem: In the option-window, ":set go&" resulted in 'go' being handled like a boolean option.

Solution: Mappings for <Space> and <CR> were overruled by the option-window. When the value of an option isn't 0 or 1, don't handle it like a boolean option.

Save and restore mappings for <Space> and <CR> when entering and leaving the option-window.

Files: runtime/optwin.vim

Patch 5.4.39

Problem: When setting a hidden option, spaces before the equal sign were not skipped and cause an error message. E.g., ":set csprg =cmd".

Solution: When skipping over a hidden option, check for a following "=val" and skip it too.

Files: src/option.c

Patch 5.4.40 (depends on 5.4.37)

Problem: Compiler error for "atol(p + 1)". (Axel Kielhorn)

Solution: Add a typecast: "atol((char *)p + 1)".

Files: src/ex_cmds.c

Patch 5.4.41

Problem: Some commands that were not included would give an error message, even when after "if 0".

Solution: Don't give an error message for an unsupported command when not executing the command.

Files: src/ex_docmd.c

Patch 5.4.42

Problem: ":w" would also cause a truncated message to appear in the message

history.
Solution: Don't put a kept message in the message history when it starts with "<".
Files: src/message.c

Patch 5.4.43 (depends on 5.4.37)

Problem: Mixing long lines with multiple lines in a register causes errors when writing the viminfo file. (Robinson)
Solution: When reading the viminfo file to skip register contents, skip lines that start with "<".
Files: src/ops.c

Patch 5.4.44

Problem: When 'whichwrap' includes '~', a "~" command that goes on to the next line cannot be properly undone. (Zellner)
Solution: Save each line for undo in n_swapchar().
Files: src/normal.c

Patch 5.4.45 (also see 5.4.x8)

Problem: When expand("\$ASDF") fails, there is an error message.
Solution: Remove the global expand_interactively. Pass a flag down to skip the error message.
Also: expand("\$ASDF") returns an empty string if \$ASDF isn't set. Previously it returned "\$ASDF" when 'shell' is "sh".
Also: system() doesn't print an error when the command returns an error code.
Files: many

Patch 5.4.46

Problem: Backspacing did not always use 'softtabstop' after hitting <CR>, inserting a register, moving the cursor, etc.
Solution: Reset inserted_space much more often in edit().
Files: src/edit.c

Patch 5.4.47

Problem: When executing BufWritePre or BufWritePost autocommands for a hidden buffer, the cursor could be moved to a non-existing position. (Vince Negri)
Solution: Save and restore the cursor and topline for the current window when it is going to be used to execute autocommands for a hidden buffer. Use an existing window for the buffer when it's not hidden.
Files: src/fileio.c

Patch 5.4.48

Problem: A paste with the mouse in Insert mode was not repeated exactly the same with ".". For example, when 'autoindent' is set and pasting text with leading indent. (Perry)
Solution: Add the CTRL-R CTRL-O r and CTRL-R CTRL-P r commands in Insert mode, which insert the contents of a register literally.
Files: src/edit.c, src/normal.c, runtime/doc/insert.txt

Patch 5.4.49

Problem: When pasting text with [<MiddleMouse>, the cursor could end up after the last character of the line.
Solution: Correct the cursor position for the change in indent.
Files: src/ops.c

Patch 5.4.x1 (note: Replaces patch 5.4.9)

Problem: Win32 GUI: menu hints were never used, because WANT_MENU is not defined until vim.h is included.
Solution: Move the #ifdef WANT_MENU from where MENUHINTS is defined to where

it is used.
Files: src/gui_w32.c

Patch 5.4.x2

Problem: BeOS: When pasting text, one character was moved to the end.
Solution: Re-enable the BeOS code in fill_input_buf(), and fix timing out with acquire_sem_etc(). (Will Day)
Files: src/os_beos.c, src/ui.c

Patch 5.4.x3

Problem: Win32 GUI: When dropping a directory on a running gvim it crashes.
Solution: Avoid using a NULL file name. Also display a message to indicate that the current directory was changed.
Files: src/gui_w32.c

Patch 5.4.x4

Problem: Win32 GUI: Removing an item from the popup menu doesn't work.
Solution: Don't remove the item from the menubar, but from the parent popup menu.
Files: src/gui_w32.c

Patch 5.4.x5 (addition to 5.4.34)

Files: src/gui_w32.c

Patch 5.4.x6

Problem: Win32: Expanding (dir)name starting with a dot doesn't work. (McCormack) Only when there is a path before it.
Solution: Fix the check, done before expansion, if the file name pattern starts with a dot.
Files: src/os_win32.c

Patch 5.4.x7

Problem: Win32 GUI: Removing "Edit with Vim" from registry is difficult.
Solution: Add uninstall program to remove the registry keys. It is installed in the "Add/Remove programs" list for ease of use.
Also: don't set \$VIM when the executable is with the runtime files.
Also: Add a text file with a step-by-step description of how to uninstall Vim for DOS and Windows.
Files: src/uninstal.c, src/dosinst.c, src/Makefile.w32, uninstal.txt

Patch 5.4.x8 (addition to 5.4.45)

Files: many

Patch 5.4.x9

Problem: Win32 GUI: After executing an external command, focus is not always regained (when using focus-follows-mouse).
Solution: Add SetFocus() in mch_system(). (Mike Steed)
Files: src/os_win32.c

Patch 5.5a.1

Problem: ":let @* = @" did not work. The text was not put on the clipboard. (Fisher)
Solution: Own the clipboard and put the text on it.
Files: src/ops.c

Patch 5.5a.2

Problem: append() did not mark the buffer modified. Marks below the new line were not adjusted.
Solution: Fix the f_append() function.
Files: src/eval.c

Patch 5.5a.3

Problem: Editing compressed ".gz" files doesn't work on non-Unix systems, because there is no "mv" command.

Solution: Add the rename() function and use it instead of ":%mv".
Also: Disable the automatic jump to the last position, because it changes the jumplist.

Files: src/eval.c, runtime/doc/eval.txt, runtime/vimrc_example.vim

Patch 5.5a.4

Problem: When using whole-line completion in insert mode while the cursor is in the indent, get "out of memory" error. (Stekrt)

Solution: Don't allocate a negative amount of memory in ins_complete().

Files: src/edit.c

Patch 5.5a.5

Problem: Win32: The 'path' option can hold only up to 256 characters, because _MAX_PATH is 256. (Robert Webb)

Solution: Use a fixed path length of 1024.

Files: src/os_win32.h

Patch 5.5a.6

Problem: Compiling with gcc on Win32, using the Unix Makefile, didn't work.

Solution: Add \$(SUFFIX) to all places where an executable is used. Also pass it to ctags. (Reynolds)

Files: src/Makefile

Patch 5.5a.7

Problem: When using "cat | vim -" in an xterm, the xterm version reply would end up in the file.

Solution: Read the file from stdin before switching the terminal to RAW mode. Should also avoid problems with programs that use a specific terminal setting.
Also: when using the GUI, print "Reading from stdin..." in the GUI window, to give a hint why it doesn't do anything.

Files: src/main.c, src/fileio.c

Patch 5.5a.8

Problem: On multi-threaded Solaris, suspending doesn't work.

Solution: Call pause() when the SIGCONT signal was not received after sending the SIGTSTP signal. (Nagano)

Files: src/os_unix.c

Patch 5.5a.9

Problem: 'winaltkeys' could be set to an empty argument, which is illegal.

Solution: Give an error message when doing ":set winaltkeys=".

Files: src/option.c

Patch 5.5a.10

Problem: Win32 console: Using ALTGR on a German keyboard to produce "}" doesn't work, because the 8th bit is set when ALT is pressed.

Solution: Don't set the 8th bit when ALT and CTRL are used. (Leipert)

Files: src/os_win32.c

Patch 5.5a.11

Problem: Tcl: Configure always uses tclsh8.0.
Also: Loading a library doesn't work.

Solution: Add "--with-tclsh" configure argument to allow specifying another name for the tcl shell.
Call Tcl_Init() in tclinit() to make loading libraries work. (Johannes Zellner)

Files: src/configure.in, src/configure, src/if_tcl.c

Patch 5.5a.12

Problem: The "user_commands" feature is called "user-commands".
 Solution: Replace "user-commands" with "user_commands". (Kim Sung-bom)
 Keep "user-commands" for the has() function, to remain backwards compatible with 5.4.
 Files: src/eval.c, src/version.c

Patch 5.5a.13

Problem: OS/2: When \$HOME is not defined, "C:/" is used for the viminfo file. That is very wrong when OS/2 is on another partition.
 Solution: Use \$VIM for the viminfo file when it is defined, like for MSDOS. Also: Makefile.os2 didn't depend on os_unix.h.
 Files: src/os_unix.h, src/Makefile.os2

Patch 5.5a.14

Problem: Athena, Motif and GTK: The Mouse scroll wheel doesn't work.
 Solution: Interpret a click of the wheel as a key press of the <MouseDown> or <MouseUp> keys. Default behavior is to scroll three lines, or a full page when Shift is used.
 Files: src/edit.c, src/ex_getln.c, src/gui.c, src/gui_gtk_x11.c, src/gui_x11.c, src/keymap.h, src/message.c, src/misc1.c, src/misc2.c, src/normal.c, src/proto/normal.pro, src/vim.h, runtime/doc/scroll.txt

Patch 5.5a.15

Problem: Using CTRL-A in Insert mode doesn't work correctly when the insert started with the <Insert> key. (Andreas Rohrschneider)
 Solution: Replace <Insert> with "i" before setting up the redo buffer.
 Files: src/normal.c

Patch 5.5a.16

Problem: VMS: GUI does not compile and run.
 Solution: Various fixes. (Zoltan Arpadffy)
 Moved functions from os_unix.c to ui.c, so that VMS can use them too: open_app_context(), x11_setup_atoms() and clip_x11* functions. Made xterm_dpy global, it's now used by ui.c and os_unix.c. Use gethostname() always, sys_hostname doesn't exist.
 Files: src/globals.h, src/gui_x11.c, src/os_vms.mms, src/os_unix.c, src/os_vms.c, src/ui.c, src/proto/os_unix.pro, src/proto/ui.pro

Renamed AdjustCursorForMultiByteCharacter() to AdjustCursorForMultiByteChar() to avoid symbol length limit of 31 characters. (Steve P. Wall)

Patch 5.5b.1

Problem: SASC complains about dead assignments and implicit type casts.
 Solution: Removed the dead assignments. Added explicit type casts.
 Files: src/buffer.c, src/edit.c, src/eval.c, src/ex_cmds.c, src/ex_getln.c, src/fileio.c, src/getchar.c, src/memline.c, src/menu.c, src/misc1.c, src/normal.c, src/ops.c, src/quickfix.c, src/screen.c

Patch 5.5b.2

Problem: When using "CTRL-O" in Insert mode, hit <Esc> and then "o" in another line truncates that line. (Devin Weaver)
 Solution: When using a command that starts Insert mode from CTRL-O, reset "restart_edit" first. This avoids that edit() is called with a mix of starting a new edit command and restarting a previous one.
 Files: src/normal.c

=====

VERSION 5.6

version-5.6

Version 5.6 is a bug-fix version of 5.5.

Changed

changed-5.6

Small changes to OleVim files. (Christian Schaller)

Inserted "/* */" between patch numbers in src/version.c. This allows for one line of context, which some versions of patch need.

Reordered the Syntax menu to avoid long submenus. Removed keyboard shortcuts for alphabetical items to avoid a clash with fixed items.

Added

added-5.6

Included Exuberant Ctags version 3.4. (Darren Hiebert)

OpenWithVim in Python. (Christian Schaller)

Win32 GUI: gvimext.dll, for the context menu "Edit with Vim" entry. Avoids the reported problems with the MS Office taskbar. Now it's a Shell Extension. (Tianmiao Hu)

New syntax files:

abel	Abel (John Cook)
aml	Arc Macro Language (Nikki Knuit)
apachestyle	Apache-style config file (Christian Hammers)
cf	Cold Fusion (Jeff Lanzarotta)
ctrlh	files with CTRL-H sequences (Bram Moolenaar)
cupl	CUPL (John Cook)
cuplsim	CUPL simulation (John Cook)
erlang	Erlang (Kresimir Marzic)
gedcom	Gedcom (Paul Johnson)
icon	Icon (Wendell Turner)
ist	MakeIndex style (Peter Meszaros)
jsp	Java Server Pages (Rafael Garcia-Suarez)
rcslog	Rcslog (Joe Karthauser)
remind	Remind (Davide Alberani)
sqr	Structured Query Report Writer (Paul Moore)
tads	TADS (Amir Karger)
texinfo	Texinfo (Sandor Kopanyi)
xpm2	X Pixmap v2 (Steve Wall)

The 'C' flag in 'coptions' can be used to switch off concatenation for sourced lines. See patch 5.5.013 below. |line-continuation|

"excludenl" argument for the ":syntax" command. See patch 5.5.032 below. |:syn-excludenl|

Implemented |z+| and |z^| commands. See patch 5.5.050 below.

Vim logo in Corel Draw format. Can be scaled to any resolution.

Fixed

fixed-5.6

Using this mapping in Select mode, terminated completion:
":vnoremap <C-N> <Esc>a<C-N>" (Benji Fisher)

Ignore K_SELECT in ins_compl_prep().

VMS (Zoltan Arpadffy, David Elins):

- ioctl() in pty.c caused trouble, #ifndef VMS added.
- Cut & paste mismatch corrected.
- Popup menu line crash corrected. (Patch 5.5.047)
- Motif directories during open and save as corrected.
- Handle full file names with version numbers. (Patch 5.5.046)
- Directory handling (CD command etc.)
- Corrected file name conversion VMS to Unix and v.v.
- Recovery was not working.
- Terminal and signal handling was outdated compared to os_unix.c.
- Improved os_vms.txt.

Configure used fprintf() instead of printf() to check for __DATE__ and __TIME__. (John Card II)

BeOS: Adjust computing the char_height and char_ascent. Round them up separately, avoids redrawing artifacts. (Mike Steed)

Fix a few multi-byte problems in menu_name_skip(), set_reg_ic(), searchc() and findmatchlimit(). (Taro Muraoka)

GTK GUI:

- With GTK 1.2.5 and later the scrollbars were not redrawn correctly.
- Adjusted the gtk_form_draw() function.
- SNIFF connection didn't work.
- 'mousefocus' was not working. (Dalecki)
- Some keys were not working with modifiers: Shift-Tab, Ctrl-Space and CTRL-@.

Patch 5.5.001

Problem: Configure in the top directory did not pass on an argument with a space correctly. For example "./configure --previs="/My home". (Stephane Chazelas)

Solution: Use '"\$@"' instead of '\$*' to pass on the arguments.

Files: configure

Patch 5.5.002

Problem: Compilation error for using "fds[] & POLLIN". (Jeff Walker)

Solution: Use "fds[].revents & POLLIN".

Files: src/os_unix.c

Patch 5.5.003

Problem: The autoconf check for sizeof(int) is wrong on machines where sizeof(size_t) != sizeof(int).

Solution: Use our own configure check. Also fixes the warning for cross-compiling.

Files: src/configure.in, src/configure

Patch 5.5.004

Problem: On Unix it's not possible to interrupt ":sleep 100".

Solution: Switch terminal to cooked mode while asleep, to allow a SIGINT to wake us up. But switch off echo, added TMODE_SLEEP.

Files: src/term.h, src/os_unix.c

Patch 5.5.005

Problem: When using <f-args> with a user command, an empty argument to the command resulted in one empty string, while no string was expected.

Solution: Catch an empty argument and pass no argument to the function. (Paul Moore)

Files: src/ex_docmd.c

Patch 5.5.006

Problem: Python: When platform-dependent files are in another directory than the platform-independent files it doesn't work.

Solution: Also check the executable directory, and add it to CFLAGS. (Tessa Lau)

Files: src/configure.in, src/configure

Patch 5.5.007 (extra)

Problem: Win32 OLE: Occasional crash when exiting while still being used via OLE.

Solution: Move OleUninitialize() to before deleting the application object. (Vince Negri)

Files: src/if_ole.cpp

Patch 5.5.008

Problem: 1000000 takes a long time and cannot be interrupted.

Solution: Check for CTRL-C typed while in the loop to push the register.

Files: src/normal.c

Patch 5.5.009

Problem: Recent Sequent machines don't link with "-linet". (Kurtis Rader)

Solution: Remove configure check for Sequent.

Files: src/configure.in, src/configure

Patch 5.5.010

Problem: Ctags freed a memory block twice when exiting. When out of memory, a misleading error message was given.

Solution: Update to ctags 3.3.2. Also fixes a few other problems. (Darren Hiebert)

Files: src/ctags/*

Patch 5.5.011

Problem: After "CTRL-V s", the cursor jumps back to the start, while all other operators leave the cursor on the last changed character. (Xiangjiang Ma)

Solution: Position cursor on last changed character, if possible.

Files: src/ops.c

Patch 5.5.012

Problem: Using CTRL-] in Visual mode doesn't work when the text includes a space (just where it's useful). (Stefan Bittner)

Solution: Don't escape special characters in a tag name with a backslash.

Files: src/normal.c

Patch 5.5.013

Problem: The ":append" and ":insert" commands allow using a leading backslash in a line. The ":source" command concatenates those lines. (Heinlein)

Solution: Add the 'C' flag in 'coptions' to switch off concatenation.

Files: src/ex_docmd.c, src/option.h, runtime/doc/options.txt, runtime/filetype.vim, runtime/scripts.vim

Patch 5.5.014

Problem: When executing a register with ":@"", the ":append" command would get text lines with a ':' prepended. (Heinlein)

Solution: Remove the ':' characters.

Files: src/ex_docmd.c, src/ex_getln.c, src/globals.h

Patch 5.5.015

Problem: When using ":g/pat/p", it's hard to see where the output starts,

the ":g" command is overwritten. Vi keeps the ":g" command.
Solution: Keep the ":g" command, but allow overwriting it with the report
for the number of changes.
Files: src/ex_cmds.c

Patch 5.5.016 (extra)

Problem: Win32: Using regedit to install Vim in the popup menu requires the
user to confirm this in a dialog.
Solution: Use "regedit /s" to avoid the dialog
Files: src/dosinst.c

Patch 5.5.017

Problem: If an error occurs when closing the current window, Vim could get
stuck in the error handling.
Solution: Don't set curwin to NULL when closing the current window.
Files: src/window.c

Patch 5.5.018

Problem: Absolute paths in shell scripts do not always work.
Solution: Use /usr/bin/env to find out the path.
Files: runtime/doc/vim2html.pl, runtime/tools/efm_filter.pl,
runtime/tools/shtags.pl

Patch 5.5.019

Problem: A function call in 'statusline' stops using ":q" twice from
exiting, when the last argument hasn't been edited.
Solution: Don't decrement quitmore when executing a function. (Madsen)
Files: src/ex_docmd.c

Patch 5.5.020

Problem: When the output of CTRL-D completion in the commandline goes all
the way to the last column, there is an empty line.
Solution: Don't add a newline when the cursor wrapped already. (Madsen)
Files: src/ex_getln.c

Patch 5.5.021

Problem: When checking if a file name in the tags file is relative,
environment variables were not expanded.
Solution: Expand the file name before checking if it is relative. (Madsen)
Files: src/tag.c

Patch 5.5.022

Problem: When setting or resetting 'paste' the ruler wasn't updated.
Solution: Update the status lines when 'ruler' changes because of 'paste'.
Files: src/option.c

Patch 5.5.023

Problem: When editing a new file and autocommands change the cursor
position, the cursor was moved back to the first non-white, unless
'startofline' was reset.
Solution: Keep the new column, just like the line number.
Files: src/ex_cmds.c

Patch 5.5.024 (extra)

Problem: Win32 GUI: When using confirm() to put up a dialog without a
default button, the dialog would not have keyboard focus.
(Krishna)
Solution: Always set focus to the dialog window. Only set focus to a button
when a default one is specified.
Files: src/gui_w32.c

Patch 5.5.025

Problem: When using "keepend" in a syntax region, a contained match that includes the end-of-line could still force that region to continue, if there is another contained match in between.
Solution: Check the keepend_level in check_state_ends().
Files: src/syntax.c

Patch 5.5.026

Problem: When starting Vim in a white-on-black xterm, with 'bg' set to "dark", and then starting the GUI with ":gui", setting 'bg' to "light" in the gvimrc, the highlighting isn't set. (Tsjokwing)
Solution: Set the highlighting when 'bg' is changed in the gvimrc, even though full_screen isn't set.
Files: src/option.c

Patch 5.5.027

Problem: Unix: os_unix.c doesn't compile when XTERM_CLIP is used but WANT_TITLE isn't. (Barnum)
Solution: Move a few functions that are used by the X11 title and clipboard and put another "#if" around it.
Files: src/os_unix.c

Patch 5.5.028 (extra)

Problem: Win32 GUI: When a file is dropped on Win32 gvim while at the ":" prompt, the file is edited but the command line is actually still there, the cursor goes back to command line on the next command. (Krishna)
Solution: When dropping a file or directory on gvim while at the ":" prompt, insert the name of the file/directory. Allows using the file/directory name for any Ex command.
Files: src/gui_w32.c

Patch 5.5.029

Problem: "das" at the end of the file didn't delete the last character of the sentence.
Solution: When there is no character after the sentence, make the operation inclusive in current_sent().
Files: src/search.c

Patch 5.5.030

Problem: Unix: in os_unix.c, "term_str" is used, which is also defined in vim.h as a macro. (wuxin)
Solution: Renamed "term_str" to "buf" in do_xterm_trace().
Files: src/os_unix.c

Patch 5.5.031 (extra)

Problem: Win32 GUI: When exiting Windows, gvim will leave swap files behind and will be killed ungracefully. (Krishna)
Solution: Catch the WM_QUERYENDSESSION and WM_ENDSESSION messages and try to exit gracefully. Allow the user to cancel the shutdown if there is a changed buffer.
Files: src/gui_w32.c

Patch 5.5.032

Problem: Patch 5.5.025 wasn't right. And C highlighting was still not working correctly for a #define.
Solution: Added "excludenl" argument to ":syntax", to be able not to extend a containing item when there is a match with the end-of-line.
Files: src/syntax.c, runtime/doc/syntax.txt, runtime/syntax/c.vim

Patch 5.5.033

Problem: When reading from stdin, a long line in viminfo would mess up the file message. readfile() uses IObuff for keep_msg, which could be

overwritten by anyone.
Solution: Copy the message from `I0buff` to `msg_buf` and set `keep_msg` to that.
Also change `vim_fgets()` to not use `I0buff` any longer.
Files: `src/fileio.c`

Patch 5.5.034
Problem: "gvim -rv" caused a crash. Using 't_Co' before it's set.
Solution: Don't try to initialize the highlighting before it has been initialized from `main()`.
Files: `src/syntax.c`

Patch 5.5.035
Problem: GTK with XIM: Resizing with status area was messy, and `":set guioptions+=b"` didn't work.
Solution: Make status area a separate widget, but not a separate window. (Chi-Deok Hwang)
Files: `src/gui_gtk_f.c`, `src/gui_gtk_x11.c`, `src/multbyte.c`

Patch 5.5.036
Problem: The `GZIP_read()` function in `$VIMRUNTIME/vimrc_example.vim` to uncompress a file did not do detection for 'fileformat'. This is because the filtering is done with 'binary' set.
Solution: Split the filtering into separate write, filter and read commands.
Files: `runtime/vimrc_example.vim`

Patch 5.5.037
Problem: The "U" command didn't mark the buffer as changed. (McCormack)
Solution: Set the 'modified' flag when using "U".
Files: `src/undo.c`

Patch 5.5.038
Problem: When typing a long ":" command, so that the screen scrolls up, causes the hit-enter prompt, even though the user just typed return to execute the command.
Solution: Reset `need_wait_return` if (part of) the command was typed in `getcmline()`.
Files: `src/ex_getln.c`

Patch 5.5.039
Problem: When using a custom status line, "%a" (file # of #) reports the index of the current window for all windows.
Solution: Pass a window pointer to `append_arg_number()`, and pass the window being updated from `build_stl_str_hl()`. (Stephen P. Wall)
Files: `src/buffer.c`, `src/screen.c`, `src/proto/buffer.pro`

Patch 5.5.040
Problem: Multi-byte: When there is some error in `xim_real_init()`, it can close XIM and return. After this there can be a segv.
Solution: Test "xic" for being non-NULL, don't set "xim" to NULL. Also try to find more matches for supported styles. (Sung-Hyun Nam)
Files: `src/multbyte.c`

Patch 5.5.041
Problem: X11 GUI: CTRL-__ requires the SHIFT key only on some machines.
Solution: Translate CTRL-- to CTRL-_. (Robert Webb)
Files: `src/gui_x11.c`

Patch 5.5.042
Problem: X11 GUI: keys with ALT were assumed to be used for the menu, even when the menu has been disabled by removing 'm' from 'guioptions'.
Solution: Ignore keys with ALT only when `gui.menu_is_active` is set. (Raf)
Files: `src/gui_x11.c`

Patch 5.5.043

Problem: GTK: Handling of fontset fonts was not right when 'guifontset' contains exactly 14 times '-'.
Solution: Avoid setting fonts when working with a fontset. (Sung-Hyun Nam)
Files: src/gui_gtk_x11.c

Patch 5.5.044

Problem: pltags.pl contains an absolute path "/usr/local/bin/perl". That might not work everywhere.
Solution: Use "/usr/bin/env perl" instead.
Files: runtime/tools/pltags.pl

Patch 5.5.045

Problem: Using "this_session" variable does not work, requires preceding it with "v:". Default filename for ":mksession" isn't mentioned in the docs. (Fisher)
Solution: Support using "this_session" to be backwards compatible.
Files: src/eval.c, runtime/doc/options.txt

Patch 5.5.046 (extra)

Problem: VMS: problems with path and filename.
Solution: Truncate file name at last ';', etc. (Zoltan Arpadffy)
Files: src/buffer.c, src/fileio.c, src/gui_motif.c, src/os_vms.c, src/proto/os_vms.pro

Patch 5.5.047

Problem: VMS: Crash when using the popup menu
Solution: Turn the #define MENU_MODE_CHARS into an array. (Arpadffy)
Files: src/structs.h, src/menu.c

Patch 5.5.048

Problem: HP-UX 11: Compiling doesn't work, because both string.h and strings.h are included. (Squassabia)
Solution: The configure test for including both string.h and strings.h must include <Xm/Xm.h> first, because it causes problems.
Files: src/configure.in, src/configure, src/config.h.in

Patch 5.5.049

Problem: Unix: When installing Vim, the protection bits of files might be influenced by the umask.
Solution: Add \$(FILEMOD) to Makefile. (Shetye)
Files: src/Makefile

Patch 5.5.050

Problem: "z+" and "z^" commands are missing.
Solution: Implemented "z+" and "z^".
Files: src/normal.c, runtime/doc/scroll.txt, runtime/doc/index.txt

Patch 5.5.051

Problem: Several Unix systems have a problem with the optimization limits check in configure.
Solution: Removed the configure check, let the user add it manually in Makefile or the environment.
Files: src/configure.in, src/configure, src/Makefile

Patch 5.5.052

Problem: Crash when using a cursor key at the ATTENTION prompt. (Alberani)
Solution: Ignore special keys at the console dialog. Also ignore characters > 255 for other uses of tolower() and toupper().
Files: src/menu.c, src/message.c, src/misc2.c

Patch 5.5.053

Problem: Indenting is wrong after a function when 'cino' has "fs". Another problem when 'cino' has "{s".
Solution: Put line after closing "}" of a function at the left margin. Apply ind_open_extra in the right way after a '{'.
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 5.5.054

Problem: Unix: ":e #" doesn't work if the alternate file name contains a space or backslash. (Hudacek)
Solution: When replacing "#", "%" or other items that stand for a file name, prepend a backslash before special characters.
Files: src/ex_docmd.c

Patch 5.5.055

Problem: Using "<C-V>\$r-" in blockwise Visual mode replaces one character beyond the end of the line. (Zivkov)
Solution: Only replace existing characters.
Files: src/ops.c

Patch 5.5.056

Problem: After "z20<CR>" messages were printed at the old command line position once. (Veselinovic)
Solution: Set msg_row and msg_col when changing cmdline_row in win_setheight().
Files: src/window.c

Patch 5.5.057

Problem: After "S<Esc>" it should be possible to restore the line with "U". (Veselinovic)
Solution: Don't call u_clearline() in op_delete() when changing only one line.
Files: src/ops.c

Patch 5.5.058

Problem: Using a long search pattern and then "n" causes the hit-enter prompt. (Krishna)
Solution: Truncate the echoed pattern, like other messages. Moved code for truncating from msg_attr() to msg_strtrunc().
Files: src/message.c, src/proto/message.pro, src/search.c

Patch 5.5.059

Problem: GTK GUI: When \$term is invalid, using "gvim" gives an error message, even though \$term isn't really used. (Robbins)
Solution: When the GUI is about to start, skip the error messages for a wrong \$term.
Files: src/term.c

Patch 5.5.060 (extra)

Problem: Dos 32 bit: When a directory in 'backupdir' doesn't exist, ":w" causes the file to be renamed to "axlqwqhy.ba~". (Matzdorf)
Solution: The code to work around a LFN bug in Windows 95 doesn't handle a non-existing target name correctly. When renaming fails, make sure the file has its original name. Also do this for the Win32 version, although it's unlikely that it runs into this problem.
Files: src/os_msdos.c, src/os_win32.c

Patch 5.5.061

Problem: When using "\:" in a modeline, the backslash is included in the option value. (Mohsin)
Solution: Remove one backslash before the ':' in a modeline.
Files: src/buffer.c, runtime/doc/options.txt

Patch 5.5.062 (extra)

Problem: Win32 console: Temp files are created in the root of the current drive, which may be read-only. (Peterson)
Solution: Use the same mechanism of the GUI version: Use \$TMP, \$TEMP or the current directory. Cleaned up vim_tempname() a bit.
Files: src/fileio.c, src/os_win32.h, runtime/doc/os_dos.txt

Patch 5.5.063

Problem: When using whole-line completion in Insert mode, 'cindent' is applied, even after changing the indent of the line.
Solution: Don't reindent the completed line after inserting/removing indent. (Robert Webb)
Files: src/edit.c

Patch 5.5.064

Problem: has("sniff") doesn't work correctly.
Solution: Return 1 when Vim was compiled with the +sniff feature. (Pruemmer)
Files: src/eval.c

Patch 5.5.065

Problem: When dropping a file on Vim, the 'shellslash' option is not effective. (Krishna)
Solution: Fix the slashes in the dropped file names according to 'shellslash'.
Files: src/ex_docmd.c, runtime/doc/options.txt

Patch 5.5.066

Problem: For systems with backslash in file name: Setting a file name option to a value starting with "\\machine" removed a backslash.
Solution: Keep the double backslash for "\\machine", but do change "\\\\"machine" to "\\machine" for backwards compatibility.
Files: src/option.c, runtime/doc/options.txt

Patch 5.5.067

Problem: With 'hlsearch' set, the pattern ">" doesn't highlight the first match in a line. (Benji Fisher)
Solution: Fix highlighting an empty match. Also highlight the first character in an empty line for "\$".
Files: src/screen.c

Patch 5.5.068

Problem: Crash when a ":while" is used with an argument that has an error. (Sylvain Viart)
Solution: Was using an uninitialized index in the cs_line[] array. The crash only happened when the index was far off. Made sure the uninitialized index isn't used.
Files: src/ex_docmd.c

Patch 5.5.069

Problem: Shifting lines in blockwise Visual mode didn't set the 'modified' flag.
Solution: Do set the 'modified' flag.
Files: src/ops.c

Patch 5.5.070

Problem: When editing a new file, creating that file outside of Vim, then editing it again, ":w" still warns for overwriting an existing file. (Nam)
Solution: The BF_NEW flag in the "b_flags" field wasn't cleared properly.
Files: src/buffer.c, src/fileio.c

Patch 5.5.071

Problem: Using a matchgroup in a ":syn region", which is the same syntax group as the region, didn't stop a contained item from matching in the start pattern.

Solution: Also push an item on the stack when the syntax ID of the matchgroup is the same as the syntax ID of the region.

Files: src/syntax.c

Patch 5.5.072 (extra)

Problem: Dos 32 bit: When setting 'columns' to a too large value, Vim may crash, and the DOS console too.

Solution: Check that the value of 'columns' isn't larger than the number of columns that the BIOS reports.

Files: src/os_msdos.c, src/proto/os_msdos.pro, src/option.c

Patch 5.5.073 (extra)

Problem: Win 32 GUI: The Find and Find/Replace dialogs didn't show the "match case" checkbox. The Find/Replace dialog didn't handle the "match whole word" checkbox.

Solution: Support the "match case" and "match whole word" checkboxes.

Files: src/gui_w32.c

Patch 5.6a.001

Problem: Using <C-End> with a count doesn't work like it does with "G". (Benji Fisher)

Solution: Accept a count for <C-End> and <C-Home>.

Files: src/normal.c

Patch 5.6a.002

Problem: The script for conversion to HTML was an older version.

Solution: Add support for running 2html.vim on a color terminal.

Files: runtime/syntax/2html.vim

Patch 5.6a.003

Problem: Defining a function inside a function didn't give an error message. A missing ":endfunction" doesn't give an error message.

Solution: Allow defining a function inside a function.

Files: src/eval.c, runtime/doc/eval.txt

Patch 5.6a.004

Problem: A missing ":endwhile" or ":endif" doesn't give an error message. (Johannes Zellner)

Solution: Check for missing ":endwhile" and ":endif" in sourced files.

Add missing ":endif" in file selection macros.

Files: src/ex_docmd.c, runtime/macros/file_select.vim

Patch 5.6a.005

Problem: 'hlsearch' was not listed alphabetically. The value of 'toolbar' was changed when 'compatible' is set.

Solution: Moved entry of 'hlsearch' in options[] table down.

Don't reset 'toolbar' option to the default value when 'compatible' is set.

Files: src/option.c

Patch 5.6a.006

Problem: Using a backwards range inside ":if 0" gave an error message.

Solution: Don't complain about a range when it is not going to be used. (Stefan Roemer)

Files: src/ex_docmd.c

Patch 5.6a.007

Problem: ":let" didn't show internal Vim variables. (Ron Aaron)

Solution: Do show ":v" variables for ":let" and ":let v:name".
Files: src/eval.c

Patch 5.6a.008

Problem: Selecting a syntax from the Syntax menu gives an error message.
Solution: Replace "else if" in SetSyn() with "elseif". (Ronald Schild)
Files: runtime/menu.vim

Patch 5.6a.009

Problem: When compiling with +extra_search but without +syntax, there is a compilation error in screen.c. (Axel Kielhorn)
Solution: Adjust the #ifdef for declaring and initializing "line" in win_line(). Also solve compilation problem when +statusline is used without +eval. Another one when +cmdline_compl is used without +eval.
Files: src/screen.c, src/misc2.c

Patch 5.6a.010

Problem: In a function, ":startinsert!" does not append to the end of the line if a ":normal" command was used to move the cursor. (Fisher)
Solution: Reset "w_set_curswant" to avoid that w_curswant is changed again.
Files: src/ex_docmd.c

Patch 5.6a.011 (depends on 5.6a.004)

Problem: A missing ":endif" or ":endwhile" in a function doesn't give an error message.
Solution: Give that error message.
Files: src/ex_docmd.c

Patch 5.6a.012 (depends on 5.6a.008)

Problem: Some Syntax menu entries caused a hit-enter prompt.
Solution: Call a function to make the command shorter. Also rename a few functions to avoid name clashes.
Files: runtime/menu.vim

Patch 5.6a.013

Problem: Command line completion works different when another completion was done earlier. (Johannes Zellner)
Solution: Reset wim_index when starting a new completion.
Files: src/ex_getln.c

Patch 5.6a.014

Problem: Various warning messages when compiling and running lint with different combinations of features.
Solution: Fix the warning messages.
Files: src/eval.c, src/ex_cmds.c, src/ex_docmd.c, src/gui_gtk_x11.c, src/option.c, src/screen.c, src/search.c, src/syntax.c, src/feature.h, src/globals.h

Patch 5.6a.015

Problem: The vimtutor command doesn't always know the value of \$VIMRUNTIME.
Solution: Let Vim expand \$VIMRUNTIME, instead of the shell.
Files: src/vimtutor

Patch 5.6a.016 (extra)

Problem: Mac: Window size is restricted when starting. Cannot drag the window all over the desktop.
Solution: Get real screen size instead of assuming 640x400. Do not use a fixed number for the drag limits. (Axel Kielhorn)
Files: src/gui_mac.c

Patch 5.6a.017

Problem: The "Paste" entry in popup menu for Visual, Insert and Cmdline mode is in the wrong position. (Stol)
Solution: Add priority numbers for all Paste menu entries.
Files: runtime/menu.vim

Patch 5.6a.018

Problem: GTK GUI: submenu priority doesn't work.
Help dialog could be destroyed too soon.
When closing a dialog window (e.g. the "ATTENTION" one), Vim would just hang.
When GTK theme is changed, Vim doesn't adjust to the new colors.
Argument for ":promptfind" isn't used.
Solution: Fixed the mentioned problems.
Made the dialogs look&feel nicer.
Moved functions to avoid the need for a forward declaration.
Fixed reentrancy of the file browser dialog.
Added drag&drop support for GNOME.
Init the text for the Find/replace dialog from the last used search string. Set "match whole word" toggle button correctly.
Made repeat rate for drag outside of window depend on the distance from the window. (Marcin Dalecki)
Made the drag in Visual mode actually work.
Removed recursiveness protection from gui_mch_get_rgb(), it might cause more trouble than it solves.
Files: src/ex_docmd.c, src/gui_gtk.c, src/gui_gtk_x11.c, src/ui.c, src/proto/ui.pro, src/misc2.c

Patch 5.6a.019

Problem: When trying to recover through NFS, which uses a large block size, Vim might think the swap file is empty, because mf_blocknr_max is zero. (Scott McDermott)
Solution: When computing the number of blocks of the file in mf_open(), round up instead of down.
Files: src/memfile.c

Patch 5.6a.020

Problem: GUI GTK: Could not set display for gvim.
Solution: Add "-display" and "--display" arguments. (Marcin Dalecki)
Files: src/gui_gtk_x11.c

Patch 5.6a.021

Problem: Recovering still may not work when the block size of the device where the swap file is located is larger than 4096.
Solution: Read block 0 with the minimal block size.
Files: src/memline.c, src/memfile.c, src/vim.h

Patch 5.6a.022 (extra)

Problem: Win32 GUI: When an error in the vimrc causes a dialog to pop up (e.g., for an existing swap file), Vim crashes. (David Elins)
Solution: Before showing a dialog, open the main window.
Files: src/gui_w32.c

Patch 5.6a.023

Problem: Using expand("%:gs??/?") causes a crash. (Ron Aaron)
Solution: Check for running into the end of the string in do_string_sub().
Files: src/eval.c

Patch 5.6a.024

Problem: Using an autocommand to delete a buffer when leaving it can cause a crash when jumping to a tag. (Franz Gorkotte)
Solution: In do_tag(), store tagstacklen before jumping to another buffer. Check tagstackidx after jumping to another buffer.

Files: Add extra check in win_split() if tagname isn't NULL.
src/tag.c, src/window.c

Patch 5.6a.025 (extra)

Problem: Win32 GUI: The tables for toupper() and tolower() are initialized too late. (Mike Steed)

Solution: Move the initialization to win32_init() and call it from main().

Files: src/main.c, src/os_w32.c, src/proto/os_w32.pro

Patch 5.6a.026

Problem: When the SNIFF connection is open, shell commands hang. (Pruemmer)

Solution: Skip a second wait() call if waitpid() already detected that the child has exited.

Files: src/os_unix.c

Patch 5.6a.027 (extra)

Problem: Win32 GUI: The "Edit with Vim" popup menu entry causes problems for the Office toolbar.

Solution: Use a shell extension dll. (Tianmiao Hu)

Added it to the install and uninstal programs, replaces the old "Edit with Vim" menu registry entries.

Files: src/dosinst.c, src/uninstal.c, gvimext/*, runtime/doc/gui_w32.txt

Patch 5.6a.028 (extra)

Problem: Win32 GUI: Dialogs and tear-off menus can't handle multi-byte characters.

Solution: Adjust nCopyAnsiToWideChar() to handle multi-byte characters correctly.

Files: src/gui_w32.c

=====

VERSION 5.7

version-5.7

Version 5.7 is a bug-fix version of 5.6.

Changed

changed-5.7

Renamed src/INSTALL.mac to INSTALL_mac.txt to avoid it being recognized with a wrong file type. Also renamed src/INSTALL.amiga to INSTALL_ami.txt.

Added

added-5.7

New syntax files:

stp	Stored Procedures (Jeff Lanzarotta)
snnset, snnsnat, snnsres	SNNS (Davide Alberani)
mel	MEL (Robert Minsk)
ruby	Ruby (Mirko Nasato)
tli	TealInfo (Kurt W. Andrews)
ora	Oracle config file (Sandor Kopanyi)
abaqus	Abaqus (Carl Osterwisch)
jproperties	Java Properties (Simon Baldwin)
apache	Apache config (Allan Kelly)
csp	CSP (Jan Bredereke)
samba	Samba config (Rafael Garcia-Suarez)
kscript	KDE script (Thomas Capricelli)
hb	Hyper Builder (Alejandro Forero Cuervo)
fortran	Fortran (rewritten) (Ajit J. Thakkar)
sml	SML (Fabrizio Zeno Cornelli)
cvs	CVS commit (Matt Dunford)

```
aspperl      ASP Perl (Aaron Hope)
bc           BC calculator (Vladimir Scholtz)
latte       Latte (Nick Moffitt)
wml         WML (Gerfried Fuchs)
```

Included Exuberant ctags 3.5.1. (Darren Hiebert)

"display" and "fold" arguments for syntax items. For future extension, they are ignored now.

strftime() function for the Macintosh.

macros/explorer.vim: A file browser script (M A Aziz Ahmed)

```
Fixed                                     *fixed-5.7*
-----
```

The 16 bit MS-DOS version is now compiled with Bcc 3.1 instead of 4.0. The executable is smaller.

When a "make test" failed, the output file was lost. Rename it to test99.failed to be able to see what went wrong.

After sourcing bugreport.vim, it's not clear that bugreport.txt has been written in the current directory. Edit bugreport.txt to avoid that.

Adding IME support when using Makefile.w32 didn't work. (Taro Muraoka)

Win32 console: Mouse drags were passed on even when the mouse didn't move.

Perl interface: In Buffers(), type of argument to SvPV() was int, should be STRLEN. (Tony Leneis)

Problem with prototype for index() on AIX 4.3.0. Added check for _AIX43 in os_unix.h. (Jake Hamby)

Mappings in mswin.vim could break when some commands are mapped. Add "nore" to most mappings to avoid re-mapping.

modify_fname() made a copy of a file name for ":p" when it already was a full path name, which is a bit slow.

Win32 with Borland C++ 5.5: Pass the path to the compiler on to xxd and ctags, to avoid depending on \$PATH. Fixed "make clean".

Many fixes to Macintosh specific parts: (mostly by Dany StAmant)

- Only one Help menu.
- No more crash when removing a menu item.
- Support as External Editor for Codewarrior (still some little glitches).
- Popup menu support.
- Fixed crash when pasting after application switch.
- Color from rgb.txt properly displayed.
- 'isprint' default includes all chars above '~'. (Axel Kielhorn)
- mac_expandpath() was leaking memory.
- Add digraphs table. (Axel Kielhorn)
- Multi-byte support: (Kenichi Asai)
 - Switch keyscript when going in/out of Insert mode.
 - Draw multi-byte character correctly.
 - Don't use mblen() but highest bit of char to detect multi-byte char.
 - Display value of multi-byte in statusline (also for other systems).
- mouse button was not initialized properly to MOUSE_LEFT when

- USE_CTRLCLICKMENU not defined.
- With Japanese SJIS characters: Make "w", "b", and "e" work properly. (Kenichi Asai)
- Replaced old CodeWarrior file os_mac.CW9.hqx with os_mac.cw5.sit.hqx.

Fixes for VMS: (Zoltan Arpadffy) (also see patch 5.6.045 below)

- Added Makefile_vms.mms and vimrc.vms to src/testdir to be able to run the tests.
- Various fixes.
- Set 'undolevels' to 1000 by default.
- Made mch_settitle() equivalent to the one in os_unix.c.

RiscOS: A few prototypes for os_riscos.c were outdated. Generate prototypes automatically.

Previously released patches:

Patch 5.6.001

Problem: When using "set bs=0 si cin", Inserting "#<BS>" or "><BS>" which reduces the indent doesn't delete the "#" or ">". (Lorton)

Solution: Adjust ai_col in ins_try_si().

Files: src/edit.c

Patch 5.6.002

Problem: When using the vim.vim syntax file, a comment with all uppercase characters causes a hang.

Solution: Adjust pattern for vimCommentTitle (Charles Campbell)

Files: runtime/syntax/vim.vim

Patch 5.6.003

Problem: GTK GUI: Loading a user defined toolbar bitmap gives a warning about the colormap. Probably because the window has not been opened yet.

Solution: Use gdk_pixmap_colormap_create_from_xpm() to convert the xpm file. (Keith Radebaugh)

Files: src/gui_gtk.c

Patch 5.6.004 (extra)

Problem: Win32 GUI with IME: When setting 'guifont' to "*", the font requester appears twice.

Solution: In gui_mch_init_font() don't call get_logfont() but copy norm_logfont from fh. (Yasuhiro Matsumoto)

Files: src/gui_w32.c

Patch 5.6.005

Problem: When 'winminheight' is zero, CTRL-W - with a big number causes a crash. (David Kotchan)

Solution: Check for negative window height in win_setheight().

Files: src/window.c

Patch 5.6.006

Problem: GTK GUI: Bold font cannot always be used. Memory is freed too early in gui_mch_init_font().

Solution: Move call to g_free() to after where sdup is used. (Artem Hodyush)

Files: src/gui_gtk_x11.c

Patch 5.6.007 (extra)

Problem: Win32 IME: Font is not changed when screen font is changed. And IME composition window does not trace the cursor.

Solution: Initialize IME font. When cursor is moved, set IME composition window with ImeSetCompositionWindow(). Add call to

Files: ImmReleaseContext() in several places. (Taro Muraoka)
src/gui.c, src/gui_w32.c, src/proto/gui_w32.pro

Patch 5.6.008 (extra)

Problem: Win32: When two files exist with the same name but different case (through NFS or Samba), fixing the file name case could cause the wrong one to be edited.

Solution: Prefer a perfect match above a match while ignoring case in fname_case(). (Flemming Madsen)

Files: src/os_win32.c

Patch 5.6.009 (extra)

Problem: Win32 GUI: Garbage in Windows Explorer help line when selecting "Edit with Vim" popup menu entry.

Solution: Only return the help line when called with the GCS_HELPTEXT flag. (Tianmiao Hu)

Files: GvimExt/gvimext.cpp

Patch 5.6.010

Problem: A file name which contains a TAB was not read correctly from the viminfo file and the ":ls" listing was not aligned properly.

Solution: Parse the buffer list lines in the viminfo file from the end backwards. Count a Tab for two characters to align the ":ls" list.

Files: src/buffer.c

Patch 5.6.011

Problem: When 'columns' is huge (using a tiny font) and 'statusline' is used, Vim can crash.

Solution: Limit maxlen to MAXPATHL in win_redr_custom(). (John Mullin)

Files: src/screen.c

Patch 5.6.012

Problem: When using "zsh" for /bin/sh, toolcheck may hang until "exit" is typed. (Kuratczyk)

Solution: Add "-c exit" when checking for the shell version.

Files: src/toolcheck

Patch 5.6.013

Problem: Multibyte char in tooltip is broken.

Solution: Consider multibyte char in replace_termcodes(). (Taro Muraoka)

Files: src/term.c

Patch 5.6.014

Problem: When cursor is at the end of line and the character under cursor is a multibyte character, "yl" doesn't yank 1 multibyte-char. (Takuhiro Nishioka)

Solution: Recognize a multibyte-char at end-of-line correctly in oneright(). (Taro Muraoka)

Also: make "+quickfix" in ":version" output appear alphabetically.

Files: src/edit.c

Patch 5.6.015

Problem: New xterm delete key sends <Esc>[3~ by default.

Solution: Added <kDel> and <kIns> to make the set of keypad keys complete.

Files: src/edit.c, src/ex_getln.c, src/keymap.h, src/misc1.c,
src/misc2.c, src/normal.c, src/os_unix.c, src/term.c

Patch 5.6.016

Problem: When deleting a search string from history from inside a mapping, another entry is deleted too. (Benji Fisher)

Solution: Reset last_maptick when deleting the last entry of the search history. Also: Increment maptick when starting a mapping from

typed characters to avoid a just added search string being overwritten or removed from history.

Files: src/ex_getln.c, src/getchar.c

Patch 5.6.017

Problem: ":s/e/\^M/" should replace an "e" with a CTRL-M, not split the line. (Calder)

Solution: Replace the backslash with a CTRL-V internally. (Stephen P. Wall)

Files: src/ex_cmds.c

Patch 5.6.018

Problem: ":help [:digit:]" takes a long time to jump to the wrong place.

Solution: Insert a backslash to avoid the special meaning of '['.

Files: src/ex_cmds.c

Patch 5.6.019

Problem: "snd.c", "snd.java", etc. were recognized as "mail" filetype.

Solution: Make pattern for mail filetype more strict.

Files: runtime/filetype.vim

Patch 5.6.020 (extra)

Problem: The DJGPP version eats processor time (Walter Briscoe).

Solution: Call __dpmi_yield() in the busy-wait loop.

Files: src/os_msdos.c

Patch 5.6.021

Problem: When 'selection' is "exclusive", a double mouse click in Insert mode doesn't select last char in line. (Lutz)

Solution: Allow leaving the cursor on the NUL past the line in this case.

Files: src/edit.c

Patch 5.6.022

Problem: ":e \~<Tab>" expands to ":e ~\~\$ceelen", which doesn't work.

Solution: Re-insert the backslash before the '~'.

Files: src/ex_getln.c

Patch 5.6.023 (extra)

Problem: Various warnings for the Ming compiler.

Solution: Changes to avoid the warnings. (Bill McCarthy)

Files: src/ex_cmds.c, src/gui_w32.c, src/os_w32exe.c, src/os_win32.c, src/syntax.c, src/vim.rc

Patch 5.6.024 (extra)

Problem: Win32 console: Entering CTRL-_ requires the shift key. (Kotchan)

Solution: Specifically catch keycode 0xBD, like the GUI.

Files: src/os_win32.c

Patch 5.6.025

Problem: GTK GUI: Starting the GUI could be interrupted by a SIGWINCH. (Nils Lohner)

Solution: Repeat the read() call to get the gui_in_use value when interrupted by a signal.

Files: src/gui.c

Patch 5.6.026 (extra)

Problem: Win32 GUI: Toolbar bitmaps are searched for in \$VIMRUNTIME/bitmaps, while GTK looks in \$VIM/bitmaps. (Keith Radebaugh)

Solution: Use \$VIM/bitmaps for both, because these are not part of the distribution but defined by the user.

Files: src/gui_w32.c, runtime/doc/gui.txt

Patch 5.6.027

Problem: TCL: Crash when using a Tcl script (reported for Win32).
Solution: Call `Tcl_FindExecutable()` in `main()`. (Brent Fulgham)
Files: `src/main.c`

Patch 5.6.028

Problem: Xterm patch level 126 sends codes for mouse scroll wheel.
Fully works with xterm patch level 131.
Solution: Recognize the codes for button 4 (0x60) and button 5 (0x61).
Files: `src/term.c`

Patch 5.6.029

Problem: GTK GUI: Shortcut keys cannot be used for a dialog. (Johannes Zellner)
Solution: Add support for shortcut keys. (Marcin Dalecki)
Files: `src/gui_gtk.c`

Patch 5.6.030

Problem: When closing a window and 'ea' is set, Vim can crash. (Yasuhiro Matsumoto)
Solution: Set "curbuf" to a valid value in `win_close()`.
Files: `src/window.c`

Patch 5.6.031

Problem: Multi-byte: When a double-byte character ends in CSI, Vim waits for another character to be typed.
Solution: Recognize the CSI as the second byte of a character and don't wait for another one. (Yasuhiro Matsumoto)
Files: `src/getchar.c`

Patch 5.6.032

Problem: Functions with an argument that is a line number don't all accept " ", "\$", etc. (Ralf Arens)
Solution: Add `get_art_lnum()` and use it for `setline()`, `line2byte()` and `synID()`.
Files: `src/eval.c`

Patch 5.6.033

Problem: Multi-byte: "f " sometimes skips to the second space. (Sung-Hyun Nam)
Solution: Change logic in `searchc()` to skip trailing byte of a double-byte character.
Also: Ask for second byte when searching for double-byte character. (Park Chong-Dae)
Files: `src/search.c`

Patch 5.6.034 (extra)

Problem: Compiling with Borland C++ 5.5 fails on `tolower()` and `toupper()`.
Solution: Use `TO_LOWER()` and `TO_UPPER()` instead. Also adjust the Makefile to make using bcc 5.5 easier.
Files: `src/edit.c`, `src/ex_docmd.c`, `src/misc1.c`, `src/Makefile.bor`

Patch 5.6.035

Problem: Listing the "+comments" feature in the ":version" output depended on the wrong ID. (Stephen P. Wall)
Solution: Change "CRYPTV" to "COMMENTS".
Files: `src/version.c`

Patch 5.6.036

Problem: GTK GUI: Copy/paste text doesn't work between gvim and Eterm.
Solution: Support TEXT and COMPOUND_TEXT selection targets. (ChiDeok Hwang)
Files: `src/gui_gtk_x11.c`

Patch 5.6.037

Problem: Multi-byte: Can't use "f" command with multi-byte character in GUI.
Solution: Enable XIM in Normal mode for the GUI. (Sung-Hyun Nam)
Files: src/gui_gtk_x11.c, src/multbyte.c

Patch 5.6.038

Problem: Multi-clicks in GUI are interpreted as a mouse wheel click. When 'ttymouse' is "xterm" a mouse click is interpreted as a mouse wheel click.
Solution: Don't recognize the mouse wheel in check_termcode() in the GUI. Use 0x43 for a mouse drag in do_xterm_trace(), not 0x63.
Files: src/term.c, src/os_unix.c

Patch 5.6.039

Problem: Motif GUI under KDE: When trying to logout, Vim hangs up the system. (Hermann Rochholz)
Solution: When handling the WM_SAVE_YOURSELF event, set the WM_COMMAND property of the window to let the session manager know we finished saving ourselves.
Files: src/gui_x11.c

Patch 5.6.040

Problem: When using ":s" command, matching the regexp is done twice.
Solution: After copying the matched line, adjust the pointers instead of finding the match again. (Loic Grenie) Added vim_regnewptr().
Files: src/ex_cmds.c, src/regexp.c, src/proto/regexp.pro

Patch 5.6.041

Problem: GUI: Athena, Motif and GTK don't give more than 10 dialog buttons.
Solution: Remove the limit on the number of buttons.
Also support the 'v' flag in 'guioptions'.
For GTK: Center the buttons.
Files: src/gui_athena.c, src/gui_gtk.c, src/gui_motif.c

Patch 5.6.042

Problem: When doing "vim -u vimrc" and vimrc contains ":q", the cursor in the terminal can remain off.
Solution: Call cursor_on() in mch_windexit().
Files: src/os_unix.c

Patch 5.6.043 (extra)

Problem: Win32 GUI: When selecting guifont with the dialog, 'guifont' doesn't include the bold or italic attributes.
Solution: Append ":i" and/or ":b" to 'guifont' in gui_mch_init_font().
Files: src/gui_w32.c

Patch 5.6.044 (extra)

Problem: MS-DOS and Windows: The line that dosinst.exe appends to autoexec.bat to set PATH is wrong when Vim is in a directory with an embedded space.
Solution: Use double quotes for the value when there is an embedded space.
Files: src/dosinst.c

Patch 5.6.045 (extra) (fixed version)

Problem: VMS: Various small problems.
Solution: Many small changes. (Zoltan Arpadffy)
File name modifier ":h" keeps the path separator.
File name modifier ":e" also removes version.
Compile with MAX_FEAT by default.
When checking for autocommands ignore version in file name.
Be aware of file names being case insensitive.

Added vt320 builtin termcap.
Be prepared for an empty default_vim_dir.
Files: runtime/gvimrc_example.vim, runtime/vimrc_example.vim,
runtime/doc/os_vms.txt, src/eval.c, src/feature.h, src/fileio.c,
src/gui_motif.c, src/gui_vms_conf.h, src/main.c, src/memline.c,
src/misc1.c, src/option.c, src/os_vms_conf.h, src/os_vms.c,
src/os_vms.h, src/os_vms.mms, src/tag.c, src/term.c, src/version.c

Patch 5.6.046

Problem: Systems with backslash in file name: With 'shellslash' set, "vim
/.c" only uses a slash for the first file name. (Har'El)
Solution: Fix slashes in file name arguments after reading the vimrc file.
Files: src/option.c

Patch 5.6.047

Problem: \$CPPFLAGS is not passed on to ctags configure.
Solution: Add it. (Walter Briscoe)
Files: src/config.mk.in, src/Makefile

Patch 5.6.048

Problem: CTRL-R in Command-line mode is documented to insert text as typed,
but inserts text literally.
Solution: Make CTRL-R insert text as typed, use CTRL-R CTRL-R to insert
literally. This is consistent with Insert mode. But characters
that end Command-line mode are inserted literally.
Files: runtime/doc/index.txt, runtime/doc/cmdline.txt, src/ex_getln.c,
src/ops.c, src/proto/ops.pro

Patch 5.6.049

Problem: Documentation for [!] after ":ijump" is wrong way around. (Benji
Fisher)
Solution: Fix the documentation. Also improve the code to check for a match
after a /* */ comment.
Files: runtime/doc/tagsearch.txt, src/search.c

Patch 5.6.050

Problem: Replacing is wrong when replacing a single-byte char with
double-byte char or the other way around.
Solution: Shift the text after the character when it is replaced.
(Yasuhiro Matsumoto)
Files: src/normal.c, src/misc1.c

Patch 5.6.051

Problem: ":tprev" and ":tnext" don't give an error message when trying to
go before the first or beyond the last tag. (Robert Webb)
Solution: Added error messages. Also: Delay a second when a file-read
message is going to overwrite an error message, otherwise it won't
be seen.
Files: src/fileio.c, src/tag.c

Patch 5.6.052

Problem: Multi-byte: When an Ex command has a '|' or ''' as a second byte,
it terminates the command.
Solution: Skip second byte of multi-byte char when checking for '|' and '''.
(Asai Kenichi)
Files: src/ex_docmd.c

Patch 5.6.053

Problem: CTRL-] doesn't work on a tag that contains a '|'. (Cesar Crusius)
Solution: Escape '|', ''' and '\' in tag names when using CTRL-] and also
for command-line completion.
Files: src/ex_getln.c, src/normal.c

Patch 5.6.054

Problem: When using ":e" and ":e #" the cursor is put in the first column when 'startofline' is set. (Cordell)

Solution: Use the last known column when 'startofline' is set.
Also, use ECMD_LAST more often to simplify the code.

Files: src/buffer.c, src/ex_cmds.c, src/ex_docmd.c, src/proto/buffer.pro

Patch 5.6.055

Problem: When 'statusline' only contains a text without "%" and doesn't fit in the window, Vim crashes. (Ron Aaron)

Solution: Don't use the pointer for the first item if there is no item.

Files: src/screen.c

Patch 5.6.056 (extra)

Problem: MS-DOS: F11 and F12 don't work when 'bioskey' is set.

Solution: Use enhanced keyboard functions. (Vince Negri)
Detect presence of enhanced keyboard and set bioskey_read and bioskey_ready.

Files: src/os_msdos.c

Patch 5.6.057 (extra)

Problem: Win32 GUI: Multi-byte characters are wrong in dialogs and tear-off menus.

Solution: Use system font instead of a fixed font. (Matsumoto, Muraoka)

Files: src/gui_w32.c

Patch 5.6.058

Problem: When the 'a' flag is not in 'guioptions', non-Windows systems copy Visually selected text to the clipboard/selection on a yank or delete command anyway. On Windows it isn't done even when the 'a' flag is included.

Solution: Respect the 'a' flag in 'guioptions' on all systems.

Files: src/normal.c

Patch 5.6.059 (extra)

Problem: When moving the cursor over italic text and the characters spill over to the cell on the right, that spill-over is deleted.
Noticed in the Win32 GUI, can happen on other systems too.

Solution: Redraw italic text starting from a blank, like this is already done for bold text. (Vince Negri)

Files: src/gui.c, src/gui.h, src/gui_w32.c

Patch 5.6.060

Problem: Some bold characters spill over to the cell on the left, that spill-over can remain sometimes.

Solution: Redraw a character when the next character was bold and needs redrawing. (Robert Webb)

Files: src/screen.c

Patch 5.6.061

Problem: When xterm sends 8-bit controls, recognizing the version response doesn't work.

When using CSI instead of <Esc>[for the termcap color codes, using 16 colors doesn't work. (Neil Bird)

Solution: Also accept CSI in place of <Esc>[for the version string.
Also check for CSI when handling colors 8-15 in term_color().
Use CSI for builtin xterm termcap entries when 'term' contains "8bit".

Files: runtime/doc/term.txt, src/ex_cmds.c, src/option.c, src/term.c, src/os_unix.c, src/proto/option.pro, src/proto/term.pro

Patch 5.6.062

Problem: The documentation says that setting 'smartindent' doesn't have an effect when 'cindent' is set, but it does make a difference for lines starting with "#". (Neil Bird)

Solution: Really ignore 'smartindent' when 'cindent' is set.

Files: src/misc1.c, src/ops.c

Patch 5.6.063

Problem: Using "I" in Visual-block mode doesn't accept a count. (Johannes Zellner)

Solution: Pass the count on to do_insert() and edit(). (Allan Kelly)

Files: src/normal.c, src/ops.c, src/proto/ops.pro

Patch 5.6.064

Problem: MS-DOS and Win32 console: Mouse doesn't work correctly after including patch 5.6.28. (Vince Negri)

Solution: Don't check for mouse scroll wheel when the mouse code contains the number of clicks.

Files: src/term.c

Patch 5.6.065

Problem: After moving the cursor around in Insert mode, typing a space can still trigger an abbreviation. (Benji Fisher)

Solution: Don't check for an abbreviation after moving around in Insert mode.

Files: src/edit.c

Patch 5.6.066

Problem: Still a few bold character spill-over remains after patch 60.

Solution: Clear character just in front of blanking out rest of the line. (Robert Webb)

Files: src/screen.c

Patch 5.6.067

Problem: When a file name contains a NL, the viminfo file is corrupted.

Solution: Use viminfo_writestring() to convert the NL to CTRL-V n. Also fix the Buffers menu and listing a menu name with a newline.

Files: runtime/menu.vim, src/buffer.c, src/mark.c, src/menu.c

Patch 5.6.068

Problem: Compiling the Perl interface doesn't work with Perl 5.6.0. (Bernhard Rosenkraenzer)

Solution: Also check xs_apiversion for the version number when prepending defines for PL_*.

Files: src/Makefile

Patch 5.6.069

Problem: "go" doesn't always end up at the right character when 'fileformat' is "dos". (Bruce DeVisser)

Solution: Correct computations in ml_find_line_or_offset().

Files: src/memline.

Patch 5.6.070 (depends on 5.6.068)

Problem: Compiling the Perl interface doesn't work with Perl 5.6.0. (Bernhard Rosenkraenzer)

Solution: Simpler check instead of the one from patch 68.

Files: src/Makefile

Patch 5.6.071

Problem: "A" in Visual block mode on a Tab positions the cursor one char to the right. (Michael Haumann)

Solution: Correct the column computation in op_insert().

Files: src/ops.c

Patch 5.6.072

Problem: When starting Vim with "vim +startinsert", it enters Insert mode only after typing the first command. (Andrew Pimlott)
Solution: Insert a dummy command in the stuff buffer.
Files: src/main.c

Patch 5.6.073 (extra) (depends on 5.6.034)

Problem: Win32 GUI: When compiled with Bcc 5.5 menus don't work. In dosinst.c toupper() and tolower() give an "internal compiler error" for Bcc 5.5.
Solution: Define WINVER to 4 to avoid compiling for Windows 2000. (Dan Sharp) Also cleaned up compilation arguments. Use our own implementation of toupper() in dosinst.c. Use mytoupper() instead of tolower().
Files: src/Makefile.bor, src/dosinst.c

Patch 5.6.074 (extra)

Problem: Entering CSI directly doesn't always work, because it's recognized as the start of a special key. Mostly a problem with multi-byte in the GUI.
Solution: Use K_CSI for a typed CSI character. Use <CSI> for a normal CSI, <xCSI> for a CSI typed in the GUI.
Files: runtime/doc/intro.txt, src/getchar.c, src/gui_amiga.c, src/gui_gtk_x11.c, src/gui_mac.c, src/gui_riscos.c, src/gui_w32.c, src/keymap.h, src/misc2.c

Patch 5.6.075

Problem: When using "I" or "A" in Visual block mode while 'sts' is set may change spaces to a Tab the inserted text is not correct. (Mike Steed) And some other problems when using "A" to append after the end of the line.
Solution: Check for change in spaces/tabs after inserting the text. Append spaces to fill the gap between the end-of-line and the right edge of the block.
Files: src/ops.c

Patch 5.6.076

Problem: GTK GUI: Mapping <M-Space> doesn't work.
Solution: Don't use the "Alt" modifier twice in key_press_event().
Files: src/gui_gtk_x11.c

Patch 5.6.077

Problem: GUI: When interrupting an external program with CTRL-C, gvim might crash. (Benjamin Korvemaker)
Solution: Avoid using a NULL pointer in ui_inchar_undo().
Files: src/ui.c

Patch 5.6.078

Problem: Locale doesn't always work on FreeBSD. (David O'Brien)
Solution: Link with the "xpg4" library when available.
Files: src/configure.in, src/configure

Patch 5.6.079

Problem: Vim could crash when several Tcl interpreters are created and destroyed.
Solution: handle the "exit" command and nested ":tcl" commands better. (Ingo Wilken)
Files: runtime/doc/if_tcl.txt, src/if_tcl.c

Patch 5.6.080

Problem: When jumping to a tag, generating the tags file and jumping to the

same tag again uses the old search pattern. (Sung-Hyun Nam)
Solution: Flush cached tag matches when executing an external command.
Files: src/misc2.c, src/proto/tag.pro, src/tag.c

Patch 5.6.081

Problem: ":syn include" uses a level for the included file, this confuses contained items included at the same level.
Solution: Use a unique tag for each included file. Changed sp_syn_inc_lvl to sp_syn_inc_tag. (Scott Bigham)
Files: src/syntax.c, src/structs.h

Patch 5.6.082

Problem: When using cscope, Vim can crash.
Solution: Initialize tag_fname in find_tags(). (Anton Blanchard)
Files: src/tag.c

Patch 5.6.083 (extra)

Problem: Win32: The visual beep can't be seen. (Eric Roesinger)
Solution: Flush the output before waiting with GdiFlush(). (Maurice S. Barnum)
Also: Allow specifying the delay in t_vb for the GUI.
Files: src/gui.c, src/gui_amiga.c, src/gui_gtk_x11.c, src/gui_mac.c, src/gui_riscos.c, src/gui_w32.c, src/gui_x11.c, src/gui_beos.cc, src/proto/gui_amiga.pro, src/proto/gui_gtk_x11.pro, src/proto/gui_mac.pro, src/proto/gui_riscos.pro, src/proto/gui_w32.pro, src/proto/gui_x11.pro, src/proto/gui_beos.pro

Patch 5.6.084 (depends on 5.6.074)

Problem: GUI: Entering CSI doesn't always work for Athena and Motif.
Solution: Handle typed CSI as <xCSI> (forgot this bit in 5.6.074).
Files: src/gui_x11.c

Patch 5.6.085

Problem: Multi-byte: Using "r" to replace a double-byte char with a single-byte char moved the cursor one character. (Matsumoto)
Also, using a count when replacing a single-byte char with a double-byte char didn't work.
Solution: Don't use del_char() to delete the second byte.
Get "ptr" again after calling ins_char().
Files: src/normal.c

Patch 5.6.086 (extra)

Problem: Win32: When using libcall() and the returned value is not a valid pointer, Vim crashes.
Solution: Use IsBadStringPtr() to check if the pointer is valid.
Files: src/os_win32.c

Patch 5.6.087

Problem: Multi-byte: Commands and messages with multi-byte characters are displayed wrong.
Solution: Detect double-byte characters. (Yasuhiro Matsumoto)
Files: src/ex_getln.c, src/message.c, src/misc2.c, src/screen.c

Patch 5.6.088

Problem: Multi-byte with Motif or Athena: The message "XIM requires fontset" is annoying when Vim was compiled with XIM support but it is not being used.
Solution: Remove that message.
Files: src/multbyte.c

Patch 5.6.089

Problem: On non-Unix systems it's possible to overwrite a read-only file

without using "!".
Solution: Check if the file permissions allow overwriting before moving the file to become the backup file.
Files: src/fileio.c

Patch 5.6.090

Problem: When editing a file in "/home/dir/home/dir" this was replaced with "~". (Andreas Jellinghaus)
Solution: Replace the home directory only once in home_replace().
Files: src/misc1.c

Patch 5.6.091

Problem: When editing many "no file" files, can't create swap file, because .sw[a-p] have all been used. (Neil Bird)
Solution: Also use ".sv[a-z]", ".su[a-z]", etc.
Files: src/memline.c

Patch 5.6.092

Problem: FreeBSD: When setting \$TERM to a non-valid terminal name, Vim hangs in tputs().
Solution: After tgetent() returns an error code, call it again with the terminal name "dumb". This apparently creates an environment in which tputs() doesn't fail.
Files: src/term.c

Patch 5.6.093 (extra)

Problem: Win32 GUI: "ls | gvim -" will show a message box about reading stdin when Vim exits. (Donohue)
Solution: Don't write a message about the file read from stdin until the GUI has started.
Files: src/fileio.c

Patch 5.6.094

Problem: Problem with multi-byte string for ":echo var".
Solution: Check for length in msg_outtrans_len_attr(). (Sung-Hyun Nam)
Also make do_echo() aware of multi-byte characters.
Files: src/eval.c, src/message.c

Patch 5.6.095

Problem: With an Emacs TAGS file that include another a relative path doesn't always work.
Solution: Use expand_tag_fname() on the name of the included file. (Utz-Uwe Haus)
Files: src/tag.c

Patch 5.6.096

Problem: Unix: When editing many files, startup can be slow. (Paul Ackersviller)
Solution: Halve the number of stat() calls used to add a file to the buffer list.
Files: src/buffer.c

Patch 5.7a.001

Problem: GTK doesn't respond on drag&drop from ROX-Filer.
Solution: Add "text/uri-list" target. (Thomas Leonard)
Also: fix problem with checking for trash arguments.
Files: src/gui_gtk_x11.c

Patch 5.7a.002

Problem: Multi-byte: 'showmatch' is performed when second byte of an inserted double-byte char is a paren or brace.
Solution: Check IsTrailByte() before calling showmatch(). (Taro Muraoka)

Files: src/misc1.c

Patch 5.7a.003

Problem: Multi-byte: After using CTRL-O in Insert mode with the cursor at the end of the line on a multi-byte character the cursor moves to the left.

Solution: Check for multi-byte character at end-of-line. (Taro Muraoka)
Also: fix cls() to detect a double-byte character. (Chong-Dae Park)

Files: src/edit.c, src/search.c

Patch 5.7a.004

Problem: When reporting the search pattern offset, the string could be unterminated, which may cause a crash.

Solution: Terminate the string for the search offset. (Stephen P. Wall)

Files: src/search.c

Patch 5.7a.005

Problem: When ":s//~/" doesn't find a match it reports "[NULL]" for the pattern.

Solution: Use get_search_pat() to obtain the actually used pattern.

Files: src/ex_cmds.c, src/proto/search.pro, src/search.c

Patch 5.7a.006 (extra)

Problem: VMS: Various problems, also with the VAXC compiler.

Solution: In many places use the Unix code for VMS too.
Added time, date and compiler version to version message.
(Zoltan Arpadffy)

Files: src/ex_cmds.c, src/ex_docmd.c, src/globals.h, src/gui_vms_conf.h,
src/main.c, src/message.c, src/misc1.c, src/os_vms.c,
src/os_vms.h, src/os_vms.mms, src/os_vms_conf.h,
src/proto/os_vms.pro, src/proto/version.pro, src/term.c,
src/version.c, src/xxd/os_vms.mms, src/xxd/xxd.c

Patch 5.7a.007

Problem: Motif and Athena GUI: CTRL-@ is interpreted as CTRL-C.

Solution: Only use "intr_char" when it has been set.

Files: src/gui_x11.c

Patch 5.7a.008

Problem: GTK GUI: When using CTRL-L the screen is redrawn twice, causing trouble for bold characters. Also happens when moving with the scrollbar. Best seen when 'writedelay' is non-zero.
When starting the GUI with ":gui" the screen is redrawn once with the wrong colors.

Solution: Only set the geometry hints when the window size really changed.
This avoids setting it each time the scrollbar is forcefully redrawn.
Don't redraw in expose_event() when gui.starting is still set.

Files: src/gui_gtk_x11.c

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VERSION 5.8

version-5.8

Version 5.8 is a bug-fix version of 5.7.

Changed

changed-5.8

Ctags is no longer included with Vim. It has grown into a project of its own.
You can find it here: <http://ctags.sf.net>. It is highly recommended as a Vim

companion when you are writing programs.

Added

added-5.8

New syntax files:

acedb	AceDB (Stewart Morris)
aflex	Aflex (Mathieu Clabaut)
antlr	Antlr (Mathieu Clabaut)
asm68k	68000 Assembly (Steve Wall)
automake	Automake (John Williams)
ayacc	Ayacc (Mathieu Clabaut)
b	B (Mathieu Clabaut)
bindzone	BIND zone (glory hump)
blank	Blank (Rafal Sulejman)
cfg	Configure files (Igor Prischepoff)
changelog	ChangeLog (Gediminas Paulauskas)
cl	Clever (Phil Uren)
crontab	Crontab (John Hoelzel)
csc	Essbase script (Raul Segura Acevedo)
cynlib	Cynlib(C++) (Phil Derrick)
cynpp	Cyn++ (Phil Derrick)
debchangelog	Debian Changelog (Wichert Akkerman)
debcontrol	Debian Control (Wichert Akkerman)
dns	DNS zone file (Jehsom)
dtml	Zope's DTML (Jean Jordaan)
dylan	Dylan, Dylan-intr and Dylan-lid (Brent Fulgham)
ecd	Embedix Component Description (John Beppu)
fgl	Informix 4GL (Rafal Sulejman)
foxpro	FoxPro (Powing Tse)
gsp	GNU Server Pages (Nathaniel Harward)
gtkrc	GTK rc (David Necas)
hercules	Hercules (Avant! Corporation) (Dana Edwards)
htmlos	HTML/OS by Aestiva (Jason Rust)
inittab	SysV process control (David Necas)
iss	Inno Setup (Dominique Stephan)
jam	Jam (Ralf Lemke)
jess	Jess (Paul Baleme)
lprolog	LambdaProlog (Markus Mottl)
ia64	Intel Itanium (parth malwankar)
kix	Kixtart (Nigel Gibbs)
mgp	MaGic Point (Gerfried Fuchs)
mason	Mason (HTML with Perl) (Andrew Smith)
mma	Mathematica (Wolfgang Waltenberger)
nqc	Not Quite C (Stefan Scherer)
omnimark	Omnimark (Paul Terray)
openroad	OpenROAD (Luis Moreno Serrano)
named	BIND configuration (glory hump)
papp	PApp (Marc Lehmann)
pfmain	Postfix main config (Peter Kelemen)
pic	PIC assembly (Aleksandar Veselinovic)
ppwiz	PPWizard (Stefan Schwarzer)
progress	Progress (Phil Uren)
psf	Product Specification File (Rex Barzee)
r	R (Tom Payne)
registry	MS-Windows registry (Dominique Stephan)
robots	Robots.txt (Dominique Stephan)
rtf	Rich Text Format (Dominique Stephan)
setl	SETL (Alex Poylisher)
sgmldecl	SGML Declarations (Daniel A. Molina W.)
sinda	Sinda input (Adrian Nagle)

sindacmp	Sinda compare (Adrian Nagle)
sindaout	Sinda output (Adrian Nagle)
smith	SMITH (Rafal Sulejman)
snobol4	Snobol 4 (Rafal Sulejman)
strace	Strace (David Necas)
tak	TAK input (Adrian Nagle)
takcmp	TAK compare (Adrian Nagle)
takout	TAK output (Adrian Nagle)
tasm	Turbo assembly (Foolman)
texmf	TeX configuration (David Necas)
trasys	Trasys input (Adrian Nagle)
tssgm	TSS Geometry (Adrian Nagle)
tssop	TSS Optics (Adrian Nagle)
tsscl	TSS Command line (Adrian Nagle)
virata	Virata Configuration Script (Manuel M.H. Stol)
vsejcl	VSE JCL (David Ondrejko)
wdiff	Wordwise diff (Gerfried Fuchs)
wsh	Windows Scripting Host (Paul Moore)
xkb	X Keyboard Extension (David Necas)

Renamed php3 to php, it now also supports php4 (Lutz Eymers)

Patch 5.7.015

Problem: Syntax files for Vim 6.0 can't be used with 5.x.

Solution: Add the "default" argument to the ":highlight" command: Ignore the command if highlighting was already specified.

Files: src/syntax.c

Generate the Syntax menu with makemenu.vim, so that it doesn't have to be done when Vim is starting up. Reduces the startup time of the GUI.

Fixed

fixed-5.8

Conversion of docs to HTML didn't convert "|tag|s" to a hyperlink.

Fixed compiling under NeXT. (Jeroen C.M. Goudswaard)

optwin.vim gave an error when used in Vi compatible mode ('cpo' contains 'C').

Tcl interpreter: "buffer" command didn't check for presence of an argument.
(Dave Bodenstag)

dosinst.c: Added checks for too long file name.

Amiga: a file name starting with a colon was considered absolute but it isn't.
Amiga: ":pwd" added a slash when in the root of a drive.

Macintosh: Warnings for unused variables. (Bernhard Pruemmer)

Unix: When catching a deadly signal, handle it in such a way that it's unlikely that Vim will hang. Call _exit() instead of exit() in case of a severe problem.

Setting the window title from nothing to something didn't work after patch 29.

Check for ownership of .exrc and .vimrc was done with stat(). Use lstat() as well for extra security.

Win32 GUI: Printing a file with 'fileformat' "unix" didn't work. Set 'fileformat' to "dos" before writing the temp file.

Unix: Could start waiting for a character when checking for a CTRL-C typed when an X event is received.

Could not use Perl and Python at the same time on FreeBSD, because Perl used "-lc" and Python used the threaded C library.

Win32: The Mingw compiler gave a few warning messages.

When using "ZZ" and an autocommand for writing uses an abbreviation it didn't work. Don't stuff the ":x" command but execute it directly. (Mikael Berthe)

VMS doesn't always have lstat(), added an #ifdef around it.

Added a few corrections for the Macintosh. (Axel Kielhorn)

Win32: Gvimext could not edit more than a few files at once, the length of the argument was fixed.

Previously released patches for Vim 5.7:

Patch 5.7.001

Problem: When the current buffer is crypted, and another modified buffer isn't, ":wall" will encrypt the other buffer.
Solution: In buf_write() use "buf" instead of "curbuf" to check for the crypt key.
Files: src/fileio.c

Patch 5.7.002

Problem: When 'showmode' is set, using "CTRL-O :r file" waits three seconds before displaying the read text. (Wichert Akkerman)
Solution: Set "keep_msg" to the file message so that the screen is redrawn before the three seconds wait for displaying the mode message.
Files: src/fileio.c

Patch 5.7.003

Problem: Searching for "[[:cntrl:]]" doesn't work.
Solution: Exclude NUL from the matching characters, it terminates the list.
Files: src/regexp.c

Patch 5.7.004

Problem: GTK: When selecting a new font, Vim can crash.
Solution: In gui_mch_init_font() unreference the old font, not the new one.
Files: src/gui_gtk_x11.c

Patch 5.7.005

Problem: Multibyte: Inserting a wrapped line corrupts kterm screen. Pasting TEXT/COMPOUND_TEXT into Vim does not work. On Motif no XIM status line is displayed even though it is available.
Solution: Don't use xterm trick for wrapping lines for multibyte mode. Correct a missing "break", added TEXT/COMPOUND_TEXT selection request. Add XIMStatusArea fallback code. (Katsuhito Nagano)
Files: src/gui_gtk_x11.c, src/multibyte.c, src/screen.c, src/ui.c

Patch 5.7.006

Problem: GUI: redrawing the non-Visual selection is wrong when the window is unobscured. (Jean-Pierre Etienne)
Solution: Redraw the selection properly and don't clear it. Added "len"

Files: argument to clip_may_redraw_selection().
src/gui.c, src/ui.c, src/proto/ui.pro

Patch 5.7.007

Problem: Python: Crash when using the current buffer twice.
Solution: Increase the reference count for buffer and window objects.
(Johannes Zellner)
Files: src/if_python.c

Patch 5.7.008

Problem: In Ex mode, backspacing over the first TAB doesn't work properly.
(Wichert Akkerman)
Solution: Switch the cursor on before printing the newline.
Files: src/ex_getln.c

Patch 5.7.009 (extra)

Problem: Mac: Crash when using a long file.
Solution: Don't redefine malloc() and free(), because it will break using
realloc().
Files: src/os_mac.h

Patch 5.7.010

Problem: When using CTRL-A on a very long number Vim can crash. (Michael
Naumann)
Solution: Truncate the length of the new number to avoid a buffer overflow.
Files: src/ops.c

Patch 5.7.011 (extra)

Problem: Win32 GUI on NT 5 and Win98: Displaying Hebrew is reversed.
Solution: Output each character separately, to avoid that Windows reverses
the text for some fonts. (Ron Aaron)
Files: src/gui_w32.c

Patch 5.7.012

Problem: When using "-complete=buffer" for ":command" the user command
fails.
Solution: In a user command don't replace the buffer name with a count for
the buffer number.
Files: src/ex_docmd.c

Patch 5.7.013

Problem: "gD" didn't always find a match in the first line, depending on
the column the search started at.
Solution: Reset the column to zero before starting to search.
Files: src/normal.c

Patch 5.7.014

Problem: Rot13 encoding was done on characters with accents, which is
wrong. (Sven Gottwald)
Solution: Only do rot13 encoding on ASCII characters.
Files: src/ops.c

Patch 5.7.016

Problem: When hitting 'n' for a ":s///c" command, the ignore-case flag was
not restored, some matches were skipped. (Daniel Blaustein)
Solution: Restore the reg_ic variable when 'n' was hit.
Files: src/ex_cmds.c

Patch 5.7.017

Problem: When using a Vim script for Vim 6.0 with <SID> before a function
name, it produces an error message even when inside an "if version
>= 600". (Charles Campbell)

Solution: Ignore errors in the function name when the function is not going to be defined.
Files: src/eval.c

Patch 5.7.018

Problem: When running "rvim" or "vim -Z" it was still possible to execute a shell command with system() and backtick-expansion. (Antonios A. Kavarnos)
Solution: Disallow executing a shell command in get_cmd_output() and mch_expand_wildcards().
Files: src/misc1.c, src/os_unix.c

Patch 5.7.019

Problem: Multibyte: In a substitute string, a multi-byte character isn't skipped properly, can be a problem when the second byte is a backslash.
Solution: Skip an extra byte for a double-byte character. (Muraoka Taro)
Files: src/ex_cmds.c

Patch 5.7.020

Problem: Compilation doesn't work on MacOS-X.
Solution: Add a couple of #ifdefs. (Jamie Curmi)
Files: src/regexp.c, src/ctags/general.h

Patch 5.7.021

Problem: Vim sometimes produces a beep when started in an xterm. Only happens when compiled without mouse support.
Solution: Requesting the xterm version results in a K_IGNORE. This wasn't handled when mouse support is disabled. Accept K_IGNORE always.
Files: src/normal.c

Patch 5.7.022

Problem: %v in 'statusline' is not displayed when it's equal to %c.
Solution: Check if %V or %v is used and handle them differently.
Files: src/screen.c

Patch 5.7.023

Problem: Crash when a WinLeave autocommand deletes the buffer in the other window.
Solution: Check that after executing the WinLeave autocommands there still is a window to be closed. Also update the test that was supposed to check for this problem.
Files: src/window.c, testdir/test13.in, testdir/test13.ok

Patch 5.7.024

Problem: Evaluating an expression for 'statusline' can have side effects.
Solution: Evaluate the expression in a sandbox.
Files: src/edit.c, src/eval.c, src/proto/eval.pro, src/ex_cmds.c, src/ex_cmds.h, src/ex_docmd.c, src/globals.h, src/option.c, src/screen.c, src/undo.c

Patch 5.7.025 (fixed)

Problem: Creating a temp file has a race condition.
Solution: Create a private directory to write the temp files in.
Files: src/fileio.c, src/misc1.c, src/proto/misc1.pro, src/proto/fileio.pro, src/memline.c, src/os_unix.h

Patch 5.7.026 (extra)

Problem: Creating a temp file has a race condition.
Solution: Create a private directory to write the temp files in. This is the extra part of patch 5.7.025.
Files: src/os_msdos.h

Patch 5.7.027

Problem: Starting to edit a file can cause a crash. For example when in Insert mode, using CTRL-O :help abbr<Tab> to scroll the screen and then <CR>, which edits a help file. (Robert Bogomip)

Solution: Check if keep_msg is NULL before copying it.

Files: src/fileio.c

Patch 5.7.028

Problem: Creating a backup or swap file could fail in rare situations.

Solution: Use O_EXCL for open().

Files: src/fileio.c, src/memfile.c

Patch 5.7.029

Problem: Editing a file with an extremely long name crashed Vim.

Solution: Check for length of the name when setting the window title.

Files: src/buffer.c

Patch 5.7.030

Problem: A ":make" or ":grep" command with a very long argument could cause a crash.

Solution: Allocate the buffer for the shell command.

Files: src/ex_docmd.c

vim:tw=78:ts=8:ft=help:norl:
 version6.txt For Vim version 8.0. Last change: 2014 Aug 29

VIM REFERENCE MANUAL by Bram Moolenaar

Welcome to Vim Version 6.0! A large number of features has been added. This file mentions all the new items that have been added, changes to existing features and bug fixes compared to Vim 5.x.

See |vi_diff.txt| for an overview of differences between Vi and Vim 6.0.
 See |version4.txt| for differences between Vim 3.0 and Vim 4.0.
 See |version5.txt| for differences between Vim 4.0 and Vim 5.0.

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VERSION 6.1	version-6.1
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Added	added-6.2
Fixed	fixed-6.2

VERSION 6.3	version-6.3
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Added	added-6.3
Fixed	fixed-6.3

VERSION 6.4	version-6.4
Changed	changed-6.4
Added	added-6.4
Fixed	fixed-6.4

=====	
INCOMPATIBLE CHANGES	*incompatible-6*

These changes are incompatible with previous releases. Check this list if you run into a problem when upgrading from Vim 5.x to 6.0

Cursor position in Visual mode	*curpos-visual*
--------------------------------	-----------------

When going from one window to another window on the same buffer while in

Visual mode, the cursor position of the other window is adjusted to keep the same Visual area. This can be used to set the start of the Visual area in one window and the end in another. In vim 5.x the cursor position of the other window would be used, which could be anywhere and was not very useful.

Substitute command Vi compatible *substitute-CR*

The substitute string (the "to" part of the substitute command) has been made Vi compatible. Previously a CTRL-V had a special meaning and could be used to prevent a <CR> to insert a line break. This made it impossible to insert a CTRL-V before a line break. Now a backslash is used to prevent a <CR> to cause a line break. Since the number of backslashes is halved, it is still possible to insert a line break at the end of the line. This now works just like Vi, but it's not compatible with Vim versions before 6.0.

When a ":s" command doesn't make any substitutions, it no longer sets the '[' and ']' marks. This is not related to Vi, since it doesn't have these marks.

Global option values introduced *new-global-values*

There are now global values for options which are local to a buffer or window. Previously the local options were copied from one buffer to another. When editing another file this could cause option values from a modeline to be used for the wrong file. Now the global values are used when entering a buffer that has not been used before. Also, when editing another buffer in a window, the local window options are reset to their global values. The ":set" command sets both the local and global values, this is still compatible. But a modeline only sets the local value, this is not backwards compatible.

":let &opt = val" now sets the local and global values, like ":set". New commands have been added to set the global or local value:

:let &opt = val	like ":set"
:let &g:opt = val	like ":setglobal"
:let &l:opt = val	like ":setlocal"

'fileencoding' changed *fileencoding-changed*

'fileencoding' was used in Vim 5.x to set the encoding used inside all of Vim. This was a bit strange, because it was local to a buffer and worked for all buffers. It could never be different between buffers, because it changed the way text in all buffers was interpreted. It is now used for the encoding of the file related to the buffer. If you still set 'fileencoding' it is likely to be overwritten by the detected encoding from 'fileencodings', thus it is "mostly harmless". The old FileEncoding autocommand now does the same as the new EncodingChanged event.

Digraphs changed *digraphs-changed*

The default digraphs now correspond to RFC1345. This is very different from what was used in Vim 5.x. |digraphs|

Filetype detection changed *filetypedetect-changed*

The filetype detection previously was using the "filetype" autocommand group. This caused confusion with the FileType event name (case is ignored). The group is now called "filetypedetect". It still works, but if the "filetype" group is used the autocommands will not be removed by ":filetype off".

The support for 'runtimepath' has made the "myfiletypefile" and "mysyntaxfile" mechanism obsolete. They are still used for backwards compatibility.

The connection between the FileType event and setting the 'syntax' option was previously in the "syntax" autocommand group. That caused confusion with the Syntax event name. The group is now called "syntaxset".

The distributed syntax files no longer contain "syntax clear". That makes it possible to include one in the other without tricks. The syntax is now cleared when the 'syntax' option is set (by an autocommand added from synload.vim). This makes the syntax cleared when the value of 'syntax' does not correspond to a syntax file. Previously the existing highlighting was kept.

Unlisted buffers introduced

new-unlisted-buffers

There is now a difference between buffers which don't appear in the buffer list and buffers which are really not in the buffer list. Commands like ":ls", ":bnext", ":blast" and the Buffers menu will skip buffers not in the buffer list. |unlisted-buffer|
The 'buflisted' option can be used to make a buffer appear in the buffer list or not.

Several commands that previously added a buffer to the buffer list now create an unlisted buffer. This means that a ":bnext" and ":ball" will not find these files until they have actually been edited. For example, buffers used for the alternative file by ":write file" and ":read file".

Other commands previously completely deleted a buffer and now only remove the buffer from the buffer list. Commands relying on a buffer not to be present might fail. For example, a ":bdelete" command in an autocommand that relied on something following to fail (was used in the automatic tests). |:bwipeout| can be used for the old meaning of ":bdelete".

The BufDelete autocommand event is now triggered when a buffer is removed from the buffer list. The BufCreate event is only triggered when a buffer is created that is added to the buffer list, or when an existing buffer is added to the buffer list. BufAdd is a new name for BufCreate. The new BufNew event is for creating any buffer and BufWipeout for really deleting a buffer.

When doing Insert mode completion, only buffers in the buffer list are scanned. Added the 'U' flag to 'complete' to do completion from unlisted buffers.

Unlisted buffers are not stored in a viminfo file.

CTRL-U in Command-line mode changed

CTRL-U-changed

Using CTRL-U when editing the command line cleared the whole line. Most shells only delete the characters before the cursor. Made it work like that. (Steve Wall)

You can get the old behavior with CTRL-E CTRL-U: >
 :cnoremap <C-U> <C-E><C-U>

Ctags gone

ctags-gone

Ctags is no longer part of the Vim distribution. It's now a grown-up program by itself, it deserves to be distributed separately. Ctags can be found here: <http://ctags.sf.net/>.

Documentation reorganized

documentation-6

The documentation has been reorganized, an item may not be where you found it in Vim 5.x.

- The user manual was added, some items have been moved to it from the reference manual.
- The quick reference is now in a separate file (so that it can be printed).

The examples in the documentation were previously marked with a ">" in the first column. This made it difficult to copy/paste them. There is now a single ">" before the example and it ends at a "<" or a non-blank in the first column. This also looks better without highlighting.

'helpfile' is no longer used to find the help tags file. This allows a user to add its own help files (e.g., for plugins).

Modeless selection and clipboard

modeless-and-clipboard

The modeless selection is used to select text when Visual mode can't be used, for example when editing the command line or at the more prompt. In Vim 5.x the modeless selection was always used. On MS-Windows this caused the clipboard to be overwritten, with no way to avoid that. The modeless selection now obeys the 'a' and 'A' flags in 'guioptions' and "autoselect" and "autoselectml" in 'clipboard'. By default there is no automatic copy on MS-Windows. Use the |c_CTRL-Y| command to manually copy the selection.

To get the old behavior back, do this: >

```
:set clipboard^=autoselectml guioptions+=A
```

Small incompatibilities

incomp-small-6

'backupdir', 'cdpath', 'directory', 'equalprg', 'errorfile', 'formatprg', 'grepprg', 'helpfile', 'makeef', 'makeprg', 'keywordprg', 'cscopeprg', 'viminfo' and 'runtimepath' can no longer be set from a modeline, for better security.

Removed '_' from the 'breakat' default: It's commonly used in keywords.

The default for 'mousehide' is on, because this works well for most people.

The Amiga binary is now always compiled with "big" features. The "big" binary archive no longer exists.

The items "[RO]", "[+]", "[help]", "[Preview]" and "[filetype]" in 'statusline' no longer have a leading space.

Non-Unix systems: When expanding wildcards for the Vim arguments, don't use 'suffixes'. It now works as if the shell had expanded the arguments.

The 'lisp', 'smartindent' and 'cindent' options are not switched off when 'paste' is set. The auto-indenting is disabled when 'paste' is set, but manual indenting with "=" still works.

When formatting with "=" uses 'cindent' or 'indentexpr' indenting, and there is no change in indent, this is not counted as a change ('modified' isn't set and there is nothing to undo).

Report 'modified' as changed when 'fileencoding' or 'fileformat' was set. Thus it reflects the possibility to abandon the buffer without losing changes.

The "Save As" menu entry now edits the saved file. Most people expect it to work like this.

A buffer for a directory is no longer added to the Buffers menu.

Renamed <Return> to <Enter>, since that's what it's called on most keyboards. Thus it's now the hit-enter prompt instead of the hit-return prompt. Can map <Enter> just like <CR> or <Return>.

The default for the 'viminfo' option is now '20,"50,h when 'compatible' isn't set. Most people will want to use it, including beginners, but it required setting the option, which isn't that easy.

After using ":colder" the newer error lists are overwritten. This makes it possible to use ":grep" to browse in a tree-like way. Must use ":cnewer 99" to get the old behavior.

The patterns in 'errorformat' would sometimes ignore case (MS-Windows) and sometimes not (Unix). Now case is always ignored. Add "\C" to the pattern to match case.

The 16 bit MS-DOS version is now compiled without the +listcmds feature (buffer list manipulation commands). They are not often needed and this executable needs to be smaller.

'sessionoptions' now includes "curdir" by default. This means that restoring a session will result in the current directory being restored, instead of going to the directory where the session file is located.

A session deleted all buffers, deleting all marks. Now keep the buffer list, it shouldn't hurt for some existing buffers to remain present. When the argument list is empty ":argdel *" caused an error message.

No longer put the search pattern from a tag jump in the history.

Use "SpecialKey" highlighting for unprintable characters instead of "NonText". The idea is that unprintable text or any text that's displayed differently from the characters in the file is using "SpecialKey", and "NonText" is used for text that doesn't really exist in the file.

Motif now uses the system default colors for the menu and scrollbar. Used to be grey. It's still possible to set the colors with ":highlight" commands and resources.

Formatting text with "gq" breaks a paragraph at a non-empty blank line.

Previously the line would be removed, which wasn't very useful.

":normal" does no longer hang when the argument ends in half a command. Previously Vim would wait for more characters to be typed, without updating the screen. Now it pretends an <Esc> was typed.

Bitmaps for the toolbar are no longer searched for in "\$VIM/bitmaps" but in the "bitmaps" directories in 'runtimepath'.

Now use the Cmdline-mode menus for the hit-enter prompt instead of the Normal mode menus. This generally works better and allows using the "Copy" menu to produce CTRL-Y to copy the modeless selection.

Moved the font selection from the Window to the Edit menu, together with the other settings.

The default values for 'isfname' include more characters to make "gf" work better.

Changed the license for the documentation to the Open Publication License. This seemed fair, considering the inclusion of parts of the Vim book, which is also published under the OPL. The downside is that we can't force someone who would sell copies of the manual to contribute to Uganda.

After "ayy don't let ""yy or :let @" = val overwrite the "a register. Use the unnamed register instead.

MSDOS: A pattern "*. *" previously also matched a file name without a dot. This was inconsistent with other versions.

In Insert mode, CTRL-O CTRL-\ CTRL-N {cmd} remains in Normal mode. Previously it would go back to Insert mode, thus confusing the meaning of CTRL-\ CTRL-N, which is supposed to take us to Normal mode (especially in ":amenu").

Allow using ":" commands after an operator. Could be used to implement a new movement command. Thus it no longer aborts a pending operator.

For the Amiga the "-d {device}" argument was possible. When compiled with the diff feature, this no longer works. Use "-dev {device}" instead. |-dev|

Made the default mappings for <S-Insert> in Insert mode insert the text literally, avoids that special characters like BS cause side effects.

Using ":confirm" applied to the rest of the line. Now it applies only to the command right after it. Thus ":confirm if x | edit | endif" no longer works, use ":if x | confirm edit | endif". This was the original intention, that it worked differently was a bug.

NEW FEATURES

new-6

Folding

new-folding

Vim can now display a buffer with text folded. This allows overviewing the structure of a file quickly. It is also possible to yank, delete and put folded text, for example to move a function to another position.

There is a whole bunch of new commands and options related to folding. See |folding|.

Vertically split windows

new-vertsplitt

Windows can also be split vertically. This makes it possible to have windows side by side. One nice use for this is to compare two similar files (see |new-diff-mode|). The 'scrollbind' option can be used to synchronize scrolling.

A vertical split can be created with the commands:

```
:vsplit or CTRL-W v or CTRL-W CTRL-V |:vsplit|
:vnew |:vnew|
:vertical {cmd} |:vertical|
```

The last one is a modifier, which has a meaning for any command that splits a window. For example: >

```
:vertical stag main
```

Will vertically split the window and jump to the tag "main" in the new window.

Moving from window to window horizontally can be done with the |CTRL-W_h| and |CTRL-W_l| commands. The |CTRL-W_k| and |CTRL-W_j| commands have been changed to jump to the window above or below the cursor position.

The vertical and horizontal splits can be mixed as you like. Resizing windows is easy when using the mouse, just position the pointer on a status line or vertical separator and drag it. In the GUI a special mouse pointer shape indicates where you can drag a status or separator line.

To resize vertically split windows use the |CTRL-W_<| and |CTRL-W_>| commands. To make a window the maximum width use the CTRL-W | command |CTRL-W_bar|.

To force a new window to use the full width or height of the Vim window, these two modifiers are available:

```
:topleft {cmd}      New window appears at the top with full
                    width or at the left with full height.
:botright {cmd}     New window appears at the bottom with full
                    width or at the right with full height.
```

This can be combined with ":vertical" to force a vertical split: >

```
:vert bot dsplit DEBUG
```

This will open a window at the far right, occupying the full height of the Vim window, with the cursor on the first definition of "DEBUG".

The help window is opened at the top, like ":topleft" was used, if the current window is fewer than 80 characters wide.

A few options can be used to set the preferences for vertically split windows. They work similar to their existing horizontal equivalents:

```
horizontal    vertical ~
'splitbelow'  'splitright'
'winheight'   'winwidth'
'winminheight' 'winminwidth'
```

It's possible to set 'winminwidth' to zero, so that temporarily unused windows hardly take up space without closing them.

The new 'eadirection' option tells where 'equalalways' applies:

```
:set eadirection=both      both directions
:set eadirection=ver       equalize window heights
:set eadirection=hor       equalize windows widths
```

This can be used to avoid changing window sizes when you want to keep them.

Since windows can become quite narrow with vertical splits, text lines will often not fit. The 'sidescrolloff' has been added to keep some context left and right of the cursor. The 'listchars' option has been extended with the "precedes" item, to show a "<" for example, when there is text left off the screen. (Utz-Uwe Haus)

"-O" command line argument: Like "-o" but split windows vertically. (Scott Urban)

Added commands to move the current window to the very top (CTRL-W K), bottom (CTRL-W J), left (CTRL-W H) and right (CTRL-W L). In the new position the window uses the full width/height of the screen.

When there is not enough room in the status line for both the file name and the ruler, use up to half the width for the ruler. Useful for narrow windows.

Diff mode *new-diff-mode*

In diff mode Vim shows the differences between two, three or four files. Folding is used to hide the parts of the file that are equal. Highlighting is used to show deleted and changed lines. See |diff-mode|.

An easy way to start in diff mode is to start Vim as "vimdiff file1 file2". Added the vimdiff manpage.

In a running Vim the |:diffsplit| command starts diff mode for the current file and another file. The |:diffpatch| command starts diff mode using the current file and a patch file. The |:diffthis| command starts diff mode for the current window.

Differences can be removed with the |:diffget| and |:diffput| commands.

- The 'diff' option switches diff mode on in a window.
- The |:diffupdate| command refreshes the diffs.
- The 'diffopt' option changes how diffs are displayed.
- The 'diffexpr' option can be set how a diff is to be created.
- The 'patchexpr' option can be set how patch is applied to a file.
- Added the "diff" folding method. When opening a window for diff-mode, set 'foldlevel' to zero and 'foldenable' on, to close the folds.
- Added the DiffAdd, DiffChange, DiffDelete and DiffText highlight groups to specify the highlighting for differences. The defaults are ugly...
- Unix: make a vimdiff symbolic link for "make install".
- Removed the now obsolete "vimdiff.vim" script from the distribution.
- Added the "[c" and "]c" commands to move to the next/previous change in diff mode.

Easy Vim: click-and-type *new-evim*

eVim stands for "Easy Vim". This is a separate program, but can also be started as "vim -y".

This starts Vim with 'insertmode' set to allow click-and-type editing. The \$VIMRUNTIME/evim.vim script is used to add mappings and set options to be able to do most things like Notepad. This is only for people who can't stand two modes.

eView does the same but in readonly mode.

In the GUI a CTRL-C now only interrupts when busy with something, not when waiting for a character. Allows using CTRL-C to copy text to the clipboard.

User manual

new-user-manual

The user manual has been added. It is organised around editing tasks. It reads like a book, from start to end. It should allow beginners to start learning Vim. It helps everybody to learn using the most useful Vim features. It is much easier to read than the reference manual, but omits details. See |user-manual|.

The user manual includes parts of the Vim book by Steve Oualline |frombook|. It is published under the OPL |manual-copyright|.

When syntax highlighting is not enabled, the characters in the help file which mark examples ('>' and '<') and header lines ('~') are replaced with a space.

When closing the help window, the window layout is restored from before opening it, if the window layout didn't change since then.
When opening the help window, put it at the top of the Vim window if the current window is fewer than 80 characters and not full width.

Flexible indenting

new-indent-flex

Automatic indenting is now possible for any language. It works with a Vim script, which makes it very flexible to compute the indent.

The ":filetype indent on" command enables using the provided indent scripts. This is explained in the user manual: |30.3|.

The 'indentexpr' option is evaluated to get the indent for a line. The 'indentkeys' option tells when to trigger re-indenting. Normally these options are set from an indent script. Like Syntax files, indent scripts will be created and maintained by many people.

Extended search patterns

new-searchpat

Added the possibility to match more than one line with a pattern. (partly by Loïc Grenie)

New items in a search pattern for multi-line matches:

\n	match end-of-line, also in []
_[]	match characters in range and end-of-line
_x	match character class and end-of-line
_.	match any character or end-of-line
_^\	match start-of-line, can be used anywhere in the regexp
_\$	match end-of-line, can be used anywhere in the regexp

Various other new items in search patterns:

\c	ignore case for the whole pattern
\C	match case for the whole pattern
\m	magic on for the following
\M	magic off for the following
\v	make following characters "very magic"
\V	make following characters "very nomagic"

\@!	don't match atom before this. Example: "foo\(bar\) \@!" matches "foo " but not "foobar".
-----	---

\@=	match atom, resulting in zero-width match Example: "foo\(bar\) \@=" matches "foo" in "foobar".
-----	---

\@<!	don't match preceding atom before the current position
------	--

```

\@<=      match preceding atom before the current position
\@>       match preceding atom as a subexpression

\&        match only when branch before and after it match

\[        optionally match a list of atoms; "end\[if]" matches "end",
           "endi" and "endif"
\%(\\)    like \(\), but without creating a back-reference; there can be
           any number of these, overcomes the limit of nine \( \) pairs
\%^       match start-of-file (Chase Tingley)
\%$       match end-of-file (Chase Tingley)
\%#       Match with the cursor position. (Chase Tingley)
\?        Just like "\=" but can't be used in a "?" command.

\%23l     match in line 23
\%<23l    match before line 23
\%>23l    match after line 23
\%23c, \%<23c, \%>23c  match in/before/after column 23
\%23v, \%<23v, \%>23v  match in/before/after virtual column 23

```

For syntax items:

```

\z(...\))  external reference match set (in region start pattern)
\zl - \z9  external reference match use (in region skip or end pattern)
           (Scott Bigham)

```

```

\zs       use position as start of match
\ze       use position as end of match

```

Removed limit of matching only up to 32767 times with *, \+, etc.

Added support to match multi-byte characters. (partly by Muraoka Taro)
 Made "\<" and "\>" work for UTF-8. (Muraoka Taro)

```

UTF-8 support                                *new-utf-8*
-----

```

Vim can now edit files in UTF-8 encoding. Up to 31 bit characters can be used, but only 16 bit characters are displayed. Up to two combining characters are supported, they overprint the preceding character. Double-wide characters are also supported. See |UTF-8|.

UCS-2, UCS-4 and UTF-16 encodings are supported too, they are converted to UTF-8 internally. There is also support for editing Unicode files in a Latin1 environment. Other encodings are converted with iconv() or an external converter specified with 'charconvert'.

Many new items for Multi-byte support:

- Added 'encoding' option: specifies character encoding used inside Vim. It can be any 8-bit encoding, some double-byte encodings or Unicode. It is initialized from the environment when a supported value is found.
- Added 'fileencoding' and 'fileencodings': specify character coding in a file, similar to 'fileformat' and 'fileformats'.
 When 'encoding' is "utf-8" and 'fileencodings' is "utf-8,latin1" this will automatically switch to latin1 if a file does not contain valid UTF-8.
- Added 'bomb' option and detection of a BOM at the start of a file. Can be used with "ucs-bom" in 'fileencodings' to automatically detect a Unicode file if it starts with a BOM. Especially useful on MS-Windows (NT and 2000), which uses ucs-2le files with a BOM (e.g., when exporting the registry).
- Added the 'termencoding' option: Specifies the encoding used for the

- ```
terminal. Useful to put Vim in utf-8 mode while in a non-Unicode locale: >
:let &termencoding = &encoding
:set encoding=utf-8
```
- When 'vminfo' contains the 'c' flag, the viminfo file is converted from the 'encoding' it was written with to the current 'encoding'.
  - Added ":scriptencoding" command: convert lines in a sourced script to 'encoding'. Useful for menu files.
  - Added 'guifontwide' to specify a font for double-wide characters.
  - Added Korean support for character class detection. Also fix cls() in search.c. (Chong-Dae Park)
  - Win32: Typing multi-byte characters without IME. (Alexander Smishlajev)
  - Win32 with Mingw: compile with iconv library. (Ron Aaron)
  - Win32 with MSVC: dynamically load iconv.dll library. (Muraoka Taro)
  - Make it possible to build a version with multi-byte and iconv support with Borland 5.5. (Yasuhiro Matsumoto)
  - Added 'delcombine' option: Delete combining character separately. (Ron Aaron)
  - The "xfontset" feature isn't required for "xim". These are now two independent features.
  - XIM: enable XIM when typing a language character (Insert mode, Search pattern, "f" or "r" command). Disable XIM when typing a Normal mode command.
  - When the XIM is active, show "XIM" in the 'showmode' message. (Nam SungHyun)
  - Support "CursorIM" for XIM. (Nam SungHyun)
  - Added 'm' flag to 'formatoptions': When wrapping words, allow splitting at each multibyte character, not only at a space.
  - Made ":syntax keyword" work with multi-byte characters.
  - Added support for Unicode upper/lowercase flipping and comparing. (based on patch by Raphael Finkel)
  - Let "~" on multi-byte characters that have a third case ("title case") switch between the three cases. (Raphael Finkel)

Allow defining digraphs for multi-byte characters.

Added RFC1345 digraphs for Unicode.

Most Normal mode commands that accept a character argument, like "r", "t" and "f" now accept a digraph. The 'D' flag in 'coptions' disables this to remain Vi compatible.

Added Language mapping and 'keymap' to be able to type multi-byte characters:

- Added the ":lmap" command and friends: Define mappings that are used when typing characters in the language of the text. Also for "r", "t", etc. In Insert and Command-line mode CTRL-^ switches the use of the mappings on/off. CTRL-^ also toggles the use of an input method when no language mappings are present. Allows switching the IM back on halfway typing.
- "<char-123>" argument to ":map", allows to specify the decimal, octal or hexadecimal value of a character.
- Implemented the 'keymap' option: Load a keymap file. Uses ":lnoremap" to define mappings for the keymap. The new ":loadkeymap" command is used in the keymap file.
- Added 'k' flag in 'statusline': Value of "b:keymap\_name" or 'keymap' when it's being used. Uses "<lang>" when no keymap is loaded and ":lmap"s are active. Show this text in the default statusline too.
- Added the 'iminsert' and 'imsearch' options: Specify use of langmap mappings and Input Method with an option. (Muraoka Taro)
- Added 'imcmdline' option: When set the input method is always enabled when starting to edit a command line. Useful for a XIM that uses dead keys to type accented characters.
- Added 'imactivatekey' option to better control XIM. (Muraoka Taro)
- When typing a mapping that's not finished yet, display the last character under the cursor in Insert mode and Command-line mode. Looks good for dead characters.
- Made the 'langmap' option recognize multi-byte characters. But mapping only



- works for 8-bit characters. Helps when using UTF-8.
- Use a different cursor for when ":lmap" mappings are active. Can specify two highlight groups for an item in 'guicursor'. By default "lCursor" and "Cursor" are equal, the user must set a color he likes. Use the cursor color for hangul input as well. (Sung-Hyun Nam)
- Show "(lang)" for 'showmode' when language mapping is enabled.
- UTF-8: Made "r" work with a ":lmap" that includes a composing character. Also works for "f", which now works to find a character that includes a composing character.

Other multi-byte character additions:

- Support double-byte single-width characters for euc-jp: Characters starting with 0x8E. Added ScreenLines2[] to store the second byte.

## Multi-language support

\*new-multi-lang\*

-----

The messages used in Vim can be translated. Several translations are available. This uses the gettext mechanism. It allows adding a translation without recompiling Vim. [multi-lang] (partly by Marcin Dalecki)

The translation files are in the src/po directory. The src/po/README.txt file explains a few things about doing a translation.

Menu translations are available as well. This uses the new |:menutranslate| command. The translations are found in the runtime directory "lang". This allows a user to add a translation.

Added |:language| command to set the language (locale) for messages, time and character type. This allows switching languages in Vim without changing the locale outside of Vim.

Made it possible to have vimtutor use different languages. (Eduardo Fernandez) Spanish (Eduardo Fernandez), Italian (Antonio Colombo), Japanese (Yasuhiro Matsumoto) and French (Adrien Beau) translations are included. Added "vimtutor.bat": script to start Vim on a copy of the tutor file for MS-Windows. (Dan Sharp)

- Added v:lang variable to be able to get current language setting. (Marcin Dalecki) Also v:lc\_time and v:c\_type.
- Make it possible to translate the dialogs used by the menus. Uses global "menutrans\_" variables. ":menutrans clear" deletes them.
- removed "broken locale" (Marcin Dalecki).
- Don't use color names in icons, use RGB values. The names could be translated.
- Win32: Added global IME support (Muraoka)
- Win32: Added dynamic loading of IME support.
- ":messages" prints a message about who maintains the messages or the translations. Useful to find out where to make a remark about a wrong translation.
- --disable-nls argument for configure: Disable use of gettext(). (Sung-Hyun Nam)
- Added NLS support for Win32 with the MingW compiler. (Eduardo Fernandez)
- When available, call bind\_textdomain\_codeset() to have gettext() translate messages to 'encoding'. This requires GNU gettext 0.10.36 or later.
- Added gettext support for Win32. This means messages will be translated when the locale is set and libintl.dll can be found. (Muraoka Taro) Also made it work with MingW compiler. (Eduardo Fernandez)
- Detect the language and set \$LANG to get the appropriate translated messages (if supported). Also use \$LANG to select a language, v:lang is a very different kind of name.

- Made gvimext.dll use translated messages, if possible. (Yasuhiro Matsumoto)

## Plugin support

\*new-plugins\*

-----

To make it really easy to load a Vim script when starting Vim, the "plugin" runtime directory can be used. All "\*.vim" files in it will be automatically loaded. For Unix, the directory "~/.vim/plugin" is used by default. The 'runtimepath' option can be set to look in other directories for plugins. |load-plugins| |add-plugin|

The |:runtime| command has been added to load one or more files in 'runtimepath'.

### Standard plugins:

netrw.vim - Edit files over a network |new-network-files|

gzip.vim - Edit compressed files

explorer.vim - Browse directories |new-file-browser|

Added support for local help files. |add-local-help|.

When searching for help tags, all "doc/tags" files in 'runtimepath' are used.

Added the ":helptags" command: Generate a tags file for a help directory.

The first line of each help file is automagically added to the "LOCAL ADDITIONS" section in doc/help.txt.

Added the <unique> argument to ":map": only add a mapping when it wasn't defined before.

When displaying an option value with 'verbose' set will give a message about where the option was last set. Very useful to find out which script did set the value.

The new |:scriptnames| command displays a list of all scripts that have been sourced.

GUI: For Athena, Motif and GTK look for a toolbar bitmap in the "bitmaps" directories in 'runtimepath'. Allows adding your own bitmaps.

## Filetype plugins

\*new-filetype-plugins\*

-----

A new group of files has been added to do settings for specific file types. These can be options and mappings which are specifically used for one value of 'filetype'.

The files are located in "\$VIMRUNTIME/ftplugin". The 'runtimepath' option makes it possible to use several sets of plugins: Your own, system-wide, included in the Vim distribution, etc.

To be able to make this work, several features were added:

- Added the "s:" variables, local to a script. Avoids name conflicts with global variables. They can be used in the script and in functions, autocommands and user commands defined in the script. They are kept between invocations of the same script. |s:var|
- Added the global value for local options. This value is used when opening a new buffer or editing another file. The option value specified in a modeline or filetype setting is not carried over to another buffer.
  - ":set" sets both the local and the global value.
  - ":setlocal" sets the local option value only.
  - ":setglobal" sets or displays the global value for a local option.

- `":setlocal name<` sets a local option to its global value.
- Added the buffer-local value for some global options: `'equalprg'`, `'makeprg'`, `'errorformat'`, `'grepprg'`, `'path'`, `'dictionary'`, `'thesaurus'`, `'tags'`, `'include'` and `'define'`. This allows setting a local value for these global options, without making it incompatible.
- Added mappings and abbreviations local to a buffer: `":map <buffer>"`.
- In a mapping `"<Leader>"` can be used to get the value of the `"mapleader"` variable. This simplifies mappings that use `"mapleader"`. `"<Leader>"` defaults to `"\"`. `"<LocalLeader>"` does the same with `"maplocalleader"`. This is to be used for mappings local to a buffer.
- Added `<SID>` Script ID to define functions and mappings local to a script.
- Added `<script>` argument to `":noremap"` and `":noremenu"`: Only remap script-local mappings. Avoids that mappings from other scripts get in the way, but does allow using mappings defined in the script.
- User commands can be local to a buffer: `":command -buffer"`.

The new `":setfiletype"` command is used in the filetype detection autocommands, to avoid that `'filetype'` is set twice.

#### File browser

`*new-file-browser*`

-----

When editing a directory, the explorer plugin will list the files in the directory. Pressing `<Enter>` on a file name edits that file. Pressing `<Enter>` on a directory moves the browser to that directory.

There are several other possibilities, such as opening a file in the preview window, renaming files and deleting files.

#### Editing files over a network

`*new-network-files*`

-----

Files starting with `scp://`, `rcp://`, `ftp://` and `http://` are recognized as remote files. An attempt is made to access these files with the indicated method. For `http://` only reading is possible, for the others writing is also supported. Uses the `netrw.vim` script as a standard "plugin". `|netrw|`

Made `"gf"` work on a URL. It no longer assumes the file is local on the computer (mostly didn't work anyway, because the full path was required). Adjusted `test2` for this.

Allow using a URL in `'path'`. Makes `":find index.html"` work.

GTK: Allow dropping a `http://` and `ftp://` URL on Vim. The `netrw` plugin takes care of downloading the file. (Mikael Berthe)

#### Window for command-line editing

`*new-cmdwin*`

-----

The Command-line window can be used to edit a command-line with Normal and Insert mode commands. When it is opened it contains the history. This allows copying parts of previous command lines. `|cmdwin|`

The command-line window can be opened from the command-line with the key specified by the `'cedit'` option (like `Nvi`). It can also be opened directly from Normal mode with `"q:"`, `"q/"` and `"q?"`.

The `'cmdwinheight'` is used to specify the initial height of the window.

In Insert mode CTRL-X CTRL-V can be used to complete an Ex command line, like it's done on the command-line. This is also useful for writing Vim scripts!

Additionally, there is "improved Ex mode". Entered when Vim is started as "exim" or "vim -E", and with the "gQ" command. Works like repeated use of ":", with full command-line editing and completion. (Ulf Carlsson)

#### Debugging mode

\*new-debug-mode\*

-----

In debugging mode sourced scripts and user functions can be executed line by line. There are commands to step over a command or step into it. |debug-mode|

Breakpoints can be set to run until a certain line in a script or user function is executed. |:breakadd|

Debugging can be started with ":debug {cmd}" to debug what happens when a command executes. The |-D| argument can be used to debug while starting up.

#### Cursor in virtual position

\*new-virtedit\*

-----

Added the 'virtualedit' option: Allow positioning the cursor where there is no actual character in Insert mode, Visual mode or always. (Matthias Kramm)  
This is especially useful in Visual-block mode. It allows positioning a corner of the area where there is no text character. (Many improvements by Chase Tingley)

#### Debugger interface

\*new-debug-itf\*

-----

This was originally made to work with Sun Visual Workshop. (Gordon Prieur)  
See |debugger.txt|, |sign.txt| and |workshop.txt|.

Added the ":sign" command to define and place signs. They can be displayed with two ASCII characters or an icon. The line after it can be highlighted. Useful to display breakpoints and the current PC position.

Added the |:wsverb| command to execute debugger commands.

Added balloon stuff: 'balloondelay' and 'ballooneval' options.

Added "icon=" argument for ":menu". Allows defining a specific icon for a ToolBar item.

#### Communication between Vims

\*new-vim-server\*

-----

Added communication between two Vims. Makes it possible to send commands from one Vim to another. Works for X-Windows and MS-Windows |clientserver|.

Use "--remote" to have files be edited in an already running Vim.  
Use "--remote-wait" to do the same and wait for the editing to finish.  
Use "--remote-send" to send commands from one Vim to another.  
Use "--remote-expr" to have an expression evaluated in another Vim.  
Use "--serverlist" to list the currently available Vim servers. (X only)  
There are also functions to communicate between the server and the client.  
|remote\_send()| |remote\_expr()|

(X-windows version implemented by Flemming Madsen, MS-Windows version by Paul Moore)

Added the command server name to the window title, so you can see which server name belongs to which Vim.

Removed the OleVim directory and SendToVim.exe and EditWithVim.exe from the distribution. Can now use "gvim --remote" and "gvim --remote-send", which is portable.

GTK+: Support running Vim inside another window. Uses the --socketid argument (Neil Bird)

## Buffer type options

\*new-buftype\*

-----

The 'buftype' and 'bufhidden' options have been added. They can be set to have different kinds of buffers. For example:

- 'buftype' = "quickfix": buffer with error list
- 'buftype' = "nofile" and 'bufhidden' = "delete": scratch buffer that will be deleted as soon as there is no window displaying it.

'bufhidden' can be used to overrule the 'hidden' option for one buffer.

In combination with 'buflisted' and 'swapfile' this offers the possibility to use various kinds of special buffers. See |special-buffers|.

## Printing

\*new-printing\*

-----

Included first implementation of the ":hardcopy" command for printing to paper. For MS-Windows any installed printer can be used. For other systems a PostScript file is generated, which can be printed with the 'printexpr' option.

(MS-Windows part by Vince Negri, Vipin Aravind, PostScript by Vince Negri and Mike Williams)

Made ":hardcopy" work with multi-byte characters. (Muraoka Taro, Yasuhiro Matsumoto)

Added options to tune the way printing works: (Vince Negri)

- 'prntoptions' defines various things.
- 'printhead' specifies the header format. Added "N" field to 'statusline' for the page number.
- 'printfont' specifies the font name and attributes.
- 'printdevice' defines the default printer for ":hardcopy!".

## Ports

\*ports-6\*

-----

Port to OS/390 Unix (Ralf Schandl)

- A lot of changes to handle EBCDIC encoding.
- Changed Ctrl('x') to Ctrl\_x define.

Included jsbmouse support. (Darren Garth)

Support for dec mouse in Unix. (Steve Wall)

Port to 16-bit MS Windows (Windows 3.1x) (Vince Negri)

Port to QNX. Supports the Photon GUI, mouse, etc. (Julian Kinraid)

Allow cross-compiling the Win32 version with Make\_ming.mak. (Ron Aaron)  
Added Python support for compiling with Mingw. (Ron Aaron)

Dos 32 bit: Added support the Windows clipboard. (David Kotchan)

Win32: Dynamically load Perl and Python. Allows compiling Vim with these interfaces and will try to find the DLLs at runtime. (Muraoka Taro)

Compiling the Win32 GUI with Cygwin. Also compile vimrun, dosinst and uninstall. (Gerfried)

Mac: Make Vim compile with the free MPW compiler supplied by Apple. And updates for CodeWarrior. (Axel Kielhorn)

Added typecasts and ifdefs as a start to make Vim work on Win64 (George Reilly)

#### Quickfix extended

\*quickfix-6\*

-----

Added the "error window". It contains all the errors of the current error list. Pressing <Enter> in a line makes Vim jump to that line (in another window). This makes it easy to navigate through the error list.  
|quickfix-window|.

- |:copen| opens the quickfix window.
- |:cclose| closes the quickfix window.
- |:cwindow| takes care that there is a quickfix window only when there are recognized errors. (Dan Sharp)
- Quickfix also knows "info", next to "warning" and "error" types. "%I" can be used for the start of a multi-line informational message. (Tony Leneis)
- The "%p" argument can be used in 'errorformat' to get the column number from a line where "^" points to the column. (Stefan Roemer)
- When using "%f" in 'errorformat' on a DOS/Windows system, also include "c:" in the filename, even when using "%f:".

#### Operator modifiers

\*new-operator-mod\*

-----

Insert "v", "V" or CTRL-V between an operator and a motion command to force the operator to work characterwise, linewise or blockwise. |o\_v|

#### Search Path

\*new-search-path\*

-----

Vim can search in a directory tree not only in downwards but also upwards. Works for the 'path', 'cdpath' and 'tags' options. (Ralf Schandl)

Also use "\*\*\*" for 'tags' option. (Ralf Schandl)

Added 'includeexpr', can be used to modify file name found by 'include' option.

Also use 'includeexpr' for "gf" and "<cfile>" when the file can't be found without modification. Useful for doing "gf" on the name after an include or import statement.

Added the 'cdpath' option: Locations to find a ":cd" argument. (Raf)

Added the 'suffixesadd' option: Suffixes to be added to a file name when searching for a file for the "gf", "[I", etc. commands.

Writing files improved

\*new-file-writing\*

-----

Added the 'backupcopy' option: Select whether a file is to be copied or renamed to make a backup file. Useful on Unix to speed up writing an ordinary file. Useful on other systems to preserve file attributes and when editing a file on a Unix filesystem.

Added the 'autowriteall' option. Works like 'autowrite' but for more commands.

Added the 'backupskip' option: A list of file patterns to skip making a backup file when it matches. The default for Unix includes "/tmp/\*", this makes "crontab -e" work.

Added support for Access Control Lists (ACL) for FreeBSD and Win32. The ACL is copied from the original file to the new file (or the backup if it's copied).

ACL is also supported for AIX, Solaris and generic POSIX. (Tomas Ogren)  
And on SGI.

Argument list

\*new-argument-list\*

-----

The support for the argument list has been extended. It can now be manipulated to contain the files you want it to contain.

The argument list can now be local to a window. It is created with the |:arglocal| command. The |:argglobal| command can be used to go back to the global argument list.

The |:argdo| command executes a command on all files in the argument list.

File names can be added to the argument list with |:argadd|. File names can be removed with |:argdelete|.

"##" can be used like "#", it is replaced by all the names in the argument list concatenated. Useful for ":grep foo ##".

The |:argedit| adds a file to the argument list and edits it. Like ":argadd" and then ":edit".

Restore a View

\*new-View\*

-----

The ":mkview" command writes a Vim script with the settings and mappings for one window. When the created file is sourced, the view of the window is restored. It's like ":mksession" for one window.  
The View also contains the local argument list and manually created, opened and closed folds.

Added the ":loadview" command and the 'viewdir' option: Allows for saving and restoring views of a file with simple commands. ":mkview 1" saves view 1 for

the current file, ":loadview 1" loads it again. Also allows quickly switching between two views on one file. And saving and restoring manual folds and the folding state.

Added 'viewoptions' to specify how ":mkview" works.

":mksession" now also works fine with vertical splits. It has been further improved and restores the view of each window. It also works properly with preview and quickfix windows.

'sessionoptions' is used for ":mkview" as well.

Added "curdir" and "sesdir" to 'sessionoptions'. Allows selection of what the current directory will be restored to.

The session file now also contains the argument list(s).

#### Color schemes

\*new-color-schemes\*

-----

Support for loading a color scheme. Added the ":colorscheme" command.

Automatically add menu entries for available schemes.

Should now properly reset the colors when 'background' or 't\_Co' is changed.

":highlight clear" sets the default colors again.

":syntax reset" sets the syntax highlight colors back to the defaults.

For ":set bg&" guess the value. This allows a color scheme to switch back to the default colors.

When syntax highlighting is switched on and a color scheme was defined, reload the color scheme to define the colors.

#### Various new items

\*new-items-6\*

-----

Normal mode commands: ~

"gi"                    Jump to the ^ mark and start Insert mode. Also works when the mark is just after the line. |gi|

"g'm" and "g`m"        Jump to a mark without changing the jumplist. Now you can use g`" to jump to the last known position in a file without side effects. Also useful in mappings.

[' , [' , ]' and ]`    move the cursor to the next/previous lowercase mark.

g\_                    Go to last non-blank in line. (Steve Wall)

Options: ~

'autoread'            When detected that a file changed outside of Vim, automatically read a buffer again when it's not changed. It has a global and a local value. Use ":setlocal autoread<" to go back to using the global value for 'autoread'.

'debug'                When set to "msg" it will print error messages that would otherwise be omitted. Useful for debugging 'indentexpr' and 'foldexpr'.

'lispwords'            List of words used for lisp indenting. It was previously hard



coded. Added a number of Lisp names to the default.

'fold...' Many new options for folding.

'modifiable' When off, it is impossible to make changes to a buffer. The %m and %M items in 'statusline' show a '-'.

'previewwindow' Set in the preview window. Used in a session file to mark a window as the preview window.

'printfont'

'printexpr'

'printhead'

'printdevice'

'printoptions' for ":hardcopy".

'buflisted' Makes a buffer appear in the buffer list or not.

Use "vim{version}:" for modelines, only to be executed when the version is >= {version}. Also "vim>{version}", "vim<{version}" and "vim={version}".

Ex commands: ~

:sav[eas][!] {file}  
Works like ":w file" and ":e #", but without loading the file again and avoiding other side effects. |:saveas|

:silent[!] {cmd}  
Execute a command silently. Also don't use a delay that would come after the message. And don't do 'showmatch'.  
RISCOS: Removed that "!~cmd" didn't output anything, and didn't wait for <Enter> afterwards. Can use ":silent !cmd" now.

:menu <silent> Add a menu that won't echo Ex commands.

:map <silent> Add a mapping that won't echo Ex commands.

:checktime Check for changed buffers.

:verbose {cmd} Set 'verbose' for one command.

:echomsg {expr}

:echoerr {expr} Like ":echo" but store the message in the history. (Mark Waggoner)

:grepadd Works just like ":grep" but adds to the current error list instead of defining a new list. |:grepadd|

:finish Finish sourcing a file. Can be used to skip the rest of a Vim script. |:finish|

:leftabove

:aboveleft Split left/above current window.

:rightbelow

:belowright Split right/below current window.

:first, :bfirst, :ptfirst, etc.  
Alias for ":rewind". It's more logical compared to ":last".

:enew Edit a new, unnamed buffer. This is needed, because ":edit" re-edits the same file. (Wall)

```

:quitall Same as ":qall".

:match Define match highlighting local to a window. Allows
 highlighting an item in the current window without interfering
 with syntax highlighting.

:menu enable
:menu disable Commands to enable/disable menu entries without removing them.
 (Monish Shah)

:windo Execute a command in all windows.
:bufdo Execute a command in all buffers.

:wincmd Window (CTRL-W) command. Useful when a Normal mode command
 can't be used (e.g., for a CursorHold autocommand). See
 |CursorHold-example| for a nice application with it.

:lcd and :lcdir Set local directory for a window. (Benjie Chen)

:hide {command} Execute {command} with 'hidden' set.

:emenu in Visual mode to execute a ":vmenu" entry.

:popup Pop up a popup menu.

:redraw Redraw the screen even when busy with a script or function.

:hardcopy Print to paper.

:compiler Load a Vim script to do settings for a specific compiler.

:z# List numbered lines. (Bohdan Vlasjuk)

```

New marks: ~

```

' (and ') Begin or end of current sentence. Useful in Ex commands.
'{ and '}' Begin or end of current paragraph. Useful in Ex commands.
' . Position of the last change in the current buffer.
'^ Position where Insert mode was stopped.

```

Store the ^ and . marks in the viminfo file. Makes it possible to jump to the last insert position or changed text.

New functions: ~

```

argidx() Current index in argument list.
buflisted() Checks if the buffer exists and has 'buflisted' set.
cindent() Get indent according to 'cindent'.
eventhandler() Returns 1 when inside an event handler and interactive
 commands can't be used.
executable() Checks if a program or batch script can be executed.
filewritable() Checks if a file can be written. (Ron Aaron)
foldclosed() Find out if there is a closed fold. (Johannes Zellner).
foldcloseend() Find the end of a closed fold.
foldlevel() Find out the foldlevel. (Johannes Zellner)
foreground() Move the GUI window to the foreground.
getchar() Get one character from the user. Can be used to define a
 mapping that takes an argument.

```

---

```

getcharmod() Get last used key modifier.
getbufvar() gets the value of an option or local variable in a buffer (Ron
 Aaron)
getfsize() Return the size of a file.
getwinvar() gets the value of an option or local variable in a window (Ron
 Aaron)
globpath() Find matching files in a list of directories.
hasmapto() Detect if a mapping to a string is already present.
iconv() Convert a string from one encoding to another.
indent() gets the indent of a line (Ron Aaron)
inputdialog() Like input() but use a GUI dialog when possible. Currently
 only works for Win32, Motif, Athena and GTK.
 Use inputdialog() for the Edit/Settings/Text Width menu. Also
 for the Help/Find.. and Toolbar FindHelp items.
 (Win32 support by Thore B. Karlsen)
 (Win16 support by Vince Negri)
inputsecret() Ask the user to type a string without showing the typed keys.
 (Charles Campbell)
libcall() for Unix (Neil Bird, Johannes Zellner, Stephen Wall)
libcallnr() for Win32 and Unix
lispindent() Get indent according to 'lisp'.
mode() Return a string that indicates the current mode.
nextnonblank() Skip blank lines forwards.
prevnonblank() Skip blank lines backwards. Useful to for indent scripts.
resolve() MS-Windows: resolve a shortcut to the file it points to.
 Unix: resolve a symbolic link.
search() Search for a pattern.
searchpair() Search for matching pair. Can be used in indent files to find
 the "if" matching an endif.
setbufvar() sets an option or variable local to a buffer (Ron Aaron)
setwinvar() sets an option or variable local to a window (Ron Aaron)
stridx() Search for first occurrence of one string in another.
strridx() Search for last occurrence of one string in another.
tolower() Convert string to all-lowercase.
toupper() Convert string to all-uppercase.
type() Check the type of an expression.
wincol() window column of the cursor
winwidth() Width of a window. (Johannes Zellner)
winline() window line of the cursor

```

Added expansion of curly braces in variable and function names. This can be used for variable names that include the value of an option. Or a primitive form of arrays. (Vince Negri)

```

New autocommand events: ~
BufWinEnter Triggered when a buffer is displayed in a window, after using
 the modelines. Can be used to load a view.
BufWinLeave Triggered when a buffer is no longer in a window. Also
 triggered when exiting Vim. Can be used to save views.
FileChangedRO Triggered before making the first change to a read-only file.
 Can be used to check-out the file. (Scott Graham)
TermResponse Triggered when the terminal replies to the version-request.
 The v:termresponse internal variable holds the result. Can be
 used to react to the version of the terminal. (Ronald Schild)
FileReadCmd Triggered before reading a file.
BufReadCmd Triggered before reading a file into a buffer.
FileWriteCmd Triggered before writing a file.
BufWriteCmd Triggered before writing a buffer into a file.
FileAppendCmd Triggered before appending to a file.
FuncUndefined Triggered when a user function is not defined. (Ron Aaron)

```

The autocommands for the \*Cmd events read or write the file instead of normal file read/write. Use this in netrw.vim to be able to edit files on a remote system. (Charles Campbell)

New Syntax files: ~

|              |                                        |
|--------------|----------------------------------------|
| bdf          | BDF font definition (Nikolai Weibull)  |
| catalog      | SGML catalog (Johannes Zellner)        |
| debchangelog | Debian Changelog (Wichert Akkerman)    |
| debcontrol   | Debian Control (Wichert Akkerman)      |
| dot          | dot (Markus Mottl)                     |
| dsl          | DSSSL syntax (Johannes Zellner)        |
| eterm        | Eterm configuration (Nikolai Weibull)  |
| indent       | Indent profile (Nikolai Weibull)       |
| lftp         | LFTP (Nikolai Weibull)                 |
| lynx         | Lynx config (Doug Kearns)              |
| mush         | mush sourcecode (Bek Oberin)           |
| natural      | Natural (Marko Leipert)                |
| pilrc        | Pal resource compiler (Brian Schau)    |
| plm          | PL/M (Philippe Coulonges)              |
| povini       | Povray configuration (David Necas)     |
| ratpoison    | Ratpoison config/command (Doug Kearns) |
| readline     | readline config (Nikolai Weibull)      |
| screen       | Screen RC (Nikolai Weibull)            |
| specman      | Specman (Or Freund)                    |
| sqlforms     | SQL*Forms (Austin Ziegler)             |
| terminfo     | terminfo (Nikolai Weibull)             |
| tidy         | Tidy configuration (Doug Kearns)       |
| wget         | Wget configuration (Doug Kearns)       |

Updated many syntax files to work both with Vim 5.7 and 6.0.

Interface to Ruby. (Shugo Maeda)  
 Support dynamic loading of the Ruby interface on MS-Windows. (Muraoka Taro)  
 Support this for Mingw too. (Benoit Cerrina)

Win32: Added possibility to load TCL dynamically. (Muraoka Taro)  
 Also for Borland 5.5. (Dan Sharp)

Win32: When editing a file that is a shortcut (\*.lnk file), edit the file it links to. Unless 'binary' is set, then edit the shortcut file itself. (Yasuhiro Matsumoto)

The ":command" command now accepts a "-bar" argument. This allows the user command to be followed by "| command".

The preview window is now also used by these commands:  
 - |:pedit| edits the specified file in the preview window  
 - |:psearch| searches for a word in included files, like |:ijump|, and displays the found text in the preview window.  
 Added the CTRL-W P command: go to preview window.

MS-DOS and MS-Windows also read the system-wide vimrc file \$VIM/vimrc. Mostly for NT systems with multiple users.

A double-click of the mouse on a character that has a "%" match selects from that character to the match. Similar to "v%".

"-S session.vim" argument: Source a script file when starting up. Convenient

way to start Vim with a session file.

Added "--cmd {command}" Vim argument to execute a command before a vimrc file is loaded. (Vince Negri)

Added the "-M" Vim argument: reset 'modifiable' and 'write', thus disallow making changes and writing files.

Added runtime/delmenu.vim. Source this to remove all menus and prepare for loading new menus. Useful when changing 'langmenu'.

Perl script to filter Perl error messages to quickfix usable format. (Joerg Ziefle)

Added runtime/macros/less.vim: Vim script to simulate less, but with syntax highlighting.

MS-Windows install program: (Jon Merz)

- The Win32 program can now create shortcuts on the desktop and install Vim in the Start menu.
- Possibly remove old "Edit with Vim" entries.
- The Vim executable is never moved or \$PATH changed. A small batch file is created in a directory in \$PATH. Fewer choices to be made.
- Detect already installed Vim versions and offer to uninstall them first.

Improved the MS-Windows uninstal program. It now also deletes the entries in the Start menu, icons from the desktop and the created batch files. (Jon Merz) Also made it possible to delete only some of these. Also unregister gvim for OLE.

Generate a self-installing Vim package for MS-Windows. This uses NSIS. (Jon Merz et al.)

Added ":filetype detect". Try detecting the filetype again. Helps when writing a new shell script, after adding "#!/bin/csh".

Added ":augroup! name" to delete an autocommand group. Needed for the client-server "--remote-wait".

Add the Vim version number to the viminfo file, useful for debugging.

```
=====
IMPROVEMENTS *improvements-6*
```

Added the 'n' flag in 'coptions': When omitted text of wrapped lines is not put between line numbers from 'number' option. Makes it a lot easier to read wrapped lines.

When there is a format error in a tags file, the byte position is reported so that the error can be located.

"gf" works in Visual mode: Use the selected text as the file name. (Chase Tingley)

Allow ambiguous mappings. Thus "aa" and "aaa" can both be mapped, the longest matching one is used. Especially useful for ":lmap" and 'keymap'.

Encryption: Ask the key to be typed twice when crypting the first time. Otherwise a typo might cause the text to be lost forever. (Chase Tingley)

The window title now has "VIM" on the end. The file name comes first, useful in the taskbar. A "+" is added when the file is modified. "=" is added for

a read-only file. "-" is added for a file with 'modifiable' off.

In Visual mode, mention the size of the selected area in the 'showcmd' position.

Added the "b:changedtick" variable. Incremented at each change, also for undo. Can be used to take action only if the buffer has been changed.

In the replacement string of a ":s" command "\=" can be used to replace with the result of an expression. From this expression the submatch() function can be used to access submatches.

When doing ":qall" and there is a change in a buffer that is being edited in another window, jump to that window, instead of editing that buffer in the current window.

Added the "++enc=" and "++ff=" arguments to file read/write commands to force using the given 'encoding' or 'fileformat'. And added the "v:cmdarg" variable, to be used for FileReadCmd autocommands that read/write the file themselves.

When reading stdin, first read the text in binary mode and then re-read it with automatic selection of 'fileformat' and 'fileencoding'. This avoids problems with not being able to rewind the file (e.g., when a line near the end of the file ends in LF instead of CR-LF).

When reading text from stdin and the buffer is empty, don't mark it changed. Allows exiting without trouble.

Added an ID to many error messages. This will make it easier to find help for a message.

Insert mode:

- "CTRL-G j" and "CTRL-G k" can be used to insert in another line in the same column. Useful for editing a table.
- Added Thesaurus completion with CTRL-X CTRL-T. (Vince Negri)
- Added the 'thesaurus' option, to use instead of 'dictionary' for thesaurus completion. Added the 's' flag in 'complete'.
- Made CTRL-X CTRL-L in Insert mode use the 'complete' option. It now also scans other loaded buffers for matching lines.
- CTRL-R now also works in Insert mode while doing completion with CTRL-X or CTRL-N. (Neil Bird)
- When doing Insert mode completion, when completion is finished check for a match with words from 'cinkeys' or 'indentkeys'.

Performance:

- Made display updating more efficient. Insert/delete lines may be used for all changes, also for undo/redo.
- The display is not redrawn when there is typeahead in Insert mode. Speeds up CTRL-R a lot.
- Improved speed of screen output for 32 bit DOS version. (Vince Negri)
- When dragging with the mouse, there is a lookahead to skip mouse codes when there is another one next. Makes dragging with the mouse a lot faster.
- Also a memory usage improvement: When calling u\_save with a single line, don't save it if the line was recently saved for the same undo already.
- When using a script that appends one character at a time, the amount of allocated memory was growing steadily. Also when 'undolevels' is -1. Caused by the line saved for "U" never to be freed. Now free an undo block when it becomes empty.
- GUI and Dos32: Use a vertical scroll region, to make scrolling in a vertically split window faster. No need to redraw the whole window.
- When scrolling isn't possible with terminal codes (e.g., for a vertically split window) redraw from ScreenLines[]. That should be faster than going

through the lines with `win_line()`, especially when using syntax highlighting.

- The Syntax menu is now pre-generated by a separate script. Makes loading the menu 70% faster. This can halve the startup time of gvim.
- When doing `:"help tag"`, don't open `help.txt` first, jump directly to the help tag. It's faster and avoids an extra message.
- Win32: When a file name doesn't end in `".lnk"` don't try resolving a shortcut, it takes quite a bit of time.
- Don't update the mouse pointer shape while there are typeahead characters.
- Change `META[]` from a string into an array, avoids using `strchr()` on it.
- Don't clear the command line when adding characters, avoids that `screen_fill` is called but doesn't do anything.

#### Robustness:

- Unix: Check for running out of stack space when executing a regexp. Avoids a nasty crash. Only works when the system supports running the signal function on another stack.
- Disallow `:"source <dirname>".` On unix it's possible to read a directory, does not make sense to use it as Vim commands.

#### Security:

- When reading from or writing to a temporary file, check that it isn't a symbolic link. Gives some protection against symlink attacks.
- When creating a backup file copy or a swap file, check for it already existing to avoid a symlink attack. (Colin Phipps)
- Evaluating options which are an expression is done in a `|sandbox|`. If the option was set by a modeline, it cannot cause damage.
- Use a secure way to generate temp file names: Create a private directory for temp files. Used for Unix, MS-DOS and OS/2.
- 'makeef' can be empty, which means that an internally generated file name is used. The old default was `"/tmp/file"`, which is a security risk. Writing 'makeef' in the current directory fails in a read-only directory and causes trouble when using `:"grep"` on all files. Made the default empty for all systems, so that a temp file is used.
- The command from a tags file is executed in the sandbox for better security.
- The Ruby, Tcl and Python interfaces cannot be used from the sandbox. They might do dangerous things. Perl is still possible, but limited to the Safe environment. (Donnie Smith)

#### Syntax highlighting:

- Optimized the speed by caching the state stack all over the file, not just the part being displayed. Required for folding.
- Added `:"syntax sync fromstart"`: Always parse from the start of the file.
- Added the "display" argument for syntax items: use the item only when displaying the result. Can make parsing faster for text that isn't going to be displayed.
- When using CTRL-L, the cached states are deleted, to force parsing the text again.
- Use elfhash algorithm for table of keywords. This should give a better distribution and speedup keyword lookup. (Campbell)
- Also allow the "lc" leading context for skip and end patterns. (Scott Bigham)
- Syntax items can have the "extend" argument to undo the effect of a "keepend" argument of an item it is contained in. Makes it possible to have some contained items extend a region while others don't.
- `:"syntax clear"` now deletes the `b:current_syntax` variable. That's logical, since no syntax is defined after this command.
- Added `:"syntax enable"`: switch on syntax highlighting without changing the colors. This allows specifying the colors in the `.vimrc` file without the need for a `mysyntaxfile`.
- Added `:"syntax reset"`: reset the colors to their defaults.
- Added the `"contains=TOP"` and `"contains=CONTAINED"` arguments. Makes it

- possible to define a transparent item that doesn't contain itself.
- Added a "containedin" argument to syntax items. Allows adding a contained item to an existing item (e.g., to highlight a name in a comment).

#### Modeless selection:

- When in the command-line window, use modeless selection in the other windows. Makes it possible to copy visible text to the command-line window.
- Support modeless selection on the cmdline in a terminal. Previously it was only possible for the GUI.
- Make double-right-click in modeless selection select a whole word. Single right click doesn't use the word selection started by a double-left-click. Makes it work like in Visual mode.
- The modeless selection no longer has an implied automatic copy to the clipboard. It now obeys the 'a' and 'A' flags in 'guioptions' or "autoselect" and "autoselectml" in 'clipboard'.
- Added the CTRL-Y command in Cmdline-mode to copy the modeless selection to the clipboard. Also works at the hit-enter prompt and the more prompt. Removed the mappings in runtime/mswin.vim for CTRL-Y and CTRL-Z in cmdline-mode to be able to use CTRL-Y in the new way.

Reduced the amount of stack space used by regmatch() to allow it to handle complicated patterns on a longer text.

'isfname' now includes '%' and '#'. Makes "vim dir\#file" work for MS-DOS.

Added keypad special keys <kEnter>, <k0> - <k9>. When not mapped they behave like the ASCII equivalent. (Ivan Wellesz and Vince Negri)

Recognize a few more xterm keys: <C-Right>, <C-Left>, <C-End>, <C-Home>

Also trigger the BufUnload event when Vim is going to exit. Perhaps a script needs to do some cleaning up.

Expand expression in backticks: `={expr}`. Can be used where backtick expansion is done. (Vince Negri)

#### GUI:

- Added 'L' and 'R' flags in 'guioptions': Add a left or right scrollbar only when there is a vertically split window.
- X11: When a color can't be allocated, use the nearest match from the colormap. This avoids that black is used for many things. (Monish Shah) Also do this for the menu and scrollbar, to avoid that they become black.
- Win32 and X11: Added 'mousethshape' option: Adjust the mouse pointer shape to the current mode. (Vince Negri)
- Added the 'linespace' option: Insert a pixel line between lines. (Nam)
- Allow modeless selection (without moving the cursor) by keeping CTRL and SHIFT pressed. (Ivan Wellesz)
- Motif: added toolbar. (Gordon Prieur) Also added tooltips.
- Athena: added toolbar and tooltips. (David Harrison -- based on Gordon Prieur's work)
- Made the 'toolbar' option work for Athena and Motif. Can now switch between text and icons on the fly. (David Harrison)
- Support menu separator lines for Athena. (David Harrison)
- Athena: Adjust the arrow pixmap used in a pullright menu to the size of the font. (David Harrison)
- Win32: Added "c" flag to 'guifont' to be able to specify the charset. (Artem Khodush)
- When no --enable-xim argument is given, automatically enable it when a X GUI is used. Required for dead key support (and multi-byte input).
- After a file selection dialog, check that the edited files were not changed or deleted. The Win32 dialog allows deleting and renaming files.
- Motif and Athena: Added support for "editres". (Marcin Dalecki)
- Motif and Athena: Added "menuFont" to be able to specify a font or fontset



- for the menus. Can also be set with the "Menu" highlight group. Useful when the locale is different from 'encoding'. (David Harrison)
- When FONTSET\_ALWAYS is defined, always use a fontset for the menus. Should avoid trouble with changing from a font to a fontset. (David Harrison)
- Highlighting and font for the tooltips can be specified with the "Tooltip" highlight group. (David Harrison)
- The Cmdline-mode menus can be used at the more-prompt. This mostly works fine, because they start with a CTRL-C. The "Copy" menu works to copy the modeless selection. Allows copying the output of ":set all" or ":intro" without auto-selection.
- When starting the GUI when there is no terminal connected to stdout and stderr, display error messages in a dialog. Previously they wouldn't be displayed at all.
- Allow setting 'browse\_dir' to the name of a directory, to be used for the file dialog. (Dan Sharp)
- b:browsefilter and g:browsefilter can be set to the filters used for the file dialog. Supported for Win32 and Motif GUI. (Dan Sharp)

#### X11:

- Support for the clipboard selection as register "+. When exiting or suspending copy the selection to cut buffer 0. Should allow copy/paste with more applications in a X11-standard way. (Neil Bird)
- Use the X clipboard in any terminal, not just in an xterm. Added "exclude:" in 'clipboard': Specify a pattern to match against terminal names for which no connection should be made to the X server. The default currently work for FreeBSD and Linux consoles.
- Added a few messages for when 'verbose' is non-zero to show what happens when trying to connect to the X server. Should help when trying to find out why startup is slow.

#### GTK GUI: (partly by Marcin Dalecki)

- With some fonts the characters can be taller than ascent + descent. E.g., "-misc-fixed-\*\*\*-18-\*\*\*-iso10646-1". Add one to the character cell height.
- Implement "no" value for 'winaltkeys': don't use Alt-Key as a menu shortcut, when 'wak' changed after creating the menus.
- Setting 'wak' after the GUI started works.
- recycle text GC's to reduce communication.
- Adjust icon size to window manager.
- Cleanup in font handling.
- Replace XQueryColor with GDK calls.
- Gnome support. Detects Gnome in configure and uses different widgets. Otherwise it's much like GTK. (Andy Kahn)
- It is disabled by default, because it causes a few problems.
- Removed the special code to fork first and then start the GUI. Now use \_exit() instead of exit(), this works fine without special tricks.
- Dialogs sometimes appeared a bit far away. Position the dialogs inside the gvim window. (Brent Verner)
- When dropping a file on Vim, remove extra slashes from the start of the path. Also shorten the file name if possible.

#### Motif: (Marcin Dalecki)

- Made the dialog layout better.
- Added find and find/replace dialogs.
- For the menus, change "iso-8859" to "iso\_8859", Linux appears to need this.
- Added icon to dialogs, like for GTK.
- Use XPM bitmaps for the icon when possible. Use the Solaris XpmP.h include file when it's available.
- Change the shadow of the toolbar items to get a visual feedback of it being pressed on non-LessTif.
- Use gadgets instead of windows for some items for speed.

## Command line completion:

- Complete environment variable names. (Mike Steed)
- For ":command", added a few completion methods: "mapping", "function", "expression" and "environment".
- When a function doesn't take arguments, let completion add () instead of (.

For MS-DOS, MS-Windows and OS/2: Expand %VAR% environment variables like \$VAR.  
(Walter Briscoe)

Redirect messages to the clipboard ":redir @" and to the unnamed register  
":redir @"". (Wall)

":let @/ = '' clears the search pattern, instead of setting it to an empty string.

## Expression evaluation:

- "? :" can be used like in C.
- col("\$") returns the length of the cursor line plus one. (Stephen P. Wall)
- Optional extra argument for match(), matchend() and matchstr(): Offset to start looking for a match.
- Made third argument to strpart() optional. (Paul Moore, Zdenek Sekera)
- exists() can also be used to check for Ex commands and defined autocommands.
- Added extra argument to input(): Default text.
- Also set "v:errmsg" when using ":silent! cmd".
- Added the v:prevcount variable: v:count for the previous command.
- Added "v:programe", name with which Vim was started. (Vince Negri)
- In the verbose message about returning from a function, also show the return value.

## Cscope:

- Added the cscope\_connection() function. (Andy Kahn)
- ":cscope kill -1" kills all cscope connections. (Andy Kahn)
- Added the 'cscopepathcomp' option. (Scott Hauck)
- Added ":scscope" command, split window and execute Cscope command. (Jason Duell)

## VMS:

- Command line arguments are always uppercase. Interpret a "-X" argument as "-x" and "-/X" as "-X".
- Set 'makeprg' and 'greprg' to meaningful defaults. (Zoltan Arpadffy)
- Use the X-clipboard feature and the X command server. (Zoltan Arpadffy)

## Macintosh: (Dany St-Amant)

- Allow a tags file to have CR, CR-LF or LF line separator. (Axel Kielhorn)
- Carbonized (while keeping non Carbon code)  
(Some work "stolen" from Ammon Skidmore)
- Improved the menu item index handling (should be faster)
- Runtime commands now handle / in file name (MacOS 9 version)
- Added ":winpos" support.
- Support using "~" in file names for home directory.

## Options:

- When using set += or ^= , check for items used twice. Duplicates are removed. (Vince Negri)
- When setting an option that is a list of flags, remove duplicate flags.
- If possible, use getrlimit() to set 'maxmemtot' and 'maxmem'. (Pina)
- Added "alpha" to 'nrformats': increment or decrement an alphabetic character with CTRL-A and CTRL-X.
- ":set opt&vi" sets an option to its Vi default, ":set opt&vim" to its Vim default. Useful to set 'cpo' to its Vim default without knowing what flags that includes.
- 'scrolloff' now also applies to a long, wrapped line that doesn't fit in the

window.

- Added more option settings to the default menus.
- Updated the option window with new options. Made it a bit easier to read.

Internal changes:

- Split line pointers in text part and attributes part. Allows for future change to make attribute more than one byte.
- Provide a qsort() function for systems that don't have it.
- Changed the big switch for Normal mode commands into a table. This cleans up the code considerably and avoids trouble for some optimizing compilers.
- Assigned a negative value to special keys, to avoid them being mixed up with Unicode characters.
- Global variables expand\_context and expand\_pattern were not supposed to be global. Pass them to ExpandOne() and all functions called by it.
- No longer use the global reg\_ic flag. It caused trouble and in a few places it was not set.
- Removed the use of the stuff buffer for "\*", "K", CTRL-], etc. Avoids problem with autocommands.
- Moved some code from ex\_docmd.c to ex\_cmds2.c. The file was getting too big. Also moved some code from screen.c to move.c.
- Don't include the CRC table for encryption, generate it. Saves quite a bit of space in the source code. (Matthias Kramm)
- Renamed multibyte.c to mbyte.c to avoid a problem with 8.3 filesystems.
- Removed the GTK implementation of ":findhelp", it now uses the ToolBar.FindHelp menu entry.
- Renamed mch\_windexit() to mch\_exit(), mch\_init() to mch\_early\_init() and mch\_shellinit() to mch\_init().

Highlighting:

- In a ":highlight" listing, show "xxx" with the highlight color.
- Added support for xterm with 88 or 256 colors. The right color numbers will be used for the name used in a ":highlight" command. (Steve Wall)
- Added "default" argument for ":highlight". When included, the command is ignored if highlighting for the group was already defined. All syntax files now use ":hi default ..." to allow the user to specify colors in his vimrc file. Also, the "if did\_xxx\_syntax\_inits" is not needed anymore. This greatly simplifies using non-default colors for a specific language.
- Adjusted colortest.vim: Included colors on normal background and reduced the size by using a while loop. (Rafael Garcia-Suarez)
- Added the "DarkYellow" color name. Just to make the list of standard colors consistent, it's not really a nice color to use.

When an xterm is in 8-bit mode this is detected by the code returned for |t\_RV|. All key codes are automatically converted to their 8-bit versions.

The OPT\_TCAP\_QUERY in xterm patch level 141 and later is used to obtain the actual key codes used and the number of colors for t\_Co. Only when |t\_RV| is also used.

":browse set" now also works in the console mode. ":browse edit" will give an error message.

":bdelete" and ":bunload" only report the number of deleted/unloaded buffers when more than 'report'. The message was annoying when deleting a buffer in a script.

Jump list:

- The number of marks kept in the jumplist has been increased from 50 to 100.
- The jumplist is now stored in the viminfo file. CTRL-O can be used to jump to positions from a previous edit session.
- When doing ":split" copy the jumplist to the new window.

Also set the '[' and ']' marks for the "~" and "r" commands. These marks are now always set when making a change with a Normal mode command.

Python interface: Allow setting the width of a vertically split window. (John Cook)

Added "=word" and "=~word" to 'cinkeys' (also used in 'indentkeys').

Added "jl" argument in 'cinoptions': indent {} inside () for Java. (Johannes Zellner)

Added the "l" flag in 'cinoptions'. (Anduin Withers)

Added 'C', 'U', 'w' and 'm' flags to 'cinoptions'. (Servatius Brandt)

When doing ":wall" or ":wqall" and a modified buffer doesn't have a name, mention its buffer number in the error message.

":function Name" lists the function with line numbers. Makes it easier to find out where an error happened.

In non-blockwise Visual mode, "r" replaces all selected characters with the typed one, like in blockwise Visual mode.

When editing the last file in the argument list in any way, allow exiting. Previously this was only possible when getting to that file with ":next" or ":last".

Added the 'l' flag to 'formatoptions'. (Vit Stradal)

Added 'n' flag in 'formatoptions': format a numbered list.

Swap file:

- When a swap file already exists, and the user selects "Delete" at the ATTENTION prompt, use the same ".swp" swapfile, to avoid creating a ".swo" file which won't always be found.
- When giving the ATTENTION message and the date of the file is newer than the date of swap file, give a warning about this.
- Made the info for an existing swap file a bit shorter, so that it still fits on a 24 line screen.
- It was possible to make a symlink with the name of a swap file, linking to a file that doesn't exist. Vim would then silently use another file (if open with O\_EXCL refuses a symlink). Now check for a symlink to exist. Also do another check for an existing swap file just before creating it to catch a symlink attack.

The g CTRL-G command also works in Visual mode and counts the number of words. (Chase Tingley)

Give an error message when using 'shell' and it's empty.

Added the possibility to include "%s" in 'shellpipe'.

Added "uhex" value for 'display': show non-printable characters as <xx>. Show unprintable characters with NonText highlighting, also in the command line.

When asked to display the value of a hidden option, tell it's not supported.

Win32:

- When dropping a shortcut on gvim (.lnk file) edit the target, not the shortcut itself. (Yasuhiro Matsumoto)
- Added C versions of the OpenWithVim and SendToVim programs. (Walter Briscoe)
- When 'shell' is "cmd" or "cmd.exe", set 'shellredir' to redirect stderr too.

Also check for the Unix shell names.

- When \$HOMEDRIVE and \$HOMEPATH are defined, use them to define \$HOME. (Craig Barkhouse)

Win32 console version:

- Includes the user and system name in the ":version" message, when available. It generates a pathdef.c file for this. (Jon Miner)
- Set the window icon to Vim's icon (only for Windows 2000). While executing a shell command, modify the window title to show this. When exiting, restore the cursor position too. (Craig Barkhouse)
- The Win32 console version can be compiled with OLE support. It can only function as a client, not as an OLE server.

Errorformat:

- Let "%p" in 'errorformat' (column of error indicated by a row of characters) also accept a line of dots.
- Added "%v" item in 'errorformat': Virtual column number. (Dan Sharp)
- Added a default 'errorformat' value for VMS. (Jim Bush)

The "p" command can now be used in Visual mode. It overwrites the selected text with the contents of a register.

Highlight the <> items in the intro message to make clear they are special.

When using the "c" flag for ":substitute", allow typing "l" for replacing this item and then stop: "last".

When printing a verbose message about sourcing another file, print the line number.

When resizing the Vim window, don't use 'equalalways'. Avoids that making the Vim window smaller makes split windows bigger. And it's what the docs say.

When typing CTRL-D in Insert mode, just after an autoindent, then hitting CR kept the remaining white space. Now made it work like BS: delete the autoindent to avoid a blank non-empty line results.

Added a GetHwnd() call to the OLE interface. (Vince Negri)

Made ":normal" work in an event handler. Useful when dropping a file on Vim and for CursorHold autocommands.

For the MS-Windows version, don't change to the directory of the file when a slash is used instead of a backslash. Explorer should always use a backslash, the user can use a slash when typing the command.

Timestamps:

- When a buffer was changed outside of Vim and regaining focus, give a dialog to allow the user to reload the file. Now also for other GUIs than MS-Windows. And also used in the console, when compiled with dialog support.
- Inspect the file contents to find out if it really changed, ignore situations where only the time stamp changed (e.g., checking the file out from CVS).
- When checking the timestamp, first check if the file size changed, to avoid a file compare then. Makes it quicker for large (log) files that are appended to.
- Don't give a warning for a changed or deleted file when 'buftype' is set.
- No longer warn for a changed directory. This avoids that the file explorer produces warnings.
- Checking timestamps is only done for buffers that are not hidden. These will be checked when they become unhidden.

- When checking for a file being changed outside of Vim, also check if the file permissions changed. When the file contents didn't change but the permissions did, give a warning.
- Avoid checking too often, otherwise the dialog keeps popping up for a log file that steadily grows.

Mapping <M-A> when 'encoding' is "latin1" and then setting 'encoding' to "utf-8" causes the first byte of a multi-byte to be mapped. Can cause very hard to find problems. Disallow mapping part of a multi-byte character.

For ":python" and ":tcl" accept an in-line script. (Johannes Zellner)  
Also for ":ruby" and ":perl". (Benoit Cerrina)

Made ":syn include" use 'runtimepath' when the file name is not a full path.

When 'switchbuf' contains "split" and the current window is empty, don't split the window.

Unix: Catch SIGPWR to preserve files when the power is about to go down.

Sniff interface: (Anton Leherbauer)

- fixed windows code, esp. the event handling stuff
- adaptations for sniff 4.x (\$SNIFF\_DIR4)
- support for adding sniff requests at runtime

Support the notation <A-x> as an alias for <M-x>. This logical, since the Alt key is used.

":find" accepts a count, which means that the count'th match in 'path' is used.

":ls" and ":buffers" output shows modified/readonly/modifiable flag. When a buffer is active show "a" instead of nothing. When a buffer isn't loaded show nothing instead of "-".

Unix install:

- When installing the tools, set absolute paths in tools scripts efm\_perl.pl and mve.awk. Avoids that the user has to edit these files.
- Install Icons for KDE when the directories exist and the icons do not exist yet.

Added has("win95"), to be able to distinguish between MS-Windows 95/98/ME and NT/2000/XP in a Vim script.

When a ":cd" command was typed, echo the new current directory. (Dan Sharp)

When using ":winpos" before the GUI window has been opened, remember the values until it is opened.

In the ":version" output, add "/dyn" for features that are dynamically loaded. This indicates the feature may not always work.

On Windows NT it is possible that a directory is read-only, but a file can be deleted. When making a backup by renaming the file and 'backupdir' doesn't use the current directory, this causes the original file to be deleted, without the possibility to create a new file. Give an extra error message then to warn to user about this.

Made CTRL-R CTRL-O at the command line work like CTRL-R CTRL-R, so that it's consistent with Insert mode.

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## COMPILE TIME CHANGES

\*compile-changes-6\*

All generated files have been moved out of the "src" directory. This makes it easy to see which files are not edited by hand. The files generated by configure are now in the "src/auto" directory. For Unix, compiled object files go in the objects directory.

The source archive was over the 1.4M floppy limit. The archives are now split up into two runtime and two source archives. Also provide a bzip2 compressed archive that contains all the sources and runtime files.

Added "reconfig" as a target for make. Useful when changing some of the arguments that require flushing the cache, such as switching from GTK to Motif. Adjusted the meaning of GUI\_INC\_LOC and GUI\_LIB\_LOC to be consistent over different GUIs.

Added src/README.txt to give an overview of the main parts of the source code.

The Unix Makefile now fully supports using \$(DESTDIR) to install to a specific location. Replaces the manual setting of \*ENDLOC variables.

Added the possibility for a maintainer of a binary version to include his e-mail address with the --with-compiledby configure argument.

Included features are now grouped in "tiny", "small", "normal", "big" and "huge". This replaces "min-features" and "max-features". Using "tiny" disables multiple windows for a really small Vim.

For the tiny version or when FEAT\_WINDOWS is not defined: Firstwin and lastwin are equal to curwin and don't use w\_next and w\_prev.

Added the +listcmds feature. Can be used to compile without the Vim commands that manipulate the buffer list and argument list (the buffer list itself is still there, can't do without it).

Added the +vreplace feature. It is disabled in the "small" version to avoid that the 16 bit DOS version runs out of memory.

Removed GTK+ support for versions older than 1.1.16.

The configure checks for using PTYs have been improved. Code taken from a recent version of screen.

Added configure options to install Vim, Ex and View under another name (e.g., vim6, ex6 and view6).

Added "--with-global-runtime" configure argument. Allows specifying the global directory used in the 'runtimepath' default.

Made enabling the SNIFF+ interface possible with a configure argument.

Configure now always checks /usr/local/lib for libraries and /usr/local/include for include files. Helps finding the stuff for iconv() and gettext().

Moved the command line history stuff into the +cmdline\_hist feature, to exclude the command line history from the tiny version.

MS-Windows: Moved common functions from Win16 and Win32 to os\_mswin.c. Avoids having to change two files for one problem. (Vince Negri)

Moved common code from gui\_w16.c and gui\_w32.c to gui\_w48.c (Vince Negri)

The jumplist is now a separate feature. It is disabled for the "small" version (16 bit MS-DOS).

Renamed all types ending in `_t` to end in `_T`. Avoids potential problems with system types.

Added a configure check for X11 header files that implicitly define the return type to `int`. (Steve Wall)

"make doslang" in the top directory makes an archive with the menu and `.mo` files for Windows. This uses the files generated on Unix, these should work on MS-Windows as well.

Merged a large part of `os_vms.c` with `os_unix.c`. The code was duplicated in the past which made maintenance more work. (Zoltan Arpadffy)

Updated the Borland C version 5 Makefile: (Dan Sharp)

- Fixed the Perl build
- Added python and tcl builds
- Added dynamic perl and dynamic python builds
- Added `uninstal.exe` build
- Use "yes" and "no" for the options, like in `Make_mvc.mak`.

Win32: Merged `Make_gvc.mak` and `Make_ovc.mak` into one file: `Make_ivc.mak`. It's much smaller, many unnecessary text has been removed. (Walter Briscoe)  
 Added `Make_dvc.mak` to be able to debug exe generated with `Make_mvc.mak` in MS-Devstudio. (Walter Briscoe)

MS-Windows: The big `gvim.exe`, which includes OLE, now also includes dynamically loaded Tcl, Perl and Python. This uses ActivePerl 5.6.1, ActivePython 2.1.1 and ActiveTCL 8.3.3

Added `AC_EXEEXT` to `configure.in`, to check if the executable needs `".exe"` for Cygwin or MingW. Renamed `SUFFIX` to `EXEEXT` in `Makefile`.

Win32: Load `comdlg32.dll` delayed for faster startup. Only when using VC 6. (Vipin Aravind)

Win32: When compiling with Borland, allow using IME. (Yasuhiro Matsumoto)

Win32: Added Makefile for Borland 5 to compile `gvimext.dll`. (Yasuhiro Matsumoto)

#### =====

#### BUG FIXES

\*bug-fixes-6\*

When checking the command name for `"gvim"`, `"ex"`, etc. ignore case. Required for systems where case is ignored in command names.

Search pattern `"[a-c-e]"` also matched a `'d'` and didn't match a `'-'`.

When double-clicking in another window, wasn't recognized as double click, because topline is different. Added `set_mouse_topline()`.

The `BROKEN_LOCALE` check was broken. (Marcin Dalecki)

When `"t_Co"` is set, the default colors remain the same, thus wrong. Reset the colors after changing `"t_Co"`. (Steve Wall)

When exiting with `":wqall"` the messages about writing files could overwrite each other and be lost forever.



When starting Vim with an extremely long file name (around 1024 characters) it would crash. Added a few checks to avoid buffer overflows.

CTRL-E could get stuck in a file with very long lines.

":au syntax<Tab>" expanded event names while it should expand groups starting with "syntax".

When expanding a file name caused an error (e.g., for <amatch>) it was produced even when inside an "if 0".

'cindent' formatted C comments differently from what the 'comments' option specified. (Steve Wall)

Default for 'grepprg' didn't include the file name when only grepping in one file. Now /dev/null has been added for Unix.

Opening the option window twice caused trouble. Now the cursor goes to the existing option window.

":sview" and ":view" didn't set 'readonly' for an existing buffer. Now do set 'readonly', unless the buffer is also edited in another window.

GTK GUI: When 'guioptions' excluded 'g', the more prompt caused the toolbar and menubar to disappear and resize the window (which clears the text). Now always grey-out the toplevel menus to avoid that the menubar changes size or disappears.

When re-using the current buffer for a new buffer, buffer-local variables were not deleted.

GUI: when 'scrolloff' is 0 dragging the mouse above the window didn't cause a down scroll. Now pass on a mouse event with mouse\_row set to -1.

Win32: Console version didn't work on telnet, because of switching between two console screens. Now use one console screen and save/restore the contents when needed. (Craig Barkhouse)

When reading a file the magic number for encryption was included in the file length. (Antonio Colombo)

The quickfix window contained leading whitespace and NULs for multi-line messages. (David Harrison)

When using cscope, redundant tags were removed. This caused a numbering problem, because they were all listed. Don't remove redundant cscope tags. (David Bustos).

Cscope: Test for which matches are in the current buffer sometimes failed, causing a jump to another match than selected. (David Bustos)

Win32: Buffer overflow when adding a charset name in a font.

'titlestring' and 'iconstring' were evaluating an expression in the current context, which could be a user function, which is a problem for local variables vs global variables.

Win32 GUI: Mapping <M-F> didn't work. Now handle SHIFT and CTRL in \_OnSysChar().

Win32 GUI: (on no file), :vs<CR>:q<CR> left a trail of pixels down the middle.

Could also happen for the ruler. `screen_puts()` didn't clear the right char in `ScreenLines[]` for the bold trick.

Win32: `":%!sort|uniq"` didn't work, because the input file name touches the `"|"`. Insert a space before the `"|"`.

OS/2: Expanding wildcards included non-existing files. Caused `":runtime"` to fail, which caused syntax highlighting to fail.

Pasting a register containing CTRL-R on the command line could cause an endless loop that can't be interrupted. Now it can be stopped with CTRL-C.

When 'verbose' is set, a message for file read/write could overwrite the previous message.

When 'verbose' is set, the header from `":select"` was put after the last message. Now start a new line.

The hit-enter prompt reacted to the response of the `t_RV` string, causing messages at startup to disappear.

When `t_Co` was set to 1, colors were still used. Now only use color when `t_Co > 1`.

Listing functions with `":function"` didn't quit when 'q' or ':' was typed at the more prompt.

Use `mkstemp()` instead of `mktemp()` when it's available, avoids a warning for linking on FreeBSD.

When doing Insert mode completion it's possible that `b_sfname` is NULL. Don't give it to `printf()` for the "Scanning" message.

`":set runtimepath=$VIMRUNTIME"` didn't work, because expansion of wildcards was done after trying to remove the string. Now for `":set opt+=val"` and `":set opt-=val"` the expansion of wildcards is done before adding or removing "val".

Using CTRL-V with the "r" command with a blockwise Visual selection inserted a CTRL-V instead of getting a special character.

Unix: Changed the order of libraries: Put `-lXdmcp` after `-lX11` and `-lSM -lICE` after `-lXdmcp`. Should fix link problem on HP-UX 10.20.

Don't remove the last `"-lm"` from the link line. Vim may link but fail later when the GUI starts.

When the shell returns with an error when trying to expand wildcards, do include the pattern when the `"EW_NOTFOUND"` flag was set.

When expanding wildcards with the shell fails, give a clear error message instead of just "1 returned".

Selecting a Visual block, with the start partly on a Tab, deleting it leaves the cursor too far to the left. Causes "s" to work in the wrong position.

Pound sign in `normal.c` caused trouble on some compilers. Use `0xA3` instead.

Warning for changing a read-only file wasn't given when 'insertmode' was set.

Win32: When 'shellxquote' is set to a double quote (e.g., using `csh`), `":!start notepad file"` doesn't work. Remove the double quotes added by 'shellxquote' when using `":!start"`. (Pavol Juhas)

The `"<f-args>"` argument of `":command"` didn't accept Tabs for white space.

Also, don't add an empty argument when there are trailing blanks.

":e test\\je" edited "test\je", but ":next test\\je" edited "testje".  
Backslashes were removed one time too many for ":next".

VMS: "gf" didn't work properly. Use vms\_fixfilename() to translate the file name. (Zoltan Arpadffy)

After ":hi Normal ctermfg=black ctermfg=white" and suspending Vim not all characters are redrawn with the right background.

When doing "make test" without +eval or +windows feature, many tests failed. Now have test1 generate a script to copy the correct output, so that a test that doesn't work is skipped.

On FreeBSD the Perl interface added "-lc" to the link command and Python added "-pthread". These two don't work together, because the libc\_r library should be used. Removed "-lc" from Perl, it should not be needed.  
Also: Add "-pthread" to \$LIBS, so that the checks for functions is done with libc\_r. Sigaltstack() appears to be missing from libc\_r.

The Syntax sub-menus were getting too long, reorganized them and added another level for some languages.

Visual block "r"eplace didn't work well when a Tab is partly included.  
(Matthias Kramm)

When yanking a Visual block, where some lines end halfway the block, putting the text somewhere else doesn't insert a block. Padd with spaces for missing characters. Added "y\_width" to struct yankreg. (Matthias Kramm)

If a substitute string has a multibyte character after a backslash only the first byte of it was skipped. (Muraoka Taro)

Win32: Numeric keypad keys were missing from the builtin termcap entry.

When a file was read-only ":wa!" didn't force it to be written. (Vince Negri)

Amiga: A file name starting with a colon was considered absolute but it isn't.  
Amiga: ":pwd" added a slash when in the root of a drive.

Don't let 'ttymouse' default to "dec" when compiled with dec mouse support.  
It breaks the gpm mouse (Linux console).

The prototypes for the Perl interface didn't work for threaded Perl. Added a sed command to remove the prototypes from proto/if\_perl.pro and added them manually to if\_perl.xs.

When ":w!" resets the 'readonly' option the title and status lines were not updated.

":args" showed the current file when the argument list was empty. Made this work like Vi: display nothing.

"99:<C-U>echo v:count" echoed "99" in Normal mode, but 0 in Visual mode.  
Don't set v:count when executing a stuffed command.

Amiga: Got a requester for "home:" because it's in the default runtime path.  
Don't bring up a requester when searching for a file in 'path', sourcing the .vimrc file or using ":runtime".

Win16 and Win32: Considered a file "\path\file" absolute. Can cause the same

file to appear as two different buffers.

Win32: Renaming a file to an empty string crashed Vim. Happened when using explorer.vim and hitting ESC at the rename prompt.

Win32: strftime() crashed when called with a "-1" value for the time.

Win32 with Borland compiler: mch\_FullName() didn't work, caused tag file not to be found.

Cscope sometimes jumped to the wrong tag. (David Bustos)

OS/2: Could not find the tags file. mch\_expand\_wildcards() added another slash to a directory name.

When using ">>" the `]` mark was not in the last column.

When Vim was compiled without menu support, filetype.vim was still trying to source the menu.vim script. (Rafael Garcia-Suarez)

":ptag" added an item to the tag stack.

Win32 IME: "gr" didn't use IME mode.

In the "vim --help" message the term "options" was used for arguments. That's confusing, call them "arguments".

When there are two windows, and a BufUnload autocommand for closing window #1 closed window #2, Vim would crash.

When there is a preview window and only one other window, ":q" wouldn't exit.

In Insert mode, when cancelling a digraph with ESC, the '?' wasn't removed.

On Unix glob(".\*") returned "." and "..", on Windows it didn't. On Windows glob("\*\*") also returned files starting with a dot. Made this work like Unix on all systems.

Win32: Removed old code to open a console. Vimrun is now used and works fine.

Compute the room needed by the intro message accurately, so that it also fits on a 25 line console. (Craig Barkhouse)

":ptnext" was broken. Now remember the last tag used in the preview window separately from the tagstack.

Didn't check for "-display" being the last argument. (Wichert Akkerman)

GTK GUI: When starting "gvim" under some conditions there would be an X error. Don't replace the error handler when creating the xterm clipboard. (Wichert Akkerman)

Adding a space after a help tag caused the tag not to be found. E.g., ":he autoindent".

Was trying to expand a URL into a full path name. On Windows this resulted in the current directory to be prepended to the URL. Added vim\_isAbsName() and vim\_FullName() to avoid that various machine specific functions do it differently.

":n \*.c" ":cd .." ":n" didn't use the original directory of the file. Vi only does it for the current file (looks like a bug). Now remember the buffer used

for the entry in the argument list and use its name (adjusted when doing ":cd"), unless it's deleted.

When inserting a special key as its name ("" as four characters) after moving around in Insert mode, undo didn't work properly.

Motif GUI: When using the right mouse button, for some people gvim froze for a couple of seconds (Motif 1.2?). This doesn't happen when there is no Popup menu. Solved by only creating a popup menu when 'mousemodel' is "popup" or "popup\_setpos". (David Harrison)

Motif: When adding many menu items, the "Help" menu disappeared but the menubar didn't wrap. Now manually set the menubar height.

When using <BS> in Insert mode to remove a line break, or using "J" to join lines, the cursor could end up halfway a multi-byte character. (Muraoka Taro)

Removed defining SVR4 in configure. It causes problems for some X header files and doesn't appear to be used anywhere.

When 'wildignore' is used, 'ignorecase' for a tag match was not working.

When 'wildignore' contains "\*~" it was impossible to edit a file ending in a "~". Now don't recognize a file ending in "~" as containing wildcards.

Disabled the mouse code for OS/2. It was not really used.

":mksession" always used the full path name for a buffer, also when the short name could be used.

":mkvimrc" and ":mksession" didn't save 'wildchar' and 'pastetoggle' in such a way that they would be restored. Now use the key name if possible, this is portable.

After recovering a file and abandoning it, an ":edit" command didn't give the ATTENTION prompt again. Would be useful to be able to delete the file in an easy way. Reset the BF\_RECOVERED flag when unloading the buffer.

histdel() could match or ignore case, depending on what happened before it. Now always match case.

When a window size was specified when splitting a window, it would still get the size from 'winheight' or 'winwidth' if it's larger.

When using "append" or "insert" inside a function definition, a line starting with "function" or "endfunction" caused confusion. Now recognize the commands and skip lines until a ".".

At the end of any function or sourced file need\_wait\_return could be reset, causing messages to disappear when redrawing.

When in a while loop the line number for error messages stayed fixed. Now the line number is remembered in the while loop.

"cd c:/" didn't work on MS-DOS. mch\_isdir() removed a trailing slash.

MS-Windows: getftime() didn't work when a directory had a trailing slash or backslash. Didn't show the time in the explorer because of this.

When doing wildcard completion, a directory "a/" sorted after "a-b". Now recognize path separators when sorting files.

Non-Unix systems: When editing "c:/dir../file" and "c:/file" they were

created as different buffers, although it's the same file. Expand to a full file name also when an absolute name contains "..".

"g&" didn't repeat the last substitute properly.

When 'clipboard' was set to "unnamed", a "Y" command would not write to "0. Now make a copy of register 0 to the clipboard register.

When the search pattern matches in many ways, it could not always be interrupted with a CTRL-C. And CTRL-C would have to be hit once for every line when 'hlsearch' is on.

When 'incsearch' is on and interrupting the search for a match, don't abandon the command line.

When turning a directory name into a full path, e.g., with fnamemodify(), sometimes a slash was added. Make this consistent: Don't add a slash.

When a file name contains a "!", using it in a shell command will cause trouble: ":!cat %". Escape the "!" to avoid that. Escape it another time when 'shell' contains "sh".

Completing a file name that has a tail that starts with a "~" didn't work: ":e view/~<Tab>".

Using a ":command" argument that contains < and > but not for a special argument was not skipped properly.

The DOS install program: On Win2000 the check for a vim.exe or gvim.exe in \$PATH didn't work, it always found it in the current directory. Rename the vim.exe in the current dir to avoid this. (Walter Briscoe)

In the MS-DOS/Windows install program, use %VIM% instead of an absolute path, so that moving Vim requires only one change in the batch file.

Mac: mch\_FullName() changed the "fname" argument and didn't always initialize the buffer.

MS-DOS: mch\_FullName() didn't fix forward/backward slashes in an absolute file name.

"echo expand("%:p:h)" with an empty file name removed one directory name on MS-DOS. For Unix, when the file name is a directory, the directory name was removed. Now make it consistent: "%:p" adds a path separator for all systems, but no path separator is added in other situations.

Unix: When checking for a CTRL-C (could happen any time) and there is an X event (e.g., clipboard updated) and there is typeahead, Vim would hang until a character was typed.

MS-DOS, MS-Windows and Amiga: expanding "\$ENV/foo" when \$ENV ends in a colon, had the slash removed.

":he \^=" gave an error for using \\_. ":he ^==" didn't find tag :set^=. Even "he :set^=" didn't find it.

A tags file name "D:/tags" was used as file "tags" in "D:". That doesn't work when the current path for D: isn't the root of the drive.

Removed calls to XtInitializeWidgetClass(), they shouldn't be necessary.

When using a dterm or various other color terminals, and the Normal group has been set to use a different background color, the background wouldn't always

be displayed with that color. Added check for "ut" termcap entry: If it's missing, clearing the screen won't give us the current background color. Need to draw each character instead. Vim now also works when the "cl" (clear screen) termcap entry is missing.

When repeating a "/" search command with a line offset, the "n" did use the offset but didn't make the motion linewise. Made "d/pat/+2" and "dn" do the same.

Win32: Trying to use ":tearoff" for a menu that doesn't exist caused a crash.

OpenPTY() didn't work on Sequent. Add a configure check for getpseudotty().

C-indenting: Indented a line starting with ")" with the matching "(", but not a line starting with "x)" looks strange. Also compute the indent for aligning with items inside the () and use the lowest indent.

MS-DOS and Windows: ":n \*.vim" also matched files ending in "~". Moved mch\_expandpath() from os\_win16.c and os\_msdos.c to misc1.c, they are equal.

Macintosh: (Dany St-Amant)

- In Vi-compatible mode didn't read files with CR line separators.
- Fixed a bug in the handling of Activate/Deactivate Event
- Fixed a bug in gui\_mch\_dialog (using wrong pointer)

Multibyte GDK XIM: While composing a multibyte-word, if user presses a mouse button, then the word is removed. It should remain and composing end. (Sung-Hyun Nam)

MS-DOS, MS-Windows and OS/2: When reading from stdin, automatic CR-LF conversion by the C library got in the way of detecting a "dos" 'fileformat'.

When 'smartcase' is set, patterns with "\S" would also make 'ignorecase' reset.

When clicking the mouse in a column larger than 222, it moved to the first column. Can't encode a larger number in a character. Now limit the number to 222, don't jump back to the first column.

GUI: In some versions CSI would cause trouble, either when typed directly or when part of a multi-byte sequence.

When using multibyte characters in a ":normal" command, a trailing byte that is CSI or K\_SPECIAL caused problems.

Wildmenu didn't handle multi-byte characters.

":sleep 10" could not be interrupted on Windows, while "gs" could. Made them both work the same.

Unix: When waiting for a character is interrupted by an X-windows event (e.g., to obtain the contents of the selection), the wait time would not be honored. A message could be overwritten quickly. Now compute the remaining waiting time.

Windows: Completing "\\share\c\$\S" inserted a backslash before the \$ and then the name is invalid. Don't insert the backslash.

When doing an auto-write before ":make", IObuff was overwritten and the wrong text displayed later.

On the Mac the directories "c:/tmp" and "c:/temp" were used in the defaults for 'backupdir' and 'directory', they don't exist.

The check for a new file not to be on an MS-DOS filesystem created the file temporarily, which can be slow. Don't do this if there is another check for the swap file being on an MS-DOS filesystem.

Don't give the "Changing a readonly file" warning when reading from stdin.

When using the "Save As" menu entry and not entering a file name, would get an error message for the trailing ":edit #". Now only do that when the alternate file name was changed.

When Vim owns the X11 selection and is being suspended, an application that tries to use the selection hangs. When Vim continues it could no longer obtain the selection. Now give up the selection when suspending.

option.h and globals.h were included in some files, while they were already included in vim.h. Moved the definition of EXTERN to vim.h to avoid doing it twice.

When repeating an operator that used a search pattern and the search pattern contained characters that have a special meaning on the cmdline (e.g., CTRL-U) it didn't work.

Fixed various problems with using K\_SPECIAL (0x80) and CSI (0x9b) as a byte in a (multibyte) character. For example, the "r" command could not be repeated.

The DOS/Windows install program didn't always work from a directory with a long filename, because \$VIM and the executable name would not have the same path.

Multi-byte:

- Using an any-but character range [^x] in a regexp didn't work for UTF-8. (Muraoka Taro)
- When backspacing over inserted characters in Replace mode multi-byte characters were not handled correctly. (Muraoka Taro)
- Search commands "#" and "\*" didn't work with multibyte characters. (Muraoka Taro)
- Word completion in Insert mode didn't work with multibyte characters. (Muraoka Taro)
- Athena/Motif GUI: when 'linespace' is non-zero the cursor would be drawn too wide (number of bytes instead of cell width).
- When changing 'encoding' to "euc-jp" and inserting a character Vim would crash.
- For euc-jp characters positioning the cursor would sometimes be wrong. Also, with two characters with 0x8e leading byte only the first one would be displayed.
- When using DYNAMIC\_ICONV on Win32 conversion might fail because of using the wrong error number. (Muraoka Taro)
- Using Alt-x in the GUI while 'encoding' was set to "utf-8" didn't produce the right character.
- When using Visual block selection and only the left halve of a double-wide character is selected, the highlighting continued to the end of the line.
- Visual-block delete didn't work properly when deleting the right halve of a double-wide character.
- Overstrike mode for the cmdline replaced only the first byte of a multibyte character.
- The cursor in Replace mode (also in the cmdline) was too small on a double-wide character.
- When a multibyte character contained a 0x80 byte, it didn't work (was using a CSI byte instead). (Muraoka Taro)



- Wordwise selection with the mouse didn't work.
- Yanking a modeless selection of multi-byte characters didn't work.
- When 'selection' is "exclusive", selecting a word that ends in a multi-byte character used wrong highlighting for the following character.

Win32 with Make\_mvc.mak: Didn't compile for debugging. (Craig Barkhouse)

Win32 GUI: When "vimrun.exe" is used to execute an external command, don't give a message box with the return value, it was already printed by vimrun. Also avoid printing the return value of the shell when ":silent!" is used.

Win32: selecting a lot of text and using the "find/replace" dialog caused a crash.

X11 GUI: When typing a character with the 8th bit set and the Meta/Alt modifier, the modifier was removed without changing the character.

Truncating a message to make it fit on the command line, using "..." for the middle, didn't always compute the space correctly.

Could not imap <C-@>. Now it works like <Nul>.

VMS:

- Fixed a few things for VAXC. os\_vms\_fix.com had some strange CTRL-M characters. (Zoltan Arpadffy and John W. Hamill)
- Added VMS-specific defaults for the 'isfname' and 'isprint' options. (Zoltan Arpadffy)
- Removed os\_vms\_osdef.h, it's no longer used.

The gzip plugin used a ":normal" command, this doesn't work when dropping a compressed file on Vim.

In very rare situations a binary search for a tag would fail, because an uninitialized value happens to be half the size of the tag file. (Narendran)

When using BufEnter and BufLeave autocommands to enable/disable a menu, it wasn't updated right away.

When doing a replace with the "c"onfirm flag, the cursor was positioned after the ruler, instead of after the question. With a long replacement string the screen could scroll up and cause a "more" prompt. Now the message is truncated to make it fit.

Motif: The autoconf check for the Xp library didn't work.

When 'verbose' is set to list lines of a sourced file, defining a function would reset the counter used for the "more" prompt.

In the Win32 find/replace dialog, a '/' character caused problems. Escape it with a backslash.

Starting a shell with ":sh" was different from starting a shell for CTRL-Z when suspending doesn't work. They now work the same way.

Jumping to a file mark while in a changed buffer gave a "mark not set" error.

":execute histget("cmd")" causes an endless loop and crashed Vim. Now catch all commands that cause too much recursiveness.

Removed "Failed to open input method" error message, too many people got this when they didn't want to use a XIM.

GUI: When compiled without the +windows feature, the scrollbar would start below line one.

Removed the trick with redefining character class functions from regexp.c.

Win32 GUI: Find dialog gives focus back to main window, when typing a character mouse pointer is blanked, it didn't reappear when moving it in the dialog window. (Vince Negri)

When recording and typing a CTRL-C, no character was recorded. When in Insert mode or cancelling half a command, playing back the recorded sequence wouldn't work. Now record the CTRL-C.

When the GUI was started, mouse codes for DEC and netterm were still checked for.

GUI: When scrolling and 'writedelay' is non-zero, the character under the cursor was displayed in the wrong position (one line above/below with CTRL-E/CTRL-Y).

A ":normal" command would reset the 'scrollbind' info. Causes problems when using a ":normal" command in an autocommand for opening a file.

Windows GUI: a point size with a dot, like "7.5", wasn't recognized. (Muraoka Taro)

When 'scrollbind' wasn't set would still remember the current position, wasting time.

GTK: Crash when 'shell' doesn't exist and doing":!ls". Use \_exit() instead of exit() when the child couldn't execute the shell.

Multi-byte:

- GUI with double-byte encoding: a mouse click in left halve of double-wide character put the cursor in previous char.
- Using double-byte encoding and 'selection' is "exclusive": "vey" and "^Vey" included the character after the word.
- When using a double-byte encoding and there is a lead byte at the end of the line, the preceding line would be displayed. "ga" also showed wrong info.
- "gf" didn't include multi-byte characters before the cursor properly. (Muraoka Taro)

GUI: The cursor was sometimes not removed when scrolling. Changed the policy from redrawing the cursor after each call to gui\_write() to only update it at the end of update\_screen() or when setting the cursor position. Also only update the scrollbars at the end of update\_screen(), that's the only place where the window text may have been scrolled.

Formatting "/\*<Tab>long text", produced "\* <Tab>" in the next line. Now remove the space before the Tab.

Formatting "/\*<Tab> long text", produced "\* <Tab> long text" in the next line. Now keep the space after the Tab.

In some places non-ASCII alphabetical characters were accepted, which could cause problems. For example, ":X" (X being such a character).

When a pattern matches the end of the line, the last character in the line was highlighted for 'hlsearch'. That looks wrong for "/\%3c". Now highlight the character just after the line.

Motif: If a dialog was closed by clicking on the "X" of the window frame Vim would no longer respond.

When using CTRL-X or CTRL-A on a number with many leading zeros, Vim would crash. (Matsumoto)

When 'insertmode' is set, the mapping in mswin.vim for CTRL-V didn't work in Select mode. Insert mode wasn't restarted after overwriting the text. Now allow nesting Insert mode with insert and change commands. CTRL-O cwfoo<Esc> now also works.

Clicking with the right mouse button in another window started Visual mode, but used the start position of the current window. Caused ml\_get errors when the line number was invalid. Now stay in the same window.

When 'selection' is "exclusive", "gv" sometimes selected one character fewer.

When 'comments' contains more than one start/middle/end triplet, the optional flags could be mixed up. Also didn't align the end with the middle part.

Double-right-click in Visual mode didn't update the shown mode.

When the Normal group has a font name, it was never used when starting up. Now use it when 'guifont' and 'guifontset' are empty. Setting a font name to a highlight group before the GUI was started didn't work.

"make test" didn't use the name of the generated Vim executable.

'cindent' problems:

- Aligned with an "else" inside a do-while loop for a line below that loop. (Meikel Brandmeyer)
- A line before a function would be indented even when terminated with a semicolon. (Meikel Brandmeyer)
- 'cindent' gave too much indent to a line after a "};" that ends an array init.
- Support declaration lines ending in "," and "\". (Meikel Brandmeyer)
- A case statement inside a do-while loop was used for indenting a line after the do-while loop. (Meikel Brandmeyer)
- When skipping a string in a line with one double quote it could continue in the previous line. (Meikel Brandmeyer)

When 'list' is set, 'hlsearch' didn't highlight a match at the end of the line. Now highlight the '\$'.

The Paste menu item in the menu bar, the popup menu and the toolbar were all different. Now made them all equal to how it was done in mswin.vim.

st\_dev can be smaller than "unsigned". The compiler may give an overflow warning. Added a configure check for dev\_t.

Athena: closing a confirm() dialog killed Vim.

Various typos in the documentation. (Matt Dunford)

Python interface: The definition of \_DEBUG could cause trouble, undefine it. The error message for not being able to load the shared library wasn't translated. (Muraoka Taro)

Mac: (Dany St-Amant and Axel Kielhorn)

- Several fixes.
- Vim was eating 80% of the CPU time.
- The project os\_mac.pbxproj didn't work, Moved it to a subdirectory.
- Made the menu priority work for the menubar.

- Fixed a problem with dragging the scrollbar.
- Cleaned up the various `#ifdefs`.

Unix: When catching a deadly signal and we keep getting one use `_exit()` to exit in a quick and dirty way.

Athena menu ordering didn't work correctly. (David Harrison)

A `":make"` or `":grep"` command with a long argument could cause a crash.

Doing `":new file"` and using "Quit" for the ATTENTION dialog still opened a new window.

GTK: When starting the GUI and there is an error in the `.vimrc` file, don't present the wait-return prompt, since the message was given in the terminal.

When there was an error in a `.vimrc` file the terminal where `gvim` was started could be cleared. Set `msg_row` in `main.c` before writing any messages.

GTK and X11 GUI: When trying to read characters from the user (e.g. with `input()`) before the Vim window was opened caused Vim to hang when it was started from the desktop.

OS/390 uses 31 bit pointers. That broke some computations with `MAX_COL`. Reduce `MAX_COL` by one bit for OS/390. (Ralf Schandl)

When defining a function and it already exists, Vim didn't say it existed until after typing it. Now do this right away when typing it.

The message remembered for displaying later (`keep_msg`) was sometimes pointing into a generic buffer, which might be changed by the time the message is displayed. Now make a copy of the message.

When using multi-byte characters in a menu and a trailing byte is a backslash, the menu would not be created correctly. (Muraoka Taro)  
Using a multibyte character in the substitute string where a trail byte is a backslash didn't work. (Muraoka Taro)

When setting `"t_Co"` in a `vimrc` file, then setting it automatically from an xterm termresponse and then setting it again manually caused a crash.

When getting the value of a string option that is not supported, the number zero was returned. This breaks a check like `"&enc == "asdf"`. Now an empty string is returned for string options.

Crashed when starting the GTK GUI while using `'notitle'` in the `vimrc`, setting `'title'` in the `gvimrc` and starting the GUI with `":gui"`. Closed the connection to the X server accidentally.

Had to hit return after selecting an entry for `":ts"`.

The message from `":cn"` message was sometimes cleared. Now display it after redrawing if it doesn't cause a scroll (truncated when necessary).

`hangulin.c` didn't compile when the GUI was disabled. Disable it when it won't work.

When setting a termcap option like `"t_C0"`, the value could be displayed as being for a normal key with a modifier, like `"<M-=>"`.

When expanding the argument list, entries which are a directory name did not get included. This stopped `"vim c:/"` from opening the file explorer.

":syn match sd "^" nextgroup=asdf" skipped the first column and matched the nextgroup in the second column.

GUI: When 'lazyredraw' is set, 'showmatch' didn't work. Required flushing the output.

Don't define the <NetMouse> termcode in an xterm, reduces the problem when someone types <Esc> } in Insert mode.

Made slash\_adjust() work correctly for multi-byte characters. (Yasuhiro Matsumoto)  
Using a filename in Big5 encoding for autocommands didn't work (backslash in trailbyte). (Yasuhiro Matsumoto)

DOS and Windows: Expanding \*.vim also matched file.vimfoo. Expand path like Unix to avoid problems with Windows dir functions. Merged the DOS and Win32 functions.

Win32: Gvimext could not edit more than a few files at once, the length of the argument was fixed.

"ls -l \* | xargs vim" worked, but the input was in cooked mode. Now switch to raw mode when needed. Use dup() to copy the stderr file descriptor to stdin to make shell commands work. No longer requires an external program to do this.

When using ":filetype off", ftplugin and indent usage would be switched off at the same time. Don't do this, setting 'filetype' manually can still use them.

GUI: When writing a double-byte character, it could be split up in two calls to gui\_write(), which doesn't work. Now flush before the output buffer becomes full.

When 'laststatus' is set and 'cmdheight' is two or bigger, the intro message would be written over the status line.  
The ":intro" command didn't work when there wasn't enough room.

Configuring for Ruby failed with a recent version of Ruby. (Akinori Musha)

Athena: When deleting the directory in which Vim was started, using the file browser made Vim exit. Removed the use of XtAppError().

When using autoconf 2.50, UNIX was not defined. Moved the comment for "#undef UNIX" to a separate line.

Win32: Disabled \_OnWindowPosChanging() to make maximize work better.

Win32: Compiling with VC 4.0 didn't work. (Walter Briscoe)

Athena:

- Finally fixed the problems with deleting a menu. (David Harrison)
- Athena: When closing the confirm() dialog, worked like OK was pressed, instead of Cancel.

The file explorer didn't work in compatible mode, because of line continuation.

Didn't give an error message for ":digraph a".

When using Ex mode in the GUI and typing a special key, <BS> didn't delete it correctly. Now display '?' for a special key.

When an operator is pending, clicking in another window made it apply to that window, even though the line numbers could be beyond the end of the buffer.

When a function call doesn't have a terminating ")" Vim could crash.

Perl interface: could crash on exit with perl 5.6.1. (Anduin Withers)

Using %P in 'errorformat' wasn't handled correctly. (Tomas Zellerin)

Using a syntax cluster that includes itself made Vim crash.

GUI: With 'ls' set to 2, dragging the status line all the way up, then making the Vim window smaller: Could not the drag status line anymore.

"vim -c startinsert! file" placed cursor on last char of a line, instead of after it. A ":set" command in the buffer menu set w\_set\_curswant. Now don't do this when w\_curswant is MAXCOL.

Win32: When the gvim window was maximized and selecting another font, the window would no longer fill the screen.

The line with 'pastetoggle' in ":options" didn't show the right value when it is a special key. Hitting <CR> didn't work either.

Formatting text, resulting in a % landing in the first line, repeated the % in the following lines, like it's the start of a comment.

GTK: When adding a toolbar item while gvim is already running, it wasn't possible to use the tooltip. Now it works by adding the tooltip first.

The output of "g CTRL-G" mentioned "Char" but it's actually bytes.

Searching for the end of a oneline region didn't work correctly when there is an offset for the highlighting.

Syntax highlighting: When synchronizing on C-comments, /\*\*/ was seen as the start of a comment.

Win32: Without scrollbars present, the MS mouse scroll wheel didn't work. Also handle the scrollbars when they are not visible.

Motif: When there is no right scrollbar, the bottom scrollbar would still leave room for it. (Marcin Dalecki)

When changing 'guicursor' and the value is invalid, some of the effects would still take place. Now first check for errors and only make the new value effective when it's OK.

Using "A" In Visual block mode, appending to lines that don't extend into the block, padding was wrong.

When pasting a block of text, a character that occupies more than one screen column could be deleted and spaces inserted instead. Now only do that with a tab.

Fixed conversion of documentation to HTML using Perl. (Dan Sharp)

Give an error message when a menu name starts with a dot.

Avoid a hang when executing a shell from the GUI on HP-UX by pushing "ptem" even when sys/ptem.h isn't present.

When creating the temp directory, make sure umask is 077, otherwise the directory is not accessible when it was set to 0177.

Unix: When resizing the window and a redraw is a bit slow, could get a window resize event while redrawing, resulting in a messed up window. Any input (e.g., a mouse click) would redraw.

The "%B" item in the status line became zero in Insert mode (that's normal) for another than the current window.

The menu entries to convert to xxd and back didn't work in Insert mode.

When ":vglobal" didn't find a line where the pattern doesn't match, the error message would be the wrong way around.

When ignoring a multi-line error message with "%-A", the continuation lines would be used anyway. (Servatius Brandt)

"grx" on a double-wide character inserted "x", instead of replacing the character with "x ". "gR" on <xx> ('display' set the "uhex") didn't replace at all. When doing "gRxx" on a control character the first "x" would be inserted, breaking the alignment.

Added "0)" to 'cinkeys', so that when typing a ) it is put in the same place as where "==" would put it.

Win32: When maximized, adding/removing toolbar didn't resize the text area.

When using <C-RightMouse> a count was discarded.

When typing CTRL-V and <RightMouse> in the command line, would insert <LeftMouse>.

Using "vis" or "vas" when 'selection' is exclusive didn't include the last character.

When adding to an option like 'grepprg', leading space would be lost. Don't expand environment variables when there is no comma separating the items.

GUI: When using a bold-italic font, would still use the bold trick and underlining.

Motif: The default button didn't work in dialogs, the first one was always used. Had to give input focus to the default button.

When using CTRL-T to jump within the same file, the '' mark wasn't set.

Undo wasn't Vi compatible when using the 'c' flag for ":s". Now it undoes the whole ":s" command instead of each confirmed replacement.

The Buffers menu, when torn-off, disappeared when being refreshed. Add a dummy item to avoid this.

Removed calling msg\_start() in main(), it should not be needed.

vim\_strpbrk() did not support multibyte characters. (Muraoka Taro)

The Amiga version didn't compile, the code was too big for relative jumps. Moved a few files from ex\_docmd.c to ex\_cmds2.c

When evaluating the "= register resulted in the "= register being changed, Vim

would crash.

When doing ":view file" and it fails, the current buffer was made read-only.

Motif: For some people the separators in the toolbar disappeared when resizing the Vim window. (Marcin Dalecki)

Win32 GUI: when setting 'lines' to a huge number, would not compute the available space correctly. Was counting the menu height twice.

Conversion of the docs to HTML didn't handle the line with the +quickfix tag correctly. (Antonio Colombo)

Win32: fname\_case() didn't handle multi-byte characters correctly. (Yasuhiro Matsumoto)

The Cygwin version had trouble with fchdir(). Don't use that function for Cygwin.

The generic check in scripts.vim for "conf" syntax was done before some checks in filetype.vim, resulting in "conf" syntax too often.

Dos32: Typing lagged behind. Would wait for one biostick when checking if a character is available.

GTK: When setting 'columns' while starting up "gvim", would set the width of the terminal it was started in.

When using ESC in Insert mode, an autoindent that wraps to the next line caused the cursor to move to the end of the line temporarily. When the character before the cursor was a double-wide multi-byte character the cursor would be on the right half, which causes problems with some terminals.

Didn't handle multi-byte characters correctly when expanding a file name. (Yasuhiro Matsumoto)

Win32 GUI: Errors generated before the GUI is decided to start were not reported.

globpath() didn't reserve enough room for concatenated results. (Anduin Withers)

When expanding an option that is very long already, don't do the expansion, it would be truncated to MAXPATHL. (Anduin Withers)

When 'selection' is "exclusive", using "Fx" in Visual mode only moved until just after the character.

When using IME on the console to enter a file name, the screen may scroll up. Redraw the screen then. (Yasuhiro Matsumoto)

Motif: In the find/replace dialog the "Replace" button didn't work first time, second time it replaced all matches. Removed the use of ":s///c".

GTK: Similar problems with the find/replace dialog, moved the code to a common function.

X11: Use shared GC's for text. (Marcin Dalecki)

"]i" found the match under the cursor, instead of the first one below it. Same for "]I", "] CTRL-I", "]d", "]D" and "] CTRL-D".

Win16: When maximized and the font is changed, don't change the window size.



(Vince Negri)

When 'lbr' is set, deleting a block of text could leave the cursor in the wrong position.

Win32: When opening a file with the "Edit with Vim" popup menu entry, wildcards would cause trouble. Added the "--literal" argument to avoid expanding file names.

When using "gv", it didn't restore that "\$" was used in Visual block mode.

Win32 GUI: While waiting for a shell command to finish, the window wasn't redrawn at all. (Yasuhiro Matsumoto)

Syntax highlighting: A match that continues on a next line because of a contained region didn't end when that region ended.

The ":s" command didn't allow flags like 'e' and 'i' right after it.

When using ":s" to split a line, marks were moved to the next line. Vi keeps them in the first line.

When using ":n" ":rew", the previous context mark was at the top of the file, while Vi puts it in the same place as the cursor. Made it Vi compatible.

Fixed Vi incompatibility: Text was not put in register 1 when using "c" and "d" with a motion character, when deleting within one line with one of the commands: % ( ) `<character> / ? N n { }

Win32 GUI: The tooltip for tear-off items remained when the tear-off item was no longer selected.

GUI: When typing ":" at the more prompt, would return to Normal mode and not redraw the screen.

When starting Vim with an argument "-c g/at/p" the printed lines would overwrite each other.

BeOS: Didn't compile. Configure didn't add the os\_beos files, the QNX check removed them. Various changes to os\_beos.cc. (Joshua Haberman)  
Removed the check for the hardware platform, the BeBox has not been produced for a long time now.

Win32 GUI: don't use a message box when the shell returns an error code, display the message in the Vim window.

Make\_mvc.mak always included "/debug" for linking. "GUI=no" argument didn't work. Use "DEBUG=yes" instead of "DEBUG=1" to make it consistent. (Dan Sharp)

When a line in the tags file ended in ";" (no TAB following) the command would not be recognized as a search command.

X11: The inputMethod resource never worked. Don't use the "none" input method for SGI, it apparently makes the first character in Input method dropped.

Fixed incorrect tests in os\_mac.h. (Axel Kielhorn)

Win32 console: When the console where Vim runs in is closed, Vim could hang in trying to restore the window icon. (Yasuhiro Matsumoto)

When using ":3call func()" or ":3,3call func()" the line number was ignored.

When 'showbreak' and 'linebreak' were both set, Visual highlighting sometimes continued until the end of the line.

GTK GUI: Tearoff items were added even when 'guioptions' didn't contain 't' when starting up.

MS-Windows: When the current directory includes a "~", searching files with "gf" or ":find" didn't work. A "\$" in the directory had the same problem. Added mch\_has\_exp\_wildcard() functions.

When reducing the Vim window height while starting up, would get an out-of-memory error message.

When editing a very long search pattern, 'incsearch' caused the redraw of the command line to fail.

Motif GUI: On some systems the "Help" menu would not be on the far right, as it should be. On some other systems (esp. IRIX) the command line would not completely show. Solution is to only resize the menubar for Lesstif.

Using "%" in a line that contains "\\" twice didn't take care of the quotes properly. Now make a difference between \" and \\".

For non-Unix systems a dummy file is created when finding a swap name to detect a 8.3 filesystem. When there is an existing swap file, would get a warning for the file being created outside of Vim. Also, when closing the Vim window the file would remain.

Motif: The menu height was always computed, using a "-menuheight" argument was setting the room for the command line. Now make clear the argument is not supported.

For some (EBCDIC) systems, POUND was equal to '#'. Added an #if for that to avoid a duplicate case in a switch.

The GUI may have problems when forking. Always call \_exit() instead of exit() in the parent, the child will call exit().

Win32 GUI: Accented characters were often wrong in dialogs and tearoff menus. Now use CP\_ACP instead of CP\_OEMCP. (Vince Negri)

When displaying text with syntax highlighting causes an error (e.g., running out of stack) the syntax highlighting is disabled to avoid further messages.

When a command in a .vimrc or .gvimrc causes an ATTENTION prompt, and Vim was started from the desktop (no place to display messages) it would hang. Now open the GUI window early to be able to display the messages and pop up the dialog.

"r<CR>" on a multi-byte character deleted only the first byte of the character. "3r<CR>" deleted three bytes instead of three characters.

When interrupting reading a file, Vi considers the buffer modified. Added the 'i' flag in 'coptions' flag for this (we don't want it modified to be able to do ":q").

When using an item in 'guicursor' that starts with a colon, Vim would get stuck or crash.

When putting a file mark in a help file and later jumping back to it, the options would not be set. Extended the modeline in all help files to make this work better.

When a modeline contained "::<" the local option values would be printed. Now ignore it.

Some help files did not use a 8.3 names, which causes problems when using MS-DOS unzip. Renamed "multibyte.txt" to "mbyte.txt", "rightleft.txt" to "rileft.txt", "tagsearch.txt" to "tagsrch.txt", "os\_riscos.txt" to "os\_risc.txt".

When Visual mode is blockwise, using "iw" or "aw" made it characterwise. That doesn't seem right, only do this when in linewise mode. But then do it always, not only when start and end of Visual mode are equal.

When using "v!w" on a single-letter word and 'selection' is exclusive, would not include the word.

When formatting text from Insert mode, using CTRL-O, could mess up undo information.

While writing a file (also for the backup file) there was no check for an interrupt (hitting CTRL-C). Vim could hang when writing a large file over a slow network, and moving the mouse didn't make it appear (when 'mousehide' is set) and the screen wasn't updated in the GUI. Also allow interrupting when syncing the swap file, it can take a long time.

When using ":mksession" while there is help window, it would later be restored to the right file but not marked as a help buffer. ":help" would then open another window. Now use the value "help" for 'buftype' to mark a help buffer.

The session file contained absolute path names in option values, that doesn't work when the home directory depends on the situation. Replace the home directory with ~/ when possible.

When using 'showbreak' a TAB just after the shown break would not be counted correctly, the cursor would be positioned wrong.

With 'showbreak' set to "--->" or "----->" and 'sts' set to 4, inserting tabs did not work right. Could cause a crash. Backspacing was also wrong, could get stuck at a line break.

Win32: crashed when tearing off a menu with over 300 items.

GUI: A menu or toolbar item would appear when only a tooltip was defined for it.

When 'scrolloff' is non-zero and "\$" is in 'coptions', using "s" while the last line of the file is the first line on screen, the text wasn't displayed.

When running "autoconf", delete the configure cache to force starting cleanly when configure is run again.

When changing the Normal colors for cterm, the value of 'background' was changed even when the GUI was used.

The warning for a missing vimrun.exe was always given on startup, but some people just editing a file don't need to be bothered by it. Only show it when vimrun would be used.

When using "%" in a multibyte text it could get confused by trailbytes that match. (Muraoka Taro)

Termcap entry for RiscOS was wrong, using 7 and 8 in octal codes.

Athena: The title of a dialog window and the file selector window were not set. (David Harrison)

The "htmlLink" highlight group specified colors, which gives problems when using a color scheme. Added the "Underlined" highlight group for this.

After using ":insert" or ":change" the '[' mark would be one line too low.

When looking for the file name after a match with 'include' one character was skipped. Same for 'define'.

Win32 and DJGPP: When editing a file with a short name in a directory, and editing the same file but using the long name, would end up with two buffers on the same file.

"gf" on a filename that starts with "../" only worked when the file being edited is in the current directory. An include file search didn't work properly for files starting with "../" or ".". Now search both relative to the file and to the current directory.

When 'printhead', 'titlestring', 'iconstring', 'rulerformat' or 'statusline' contained "%{" but no following "}" memory was corrupted and a crash could happen.

":0append" and then inserting two lines did not redraw the blank lines that were scrolled back down.

When using insert mode completion in a narrow window, the message caused a scroll up. Now shorten the message if it doesn't fit and avoid writing the ruler over the message.

XIM still didn't work correctly on some systems, especially SGI/IRIX. Added the 'imdisable' option, which is set by default for that system.

#### Patch 6.0aw.008

Problem: When the first character of a file name is over 127, the Buffers menu entry would get a negative priority and cause problems.  
Solution: Reduce the multiplier for the first character when computing the hash value for a Buffers menu entry.  
Files: runtime/menu.vim

#### Patch 6.0aw.010

Problem: Win32: ":browse edit dir/dir" didn't work. (Vikas)  
Solution: Change slashes to backslashes in the directory passed to the file browser.  
Files: src/gui\_w48.c

Athena file browser: On some systems wcstombs() can't be used to get the length of a multi-byte string. Use the maximum length then. (Yasuhiro Matsumoto)

#### Patch 6.0ax.001

Problem: When 'patchmode' is set, appending to a file gives an empty original file. (Ed Ralston)  
Solution: Also make a backup copy when appending and 'patchmode' is set.  
Files: src/fileio.c

#### Patch 6.0ax.002

Problem: When 'patchmode' is set, appending to a compressed file gives an uncompressed original file. (Ed Ralston)  
Solution: Create the original file before decompressing.

Files: runtime/plugin/gzip.vim

Patch 6.0ax.005

Problem: Athena file selector keeps the title of the first invocation.

Solution: Set the title each time the file selector is opened. (David Harrison)

Files: src/gui\_at\_fs.c

Patch 6.0ax.007

Problem: When using GPM (mouse driver in a Linux console) a double click is interpreted as a scroll wheel click.

Solution: Check if GPM is being used when deciding if a mouse event is for the scroll wheel.

Files: src/term.c

Patch 6.0ax.010

Problem: The Edit.Save menu and the Save toolbar button didn't work when the buffer has no file name.

Solution: Use a file browser to ask for a file name. Also fix the toolbar Find item in Visual mode.

Files: runtime/menu.vim

Patch 6.0ax.012

Problem: When 'coptions' contains "\$", breaking a line for 'textwidth' doesn't redraw properly. (Stefan Schulze)

Solution: Remove the dollar before breaking the line.

Files: src/edit.c

Patch 6.0ax.014

Problem: Win32: On Windows 98 ":make -f file" doesn't work when 'shell' is "command.com" and 'makeprg' is "nmake". The environment isn't passed on to "nmake".

Solution: Also use vimrun.exe when redirecting the output of a command.

Files: src/os\_win32.c

Patch 6.0ax.016

Problem: The version number was reported wrong in the intro screen.

Solution: Check for a version number with two additional letters.

Files: src/version.c

Patch 6.0ax.019

Problem: When scrolling a window with folds upwards, switching to another vertically split window and back may not update the scrollbar.

Solution: Limit w\_botline to the number of lines in the buffer plus one.

Files: src/move.c

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VERSION 6.1

\*version-6.1\*

This section is about improvements made between version 6.0 and 6.1.

This is a bug-fix release, there are not really any new features.

Changed

\*changed-6.1\*

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'iminsert' and 'imsearch' are no longer set as a side effect of defining a language-mapping using ":lmap".

Added

\*added-6.1\*

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Syntax files:

|           |                                               |
|-----------|-----------------------------------------------|
| ampl      | AMPL (David Krief)                            |
| ant       | Ant (Johannes Zellner)                        |
| baan      | Baan (Her van de Vliert)                      |
| cs        | C# (Johannes Zellner)                         |
| lifelines | Lifelines (Patrick Texier)                    |
| lscript   | LotusScript (Taryn East)                      |
| moo       | M00 (Timo Frenay)                             |
| nsis      | NSIS (Alex Jakushev)                          |
| ppd       | Postscript Printer Description (Bjoern Jacke) |
| rpl       | RPL/2 (Joel Bertrand)                         |
| scilab    | Scilab (Benoit Hamelin)                       |
| splint    | Splint (Ralf Wildenhues)                      |
| sqlj      | SQLJ (Andreas Fischbach)                      |
| wvdial    | WvDial (Prahlad Vaidyanathan)                 |
| xf86conf  | XFree86 config (Nikolai Weibull)              |
| xmodmap   | Xmodmap (Nikolai Weibull)                     |
| xslt      | Xslt (Johannes Zellner)                       |
| monk      | Monk (Mike Litherland)                        |
| xsd       | Xsd (Johannes Zellner)                        |
| cdl       | CDL (Raul Segura Acevedo)                     |
| sendpr    | Send-pr (Hendrik Scholz)                      |

Added indent file for Scheme. (Dorai Sitaram)  
 Added indent file for Prolog. (Kontra Gergely)  
 Added indent file for Povray (David Necas)  
 Added indent file for IDL (Aleksandar Jelenak)  
 Added C# indent and ftpplugin scripts.

Added Ukrainian menu translations. (Bohdan Vlasyuk)  
 Added ASCII version of the Czech menus. (Jiri Brezina)

Added Simplified Chinese translation of the tutor. (Mendel L Chan)

Added Russian keymap for yawerty keyboard.

Added an explanation of using the vimrc file in the tutor.  
 Changed tutor.vim to get the right encoding for the Taiwanese tutor.

Added Russian tutor. (Andrey Kiselev)  
 Added Polish tutor. (Mikolaj Machowski)

Added darkblue color scheme. (Bohdan Vlasyuk)

When packing the dos language archive automatically generate the .mo files  
 that are required.

Improved NSIS script to support NSIS 180. Added icons for the  
 enabled/disabled status. (Mirek Pruchnik)

cpl250 version of the Slovak message translations.

Compiler plugins for IRIX compilers. (David Harrison)

Fixed

\*fixed-6.1\*

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The license text was updated to make the meaning clearer and make it

compatible with the GNU GPL. Otherwise distributors have a problem when linking Vim with a GPL'ed library.

When installing the "less.sh" script it was not made executable. (Chuck Berg)

Win32: The "9" key on the numpad wasn't working. (Julian Kinraid)

The NSIS install script didn't work with NSIS 1.80 or later. Also add Vim-specific icons. (Pruchnik)

The script for conversion to HTML contained an "if" in the wrong place. (Michael Geddes)

Allow using ":ascii" in the sandbox, it's harmless.

Removed creat() from osdef2.h.in, it wasn't used and may cause a problem when it's redefined to creat64().

The text files in the VisVim directory were in "dos" format. This caused problems when applying a patch. Now keep them in "unix" format and convert them to "dos" format only for the PC archives.

Add ruby files to the dos source archive, they can be used by Make\_mvc.mak. (Mirek Pruchnik)

"cp -f" doesn't work on all systems. Change "cp -f" in the Makefile to "rm -f" and "cp".

Didn't compile on a Compaq Tandem Himalaya OSS. (Michael A. Benzinger)

The GTK file selection dialog didn't include the "Create Dir", "Delete File" and "Rename File" buttons.

When doing ":browse source" the dialog has the title "Run Macro". Better would be "Source Vim script". (Yegappan Lakshmanan)

Win32: Don't use the printer font as default for the font dialog.

"make doslang" didn't work when configure didn't run (yet). Set \$MAKEMO to "yes". (Mirek Pruchnik)

The ToolBar TagJump item used "g]", which prompts for a selection even when there is only one matching tag. Use "g<C-]>" instead.

The ming makefile for message translations didn't have the right list of files.

The MS-Windows 3.1 version complains about LIBINTL.DLL not found. Compile this version without message translations.

The Borland 5 makefile contained a check for Ruby which is no longer needed. The URLs for the TCL library was outdated. (Dan Sharp)

The eviso.ps file was missing from the DOS runtime archive, it's needed for printing PostScript in the 32bit DOS version.

In menu files ":scriptencoding" was used in a wrong way after patch 6.1a.032. Now use ":scriptencoding" in the file where the translations are given. Do the same for all menus in latin1 encoding.

Included a lot of fixes for the Macintosh, mostly to make it work with Carbon. (Dany StAmant, Axel Kielhorn, Benji Fisher)

Improved the vimtutor shell script to use \$TMPDIR when it exists, and delete the copied file when exiting in an abnormal way. (Max Ischenko)

When "iconv.dll" can't be found, try using "libiconv.dll".

When encryption is used, filtering with a shell command wasn't possible.

DJGPP: ":cd c:" always failed, can't get permissions for "c:".

Win32: ":cd c:/" failed if the previous current directory on c: had become invalid.

DJGPP: Shift-Del and Del both produce \316\123. Default mapping for Del is wrong. Disabled it.

Dependencies on header files in MingW makefile was wrong.

Win32: Don't use ACL stuff for MSVC 4.2, it's not supported. (Walter Briscoe)

Win32 with Borland: bcc.cfg was caching the value for \$(BOR), but providing a different argument to make didn't regenerate it.

Win32 with MSVC: Make\_ivc.mak generates a new if\_ole.h in a different directory, the if\_ole.h in the src directory may be used instead. Delete the distributed file.

When a window is vertically split and then ":ball" is used, the window layout is messed up, can cause a crash. (Muraoka Taro)

When 'insertmode' is set, using File/New menu and then double clicking, "i" is soon inserted. (Merlin Hansen)

When Select mode is active and using the Buffers menu to switch to another buffer, an old selection comes back. Reset VIsual\_reselect for a ":buffer" command.

When Select mode is active and 'insertmode' is set, using the Buffers menu to switch to another buffer, did not return to Insert mode. Make sure "restart\_edit" is set.

When double clicking on the first character of a word while 'selection' is "exclusive" didn't select that word.

#### Patch 6.0.001

Problem: Loading the sh.vim syntax file causes error messages. (Corinna Vinschen)

Solution: Add an "if". (Charles Campbell)

Files: runtime/syntax/sh.vim

#### Patch 6.0.002

Problem: Using a '@' item in 'viminfo' doesn't work. (Marko Leipert)

Solution: Add '@' to the list of accepted items.

Files: src/option.c

#### Patch 6.0.003

Problem: The configure check for ACLs on AIX doesn't work.

Solution: Fix the test program so that it compiles. (Tomas Ogren)

Files: src/configure.in, src/auto/configure

#### Patch 6.0.004

Problem: The find/replace dialog doesn't reuse a previous argument



properly.  
Solution: After removing a "\V" terminate the string. (Zwane Mwaikambo)  
Files: src/gui.c

#### Patch 6.0.005

Problem: In Insert mode, "CTRL-O :ls" has a delay before redrawing.  
Solution: Don't delay just after wait\_return() was called. Added the did\_wait\_return flag.  
Files: src/globals.h, src/message.c, src/normal.c, src/screen.c

#### Patch 6.0.006

Problem: With a vertical split, 'number' set and 'scrolloff' non-zero, making the window width very small causes a crash. (Niklas Lindstrom)  
Solution: Check for a zero width.  
Files: src/move.c

#### Patch 6.0.007

Problem: When setting 'filetype' while there is no FileType autocommand, a following ":setfiletype" would set 'filetype' again. (Kobus Retief)  
Solution: Set did\_filetype always when 'filetype' has been set.  
Files: src/option.c

#### Patch 6.0.008

Problem: 'imdisable' is missing from the options window. (Michael Naumann)  
Solution: Add an entry for it.  
Files: runtime/optwin.vim

#### Patch 6.0.009

Problem: Nextstep doesn't have S\_ISBLK. (John Beppu)  
Solution: Define S\_ISBLK using S\_IFBLK.  
Files: src/os\_unix.h

#### Patch 6.0.010

Problem: Using "gf" on a file name starting with "./" or "../" in a buffer without a name causes a crash. (Roy Lewis)  
Solution: Check for a NULL file name.  
Files: src/misc2.c

#### Patch 6.0.011

Problem: Python: After replacing or deleting lines get an ml\_get error. (Leo Lipelis)  
Solution: Adjust the cursor position for deleted or added lines.  
Files: src/if\_python.c

#### Patch 6.0.012

Problem: Polish translations contain printf format errors, this can result in a crash when using one of them.  
Solution: Fix for translated messages. (Michal Politowski)  
Files: src/po/pl.po

#### Patch 6.0.013

Problem: Using ":silent! cmd" still gives some error messages, like for an invalid range. (Salman Halim)  
Solution: Reset emsg\_silent after calling emsg() in do\_one\_cmd().  
Files: src/ex\_docmd.c

#### Patch 6.0.014

Problem: When 'modifiable' is off and 'virtualedit' is "all", "rx" on a TAB still changes the buffer. (Muraoka Taro)  
Solution: Check if saving the line for undo fails.

Files: src/normal.c

Patch 6.0.015

Problem: When 'coptions' includes "S" and "filetype plugin on" has been used, can get an error for deleting the b:did\_ftplugin variable. (Ralph Henderson)

Solution: Only delete the variable when it exists.

Files: runtime/ftplugin.vim

Patch 6.0.016

Problem: bufnr(), bufname() and bufwinnr() don't find unlisted buffers when the argument is a string. (Hari Krishna Dara)  
Also for setbufvar() and getbufvar().

Solution: Also find unlisted buffers.

Files: src/eval.c

Patch 6.0.017

Problem: When 'ttybuiltin' is set and a builtin termcap entry defines t\_Co and the external one doesn't, it gets reset to empty. (David Harrison)

Solution: Only set t\_Co when it wasn't set yet.

Files: src/term.c

Patch 6.0.018

Problem: Initializing 'encoding' may cause a crash when setlocale() is not used. (Dany St-Amant)

Solution: Check for a NULL pointer.

Files: src/mbyte.c

Patch 6.0.019

Problem: Converting a string with multi-byte characters to a printable string, e.g., with strtrans(), may cause a crash. (Tomas Zellerin)

Solution: Correctly compute the length of the result in transstr().

Files: src/charset.c

Patch 6.0.020

Problem: When obtaining the value of a global variable internally, could get the function-local value instead. Applies to using <Leader> and <LocalLeader> and resetting highlighting in a function.

Solution: Prepend "g:" to the variable name. (Aric Blumer)

Files: src/syntax.c, src/term.c

Patch 6.0.021

Problem: The 'cscopepathcomp' option didn't work.

Solution: Change USE\_CSCOPE to FEAT\_CSCOPE. (Mark Feng)

Files: src/option.c

Patch 6.0.022

Problem: When using the 'langmap' option, the second character of a command starting with "g" isn't adjusted.

Solution: Apply 'langmap' to the second character. (Alex Kapranoff)

Files: src/normal.c

Patch 6.0.023

Problem: Loading the lhaskell syntax doesn't work. (Thore B. Karlsen)

Solution: Use ":runtime" instead of "source" to load haskell.vim.

Files: runtime/syntax/lhaskell.vim

Patch 6.0.024

Problem: Using "CTRL-V u 9900" in Insert mode may cause a crash. (Noah Levitt)

Solution: Don't insert a NUL byte in the text, use a newline.

Files: src/misc1.c

Patch 6.0.025

Problem: The pattern "\vx(.|\$)" doesn't match "x" at the end of a line.  
(Preben Peppe Guldborg)

Solution: Always see a "\$" as end-of-line after "\v". Do the same for "^".

Files: src/regexp.c

Patch 6.0.026

Problem: GTK: When using arrow keys to navigate through the menus, the separators are selected.

Solution: Set the separators "insensitive". (Pavel Kankovsky)

Files: src/gui\_gtk.c, src/gui\_gtk\_x11.c

Patch 6.0.027

Problem: VMS: Printing doesn't work, the file is deleted too quickly.  
No longer need the VMS specific printing menu.

gethostname() is not available with VAXC.

The makefile was lacking selection of the tiny-huge feature set.

Solution: Adjust the 'printexpr' option default. Fix the other problems and update the documentation. (Zoltan Arpadffy)

Files: runtime/doc/os\_vms.txt, runtime/menu.vim, src/INSTALLvms.txt,  
src/Make\_vms.mms, src/option.c, src/os\_unix.c, src/os\_vms\_conf.h

Patch 6.0.028

Problem: Can't compile without +virtualedit and with +visualextra. (Geza Lakner)

Solution: Add an #ifdef for +virtualedit.

Files: src/ops.c

Patch 6.0.029

Problem: When making a change in line 1, then in line 2 and then deleting line 1, undo info could be wrong. Only when the changes are undone at once. (Gerhard Hochholzer)

Solution: When not saving a line for undo because it was already done before, remember for which entry the last line must be computed. Added ue\_getbot\_entry pointer for this. When the number of lines changes, adjust the position of newer undo entries.

Files: src/structs.h, src/undo.c

Patch 6.0.030

Problem: Using ":source! file" doesn't work inside a loop or after ":argdo". (Pavol Juhas)

Solution: Execute the commands in the file right away, do not let the main loop do it.

Files: src/ex\_cmds2.c, src/ex\_docmd.c, src/getchar.c, src/globals.h,  
src/proto/ex\_docmd.pro, src/proto/getchar.pro

Patch 6.0.031

Problem: Nextstep doesn't have setenv() or putenv(). (John Beppu)

Solution: Move putenv() from pty.c to misc2.c

Files: src/misc2.c, src/pty.c

Patch 6.0.032

Problem: When changing a setting that affects all folds, they are not displayed immediately.

Solution: Set the redraw flag in foldUpdateAll().

Files: src/fold.c

Patch 6.0.033

Problem: Using 'wildmenu' on MS-Windows, file names that include a space are only displayed starting with that space. (Xie Yuheng)

Solution: Don't recognize a backslash before a space as a path separator.  
Files: src/screen.c

Patch 6.0.034

Problem: Calling searchpair() with three arguments could result in a crash or strange error message. (Kalle Bjorklid)

Solution: Don't use the fifth argument when there is no fourth argument.  
Files: src/eval.c

Patch 6.0.035

Problem: The menu item Edit/Global\_Settings/Toggle\_Toolbar doesn't work when 'ignorecase' is set. (Allen Castaban)

Solution: Always match case when checking if a flag is already present in 'guioptions'.  
Files: runtime/menu.vim

Patch 6.0.036

Problem: OS/2, MS-DOS and MS-Windows: Using a path that starts with a slash in 'tags' doesn't work as expected. (Mathias Koehrer)

Solution: Only use the drive, not the whole path to the current directory. Also make it work for "c:dir/file".  
Files: src/misc2.c

Patch 6.0.037

Problem: When the user has set "did\_install\_syntax\_menu" to avoid the default Syntax menu it still appears. (Virgilio)

Solution: Don't add the three default items when "did\_install\_syntax\_menu" is set.  
Files: runtime/menu.vim

Patch 6.0.038

Problem: When 'selection' is "exclusive", deleting a block of text at the end of a line can leave the cursor beyond the end of the line.

Solution: Correct the cursor position.  
Files: src/ops.c

Patch 6.0.039

Problem: "gP" leaves the cursor in the wrong position when 'virtualedit' is used. Using "c" in blockwise Visual mode leaves the cursor in a strange position.

Solution: For "gP" reset the "coladd" field for the ']' mark. For "c" leave the cursor on the last inserted character.  
Files: src/ops.c

Patch 6.0.040

Problem: When 'fileencoding' is invalid and writing fails because of this, the original file is gone. (Eric Carlier)

Solution: Restore the original file from the backup.  
Files: src/fileio.c

Patch 6.0.041

Problem: Using ":language messages en" when LC\_MESSAGES is undefined results in setting LC\_CTYPE. (Eric Carlier)

Solution: Set \$LC\_MESSAGES instead.  
Files: src/ex\_cmds2.c

Patch 6.0.042

Problem: ":mksession" can't handle file names with a space.

Solution: Escape special characters in file names with a backslash.  
Files: src/ex\_docmd.c

Patch 6.0.043

Problem: Patch 6.0.041 was wrong.  
Solution: Use mch\_getenv() instead of vim\_getenv().  
Files: src/ex\_cmds2.c

#### Patch 6.0.044

Problem: Using a "containedin" list for a syntax item doesn't work for an item that doesn't have a "contains" argument. Also, "containedin" doesn't ignore a transparent item. (Timo Frenay)  
Solution: When there is a "containedin" argument somewhere, always check for contained items. Don't check for the transparent item but the item it's contained in.  
Files: src/structs.h, src/syntax.c

#### Patch 6.0.045

Problem: After creating a fold with a Visual selection, another window with the same buffer still has inverted text. (Sami Salonen)  
Solution: Redraw the inverted text.  
Files: src/normal.c

#### Patch 6.0.046

Problem: When getrlimit() returns an 8 byte number the check for running out of stack may fail. (Anthony Meijer)  
Solution: Skip the stack check if the limit doesn't fit in a long.  
Files: src/auto/configure, src/config.h.in, src/configure.in, src/os\_unix.c

#### Patch 6.0.047

Problem: Using a regexp with "\\(\\)" inside a "\\%[]" item causes a crash. (Samuel Lacas)  
Solution: Don't allow nested atoms inside "\\%[]".  
Files: src/regexp.c

#### Patch 6.0.048

Problem: Win32: In the console the mouse doesn't always work correctly. Sometimes after getting focus a mouse movement is interpreted like a button click.  
Solution: Use a different function to obtain the number of mouse buttons. Avoid recognizing a button press from undefined bits. (Vince Negri)  
Files: src/os\_win32.c

#### Patch 6.0.049

Problem: When using evim the intro screen is misleading. (Adrian Nagle)  
Solution: Mention whether 'insertmode' is set and the menus to be used.  
Files: runtime/menu.vim, src/version.c

#### Patch 6.0.050

Problem: UTF-8: "viw" doesn't include non-ASCII characters before the cursor. (Bertilo Wennergren)  
Solution: Use dec\_cursor() instead of decrementing the column number.  
Files: src/search.c

#### Patch 6.0.051

Problem: UTF-8: Using CTRL-R on the command line doesn't insert composing characters. (Ron Aaron)  
Solution: Also include the composing characters and fix redrawing them.  
Files: src/ex\_getln.c, src/ops.c

#### Patch 6.0.052

Problem: The check for rlim\_t in patch 6.0.046 does not work on some systems. (Zdenek Sekera)  
Solution: Also look in sys/resource.h for rlim\_t.  
Files: src/auto/configure, src/configure.in

## Patch 6.0.053 (extra)

Problem: Various problems with QNX.

Solution: Minor fix for configure. Switch on terminal clipboard support in main.c. Fix "pterm" mouse support. os\_qnx.c didn't build without photon. (Julian Kinraid)

Files: src/auto/configure, src/configure.in, src/gui\_photon.c, src/main.c, src/misc2.c, src/option.h, src/os\_qnx.c, src/os\_qnx.h, src/syntax.c

## Patch 6.0.054

Problem: When using mswin.vim, CTRL-V pastes a block of text like it is normal text. Using CTRL-V in blockwise Visual mode leaves "x" characters behind.

Solution: Make CTRL-V work as it should. Do the same for the Paste menu entries.

Files: runtime/menu.vim, runtime/mswin.vim

## Patch 6.0.055

Problem: GTK: The selection isn't copied the first time.

Solution: Own the selection at the right moment.

Files: src/gui\_gtk\_x11.c

## Patch 6.0.056

Problem: Using "CTRL-O cw" in Insert mode results in a nested Insert mode. <Esc> doesn't leave Insert mode then.

Solution: Only use nested Insert mode when 'insertmode' is set or when a mapping is used.

Files: src/normal.c

## Patch 6.0.057

Problem: Using ":wincmd g}" in a function doesn't work. (Gary Holloway)

Solution: Execute the command directly, instead of putting it in the typeahead buffer.

Files: src/normal.c, src/proto/normal.pro, src/window.c

## Patch 6.0.058

Problem: When a Cursorhold autocommand moved the cursor, the ruler wasn't updated. (Bohdan Vlasjuk)

Solution: Update the ruler after executing the autocommands.

Files: src/gui.c

## Patch 6.0.059

Problem: Highlighting for 'hlsearch' isn't visible in lines that are highlighted for diff highlighting. (Gary Holloway)

Solution: Let 'hlsearch' highlighting overrule diff highlighting.

Files: src/screen.c

## Patch 6.0.060

Problem: Motif: When the tooltip is to be popped up, Vim crashes. (Gary Holloway)

Solution: Check for a NULL return value from gui\_motif\_fontset2fontlist().

Files: src/gui\_beval.c

## Patch 6.0.061

Problem: The toolbar buttons to load and save a session do not correctly use v:this\_session.

Solution: Check for v:this\_session to be empty instead of existing.

Files: runtime/menu.vim

## Patch 6.0.062

Problem: Crash when 'verbose' is > 3 and using ":shell". (Yegappan

Lakshmanan)  
Solution: Avoid giving a NULL pointer to printf(). Also output a newline and switch the cursor on.  
Files: src/misc2.c

#### Patch 6.0.063

Problem: When 'coptions' includes "\$", using "cw" to type a ')' on top of the "\$" doesn't update syntax highlighting after it.  
Solution: Stop displaying the "\$" when typing a ')' in its position.  
Files: src/search.c

#### Patch 6.0.064 (extra)

Problem: The NSIS install script doesn't work with newer versions of NSIS. The diff feature doesn't work when there isn't a good diff.exe on the system.  
Solution: Replace the GetParentDir instruction by a user function. Fix a few cosmetic problems. Use defined constants for the version number, so that it's defined in one place only. Only accept the install directory when it ends in "vim". (Eduardo Fernandez)  
Add a diff.exe and use it from the default \_vimrc.  
Files: nsis/gvim.nsi, nsis/README.txt, src/dosinst.c

#### Patch 6.0.065

Problem: When using ":normal" in 'indentexpr' it may use redo characters before its argument. (Neil Bird)  
Solution: Save and restore the stuff buffer in ex\_normal().  
Files: src/ex\_docmd.c, src/getchar.c, src/globals.h, src/structs.h

#### Patch 6.0.066

Problem: Sometimes undo for one command is split into two undo actions. (Halim Salman)  
Solution: Don't set the undo-synced flag when reusing a line that was already saved for undo.  
Files: src/undo.c

#### Patch 6.0.067

Problem: if\_xcmdsrv.c doesn't compile on systems where fd\_set isn't defined in the usual header file (e.g., AIX). (Mark Waggoner)  
Solution: Include sys/select.h in if\_xcmdsrv.c for systems that have it.  
Files: src/if\_xcmdsrv.c

#### Patch 6.0.068

Problem: When formatting a Visually selected area with "gq" and the number of lines increases the last line may not be redrawn correctly. (Yegappan Lakshmanan)  
Solution: Correct the area to be redrawn for inserted/deleted lines.  
Files: src/ops.c

#### Patch 6.0.069

Problem: Using "K" on a word that includes a "!" causes a "No previous command" error, because the "!" is expanded. (Craig Jeffries)  
Solution: Put a backslash before the "!".  
Files: src/normal.c

#### Patch 6.0.070

Problem: Win32: The error message for a failed dynamic linking of a Perl, Ruby, Tcl and Python library is unclear about what went wrong.  
Solution: Give the name of the library or function that could not be loaded. Also for the iconv and gettext libraries when 'verbose' is set.  
Files: src/eval.c, src/if\_perl.xs, src/if\_python.c, src/if\_ruby.c, src/if\_tcl.c, src/mbyte.c, src/os\_win32.c, src/proto/if\_perl.pro,

src/proto/if\_python.pro, src/proto/if\_ruby.pro,  
src/proto/if\_tcl.pro, src/proto/mbyte.pro

Patch 6.0.071

Problem: The "iris-ansi" builtin termcap isn't very good.  
Solution: Fix the wrong entries. (David Harrison)  
Files: src/term.c

Patch 6.0.072

Problem: When 'lazyredraw' is set, a mapping that stops Visual mode, moves the cursor and starts Visual mode again causes a redraw problem. (Brian Silverman)  
Solution: Redraw both the old and the new Visual area when necessary.  
Files: src/normal.c, src/screen.c

Patch 6.0.073 (extra)

Problem: DJGPP: When using CTRL-Z to start a shell, the prompt is halfway the text. (Volker Kiefel)  
Solution: Position the system cursor before starting the shell.  
Files: src/os\_msdos.c

Patch 6.0.074

Problem: When using "&" in a substitute string a multi-byte character with a trailbyte 0x5c is not handled correctly.  
Solution: Recognize multi-byte characters inside the "&" part. (Muraoka Taro)  
Files: src/regexp.c

Patch 6.0.075

Problem: When closing a horizontally split window while 'eadirection' is "hor" another horizontally split window is still resized. (Aron Griffis)  
Solution: Only resize windows in the same top frame as the window that is split or closed.  
Files: src/main.c, src/proto/window.pro, src/window.c

Patch 6.0.076

Problem: Warning for wrong pointer type when compiling.  
Solution: Use char instead of char\_u pointer.  
Files: src/version.c

Patch 6.0.077

Problem: Patch 6.0.075 was incomplete.  
Solution: Fix another call to win\_equal().  
Files: src/option.c

Patch 6.0.078

Problem: Using "daw" at the end of a line on a single-character word didn't include the white space before it. At the end of the file it didn't work at all. (Gavin Sinclair)  
Solution: Include the white space before the word.  
Files: src/search.c

Patch 6.0.079

Problem: When "W" is in 'coptions' and 'backupcopy' is "no" or "auto", can still overwrite a read-only file, because it's renamed. (Gary Holloway)  
Solution: Add a check for a read-only file before renaming the file to become the backup.  
Files: src/fileio.c

Patch 6.0.080

Problem: When using a session file that has the same file in two windows,



the fileinfo() call in do\_ecmd() causes a scroll and a hit-enter prompt. (Robert Webb)  
Solution: Don't scroll this message when 'shortmess' contains '0'.  
Files: src/ex\_cmds.c

## Patch 6.0.081

Problem: After using ":saveas" the new buffer name is added to the Buffers menu with a wrong number. (Chauk-Mean Proum)  
Solution: Trigger BufFilePre and BufFilePost events for the renamed buffer and BufAdd for the old name (which is with a new buffer).  
Files: src/ex\_cmds.c

## Patch 6.0.082

Problem: When swapping screens in an xterm and there is an (error) message from the vimrc script, the shell prompt is after the message.  
Solution: Output a newline when there was output on the alternate screen. Also when starting the GUI.  
Files: src/main.c

## Patch 6.0.083

Problem: GTK: When compiled without menu support the buttons in a dialog don't have any text. (Erik Edelman)  
Solution: Add the text also when GTK\_USE\_ACCEL isn't defined. And define GTK\_USE\_ACCEL also when not using menus.  
Files: src/gui\_gtk.c

## Patch 6.0.084

Problem: UTF-8: a "r" command with an argument that is a keymap for a character with a composing character can't be repeated with ".".  
(Raphael Finkel)  
Solution: Add the composing characters to the redo buffer.  
Files: src/normal.c

## Patch 6.0.085

Problem: When 'mousefocus' is set, using "s" to go to Insert mode and then moving the mouse pointer to another window stops Insert mode, while this doesn't happen with "a" or "i". (Robert Webb)  
Solution: Reset finish\_op before calling edit().  
Files: src/normal.c

## Patch 6.0.086

Problem: When using "gu" the message says "~ed".  
Solution: Make the message say "changed".  
Files: src/ops.c

## Patch 6.0.087 (lang)

Problem: Message translations are incorrect, which may cause a crash.  
(Peter Figura)  
The Turkish translations needed more work and the maintainer didn't have time.  
Solution: Fix order of printf arguments. Remove %2\$d constructs.  
Add "-v" to msgfmt to get a warning for wrong translations.  
Don't install the Turkish translations for now.  
Update a few more translations.  
Files: src/po/Makefile, src/po/af.po, src/po/cs.po, src/po/cs.cp1250.po, src/po/de.po, src/po/es.po, src/po/fr.po, src/po/it.po, src/po/ja.po, src/po/ja.sjis.po, src/po/ko.po, src/po/pl.po, src/po/sk.po, src/po/uk.po, src/po/zh\_CN.UTF-8.po, src/po/zh\_CN.cp936.po, src/po/zh\_CN.po, src/po/zh\_TW.po

## Patch 6.0.088

Problem: "." doesn't work after using "rx" in Visual mode. (Charles

Campbell)  
Solution: Also store the replacement character in the redo buffer.  
Files: src/normal.c

#### Patch 6.0.089

Problem: In a C file, using "==" to align a line starting with "\*" after a line with "\*" -" indents one space too few. (Piet Delpont)  
Solution: Align with the previous line if the comment-start-string matches there.  
Files: src/misc1.c

#### Patch 6.0.090

Problem: When a wrapping line does not fit in a window and 'scrolloff' is bigger than half the window height, moving the cursor left or right causes the screen to flash badly. (Lubomir Host)  
Solution: When there is not enough room to show 'scrolloff' screen lines and near the end of the line, show the end of the line.  
Files: src/move.c

#### Patch 6.0.091

Problem: Using CTRL-O in Insert mode, while 'virtualedit' is "all" and the cursor is after the end-of-line, moves the cursor left. (Yegappan Lakshmanan)  
Solution: Keep the cursor in the same position.  
Files: src/edit.c

#### Patch 6.0.092

Problem: The explorer plugin doesn't ignore case of 'suffixes' on MS-Windows. (Mike Williams)  
Solution: Match or ignore case as appropriate for the OS.  
Files: runtime/plugin/explorer.vim

#### Patch 6.0.093

Problem: When the Tcl library couldn't be loaded dynamically, get an error message when closing a buffer or window. (Muraoka Taro)  
Solution: Only free structures if already using the Tcl interpreter.  
Files: src/if\_tcl.c

#### Patch 6.0.094

Problem: Athena: When clicking in the horizontal scrollbar Vim crashes. (Paul Ackersviller)  
Solution: Use the thumb size instead of the window pointer of the scrollbar (which is NULL). (David Harrison)  
Also avoid that scrolling goes the wrong way in a narrow window.  
Files: src/gui\_athena.c

#### Patch 6.0.095

Problem: Perl: Deleting lines may leave the cursor beyond the end of the file.  
Solution: Check the cursor position after deleting a line. (Serguei)  
Files: src/if\_perl.xs

#### Patch 6.0.096

Problem: When ":saveas fname" fails because the file already exists, the file name is changed anyway and a following ":w" will overwrite the file. (Eric Carlier)  
Solution: Don't change the file name if the file already exists.  
Files: src/ex\_cmds.c

#### Patch 6.0.097

Problem: Re-indenting in Insert mode with CTRL-F may cause a crash with a multi-byte encoding.

Solution: Avoid using a character before the start of a line. (Sergey Vlasov)  
Files: src/edit.c

Patch 6.0.098

Problem: GTK: When using Gnome the "Search" and "Search and Replace" dialog boxes are not translated.  
Solution: Define ENABLE\_NLS before including gnome.h. (Eduardo Fernandez)  
Files: src/gui\_gtk.c, src/gui\_gtk\_x11.c

Patch 6.0.099

Problem: Cygwin: When running Vi compatible MS-DOS line endings cause trouble.  
Solution: Make the default for 'fileformats' "unix,dos" in Vi compatible mode. (Michael Schaap)  
Files: src/option.h

Patch 6.0.100

Problem: ":badd +0 test%file" causes a crash.  
Solution: Take into account that the "+0" is NUL terminated when allocating room for replacing the "%".  
Files: src/ex\_docmd.c

Patch 6.0.101

Problem: ":mksession" doesn't restore editing a file that has a '#' or '%' in its name. (Wolfgang Blankenburg)  
Solution: Put a backslash before the '#' and '%'.  
Files: src/ex\_docmd.c

Patch 6.0.102

Problem: When changing folds the cursor may appear halfway a closed fold. (Nam SungHyun)  
Solution: Set w\_cline\_folded correctly. (Yasuhiro Matsumoto)  
Files: src/move.c

Patch 6.0.103

Problem: When using 'scrollbind' a large value of 'scrolloff' will make the scroll binding stop near the end of the file. (Coen Engelbarts)  
Solution: Don't use 'scrolloff' when limiting the topline for scroll binding. (Dany StAmant)  
Files: src/normal.c

Patch 6.0.104

Problem: Multi-byte: When '\$' is in 'coptions', typing a double-wide character that overwrites the left halve of an old double-wide character causes a redraw problem and the cursor stops blinking.  
Solution: Clear the right half of the old character. (Yasuhiro Matsumoto)  
Files: src/edit.c, src/screen.c

Patch 6.0.105

Problem: Multi-byte: In a window of one column wide, with syntax highlighting enabled a crash might happen.  
Solution: Skip getting the syntax attribute when the character doesn't fit anyway. (Yasuhiro Matsumoto)  
Files: src/screen.c

Patch 6.0.106 (extra)

Problem: Win32: When the printer font is wrong, there is no error message.  
Solution: Give an appropriate error message. (Yasuhiro Matsumoto)  
Files: src/os\_mswin.c

Patch 6.0.107 (extra)

Problem: VisVim: When editing another file, a modified file may be written unexpectedly and without warning.  
Solution: Split the window if a file was modified.  
Files: VisVim/Commands.cpp

#### Patch 6.0.108

Problem: When using folding could try displaying line zero, resulting in an error for a NULL pointer.  
Solution: Stop decrementing w\_topleft when the first line of a window is in a closed fold.  
Files: src/window.c

#### Patch 6.0.109

Problem: XIM: When the input method is enabled, repeating an insertion with "." disables it. (Marcel Svitalsky)  
Solution: Don't store the input method status when a command comes from the stuff buffer.  
Files: src/ui.c

#### Patch 6.0.110

Problem: Using undo after executing "OxjAxkdd" from a register in an empty buffer gives an error message. (Gerhard Hochholzer)  
Solution: Don't adjust the bottom line number of an undo block when it's zero. Add a test for this problem.  
Files: src/undo.c, src/testdir/test20.in, src/testdir/test20.ok

#### Patch 6.0.111

Problem: The virtcol() function doesn't take care of 'virtualedit'.  
Solution: Add the column offset when needed. (Yegappan Lakshmanan)  
Files: src/eval.c

#### Patch 6.0.112

Problem: The explorer plugin doesn't sort directories with a space or special character after a directory with a shorter name.  
Solution: Ignore the trailing slash when comparing directory names. (Mike Williams)  
Files: runtime/plugin/explorer.vim

#### Patch 6.0.113

Problem: ":edit ~/fname" doesn't work if \$HOME includes a space. Also, expanding wildcards with the shell may fail. (John Daniel)  
Solution: Escape spaces with a backslash when needed.  
Files: src/ex\_docmd.c, src/misc1.c, src/proto/misc1.pro, src/os\_unix.c

#### Patch 6.0.114

Problem: Using ":p" with fnamemodify() didn't expand "~/ " or "~user/" to a full path. For Win32 the current directory was prepended. (Michael Geddes)  
Solution: Expand the home directory.  
Files: src/eval.c

#### Patch 6.0.115 (extra)

Problem: Win32: When using a dialog with a textfield it cannot scroll the text.  
Solution: Add ES\_AUTOHSCROLL to the textfield style. (Pedro Gomes)  
Files: src/gui\_w32.c

#### Patch 6.0.116 (extra)

Problem: MS-Windows NT/2000/XP: filewritable() doesn't work correctly for filesystems that use ACLs.  
Solution: Use ACL functions to check if a file is writable. (Mike Williams)  
Files: src/eval.c, src/macros.h, src/os\_win32.c, src/proto/os\_win32.pro

## Patch 6.0.117 (extra)

Problem: Win32: when disabling the menu, "set lines=999" doesn't use all the available screen space.  
Solution: Don't subtract the fixed caption height but the real menu height from the available screen space. Also: Avoid recursion in `gui_mswin_get_menu_height()`.  
Files: `src/gui_w32.c`, `src/gui_w48.c`

## Patch 6.0.118

Problem: When `$TMPDIR` is a relative path, the temp directory is missing a trailing slash and isn't deleted when Vim exits. (Peter Holm)  
Solution: Add the slash after expanding the directory to an absolute path.  
Files: `src/fileio.c`

## Patch 6.0.119 (depends on patch 6.0.116)

Problem: VMS: `filewritable()` doesn't work properly.  
Solution: Use the same method as for Unix. (Zoltan Arpadffy)  
Files: `src/eval.c`

## Patch 6.0.120

Problem: The conversion to html isn't compatible with XHTML.  
Solution: Quote the values. (Jess Thrysoee)  
Files: `runtime/syntax/2html.vim`

## Patch 6.0.121 (extra) (depends on patch 6.0.116)

Problem: Win32: After patch 6.0.116 Vim doesn't compile with mingw32.  
Solution: Add an `#ifdef HAVE_ACL`.  
Files: `src/os_win32.c`

## Patch 6.0.122 (extra)

Problem: Win16: Same resize problems as patch 6.0.117 fixed for Win32. And dialog textfield problem from patch 6.0.115.  
Solution: Set `old_menu_height` only when used. Add `ES_AUTOHSCROLL` flag. (Vince Negri)  
Files: `src/gui_w16.c`

## Patch 6.0.123 (depends on patch 6.0.119)

Problem: Win16: Compilation problems.  
Solution: Move "&&" to other lines. (Vince Negri)  
Files: `src/eval.c`

## Patch 6.0.124

Problem: When using a `":substitute"` command that starts with `"\"` (evaluated as an expression), `"~"` was still replaced with the previous substitute string.  
Solution: Skip the replacement when the substitute string starts with `"\"`. Also adjust the documentation about doubling backslashes.  
Files: `src/ex_cmds.c`, `runtime/doc/change.txt`

## Patch 6.0.125 (extra)

Problem: Win32: When using the `multi_byte_ime` feature pressing the shift key would be handled as if a character was entered, thus mappings with a shifted key didn't work. (Charles Campbell)  
Solution: Ignore pressing the shift, control and alt keys.  
Files: `src/os_win32.c`

## Patch 6.0.126

Problem: The python library was always statically linked.  
Solution: Link the python library dynamically. (Matthias Klose)  
Files: `src/auto/configure`, `src/configure.in`

## Patch 6.0.127

Problem: When using a terminal that swaps screens and the Normal background color has a different background, using an external command may cause the color of the wrong screen to be changed. (Mark Waggoner)

Solution: Don't call screen\_stop\_highlight() in stoptermcap().

Files: src/term.c

## Patch 6.0.128

Problem: When moving a vertically split window to the far left or right, the scrollbars are not adjusted. (Scott E Lee) When 'mousefocus' is set the mouse pointer wasn't adjusted.

Solution: Adjust the scrollbars and the mouse pointer.

Files: src/window.c

## Patch 6.0.129

Problem: When using a very long file name, ":ls" (repeated a few times) causes a crash. Test with "vim `perl -e 'print "A"x1000`". (Tejeda)

Solution: Terminate a string before getting its length in buflist\_list().

Files: src/buffer.c

## Patch 6.0.130

Problem: When using ":cprev" while the error window is open, and the new line at the top wraps, the window isn't correctly drawn. (Yegappan Lakshmanan)

Solution: When redrawing the topline don't scroll twice.

Files: src/screen.c

## Patch 6.0.131

Problem: When using bufname() and there are two matches for listed buffers and one match for an unlisted buffer, the unlisted buffer is used. (Aric Blumer)

Solution: When there is a match with a listed buffer, don't check for unlisted buffers.

Files: src/buffer.c

## Patch 6.0.132

Problem: When setting 'iminsert' in the vimrc and using an xterm with two screens the ruler is drawn in the wrong screen. (Igor Goldenberg)

Solution: Only draw the ruler when using the right screen.

Files: src/option.c

## Patch 6.0.133

Problem: When opening another buffer while 'keymap' is set and 'iminsert' is zero, 'iminsert' is set to one unexpectedly. (Igor Goldenberg)

Solution: Don't set 'iminsert' as a side effect of defining a ":lmap" mapping. Only do that when 'keymap' is set.

Files: src/getchar.c, src/option.c

## Patch 6.0.134

Problem: When completing ":set tags=" a path with an embedded space causes the completion to stop. (Sektor van Skijlen)

Solution: Escape spaces with backslashes, like for ":set path=". Also take backslashes into account when searching for the start of the path to complete (e.g., for 'backupdir' and 'cscopeprg').

Files: src/ex\_docmd.c, src/ex\_getln.c, src/option.c, src/structs.h

## Patch 6.0.135

Problem: Menus that are not supposed to do anything used "<Nul>", which still produced an error beep.

When CTRL-O is mapped for Insert mode, ":amenu" commands didn't work in Insert mode.

Solution: Menu language falls back to English when \$LANG ends in "@euro".  
Use "<Nop>" for a menu item that doesn't do anything, just like mappings.  
Use ":anoremenu" instead of ":amenu".  
Ignore "@euro" in the locale name.  
Files: runtime/makemenu.vim, runtime/menu.vim, src/menu.c

#### Patch 6.0.136

Problem: When completing in Insert mode, a mapping could be unexpectedly applied.  
Solution: Don't use mappings when checking for a typed character.  
Files: src/edit.c

#### Patch 6.0.137

Problem: GUI: When using the find or find/replace dialog from Insert mode, the input mode is stopped.  
Solution: Don't use the input method status when the main window doesn't have focus.  
Files: src/ui.c

#### Patch 6.0.138

Problem: GUI: When using the find or find/replace dialog from Insert mode, the text is inserted when CTRL-O is mapped. (Andre Pang)  
When opening the dialog again, a whole word search isn't recognized.  
When doing "replace all" a whole word search was never done.  
Solution: Don't put a search or replace command in the input buffer, execute it directly.  
Recognize "<" and ">" after removing "\V".  
Add "<" and ">" also for "replace all".  
Files: src/gui.c

#### Patch 6.0.139

Problem: When stopping 'wildmenu' completion, the statusline of the bottom-left vertically split window isn't redrawn. (Yegappan Lakshmanan)  
Solution: Redraw all the bottom statuslines.  
Files: src/ex\_getln.c, src/proto/screen.pro, src/screen.c

#### Patch 6.0.140

Problem: Memory allocated for local mappings and abbreviations is leaked when the buffer is wiped out.  
Solution: Clear the local mappings when deleting a buffer.  
Files: src/buffer.c, src/getchar.c, src/proto/getchar.pro, src/vim.h

#### Patch 6.0.141

Problem: When using ":enew" in an empty buffer, some buffer-local things are not cleared. b:keymap\_name is not set.  
Solution: Clear user commands and mappings local to the buffer when re-using the current buffer. Reload the keymap.  
Files: src/buffer.c

#### Patch 6.0.142

Problem: When Python is linked statically, loading dynamic extensions might fail.  
Solution: Add an extra linking flag when needed. (Andrew Rodionoff)  
Files: src/configure.in, src/auto/configure

#### Patch 6.0.143

Problem: When a syntax item includes a line break in a pattern, the syntax may not be updated properly when making a change.  
Solution: Add the "linebreaks" argument to ":syn sync".

Files: runtime/doc/syntax.txt, src/screen.c, src/structs.h, src/syntax.c

Patch 6.0.144

Problem: After patch 6.0.088 redoing "veU" doesn't work.

Solution: Don't add the "U" to the redo buffer, it will be used as an undo command.

Files: src/normal.c

Patch 6.0.145

Problem: When Vim can't read any input it might get stuck. When redirecting stdin and stderr Vim would not read commands from a file. (Servatius Brandt)

Solution: When repeatedly trying to read a character when it's not possible, exit Vim. When stdin and stderr are not a tty, still try reading from them, but don't do a blocking wait.

Files: src/ui.c

Patch 6.0.146

Problem: When 'statusline' contains "%{'-'}" this results in a zero. (Milan Vancura)

Solution: Don't handle numbers with a minus as a number, they were not displayed anyway.

Files: src/buffer.c

Patch 6.0.147

Problem: It's not easy to mark a Vim version as being modified. The new license requires this.

Solution: Add the --modified-by argument to configure and the MODIFIED\_BY define. It's used in the intro screen and the ":version" output.

Files: src/auto/configure, src/configure.in, src/config.h.in, src/feature.h, src/version.c

Patch 6.0.148

Problem: After "p" in an empty line, `[ goes to the second character. (Kontra Gergely)

Solution: Don't increment the column number in an empty line.

Files: src/ops.c

Patch 6.0.149

Problem: The pattern "\(\{-}\)\*" causes a hang. When using a search pattern that causes a stack overflow to be detected Vim could still hang.

Solution: Correctly report "operand could be empty" when using "\{-}". Check for "out\_of\_stack" inside loops to avoid a hang.

Files: src/regexp.c

Patch 6.0.150

Problem: When using a multi-byte encoding, patch 6.0.148 causes "p" to work like "P". (Sung-Hyun Nam)

Solution: Compute the byte length of a multi-byte character.

Files: src/ops.c

Patch 6.0.151

Problem: Redrawing the status line and ruler can be wrong when it contains multi-byte characters.

Solution: Use character width and byte length correctly. (Yasuhiro Matsumoto)

Files: src/screen.c

Patch 6.0.152

Problem: strtrans() could hang on an illegal UTF-8 byte sequence.

Solution: Skip over illegal bytes. (Yasuhiro Matsumoto)

Files: src/charset.c



## Patch 6.0.153

Problem: When using (illegal) double-byte characters and Vim syntax highlighting Vim can crash. (Yasuhiro Matsumoto)  
Solution: Increase a pointer over a character instead of a byte.  
Files: src/regexp.c

## Patch 6.0.154

Problem: MS-DOS and MS-Windows: The menu entries for xxd don't work when there is no xxd in the path.  
When converting back from Hex the filetype may remain "xxd" if it is not detected.  
Solution: When xxd is not in the path use the one in the runtime directory, where the install program has put it.  
Clear the 'filetype' option before detecting the new value.  
Files: runtime/menu.vim

## Patch 6.0.155

Problem: Mac: compilation problems in ui.c after patch 6.0.145. (Axel Kielhorn)  
Solution: Don't call mch\_inchar() when NO\_CONSOLE is defined.  
Files: src/ui.c

## Patch 6.0.156

Problem: Starting Vim with the -b argument and two files, ":next" doesn't set 'binary' in the second file, like Vim 5.7. (Norman Diamond)  
Solution: Set the global value for 'binary'.  
Files: src/option.c

## Patch 6.0.157

Problem: When defining a user command with "-complete=dir" files will also be expanded. Also, "-complete=mapping" doesn't appear to work. (Michael Naumann)  
Solution: Use the expansion flags defined with the user command.  
Handle expanding mappings specifically.  
Files: src/ex\_docmd.c

## Patch 6.0.158

Problem: When getting the warning for a file being changed outside of Vim and reloading the file, the 'readonly' option is reset, even when the permissions didn't change. (Marcel Svitalsky)  
Solution: Keep 'readonly' set when reloading a file and the permissions didn't change.  
Files: src/fileio.c

## Patch 6.0.159

Problem: Wildcard expansion for ":emenu" also shows separators.  
Solution: Skip menu separators for ":emenu", ":popup" and ":tearoff". Also, don't handle ":tmenu" as if it was ":tearoff". And leave out the alternatives with "&" included.  
Files: src/menu.c

## Patch 6.0.160

Problem: When compiling with GCC 3.0.2 and using the "-O2" argument, the optimizer causes a problem that makes Vim crash.  
Solution: Add a configure check to avoid "-O2" for this version of gcc.  
Files: src/configure.in, src/auto/configure

## Patch 6.0.161 (extra)

Problem: Win32: Bitmaps don't work with signs.  
Solution: Make it possible to use bitmaps with signs. (Muraoka Taro)  
Files: src/ex\_cmds.c, src/feature.h, src/gui\_w32.c, src/gui\_x11.c,

src/proto/gui\_w32.pro, src/proto/gui\_x11.pro

Patch 6.0.162

Problem: Client-server: An error message for a wrong expression appears in the server instead of the client.

Solution: Pass the error message from the server to the client. Also adjust the example code. (Flemming Madsen)

Files: src/globals.h, src/if\_xcmdsrv.c, src/main.c, src/os\_mswin.c,  
src/proto/if\_xcmdsrv.pro, src/proto/os\_mswin.pro,  
runtime/doc/eval.txt, runtime/tools/xcmdsrv\_client.c

Patch 6.0.163

Problem: When using a GUI dialog, a file name is sometimes used like it was a directory.

Solution: Separate path and file name properly.  
For GTK, Motif and Athena concatenate directory and file name for the default selection.

Files: src/diff.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c,  
src/gui\_athena.c, src/gui\_gtk.c, src/gui\_motif.c, src/message.c

Patch 6.0.164

Problem: After patch 6.0.135 the menu entries for pasting don't work in Insert and Visual mode. (Muraoka Taro)

Solution: Add <script> to allow script-local mappings.

Files: runtime/menu.vim

Patch 6.0.165

Problem: Using --remote and executing locally gives unavoidable error messages.

Solution: Add --remote-silent and --remote-wait-silent to silently execute locally.

For Win32 there was no error message when a server didn't exist.  
Files: src/eval.c, src/if\_xcmdsrv.c, src/main.c, src/os\_mswin.c,  
src/proto/if\_xcmdsrv.pro, src/proto/os\_mswin.pro

Patch 6.0.166

Problem: GUI: There is no way to avoid dialogs to pop up.

Solution: Add the 'c' flag to 'guioptions': Use console dialogs. (Yegappan Lakshmanan)

Files: runtime/doc/options.txt, src/option.h, src/message.c

Patch 6.0.167

Problem: When 'fileencodings' is "latin2" some characters in the help files are displayed wrong.

Solution: Force the 'fileencoding' for the help files to be "latin1".

Files: src/fileio.c

Patch 6.0.168

Problem: ":s/\n/#/" doesn't replace at an empty line. (Bruce DeVisser)

Solution: Don't skip matches after joining two lines.

Files: src/ex\_cmds.c

Patch 6.0.169

Problem: When run as evim and the GUI can't be started we get stuck in a terminal without menus in Insert mode.

Solution: Exit when using "evim" and "gvim -y" when the GUI can't be started.

Files: src/main.c

Patch 6.0.170

Problem: When printing double-width characters the size of tabs after them is wrong. (Muraoka Taro)

Solution: Correctly compute the column after a double-width character.  
Files: src/ex\_cmds2.c

Patch 6.0.171

Problem: With 'keymodel' including "startsel", in Insert mode after the end of a line, shift-Left does not move the cursor. (Steve Hall)

Solution: CTRL-O doesn't move the cursor left, need to do that explicitly.  
Files: src/edit.c

Patch 6.0.172

Problem: CTRL-Q doesn't replace CTRL-V after CTRL-X in Insert mode while it does in most other situations.

Solution: Make CTRL-X CTRL-Q work like CTRL-X CTRL-V in Insert mode.  
Files: src/edit.c

Patch 6.0.173

Problem: When using "P" to insert a line break the cursor remains past the end of the line.

Solution: Check for the cursor being beyond the end of the line.  
Files: src/ops.c

Patch 6.0.174

Problem: After using "gd" or "gD" the search direction for "n" may still be backwards. (Servatius Brandt)

Solution: Reset the search direction to forward.  
Files: src/normal.c, src/search.c, src/proto/search.pro

Patch 6.0.175

Problem: ":help /\z(\)" doesn't work. (Thomas Koehler)

Solution: Double the backslashes.  
Files: src/ex\_cmds.c

Patch 6.0.176

Problem: When killed by a signal autocommands are still triggered as if nothing happened.

Solution: Add the v:dying variable to allow autocommands to work differently when a deadly signal has been trapped.

Files: src/eval.c, src/os\_unix.c, src/vim.h

Patch 6.0.177

Problem: When 'commentstring' is empty and 'foldmethod' is "marker", "zf" doesn't work. (Thomas S. Urban)

Solution: Add the marker even when 'commentstring' is empty.  
Files: src/fold.c, src/normal.c

Patch 6.0.178

Problem: Uninitialized memory read from xp\_backslash field.

Solution: Initialize xp\_backslash field properly.

Files: src/eval.c, src/ex\_docmd.c, src/ex\_getln.c, src/misc1.c, src/tag.c

Patch 6.0.179

Problem: Win32: When displaying UTF-8 characters may read uninitialized memory.

Solution: Add utfc\_ptr2len\_check\_len() to avoid reading past the end of a string.

Files: src/mbyte.c, src/proto/mbyte.pro, src/gui\_w32.c

Patch 6.0.180

Problem: Expanding environment variables in a string that ends in a backslash could go past the end of the string.

Solution: Detect the trailing backslash.  
Files: src/misc1.c

## Patch 6.0.181

Problem: When using ":cd dir" memory was leaked.

Solution: Free the allocated memory. Also avoid an uninitialized memory read.

Files: src/misc2.c

## Patch 6.0.182

Problem: When using a regexp on multi-byte characters, could try to read a character before the start of the line.

Solution: Don't decrement a pointer to before the start of the line.

Files: src/regexp.c

## Patch 6.0.183

Problem: Leaking memory when ":func!" redefines a function.

Solution: Free the function name when it's not used.

Files: src/eval.c

## Patch 6.0.184

Problem: Leaking memory when expanding option values.

Solution: Don't always copy the expanded option into allocated memory.

Files: src/option.c

## Patch 6.0.185

Problem: Crash in Vim when pasting a selection in another application, on a 64 bit machine.

Solution: Fix the format for an Atom to 32 bits. (Peter Derr)

Files: src/ui.c

## Patch 6.0.186

Problem: X11: Three warnings when compiling the client-server code.

Solution: Add a typecast to unsigned char.

Files: src/if\_xcmdsrv.c

## Patch 6.0.187

Problem: "I" in Visual mode and then "u" reports too many changes. (Andrew Stryker)

"I" in Visual linewise mode adjusts the indent for no apparent reason.

Solution: Only save those lines for undo that are changed.

Don't change the indent after inserting in Visual linewise mode.

Files: src/ops.c

## Patch 6.0.188

Problem: Win32: After patch 6.0.161 signs defined in the vimrc file don't work.

Solution: Initialize the sign icons after initializing the GUI. (Vince Negri)

Files: src/gui.c, src/gui\_x11.c

## Patch 6.0.189

Problem: The size of the Visual area isn't always displayed when scrolling ('ruler' off, 'showcmd' on). Also not when using a search command. (Sylvain Hitier)

Solution: Redisplay the size of the selection after showing the mode.

Files: src/screen.c

## Patch 6.0.190

Problem: GUI: when 'mouse' is empty a click with the middle button still moves the cursor.

Solution: Paste at the cursor position instead of the mouse position.

Files: src/normal.c

## Patch 6.0.191

Problem: When no servers are available serverlist() gives an error instead of returning an empty string. (Hari Krishna)  
Solution: Don't give an error message.  
Files: src/eval.c

## Patch 6.0.192

Problem: When 'virtualedit' is set, "ylj" goes to the wrong column. (Andrew Nikitin)  
Solution: Reset the flag that w\_virtcol is valid when moving the cursor back to the start of the operated area.  
Files: src/normal.c

## Patch 6.0.193

Problem: When 'virtualedit' is set, col(".") after the end of the line should return one extra.  
Solution: Add one to the column.  
Files: src/eval.c

## Patch 6.0.194

Problem: "--remote-silent" tries to send a reply to the client, like it was "--remote-wait".  
Solution: Properly check for the argument.  
Files: src/main.c

## Patch 6.0.195

Problem: When 'virtualedit' is set and a search starts in virtual space ":call search('x')" goes to the wrong position. (Eric Long)  
Solution: Reset coladd when finding a match.  
Files: src/search.c

## Patch 6.0.196

Problem: When 'virtualedit' is set, 'selection' is "exclusive" and visually selecting part of a tab at the start of a line, "x" joins it with the previous line. Also, when the selection spans more than one line the whole tab is deleted.  
Solution: Take coladd into account when adjusting for 'selection' being "exclusive". Also expand a tab into spaces when deleting more than one line.  
Files: src/normal.c, src/ops.c

## Patch 6.0.197

Problem: When 'virtualedit' is set and 'selection' is "exclusive", "v\$x" doesn't delete the last character in the line. (Eric Long)  
Solution: Don't reset the inclusive flag. (Helmut Stiegler)  
Files: src/normal.c

## Patch 6.0.198

Problem: When 'virtualedit' is set and 'showbreak' is not empty, moving the cursor over the line break doesn't work properly. (Eric Long)  
Solution: Make getviscol() and getviscol2() use getvicol() to obtain the virtual cursor position. Adjust coladvance() and oneleft() to skip over the 'showbreak' characters.  
Files: src/edit.c, src/misc2.c

## Patch 6.0.199

Problem: Multi-byte: could use iconv() after calling iconv\_end(). (Yasuhiro Matsumoto)  
Solution: Stop converting input and output stream after calling iconv\_end().  
Files: src/mbyte.c

## Patch 6.0.200

Problem: A script that starts with "#!perl" isn't recognized as a Perl filetype.  
Solution: Ignore a missing path in a script header. Also, speed up recognizing scripts by simplifying the patterns used.  
Files: runtime/scripts.vim

## Patch 6.0.201

Problem: When scrollbinding and doing a long jump, switching windows jumps to another position in the file. Scrolling a few lines at a time is OK. (Johannes Zellner)  
Solution: When setting w\_topleft reset the flag that indicates w\_botline is valid.  
Files: src/diff.c

## Patch 6.0.202

Problem: The "icon=" argument for the menu command to define a toolbar icon with a file didn't work for GTK. (Christian J. Robinson)  
For Motif and Athena a full path was required.  
Solution: Search the icon file using the specified path. Expand environment variables in the file name.  
Files: src/gui\_gtk.c, src/gui\_x11.c

## Patch 6.0.203

Problem: Can change 'fileformat' even though 'modifiable' is off. (Servatius Brandt)  
Solution: Correct check for kind of set command.  
Files: src/option.c

## Patch 6.0.204

Problem: ":unlet" doesn't work for variables with curly braces. (Thomas Scott Urban)  
Solution: Handle variable names with curly braces properly. (Vince Negri)  
Files: src/eval.c

## Patch 6.0.205 (extra)

Problem: "gvim -f" still forks when using the batch script to start Vim.  
Solution: Add an argument to "start" to use a foreground session (Michael Geddes)  
Files: src/dosinst.c

## Patch 6.0.206

Problem: Unix: if expanding a wildcard in a file name results in a wildcard character and there are more parts in the path with a wildcard, it is expanded again.  
Windows: ":edit \[abc]" could never edit the file "[abc]".  
Solution: Don't expand wildcards in already expanded parts.  
Don't remove backslashes used to escape the special meaning of a wildcard; can edit "[abc]" if '[' is removed from 'isfname'.  
Files: src/misc1.c, src/os\_unix.c

## Patch 6.0.207 (extra)

Problem: Win32: The shortcuts and start menu entries let Vim startup in the desktop directory, which is not very useful.  
Solution: Let shortcuts start Vim in \$HOME or \$HOMEDIR\$HOMEPATH.  
Files: src/dosinst.c

## Patch 6.0.208

Problem: GUI: When using a keymap and the cursor is not blinking, CTRL-^ in Insert mode doesn't directly change the cursor color. (Alex Solow)  
Solution: Force a redraw of the cursor after CTRL-^.

Files: src/edit.c

#### Patch 6.0.209

Problem: GUI GTK: After selecting a 'guifont' with the font dialog there are redraw problems for multi-byte characters.

Solution: Separate the font dialog from setting the new font name to avoid that "\*" is used to find wide and bold fonts.  
When redrawing extra characters for the bold trick, take care of UTF-8 characters.

Files: src/gui.c, src/gui\_gtk\_x11.c, src/option.c, src/proto/gui.pro, src/proto/gui\_gtk\_x11.pro

#### Patch 6.0.210

Problem: After patch 6.0.167 it's no longer possible to edit a help file in another encoding than latin1.

Solution: Let the "++enc=" argument overrule the encoding.

Files: src/fileio.c

#### Patch 6.0.211

Problem: When reading a file fails, the buffer is empty, but it might still be possible to write it with ":w" later. The original file is lost then. (Steve Amerige)

Solution: Set the 'readonly' option for the buffer.

Files: src/fileio.c

#### Patch 6.0.212

Problem: GUI GTK: confirm("foo", "") causes a crash.

Solution: Don't make a non-existing button the default. Add a default "OK" button if none is specified.

Files: src/eval.c, src/gui\_gtk.c

#### Patch 6.0.213

Problem: When a file name contains unprintable characters, CTRL-G and other commands don't work well.

Solution: Turn unprintable into printable characters. (Yasuhiro Matsumoto)

Files: src/buffer.c, src/charset.c

#### Patch 6.0.214

Problem: When there is a buffer without a name, empty entries appear in the jumplist saved in the viminfo file.

Solution: Don't write jumplist entries without a file name.

Files: src/mark.c

#### Patch 6.0.215

Problem: After using "/" from Visual mode the Paste menu and Toolbar entries don't work. Pasting with the middle mouse doesn't work and modeless selection doesn't work.

Solution: Use the command line mode menus and use the mouse like in the command line.

Files: src/gui.c, src/menu.c, src/ui.c

#### Patch 6.0.216

Problem: After reloading a file, displayed in another window than the current one, which was changed outside of Vim the part of the file around the cursor set by autocommands may be displayed, but jumping back to the original cursor position when entering the window again.

Solution: Restore the topline of the window.

Files: src/fileio.c

#### Patch 6.0.217

Problem: When getting help from a help file that was used before, an empty

unlisted buffer remains in the buffer list. (Eric Long)  
Solution: Wipe out the buffer used to do the tag jump from.  
Files: src/buffer.c, src/ex\_cmds.c, src/proto/buffer.pro

#### Patch 6.0.218

Problem: With explorer plugin: "vim -o filename dirname" doesn't load the explorer window until entering the window.  
Solution: Call s:EditDir() for each window after starting up.  
Files: runtime/plugin/explorer.vim

#### Patch 6.0.219

Problem: ":setlocal" and ":setglobal", without arguments, display terminal options. (Zdenek Sekera)  
Solution: Skip terminal options for these two commands.  
Files: src/option.c

#### Patch 6.0.220

Problem: After patch 6.0.218 get a beep on startup. (Muraoka Taro)  
Solution: Don't try going to another window when there isn't one.  
Files: runtime/plugin/explorer.vim

#### Patch 6.0.221

Problem: When using ":bdel" and all other buffers are unloaded the lowest numbered buffer is jumped to instead of the most recent one. (Dave Cecil)  
Solution: Prefer an unloaded buffer from the jumplist.  
Files: src/buffer.c

#### Patch 6.0.222

Problem: When 'virtualedit' is set and using autoindent, pressing Esc after starting a new line leaves behind part of the autoindent. (Helmut Stiegler)  
Solution: After deleting the last char in the line adjust the cursor position in del\_bytes().  
Files: src/miscl.c, src/ops.c

#### Patch 6.0.223

Problem: When splitting a window that contains the explorer, hitting CR on a file name gives error messages.  
Solution: Set the window variables after splitting the window.  
Files: runtime/plugin/explorer.vim

#### Patch 6.0.224

Problem: When 'sidescroll' and 'sidescrolloff' are set in a narrow window the text may jump left-right and the cursor is displayed in the wrong position. (Aric Blumer)  
Solution: When there is not enough room, compute the left column for the window to put the cursor in the middle.  
Files: src/move.c

#### Patch 6.0.225

Problem: In Visual mode "gk" gets stuck in a closed fold. (Srinath Avadhanula)  
Solution: Behave differently in a closed fold.  
Files: src/normal.c

#### Patch 6.0.226

Problem: When doing ":recover file" get the ATTENTION prompt. After recovering the same file five times get a read error or a crash. (Alex Davis)  
Solution: Set the recoverymode flag before setting the file name. Correct the amount of used memory for the size of block zero.



Files: src/ex\_docmd.c

Patch 6.0.227 (extra)

Problem: The RISC OS port has several problems.

Solution: Update the makefile and fix some of the problems. (Andy Wingate)

Files: src/Make\_ro.mak, src/os\_riscos.c, src/os\_riscos.h,  
src/proto/os\_riscos.pro, src/search.c

Patch 6.0.228

Problem: After putting text in Visual mode the ']' mark is not at the end of the put text.

Undo doesn't work properly when putting a word into a Visual selection that spans more than one line.

Solution: Correct the ']' mark for the deleting the Visually selected text.

#ifdef code that depends on FEAT\_VISUAL properly.

Also fix that "d" crossing line boundary puts '[' just before deleted text.

Fix undo by saving all deleted lines at once.

Files: src/ex\_docmd.c, src/globals.h, src/normal.c, src/ops.c,  
src/structs.h, src/vim.h

Patch 6.0.229

Problem: Multi-byte: With 'm' in 'formatoptions', formatting doesn't break at a multi-byte char followed by an ASCII char, and the other way around. (Muraoka Taro)

When joining lines a space is inserted between multi-byte characters, which is not always wanted.

Solution: Check for multi-byte character before and after the breakpoint.

Don't insert a space before or after a multi-byte character when joining lines and the 'M' flag is in 'formatoptions'. Don't insert a space between multi-byte characters when the 'B' flag is in 'formatoptions'.

Files: src/edit.c, src/ops.c, src/option.h

Patch 6.0.230

Problem: The ":" used as a motion after an operator is exclusive, but sometimes it should be inclusive.

Solution: Make the "v" in between an operator and motion toggle inclusive/exclusive. (Servatius Brandt)

Files: runtime/doc/motion.txt, src/normal.c

Patch 6.0.231

Problem: "gd" and "gD" don't work when the variable matches in a comment just above the match to be found. (Servatius Brandt)

Solution: Continue searching in the first column below the comment.

Files: src/normal.c

Patch 6.0.232

Problem: "vim --version" prints on stderr while "vim --help" prints on stdout.

Solution: Make "vim --version" use stdout.

Files: runtime/doc/starting.txt, src/globals.h, src/main.c, src/message.c

Patch 6.0.233

Problem: "\l{,8}" in a regexp is not allowed, but it should work, because there is an upper limit. (Jim Battle)

Solution: Allow using "{min,max}" after an atom that can be empty if there is an upper limit.

Files: src/regexp.c

Patch 6.0.234

Problem: It's not easy to set the cursor position without modifying marks.

Solution: Add the cursor() function. (Yegappan Lakshmanan)  
Files: runtime/doc/eval.txt, src/eval.c

#### Patch 6.0.235

Problem: When writing a file and renaming the original file to make the backup, permissions could change when setting the owner.  
Solution: Only set the owner when it's needed and set the permissions again afterwards.  
When 'backupcopy' is "auto" check that the owner and permissions of a newly created file can be set properly.  
Files: src/fileio.c

#### Patch 6.0.236

Problem: ":edit" without argument should move cursor to line 1 in Vi compatible mode.  
Solution: Add 'g' flag to 'coptions'.  
Files: runtime/doc/options.txt, src/ex\_docmd.c, src/option.h

#### Patch 6.0.237

Problem: In a C file, using the filetype plugin, re-indenting a comment with two spaces after the middle "\*" doesn't align properly.  
Solution: Don't use a middle entry from a start/middle/end to line up with the start of the comment when the start part doesn't match with the actual comment start.  
Files: src/misc1.c

#### Patch 6.0.238

Problem: Using a ":substitute" command with a substitute() call in the substitution expression causes errors. (Srinath Avadhanula)  
Solution: Save and restore pointers when doing substitution recursively.  
Files: src/regexp.c

#### Patch 6.0.239

Problem: Using "A" to append after a Visually selected block which is after the end of the line, spaces are inserted in the wrong line and other unexpected effects. (Michael Naumann)  
Solution: Don't advance the cursor to the next line.  
Files: src/ops.c

#### Patch 6.0.240

Problem: Win32: building with Python 2.2 doesn't work.  
Solution: Add support for Python 2.2 with dynamic linking. (Paul Moore)  
Files: src/if\_python.c

#### Patch 6.0.241

Problem: Win32: Expanding the old value of an option that is a path that starts with a backslash, an extra backslash is inserted.  
Solution: Only insert backslashes where needed.  
Also handle multi-byte characters properly when removing backslashes.  
Files: src/option.c

#### Patch 6.0.242

Problem: GUI: On a system with an X server sometimes get a "Bad Window" error. (Tommi Maekitalo)  
Solution: When forking, use a pipe to wait in the parent for the child to have done the setsid() call.  
Files: src/gui.c

#### Patch 6.0.243

Problem: Unix: "vim --version" outputs a NL before the last line instead of after it. (Charles Campbell)

Solution: Send the NL to the same output stream as the text.  
Files: src/message.c, src/os\_unix.c, src/proto/message.pro

#### Patch 6.0.244

Problem: Multi-byte: Problems with (illegal) UTF-8 characters in menu and file name (e.g., icon text, status line).  
Solution: Correctly handle unprintable characters. Catch illegal UTF-8 characters and replace them with <xx>. Truncating the status line wasn't done correctly at a multi-byte character. (Yasuhiro Matsumoto)  
Added correct\_cmdspos() and transchar\_byte().  
Files: src/buffer.c, src/charset.c, src/ex\_getln.c, src/gui.c, src/message.c, src/screen.c, src/vim.h

#### Patch 6.0.245

Problem: After using a color scheme, setting the 'background' option might not work. (Peter Horst)  
Solution: Disable the color scheme if it switches 'background' back to the wrong value.  
Files: src/option.c

#### Patch 6.0.246

Problem: ":echomsg" didn't use the highlighting set by ":echohl". (Gary Holloway)  
Solution: Use the specified attributes for the message. (Yegappan Lakshmanan)  
Files: src/eval.c

#### Patch 6.0.247

Problem: GTK GUI: Can't use gvim in a kpart widget.  
Solution: Add the "--echo-wid" argument to let Vim echo the window ID on stdout. (Philippe Fremy)  
Files: runtime/doc/starting.txt, src/globals.h, src/gui\_gtk\_x11.c, src/main.c

#### Patch 6.0.248

Problem: When using compressed help files and 'encoding' isn't "latin1", Vim converts the help file before decompressing. (David Reviejo)  
Solution: Don't convert a help file when 'binary' is set.  
Files: src/fileio.c

#### Patch 6.0.249

Problem: "vim -t edit -c 'sta ex\_help'" doesn't move cursor to edit().  
Solution: Don't set the cursor on the first line for "-c" arguments when there also is a "-t" argument.  
Files: src/main.c

#### Patch 6.0.250 (extra)

Problem: Macintosh: Various problems when compiling.  
Solution: Various fixes, mostly #ifdefs. (Dany St. Amant)  
Files: src/gui\_mac.c, src/main.c, src/misc2.c, src/os\_mac.h, src/os\_mac.pbxproj/project.pbxproj, src/os\_unix.c

#### Patch 6.0.251 (extra)

Problem: Macintosh: menu shortcuts are not very clear.  
Solution: Show the shortcut with the Mac clover symbol. (raindog)  
Files: src/gui\_mac.c

#### Patch 6.0.252

Problem: When a user function was defined with "abort", an error that is not inside if/endif or while/endwhile doesn't abort the function. (Servatius Brandt)

Solution: Don't reset did\_emsg when the function is to be aborted.  
Files: src/ex\_docmd.c

Patch 6.0.253

Problem: When 'insertmode' is set, after "<C-O>:edit file" the next <C-O> doesn't work. (Benji Fisher) <C-L> has the same problem.

Solution: Reset need\_start\_insertmode once in edit().  
Files: src/edit.c

Patch 6.0.254 (extra)

Problem: Borland C++ 5.5: Checking for stack overflow doesn't work correctly. Matters when using a complicated regexp.

Solution: Remove -N- from Make\_bc5.mak. (Yasuhiro Matsumoto)  
Files: src/Make\_bc5.mak

Patch 6.0.255 (extra) (depends on patch 6.0.116 and 6.0.121)

Problem: Win32: ACL support doesn't work well on Samba drives.

Solution: Add a check for working ACL support. (Mike Williams)  
Files: src/os\_win32.c

Patch 6.0.256 (extra)

Problem: Win32: ":highlight Comment guifg=asdf" does not give an error message. (Randall W. Morris) Also for other systems.

Solution: Add gui\_get\_color() to give one error message for all systems.  
Files: src/gui.c, src/gui\_amiga.c, src/gui\_athena.c, src/gui\_motif.c, src/gui\_riscos.c, src/gui\_x11.c, src/gui\_gtk\_x11.c, src/proto/gui.pro, src/syntax.c

Patch 6.0.257

Problem: Win32: When 'mousefocus' is set and there is a BufRead autocommand, after the dialog for permissions changed outside of Vim: 'mousefocus' stops working. (Robert Webb)

Solution: Reset need\_mouse\_correct after checking timestamps.  
Files: src/fileio.c

Patch 6.0.258

Problem: When 'scrolloff' is 999 and there are folds, the text can jump up and down when moving the cursor down near the end of the file. (Lubomir Host)

Solution: When putting the cursor halfway the window start counting lines at the end of a fold.  
Files: src/move.c

Patch 6.0.259

Problem: MS-DOS: after editing the command line the cursor shape may remain like in Insert mode. (Volker Kiefel)

Solution: Reset the cursor shape after editing the command line.  
Files: src/ex\_getln.c

Patch 6.0.260

Problem: GUI: May crash while starting up when giving an error message for missing color. (Servatius Brandt)

Solution: Don't call gui\_write() when still starting up. Don't give error message for empty color name. Don't use 't\_vb' while the GUI is still starting up.

Files: src/fileio.c, src/gui.c, src/misc1.c, src/ui.c

Patch 6.0.261

Problem: nr2char() and char2nr() don't work with multi-byte characters.

Solution: Use 'encoding' for these functions. (Yasuhiro Matsumoto)  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 6.0.262 (extra)

Problem: Win32: IME doesn't work properly. OnImeComposition() isn't used at all.

Solution: Adjust various things for IME.

Files: src/globals.h, src/gui\_w32.c, src/mbyte.c, src/proto/ui.pro, src/structs.h, src/ui.c

## Patch 6.0.263

Problem: GTK: When a dialog is closed by the window manager, Vim hangs. (Christian J. Robinson)

Solution: Use GTK\_WIDGET\_DRAWABLE() instead of GTK\_WIDGET\_VISIBLE().

Files: src/gui\_gtk.c, src/gui\_gtk\_x11.c

## Patch 6.0.264

Problem: The amount of virtual memory is used to initialize 'maxmemtot', which may be much more than the amount of physical memory, resulting in a lot of swapping.

Solution: Get the amount of physical memory with sysctl(), sysconf() or sysinfo() when possible.

Files: src/auto/configure, src/configure.in, src/config.h.in, src/os\_unix.c, src/os\_unix.h

## Patch 6.0.265

Problem: Win32: Using backspace while 'fkmap' is set causes a crash. (Jamshid Oasjmoha)

Solution: Don't try mapping special keys.

Files: src/farsi.c

## Patch 6.0.266

Problem: The rename() function deletes the file if the old and the new name are the same. (Volker Kiefel)

Solution: Don't do anything if the names are equal.

Files: src/fileio.c

## Patch 6.0.267

Problem: UTF-8: Although 'isprint' says a character is printable, utf\_char2cells() still considers it unprintable.

Solution: Use vim\_isprintc() for characters upto 0x100. (Yasuhiro Matsumoto)

Files: src/mbyte.c

## Patch 6.0.268 (extra) (depends on patch 6.0.255)

Problem: Win32: ACL check crashes when using forward slash in file name.

Solution: Improve the check for the path in the file name.

Files: src/os\_win32.c

## Patch 6.0.269

Problem: Unprintable characters in a file name may cause problems when using the 'statusline' option or when 'buftype' is "nofile".

Solution: call trans\_characters() for the resulting statusline. (Yasuhiro Matsumoto)

Files: src/buffer.c, src/screen.c, src/charset.c

## Patch 6.0.270 (depends on patch 6.0.267)

Problem: A tab causes UTF-8 text to be displayed in the wrong position. (Ron Aaron)

Solution: Correct utf\_char2cells() again.

Files: src/mbyte.c

## Patch 6.1a.001 (extra)

Problem: 32bit DOS: copying text to the clipboard may cause a crash. (Jonathan D Johnston)

Solution: Don't copy one byte too much in SetClipboardData().

Files: src/os\_msdos.c

Patch 6.1a.002

Problem: GTK: On some configurations, when closing a dialog from the window manager, Vim hangs.

Solution: Catch the "destroy" signal. (Aric Blumer)

Files: src/gui\_gtk.c

Patch 6.1a.003

Problem: Multi-byte: With UTF-8 double-wide char and 'virtualedit' set: yanking in Visual mode doesn't include the last byte. (Eric Long)

Solution: Don't add a space for a double-wide character.

Files: src/ops.c

Patch 6.1a.004 (extra)

Problem: MINGW: undefined type. (Ron Aaron)

Solution: Make GetCompositionString\_inUCS2() static.

Files: src/gui\_w32.c, src/gui\_w48.c, src/proto/gui\_w32.pro

Patch 6.1a.005 (extra)

Problem: Win32: ":hardcopy" doesn't work after ":hardcopy!". (Jonathan Johnston)

Solution: Don't keep the driver context when using ":hardcopy!". (Vince Negri)

Files: src/os\_mswin.c

Patch 6.1a.006

Problem: multi-byte: after setting 'encoding' the window title might be wrong.

Solution: Force resetting the title. (Yasuhiro Matsumoto)

Files: src/option.c

Patch 6.1a.007

Problem: Filetype detection for "\*.inc" doesn't work.

Solution: Use a ":let" command. (David Schweikert)

Files: runtime/filetype.vim

Patch 6.1a.008 (extra)

Problem: Win32: ACL detection for network shares doesn't work.

Solution: Include the trailing (back)slash in the root path. (Mike Williams)

Files: src/os\_win32.c

Patch 6.1a.009

Problem: When using "\@<=" or "\@<!" in a pattern, a "\1" may refer to a () part that follows, but it generates an error message.

Solution: Allow a forward reference when there is a following "\@<=" or "\@<!".

Files: runtime/doc/pattern.txt, src/regexp.c

Patch 6.1a.010

Problem: When using ":help" and opening a new window, the alternate file isn't set.

Solution: Set the alternate file to the previously edited file.

Files: src/ex\_cmds.c

Patch 6.1a.011

Problem: GTK: ":set co=77", change width with the mouse, ":set co=77" doesn't resize the window. (Darren Hiebert)

Solution: Set the form size after handling a resize event.

Files: src/gui\_gtk\_x11.c

Patch 6.1a.012

Problem: GTK: The file browser always returns a full path. (Lohner)  
Solution: Shorten the file name if possible.  
Files: src/gui\_gtk.c

#### Patch 6.1a.013

Problem: When using "=~word" in 'cinkeys' or 'indentkeys', the case of the last character of the word isn't ignored. (Raul Segura Acevedo)  
Solution: Ignore case when checking the last typed character.  
Files: src/edit.c

#### Patch 6.1a.014

Problem: After patch 6.1a.006 can't compile without the title feature.  
Solution: Add an #ifdef.  
Files: src/option.c

#### Patch 6.1a.015

Problem: MS-Windows: When expanding a file name that contains a '[' or '{' an extra backslash is inserted. (Raul Segura Acevedo)  
Solution: Avoid adding the backslash.  
Files: src/ex\_getln.c

#### Patch 6.1a.016

Problem: Completion after ":language" doesn't include "time". (Raul Segura Acevedo)  
Solution: Add the alternative to the completions.  
Files: src/ex\_cmds2.c

#### Patch 6.1a.017

Problem: Clicking the mouse in the top row of a window where the first line doesn't fit moves the cursor to the wrong column.  
Solution: Add the skipcol also for the top row of a window.  
Files: src/ui.c

#### Patch 6.1a.018

Problem: When 'scrolloff' is one and the window height is one, "gj" can put the cursor above the window. (Raul Segura Acevedo)  
Solution: Don't let skipcol become bigger than the cursor column.  
Files: src/move.c

#### Patch 6.1a.019

Problem: When using a composing character on top of an ASCII character, the "l" command clears the composing character. Only when 'ruler' and 'showcmd' are off. (Raphael Finkel)  
Solution: Don't move the cursor by displaying characters when there are composing characters.  
Files: src/screen.c

#### Patch 6.1a.020

Problem: GTK: after patch 6.1a.011 resizing with the mouse doesn't always work well for small sizes. (Adrien Beau)  
Solution: Use another way to avoid the problem with ":set co=77".  
Files: src/gui\_gtk\_x11.c

#### Patch 6.1a.021

Problem: Several Syntax menu entries are wrong or confusing.  
Solution: Rephrase and correct the menu entries. (Adrien Beau)  
Files: runtime/makemenu.vim, runtime/menu.vim

#### Patch 6.1a.022

Problem: A tags file might be used twice on case insensitive systems. (Rick Swanton)  
Solution: Don't use the same file name twice in the default for the 'tags'

option. Ignore case when comparing names of already visited files.  
Files: src/misc2.c, src/option.c

Patch 6.1a.023

Problem: When starting the GUI get "C" characters echoed in the terminal.  
Solution: Don't try sending a clear-screen command while the GUI is starting up.  
Files: src/screen.c

Patch 6.1a.024

Problem: In other editors CTRL-F is often used for a find dialog.  
Solution: In evim use CTRL-F for the find dialog.  
Files: runtime/evim.vim

Patch 6.1a.025

Problem: The choices for the fileformat dialog can't be translated.  
Solution: Add g:menutrans\_fileformat\_choices. (Adrien Beau)  
Files: runtime/menu.vim

Patch 6.1a.026

Problem: Indenting Java files is wrong with "throws", "extends" and "implements" clauses.  
Solution: Update the Java indent script.  
Files: runtime/indent/java.vim

Patch 6.1a.027

Problem: A few Syntax menu entries missing or incorrect.  
Solution: Add and correct the menu entries. (Adrien Beau)  
Shorten a few menus to avoid they become too long.  
Files: runtime/makemenu.vim, runtime/menu.vim

Patch 6.1a.028

Problem: XIM: problems with feedback and some input methods.  
Solution: Use iconv for calculating the cells. Remove the queue for key\_press\_event only when text was changed. (Yasuhiro Matsumoto)  
Files: src/globals.h, src/mbyte.c, src/screen.c

Patch 6.1a.029

Problem: After patch 6.1a.028 can't compile GTK version with XIM but without multi-byte chars.  
Solution: Add an #ifdef. (Aschwin Marsman)  
Files: src/mbyte.c

Patch 6.1a.030

Problem: With double-byte encodings toupper() and tolower() may have wrong results.  
Solution: Skip double-byte characters. (Eric Long)  
Files: src/eval.c

Patch 6.1a.031

Problem: Accessing the 'balloondelay' variable may cause a crash.  
Solution: Make the variable for 'balloondelay' a long. (Olaf Seibert)  
Files: src/option.h

Patch 6.1a.032 (extra)

Problem: Some menu files used a wrong encoding name for "scriptencoding".  
Solution: Move the translations to a separate file, which is sourced after setting "scriptencoding".  
Also add Czech menu translations in ASCII and update the other encodings.  
Files: runtime/lang/menu\_cs\_cz.iso\_8859-1.vim,



```
runtime/lang/menu_cs_cz.iso_8859-2.vim,
runtime/lang/menu_czech_czech_republic.1250.vim,
runtime/lang/menu_czech_czech_republic.1252.vim,
runtime/lang/menu_czech_czech_republic.ascii.vim,
runtime/lang/menu_de_de.iso_8859-1.vim,
runtime/lang/menu_de_de.latin1.vim,
runtime/lang/menu_fr_fr.iso_8859-1.vim,
runtime/lang/menu_fr_fr.latin1.vim,
runtime/lang/menu_french_france.1252.vim,
runtime/lang/menu_german_germany.1252.vim,
runtime/lang/menu_ja_jp.euc-jp.vim,
runtime/lang/menu_ja_jp.utf-8.vim,
runtime/lang/menu_japanese_japan.932.vim
```

Patch 6.1a.033

Problem: XIM: doesn't reset input context.

Solution: call xim\_reset() with im\_set\_active(FALSE). (Takuhiko Nishioka)

Files: src/mbyte.c

Patch 6.1a.034 (extra)

Problem: Win32: The ACL checks for a readonly file still don't work well.

Solution: Remove the ACL checks, go back to how it worked in Vim 6.0.

Files: src/os\_win32.c

Patch 6.1a.035

Problem: multi-byte: When using ":sh" in the GUI, typed and displayed multi-byte characters are not handled correctly.

Solution: Deal with multi-byte characters to and from the shell. (Yasuhiro Matsumoto) Also handle UTF-8 composing characters.

Files: src/os\_unix.c

Patch 6.1a.036

Problem: GTK: the save-yourself event was not handled.

Solution: Catch the save-yourself event and preserve swap files. (Neil Bird)

Files: src/gui\_gtk\_x11.c

Patch 6.1a.037

Problem: The MS-Windows key mapping doesn't include CTRL-S for saving. (Vlad Sandrini)

Solution: Map CTRL-S to ":update".

Files: runtime/mswin.vim

Patch 6.1a.038

Problem: Solaris: Including both sys/sysctl.h and sys/sysinfo.h doesn't work. (Antonio Colombo)

Solution: Don't include sys/sysinfo.h when not calling sysinfo().

Files: src/os\_unix.c

Patch 6.1a.039

Problem: Not all visual basic files are recognized.

Solution: Add checks to catch \*.ctl files. (Raul Segura Acevedo)

Files: runtime/filetype.vim

Patch 6.1a.040

Problem: A \*.pl file is recognized as Perl, but it could be a prolog file.

Solution: Check the first non-empty line. (Kontra Gergely)

Files: runtime/filetype.vim

Patch 6.1a.041

Problem: When pressing the left mouse button in the command line and then moving the mouse upwards, nearly all the text is selected.

Solution: Don't try extending a modeless selection when there isn't one.

Files: src/ui.c

Patch 6.1a.042

Problem: When merging files, ":diffput" and ":diffget" are used a lot, but they require a lot of typing.

Solution: Add "dp" for ":diffput" and "do" for ":diffget".

Files: runtime/doc/diff.txt, src/diff.c, src/normal.c, src/proto/diff.pro

Patch 6.1b.001 (extra)

Problem: Checking for wildcards in a path does not handle multi-byte characters with a trail byte which is a wildcard.

Solution: Handle multi-byte characters correctly. (Muraoka Taro)

Files: src/os\_amiga.c, src/os\_mac.c, src/os\_msdos.c, src/os\_mswin.c, src/os\_unix.c

Patch 6.1b.002

Problem: A regexp that ends in "\{" is not flagged as an error. May cause a stack overflow when 'incsearch' is set. (Gerhard Hochholzer)

Solution: Handle a missing "}" as an error.

Files: src/regexp.c

Patch 6.1b.003 (extra)

Problem: The RISC OS GUI doesn't compile.

Solution: Include changes since Vim 5.7. (Andy Wingate)

Files: src/Make\_ro.mak, src/gui\_riscos.c, src/os\_riscos.c, src/os\_riscos.h, src/proto/gui\_riscos.pro

Patch 6.1b.004

Problem: col(">") returns a negative number for linewise selection. (Neil Bird)

Solution: Don't add one to MAXCOL.

Files: src/eval.c

Patch 6.1b.005

Problem: Using a search pattern that causes an out-of-stack error while 'hlsearch' is set keeps giving the hit-Enter prompt.

A search pattern that takes a long time delays typing when 'incsearch' is set.

Solution: Stop 'hlsearch' highlighting when the regexp causes an error.

Stop searching for 'incsearch' when a character is typed.

Files: src/globals.h, src/message.c, src/screen.c, src/search.c, src/vim.h

Patch 6.1b.006

Problem: When entering a composing character on the command line with CTRL-V, the text isn't redrawn correctly.

Solution: Redraw the text under and after the cursor.

Files: src/ex\_getln.c

Patch 6.1b.007

Problem: When the cursor is in the white space between two sentences, "dis" deletes the first character of the following sentence, "das" deletes a space after the sentence.

Solution: Backup the cursor one character in these situations.

Files: src/search.c

Patch 6.1b.008

Problem: \*.xsl files are not recognized as xslt but xml.

Monk files are not recognized.

Solution: Delete the duplicate line for \*.xsl. (Johannes Zellner)

Recognize monk files.

Files: runtime/filetype.vim

Patch 6.1b.009

Problem: Can't always compile small features and then adding eval feature, "sandbox" is undefined. (Axel Kielhorn)

Solution: Always define "sandbox" when the eval feature is used.

Files: src/globals.h

Patch 6.1b.010 (extra)

Problem: When compiling gvimext.cpp with MSVC 4.2 get a number of warnings.

Solution: Change "true" to "TRUE". (Walter Briscoe)

Files: GvimExt/gvimext.cpp

Patch 6.1b.011

Problem: When using a very long string for confirm(), can't quit the displaying at the more prompt. (Hari Krishna Dara)

Solution: Jump to the end of the message to show the choices.

Files: src/message.c

Patch 6.1b.012

Problem: Multi-byte: When 'showbreak' is set and a double-wide character doesn't fit at the right window edge the cursor gets stuck there. Using cursor-left gets stuck when 'virtualedit' is set. (Eric Long)

Solution: Fix the way the extra ">" character is counted when 'showbreak' is set. Don't correct cursor for virtual editing on a double-wide character.

Files: src/charset.c, src/edit.c

Patch 6.1b.013

Problem: A user command that partly matches with a buffer-local user command and matches full with a global user command unnecessarily gives an 'ambiguous command' error.

Solution: Find the full global match even after a partly local match.

Files: src/ex\_docmd.c

Patch 6.1b.014

Problem: EBCDIC: switching mouse events off causes garbage on screen. Positioning the cursor in the GUI causes garbage.

Solution: Insert an ESC in the terminal code. (Ralf Schandl)

Use "\b" instead of "\010" for KS\_LE.

Files: src/os\_unix.c, src/term.c

Patch 6.1b.015

Problem: Vimtutor has a typo. Get a warning for "tempfile" if it doesn't exist.

Solution: Move a quote to the end of a line. (Max Ischenko)

Use "mktemp" first, more systems have it.

Files: src/vimtutor

Patch 6.1b.016

Problem: GTK: loading a fontset that works partly, Vim might hang or crash.

Solution: Avoid that char\_width becomes zero. (Yasuhiro Matsumoto)

Files: src/gui\_gtk\_x11.c

Patch 6.1b.017

Problem: GUI: When using ":shell" and there is a beep, nothing happens.

Solution: Call vim\_beep() to produce the beep from the shell. (Yasuhiro Matsumoto)

Files: src/message.c

Patch 6.1b.018 (depends on 6.1b.006)

Problem: When entering the encryption key, special keys may still reveal the typed characters.  
Solution: Make sure stars are used or nothing is shown in all cases.  
Files: src/digraph.c, src/getchar.c, src/ex\_getln.c

Patch 6.1b.019 (depends on 6.1b.005)

Problem: A search pattern that takes a long time slows down typing when 'incsearch' is set.  
Solution: Pass SEARCH\_PEEK to dosearch().  
Files: src/ex\_getln.c

Patch 6.1b.020

Problem: When using the matchit plugin, "%" finds a match on the "end" of a ":syntax region" command in Vim scripts.  
Solution: Skip over ":syntax region" commands by setting b:match\_skip.  
Files: runtime/ftplugin/vim.vim

Patch 6.1b.021

Problem: when 'mousefocus' is set, CTRL-W CTRL-J sometimes doesn't warp the pointer to the new window. (Robert Webb)  
Solution: Don't reset need\_mouse\_correct when checking the timestamp of a file.  
Files: src/fileio.c

Patch 6.1b.022

Problem: With lots of folds "j" does not obey 'scrolloff' properly. (Srinath Avadhanula)  
Solution: Go to end of the fold before counting context lines.  
Files: src/move.c

Patch 6.1b.023

Problem: On MS-Windows system() may cause checking timestamps, because Vim loses and gains input focus, while this doesn't happen on Unix.  
Solution: Don't check timestamps while system() is busy.  
Files: src/ex\_cmds2.c, src/fileio.c, src/globals.h, src/misc1.c

Patch 6.1b.024 (extra)

Problem: Gettext 0.11 complains that "sjis" is not a standard name.  
Solution: Use "cp932" instead.  
Files: src/po/sjiscorr.c

Patch 6.1b.025 (extra)

Problem: Win32: When closing gvim while it is minimized and has a changed file, the file-changed dialog pops up in a corner of the screen.  
Solution: Put the dialog in the middle of the screen.  
Files: src/gui\_w48.c

Patch 6.1b.026

Problem: When 'diffopt' contains 'iwhite' but not 'icase': differences in case are not highlighted properly. (Gerhard Hochholzer)  
Solution: Don't ignore case when ignoring white space differences.  
Files: src/diff.c

Patch 6.1b.027

Problem: "vim --remote +" may cause a crash.  
Solution: Check for missing file name argument. (Martin Kahlert)  
Files: src/main.c

Patch 6.1b.028 (extra)

Problem: Win16: Can't compile after patch 6.1b.025.  
Solution: Add code specifically for Win16. (Vince Negri)  
Files: src/gui\_w48.c

## Patch 6.1b.029

Problem: Win32: When a directory on an NTFS partition is read/execute (no delete, modify, write) and the file has modify rights, trying to write the file deletes it. Making the file read/write/execute (not delete) solves it. (Mark Canup)

Solution: Use the Unix code to check for a writable directory. If not, then make a backup copy and overwrite the file.

Files: src/fileio.c

## Patch 6.1b.030 (extra)

Problem: Mac: small mistake in the build script and prototypes.

Solution: Fix the build script and add the prototypes. (Axel Kielhorn)

Files: src/os\_mac.build, src/gui\_mac.c

## Patch 6.1b.031 (extra)

Problem: Win32 GUI: ":set guifont=\*" doesn't set 'guifont' to the resulting font name. (Vlad Sandrini)

Solution: Put the code back in gui\_mch\_init\_font() to form the font name out of the logfont.

Files: src/gui\_w48.c

## Patch 6.1b.032

Problem: Athena: Setting a color scheme before the GUI has started causes a crash. (Todd Blumer)

Solution: Don't try using color names that haven't been set yet.

Files: src/gui\_athena.c

## Patch 6.1b.033

Problem: When using a count after a ":s" command may get ml\_get errors. (Dietmar Lang)

Solution: Check that the resulting range does not go past the end of the buffer.

Files: src/ex\_cmds.c

## Patch 6.1b.034

Problem: After sourcing mswin.vim, when using <C-S-Right> after auto-indenting and then <Del>, get warning for allocating ridiculous amount of memory. (Dave Delgreco)

Solution: Adjust the start of the Visual area when deleting the auto-indent.

Files: src/edit.c

## Patch 6.1b.035

Problem: When using evim, dropping a file on Vim and then double clicking on a word, it is changed to "i". (Merlin Hansen)

Solution: Reset need\_start\_insertmode after editing the file.

Files: src/ex\_docmd.c

## =====

\*version-6.2\*

VERSION 6.2

This section is about improvements made between version 6.1 and 6.2.

This is mainly a bug-fix release. There are also a few new features.

## Main new features:

- Support for GTK 2. (Daniel Elstner)
- Support for editing Arabic text. (Nadim Shaikli & Isam Bayazidi)
- ":try" command and exception handling. (Servatius Brandt)
- Support for the neXtaw GUI toolkit (mostly like Athena). (Alexey Froloff)
- Cscope support for Win32. (Khorev Sergey)

- Support for PostScript printing in various 8-bit encodings. (Mike Williams)

Changed

\*changed-6.2\*

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Removed the scheme indent file, the internal Lisp indenting works well now.

Moved the GvimEXt, OleVim and VisVim directories into the "src" directory. This is more consistent with how xxd is handled.

The VisVim.dll file is installed in the top directory, next to gvimext.dll, instead of in a subdirectory "VisVim". Fixes that NSIS was uninstalling it from the wrong directory.

Removed the art indent file, it didn't do anything.

submatch() returned line breaks with CR instead of LF.

Changed the Win32 Makefiles to become more uniform and compile gvimext.dll. (Dan Sharp)

'cindent': Align a "/\*" comment with a "/\*" comment in a previous line. (Helmut Stiegler)

Previously only for xterm-like terminals parent widgets were followed to find the title and icon label. Now do this for all terminal emulators.

Made it possible to recognize backslashes for "%" matching. The 'M' flag in 'coptions' disables it. (Haakon Riiser)

Removed the Make\_tcc.mak makefile for Turbo C. It didn't work and we probably can't make it work (the compiler runs out of memory).

Even though the documentation refers to keywords, "[ CTRL-D" was using 'isident' to find matches. Changed it to use 'iskeyword'. Also applies to other commands that search for defined words in included files such as ":dsearch", "[D" and "[d".

Made 'keywordprg' global-local. (Christian Robinson)

Enabled the Netbeans interface by default. Reversed the configure argument from "--enable-netbeans" to "--disable-netbeans".

Added

\*added-6.2\*

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New options:

- 'arabic'
- 'arabicshape'
- 'ambiwidth'
- 'autochdir'
- 'casemap'
- 'copyindent'
- 'cscopequickfix'
- 'preserveindent'
- 'printencoding'
- 'rightleftcmd'
- 'termbidi'
- 'toolbariconsizes'
- 'winfixheight'

## New keymaps:

- Serbian (Aleksandar Veselinovic)
- Chinese Pinyin (Fredrik Roubert)
- Esperanto (Antoine J. Mechelynck)

## New syntax files:

- Valgrind (Roger Luethi)
- Smarty template (Manfred Stienstra)
- MySQL (Kenneth Pronovici)
- RockLinux package description (Piotr Esden-Tempski)
- MMIX (Dirk Huesken)
- gkrellmrc (David Necas)
- Tilde (Tobias Rundtrom)
- Logtalk (Paulo Moura)
- PLP (Juerd Waalboer)
- fvwm2m4 (David Necas)
- IPfilter (Hendrik Scholz)
- fstab (Radu Dineiu)
- Quake (Nikolai Weibull)
- Occam (Mario Schweigler)
- lpc (Shizhu Pan)
- Exim conf (David Necas)
- EDIF (Artem Zankovich)
- .cvsrc (Nikolai Weibull)
- .fetchmailrc (Nikolai Weibull)
- GNU gpg (Nikolai Weibull)
- Grub (Nikolai Weibull)
- Modconf (Nikolai Weibull)
- RCS (Dmitry Vasiliev)
- Art (Dorai Sitaram)
- Renderman Interface Bytestream (Andrew J Bromage)
- Mailcap (Doug Kearns)
- Subversion commit file (Dmitry Vasiliev)
- Microsoft IDL (Vadim Zeitlin)
- WildPackets EtherPeek Decoder (Christopher Shinn)
- Spyce (Rimon Barr)
- Resolv.conf (Radu Dineiu)
- A65 (Clemens Kirchgatterer)
- sshconfig and sshdconfig (David Necas)
- Cheetah and HTMLCheetah (Max Ischenko)
- Packet filter (Camiel Dobbelaar)

## New indent files:

- Eiffel (David Clarke)
- Tilde (Tobias Rundtrom)
- Occam (Mario Schweigler)
- Art (Dorai Sitaram)
- PHP (Miles Lott)
- Dylan (Brent Fulgham)

## New tutor translations:

- Slovak (Lubos Celko)
- Greek (Christos Kontas)
- German (Joachim Hofmann)
- Norwegian (Vidar Holm)

## New filetype plugins:

- Occam (Mario Schweigler)
- Art (Dorai Sitaram)
- ant.vim, aspvbs.vim, config.vim, csc.vim, csh.vim, dtd.vim, html.vim, jsp.vim, pascal.vim, php.vim, sgml.vim, sh.vim, svg.vim, tcsh.vim,

xhtml.vim, xml.vim, xsd.vim. (Dan Sharp)

New compiler plugins:

Checkstyle (Doug Kearns)  
g77 (Ralf Wildenhues)  
fortran (Johann-Guenter Simon)  
Xmllint (Doug Kearns)  
Ruby (Tim Hammerquist)  
Modelsim vcom (Paul Baleme)

New menu translations:

Brazilian (Jos~~E~~9 de Paula)  
British (Mike Williams)  
Korean in UTF-8. (Nam SungHyun)  
Norwegian (~~D~~8yvind Holm)  
Serbian (Aleksandar Jelenak)

New message translation for Norwegian. (~~D~~8yvind Holm)

New color scheme:

desert (Hans Fugal)

Arabic specific features. 'arabicshape', 'termbidi', 'arabic' and 'rightleftcmd' options. (Nadim Shaikli & Isam Bayazidi)

Support for neXtaw GUI toolkit, mostly like Athena. (Alexey Froloff)

Win32: cscope support. (Khorev Sergey)

VMS: various improvements to documentation and makefiles. (Zoltan Arpadffy)

Added "x" key to the explorer plugin: execute the default action. (Yasuhiro Matsumoto)

Compile gvimext.dll with MingW. (Rene de Zwart)

Add the "tohtml.vim" plugin. It defines the ":TOhtml" user command, an easy way to convert text to HTML.

Added ":try" / ":catch" / ":finally" / ":endtry" commands. Add E999 numbers to all error messages, so that they can be caught by the number. (Servatius Brandt)

Moved part of ex\_docmd.c to the new ex\_eval.c source file.

Include support for GTK+ 2.2.x (Daniel Elstner)

Adds the "~" register: drag & drop text.

Adds the 'toolbariconsize' option.

Add -Dalloca when running lint to work around a problem with alloca() prototype.

When selecting an item in the error window to jump to, take some effort to find an ordinary window to show the file in (not a preview window).

Support for PostScript printing of various 8-bit encodings. (Mike Williams)

inputdialog() accepts a third argument that is used when the dialog is cancelled. Makes it possible to see a difference between cancelling and entering nothing.

Included Aap recipes. Can be used to update Vim to the latest version, building and installing.



"/" option in 'cinoptions': extra indent for comment lines. (Helmut Stiegler)

Vim variable "v:register" and functions setreg(), getreg() and getregtype().  
(Michael Geddes)

"v" flag in 'cpoptions': Leave text on screen with backspace in Insert mode.  
(Phillip Vandry)

Dosinst.exe also finds gvimext.dll in the "GvimExt" directory. Useful when  
running install in the "src" directory for testing.

Support tag files that were sorted with case ignored. (Flemming Madsen)

When completing a wildcard in a leading path element, as in "../\*/Makefile",  
only the last part ("Makefile") was listed. Support custom defined  
command line completion. (Flemming Madsen)

Also recognize "rxvt" as an xterm-like terminal. (Tomas Styblo)

Proper X11 session management. Fixes that the WM\_SAVE\_YOURSELF event was not  
used by popular desktops. (Neil Bird)  
Not used for Gnome 2, it has its own handling.

Support BOR, DEBUG and SPAWNO arguments for the Borland 3 Makefile. (Walter  
Briscoe)

Support page breaks for printing. Adds the "formfeed" field in  
'printoptions'. (Mike Williams)

Mac OSX: multi-language support: iconv and gettext. (Muraoka Taro, Axel  
Kielhorn)

"\Z" flag in patterns: ignore differences in combining characters. (Ron Aaron)

Added 'preserveindent' and 'copyindent' options. They use existing white  
space characters instead of using Tabs as much as possible. (Chris Leishman)

Updated Unicode tables to Unicode 4.0. (Raphael Finkel)

Support for the mouse wheel in rxvt. (AIDA Shinra)

Win32: Added ":8" file modifier to get short filename. Test50 tests the ":8"  
expansion on Win32 systems. (Michael Geddes)

'cscopequickfix' option: Open quickfix window for Cscope commands. Also  
cleanup the code for giving messages. (Khorev Sergey)

GUI: Support more than 222 columns for mouse positions.

":stopinsert" command: Don't return to Insert mode.

"interrupt" command for debug mode. Useful for simulating CTRL-C. (Servatius  
Brandt)

Fixed  
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\*fixed-6.2\*

Removed a few unused #defines from config.h.in, os\_os2\_cfg.h and os\_vms\_conf.h.

The Vim icons in PNG format didn't have a transparent background. (Greg  
Roelofs)

Fixed a large number of spelling mistakes in the docs. (Adri Verhoef)

The #defines for prototype generation were causing trouble. Changed them to typedefs.

A new version of libintl.h uses \_\_asm\_\_, which confuses cproto. Define a dummy \_\_asm\_\_ macro.

When 'virtualedit' is set can't move to halfway an unprintable character. Cripples CTRL-V selection. (Taro Muraoka)  
Allow moving to halfway an unprintable character. Don't let getvvcol() change the pos->coladd argument.

When a tab wraps to the next line, 'listchars' is set and 'foldcolumn' is non-zero, only one character of the foldcolumn is highlighted. (Muraoka Taro)

When using ":catch" without an argument Vim crashes. (Yasuhiro Matsumoto)  
When no argument given use the ".\*" pattern.

Win32: When gvim.exe is started from a shortcut with the window style property set to maximize Vim doesn't start with a maximized window. (Yasuhiro Matsumoto) Open the window with the default size and don't call ShowWindow() again when it's already visible. (Helmut Stiegler)

gui\_gtk.c used MAX, but it's undefined to avoid a conflict with system header files.

Win32: When closing a window from a mapping some pixels remain on the statusline. (Yasuhiro Matsumoto)

A column number in an errorformat that goes beyond the end of the line may cause a crash.

":throw 'test'" crashes Vim. (Yasuhiro Matsumoto)

The file selector's scrollbar colors are not set after doing a ":hi Scrollbar guifg=color". And the file selector's colors are not changed by the colorscheme command. (David Harrison)

Motif: When compiling with FEAT\_FOOTER defined, the text area gets a few pixels extra space on the right. Remove the special case in gui\_get\_base\_width(). (David Harrison)

Using CTRL-R CTRL-P in Insert mode puts the ']' mark in the wrong position. (Helmut Stiegler)

When 'formatoptions' includes "awct" a non-comment wasn't auto-formatted.

Using a "--cmd" argument more than 10 times caused a crash.

DEC style mouse support didn't work if the page field is not empty. (Uribarri)

"vim -l one two" did only set 'lisp' in the first file. Vi does it for every file.

":set tw<" didn't work. Was checking for '^' instead of '<'.

In ":hardcopy > %.ps" the "%" was not expanded to the current filename.

Made ":redraw" also update the Visual area.

When a not implemented command, such as `":perl"`, has wrong arguments the less important error was reported, giving the user the idea the command could work.

On non-Unix systems autocommands for writing did not attempt a match with the short file name, causing a pattern like `"a/b"` to fail.

VMS: `e_screenmode` was not defined and a few other fixes for VMS. (Zoltan Arpadffy)

`redraw_msg()` depended on `FEAT_ARABIC` instead of `FEAT_RIGHTLEFT`. (Walter Briscoe)

Various changes for the PC Makefiles. (Walter Briscoe)

Use `_truenamex()` instead of our own code to expand a file name into a full path. (Walter Briscoe)

Error in filetype check for `/etc/modutils`. (Lubomir Host)

Cscope interface: allocated a buffer too small.

Win16: remove a trailing backslash from a path when obtaining the permission flags. (Vince Negri)

When searching for tags with case ignored Vim could hang.

When searching directories with a `stopdir` could get a crash. Did not re-allocate enough memory. (Vince Negri)

A user command may cause a crash. Don't use the command index when it's negative. (Vince Negri)

`putenv()` didn't work for MingW and Cygwin. (Dan Sharp)

Many functions were common between `os_msdos.c` and `os_win16.c`. Use `os_msdos.c` for compiling the Win16 version and remove the functions from `os_win16.c`. (Vince Negri)

For terminals that behave like an xterm but didn't have a name that is recognized, the window title would not always be set.

When syntax highlighting is off `":hardcopy"` could still attempt printing colors.

Crash when using `":catch"` without an argument. (Servatius Brandt)

Win32: `":n #"` doubled the backslashes.

Fixed Arabic shaping for the command line. (Nadim Shaikli)

Avoid splitting up a string displayed on the command line into individual characters, it breaks Arabic shaping.

Updated Cygwin and MingW makefiles to use more dependencies. (Dan Sharp)

`2html.vim` didn't work with `'nomagic'` set.

When a local argument list is used and doing `":only"` Vim could crash later. (Muraoka Taro)

When using `"%P"` in `'statusline'` and the `fillchar` is `"-"`, a percentage of 3%

could result in "-3%". Also avoid changing a space inside a filename to the fill character.

MSwin: Handling of backslashes and double quotes for command line arguments was not like what other applications do. (Walter Briscoe)

Test32 sometimes didn't work, because test11.out was written as TEST11.OUT.

Avoid pointer conversions warnings for Borland C 5.5 in dosinst.c and uninstal.c.

More improvements for Make\_bc3.mak file. (Walter Briscoe)

When ":syn sync linebreaks=1" is used, editing the first line caused a redraw of the whole screen.

Making translated messages didn't work, if\_perl.xs wasn't found. (Vlad Sandrini)

Motif and Athena: moving Vim to the foreground didn't uniconify it. Use XMapRaised() instead of XRaiseWindow(). (Srikanth Sankaran)

When using ":ptag" in a window where 'scrollbind' is set the preview window would also have 'scrollbind' set. Also reset 'foldcolumn' and 'diff'.

Various commands that split a window took over 'scrollbind', which is hardly ever desired. Esp. for "q:" and ":copen". Mostly reset 'scrollbind' when splitting a window.

When 'shellslash' is set in the vimrc file the first entry of ":scriptnames" would still have backslashes. Entries in the quickfix list could also have wrong (back)slashes.

Win32: printer dialog texts were not translated. (Yasuhiro Matsumoto)

When using a multi-byte character with a K\_SPECIAL byte or a special key code with "--remote-send" the received byte sequence was mangled. Put it in the typeahead buffer instead of the input buffer.

Win32: The cursor position was incorrect after changing cursor shape. (Yasuhiro Matsumoto).

Win32: When 'encoding' is not the current codepage the title could not be set to non-ascii characters.

"vim -d scp://machine/file1 scp://machine/file2" did not work, there was only one window. Fixed the netrw plugin not to wipe out the buffer if it is displayed in other windows.

"/\$" caused "e" in last column of screen to disappear, a highlighted blank was displayed instead.

":s/ \*\ze\n//e" removed the line break and introduced arbitrary text. Was using the line count including what matched after the "\ze".

Using the "c" flag with ":s" changed the behavior when a line break is replaced and "@<=" is used. Without "c" a following match was not found.

":%s/\vA@<=\nB@=//gce" got stuck on "A\nB" when entering "n".

VMS: add HAVE\_STRFTIME in the config file. (Zoltan Arpadffy)

When a delete prompts if a delete should continue when yanking is not possible, restore msg\_silent afterwards.

":sign" did not complain about a missing argument.

When adding or deleting a sign 'hlsearch' highlighting could disappear. Use the generic functions for updating signs.

On MS-Windows NT, 2K and XP don't use command.com but cmd.exe for testing. Makes the tests work on more systems.

In the DOS tests don't create "/tmp" to avoid an error.

Mac classic: Problems with reading files with CR vs CR/LF. Rely on the library version of fgets() to work correctly for Metrowerks 2.2. (Axel Kielhorn)

When typing a password a "\*" was shown for each byte instead of for each character. Added multi-byte handling to displaying the stars. (Yasuhiro Matsumoto)

When using Perl 5.6 accessing \$curbuf doesn't work. Add an #ifdef to use different code for 5.6 and 5.8. (Dan Sharp)

MingW and Cygwin: Don't strip the debug executable. (Dan Sharp)

An assignment to a variable with curlies that includes "==" doesn't work. Skip over the curlies before searching for an "=". (Vince Negri)

When cancelling the selection of alternate matching tags the tag stack index could be advanced too far, resulting in an error message when using CTRL-T.

#### Patch 6.1.001

Problem: When formatting UTF-8 text it might be wrapped at a space that is followed by a composing character. (Raphael Finkel)  
Also correct a display error for removing a composing char on top of a space.

Solution: Check for a composing character on a space.

Files: src/edit.c, src/misc1.c, src/screen.c

#### Patch 6.1.002 (extra)

Problem: Win32: after a ":popup" command the mouse pointer stays hidden.

Solution: Unhide the mouse pointer before showing the menu.

Files: src/gui\_w48.c

#### Patch 6.1.003

Problem: When 'laststatus' is zero and there is a vertical split, the vertical separator is drawn in the command line. (Srikant Sankaran)

Solution: Don't draw the vertical separator where there is no statusline.

Files: src/screen.c

#### Patch 6.1.004

Problem: Unicode 3.2 changes width and composing of a few characters. (Markus Kuhn)

Solution: Adjust the Unicode functions for the character width and composing characters.

Files: src/mbyte.c

#### Patch 6.1.005

Problem: When using more than 50 items in 'statusline' Vim might crash.

(Steve Hall)  
Solution: Increment itemcnt in check\_stl\_option(). (Flemming Madsen)  
Files: src/option.c

## Patch 6.1.006

Problem: When using "P" in Visual mode to put linewise selected text, the wrong text is deleted. (Jakub Turski)  
Solution: Put the text before the Visual area and correct the text to be deleted for the inserted lines.  
Also fix that "p" of linewise text in Visual block mode doesn't work correctly.  
Files: src/normal.c, src/ops.c

## Patch 6.1.007

Problem: Using ":filetype plugin off" when filetype plugins were never enabled causes an error message. (Yiu Wing)  
Solution: Use ":silent!" to avoid the error message.  
Files: runtime/ftpluginof.vim

## Patch 6.1.008

Problem: The "%" command doesn't ignore \" inside a string, it's seen as the end of the string. (Ken Clark)  
Solution: Skip a double quote preceded by an odd number of backslashes.  
Files: src/search.c

## Patch 6.1.009

Problem: Vim crashes when using a huge number for the maxwid value in a statusline. (Robert M. Nowotniak)  
Solution: Check for an overflow that makes maxwid negative.  
Files: src/buffer.c

## Patch 6.1.010

Problem: Searching backwards for a question mark with "?\" doesn't work. (Alan Isaac) Same problem in ":s?\" and ":g?\".  
Solution: Change the "\" in a pattern to "?" when using "?" as delimiter.  
Files: src/ex\_cmds.c, src/ex\_docmd.c, src/proto/regexp.pro, src/regexp.c, src/search.c, src/syntax.c, src/tag.c

## Patch 6.1.011

Problem: XIM: doesn't work correctly when 'number' is set. Also, a focus problem when selecting candidates.  
Solution: Fix the XIM problems. (Yasuhiro Matsumoto)  
Files: src/mbyte.c, src/screen.c

## Patch 6.1.012

Problem: A system() call might fail if fread() does CR-LF to LF translation.  
Solution: Open the output file in binary mode. (Pavol Huhás)  
Files: src/misc1.c

## Patch 6.1.013

Problem: Win32: The default for 'printexpr' doesn't work when there are special characters in 'printdevice'.  
Solution: Add double quotes around the device name. (Mike Williams)  
Files: runtime/doc/option.txt, src/option.c

## Patch 6.1.014

Problem: An operator like "r" used in Visual block mode doesn't use 'virtualedit' when it's set to "block".  
Solution: Check for 'virtualedit' being active in Visual block mode when the operator was started.  
Files: src/ex\_docmd.c, src/globals.h, src/misc2.c, src/normal.c,

src/ops.c, src/undo.c

Patch 6.1.015

Problem: After patch 6.1.014 can't compile with tiny features. (Christian J. Robinson)

Solution: Add the missing define of virtual\_op.

Files: src/vim.h

Patch 6.1.016 (extra)

Problem: Win32: Outputting Hebrew or Arabic text might have a problem with reversing.

Solution: Replace the RevOut() function with ETO\_IGNORELANGUAGE. (Ron Aaron)

Files: src/gui\_w32.c

Patch 6.1.017

Problem: Cygwin: After patch 6.1.012 Still doesn't do binary file I/O. (Pavol Juhas)

Solution: Define BINARY\_FILE\_IO for Cygwin.

Files: src/os\_unix.h

Patch 6.1.018

Problem: Error message when using cterm highlighting. (Leonardo Di Lella)

Solution: Remove a backslash before a question mark.

Files: runtime/syntax/cterm.vim

Patch 6.1.019 (extra)

Problem: Win32: File name is messed up when editing just a drive name. (Walter Briscoe)

Solution: Append a NUL after the drive name. (Vince Negri)

Files: src/os\_win32.c

Patch 6.1.020

Problem: col("'>") returns a huge number after using Visual line mode.

Solution: Return the length of the line instead.

Files: src/eval.c

Patch 6.1.021 (depends on patch 6.1.009)

Problem: Vim crashes when using a huge number for the minwid value in a statusline. (Robert M. Nowotniak)

Solution: Check for an overflow that makes minwid negative.

Files: src/buffer.c

Patch 6.1.022

Problem: Grabbing the status line above the command-line window works like the bottom status line was grabbed. (Jim Battle)

Solution: Make it possible to grab the status line above the command-line window, so that it can be resized.

Files: src/ui.c

Patch 6.1.023 (extra)

Problem: VMS: running tests doesn't work properly.

Solution: Adjust the makefile. (Zoltan Arpadffy)

Files: src/testdir/Make\_vms.mms

Patch 6.1.024

Problem: When header files use a new syntax for declaring functions, Vim can't figure out missing prototypes properly.

Solution: Accept braces around a function name. (M. Warner Losh)

Files: src/osdef.sh

Patch 6.1.025

Problem: Five messages for "vim --help" don't start with a capital. (Vlad

Sandrini)  
Solution: Make the messages consistent.  
Files: src/main.c

#### Patch 6.1.026

Problem: \*.patch files are not recognized as diff files. In a script a "VAR=val" argument after "env" isn't ignored. PHP scripts are not recognized.  
Solution: Add \*.patch for diff filetypes. Ignore "VAR=val". Recognize PHP scripts. (Roman Neuhauser)  
Files: runtime/filetype.vim, runtime/scripts.vim

#### Patch 6.1.027

Problem: When 'foldcolumn' is non-zero, a special character that wraps to the next line disturbs the foldcolumn highlighting. (Yasuhiro Matsumoto)  
Solution: Only use the special highlighting when drawing text characters.  
Files: src/screen.c

#### Patch 6.1.028

Problem: Client-server: When a --remote-expr fails, Vim still exits with status zero.  
Solution: Exit Vim with a non-zero status to indicate the --remote-expr failed. (Thomas Scott Urban)  
Files: src/main.c

#### Patch 6.1.029

Problem: When 'encoding' is an 8-bit encoding other than "latin1", editing a utf-8 or other Unicode file uses the wrong conversion. (Jan Fedak)  
Solution: Don't use Unicode to latin1 conversion for 8-bit encodings other than "latin1".  
Files: src/fileio.c

#### Patch 6.1.030

Problem: When CTRL-N is mapped in Insert mode, it is also mapped after CTRL-X CTRL-N, while it is not mapped after CTRL-X CTRL-F. (Kontra Gergely)  
Solution: Don't map CTRL-N after CTRL-X CTRL-N. Same for CTRL-P.  
Files: src/getchar.c

#### Patch 6.1.031

Problem: Cygwin: Xxd could read a file in text mode instead of binary mode.  
Solution: Use "rb" or "rt" when needed. (Pavol Juhas)  
Files: src/xxd/xxd.c

#### Patch 6.1.032

Problem: Can't specify a quickfix file without jumping to the first error.  
Solution: Add the ":cgetfile" command. (Yegappan Lakshmanan)  
Files: runtime/doc/index.txt, runtime/doc/quickfix.txt, src/ex\_cmds.h, src/quickfix.c

#### Patch 6.1.033

Problem: GUI: When the selection is lost and the Visual highlighting is changed to underlining, the cursor is left in a different position. (Christian Michon)  
Solution: Update the cursor position after redrawing the selection.  
Files: src/ui.c

#### Patch 6.1.034

Problem: A CVS diff file isn't recognized as diff filetype.  
Solution: Skip lines starting with "? " before checking for an "Index:" line.



Files: runtime/scripts.vim

Patch 6.1.035 (extra, depends on 6.1.016)

Problem: Win32: Outputting Hebrew or Arabic text might have a problem with reversing on MS-Windows 95/98/ME.

Solution: Restore the RevOut() function and use it in specific situations only. (Ron Aaron)

Files: src/gui\_w32.c

Patch 6.1.036

Problem: This command may cause a crash: ":v/./,/-j". (Ralf Arens)

Solution: Compute the right length of the regexp when it's empty.

Files: src/search.c

Patch 6.1.037

Problem: When 'lazyredraw' is set, pressing "q" at the hit-enter prompt causes an incomplete redraw and the cursor isn't positioned. (Lubomir Host)

Solution: Overrule 'lazyredraw' when do\_redraw is set.

Files: src/main.c, src/screen.c

Patch 6.1.038

Problem: Multi-byte: When a ":s" command contains a multi-byte character where the trail byte is '~' the text is messed up.

Solution: Properly skip multi-byte characters in regtilde() (Muraoka Taro)

Files: src/regexp.c

Patch 6.1.039

Problem: When folds are defined and the file is changed outside of Vim, reloading the file doesn't update the folds. (Anders Schack-Nielsen)

Solution: Recompute the folds after reloading the file.

Files: src/fileio.c

Patch 6.1.040

Problem: When changing directory for expanding a file name fails there is no error message.

Solution: Give an error message for this situation. Don't change directory if we can't return to the original directory.

Files: src/diff.c, src/ex\_docmd.c, src/globals.h, src/misc1.c, src/os\_unix.c

Patch 6.1.041

Problem: ":mkvimrc" doesn't handle a mapping that has a leading space in the rhs. (Davyd Ondrejko)

Solution: Insert a CTRL-V before the leading space. Also display leading and trailing white space in <> form.

Files: src/getchar.c, src/message.c

Patch 6.1.042

Problem: "vim -r" doesn't show all matches when 'wildignore' removes swap files. (Steve Talley)

Solution: Keep all matching swap file names.

Files: src/memline.c

Patch 6.1.043

Problem: After patch 6.1.040 a few warnings are produced.

Solution: Add a type cast to "char \*" for mch\_chdir(). (Axel Kielhorn)

Files: src/diff.c, src/ex\_docmd.c, src/misc1.c, src/os\_unix.c

Patch 6.1.044 (extra)

Problem: GUI: When using the find/replace dialog with text that contains a

slash, an invalid substitute command is generated.  
 On Win32 a find doesn't work when 'insertmode' is set.  
 Solution: Escape slashes with a backslash.  
 Make the Win32, Motif and GTK gui use common code for the  
 find/replace dialog.  
 Add the "match case" option for Motif and GTK.  
 Files: src/feature.h, src/proto/gui.pro, src/gui.c, src/gui.h,  
 src/gui\_motif.c, src/gui\_gtk.c, src/gui\_w48.c

## Patch 6.1.045

Problem: In Visual mode, with lots of folds and 'scrolloff' set to 999,  
 moving the cursor down near the end of the file causes the text to  
 jump up and down. (Lubomir Host)  
 Solution: Take into account that the cursor may be on the last line of a  
 closed fold.  
 Files: src/move.c

## Patch 6.1.046

Problem: X11 GUI: ":set lsp=2 gcr=n-v-i:hor1-blinkon0" draws a black  
 rectangle. ":set lsp=2 gcr=n-v-i:hor10-blinkon0" makes the cursor  
 disappear. (Nam SungHyun)  
 Solution: Correctly compute the height of the horizontal cursor.  
 Files: src/gui\_gtk\_x11.c, src/gui\_x11.c

## Patch 6.1.047

Problem: When skipping commands after an error was encountered, expressions  
 for ":if", ";elseif" and ":while" are still evaluated.  
 Solution: Skip the expression after an error. (Servatius Brandt)  
 Files: src/ex\_docmd.c

## Patch 6.1.048

Problem: Unicode 3.2 changes were missing a few Hangul Jamo characters.  
 Solution: Recognize more characters as composing characters. (Jungshik Shin)  
 Files: src/mbyte.c

## Patch 6.1.049 (extra)

Problem: On a 32 bit display a valid color may cause an error message,  
 because its pixel value is negative. (Chris Paulson-Ellis)  
 Solution: Check for -11111 instead of the color being negative.  
 Don't add one to the pixel value, -1 may be used for white.  
 Files: src/globals.h, src/gui.c, src/gui.h, src/gui\_amiga.c,  
 src/gui\_athena.c, src/gui\_beos.cc, src/gui\_gtk\_x11.c,  
 src/gui\_mac.c, src/gui\_motif.c, src/gui\_photon.c,  
 src/gui\_riscos.c, src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c,  
 src/gui\_x11.c, src/mbyte.c, src/syntax.c

## Patch 6.1.050 (depends on 6.1.049)

Problem: After patch 6.1.049 the non-GUI version doesn't compile.  
 Solution: Add an #ifdef FEAT\_GUI. (Robert Stanton)  
 Files: src/syntax.c

## Patch 6.1.051 (depends on 6.1.044)

Problem: Doesn't compile with GUI and small features.  
 Solution: Adjust the #if for ga\_append().  
 Files: src/misc2.c

## Patch 6.1.052

Problem: Unix: The executable() function doesn't work when the "which"  
 command isn't available.  
 Solution: Go through \$PATH manually. Also makes it work for VMS.  
 Files: src/os\_unix.c

## Patch 6.1.053

Problem: When 'sessionoptions' contains "globals", or "localoptions" and an option value contains a line break, the resulting script is wrong.  
Solution: Use "\n" and "\r" for a line break. (Srinath Avadhanula)  
Files: src/eval.c

## Patch 6.1.054

Problem: GUI: A mouse click is not recognized at the more prompt, even when 'mouse' includes 'r'.  
Solution: Recognize a mouse click at the more prompt.  
Also accept a mouse click in the last line in the GUI.  
Add "ml" entry in 'moushape'.  
Files: src/gui.c, src/message.c, src/misc1.c, src/misc2.c, src/option.c, src/structs.h

## Patch 6.1.055

Problem: When editing a compressed file, Vim will inspect the contents to guess the filetype.  
Solution: Don't source scripts.vim for .Z, .gz, .bz2, .zip and .tgz files.  
Files: runtime/filetype.vim, runtime/plugin/gzip.vim

## Patch 6.1.056

Problem: Loading the Syntax menu can take quite a bit of time.  
Solution: Add the "skip\_syntax\_sel\_menu" variable. When it's defined the available syntax files are not in the Syntax menu.  
Files: runtime/doc/gui.txt, runtime/menu.vim

## Patch 6.1.057

Problem: An ESC inside a mapping doesn't work as documented when 'insertmode' is set, it does go from Visual or Normal mode to Insert mode. (Benji Fisher)  
Solution: Make it work as documented.  
Files: src/normal.c

## Patch 6.1.058

Problem: When there is a closed fold just above the first line in the window, using CTRL-X CTRL-Y in Insert mode will show only one line of the fold. (Alexey Marinichev)  
Solution: Correct the topline by putting it at the start of the fold.  
Files: src/move.c

## Patch 6.1.059

Problem: ":redir > ~/file" doesn't work. (Stephen Rasku)  
Solution: Expand environment variables in the ":redir >" argument.  
Files: src/ex\_docmd.c

## Patch 6.1.060

Problem: When 'virtualedit' is set and 'selection' is "exclusive", deleting a character just before a tab changes the tab into spaces. Undo doesn't restore the tab. (Helmut Stiegler)  
Solution: Don't replace the tab by spaces when it's not needed. Correctly save the line before it's changed.  
Files: src/ops.c

## Patch 6.1.061

Problem: When 'virtualedit' is set and 'selection' is "exclusive", a Visual selection that ends just after a tab doesn't include that tab in the highlighting. (Helmut Stiegler)  
Solution: Use a different way to exclude the character under the cursor.  
Files: src/screen.c

## Patch 6.1.062

Problem: The "man" filetype plugin doesn't work properly on Solaris 5.  
Solution: Use a different way to detect that "man -s" should be used. (Hugh Sasse)  
Files: runtime/ftplugin/man.vim

#### Patch 6.1.063

Problem: Java indenting doesn't work properly.  
Solution: Ignore comments when checking if the indent doesn't increase after a "}".  
Files: runtime/indent/java.vim

#### Patch 6.1.064

Problem: The URLs that the netrw plugin recognized for ftp and rcp did not conform to the standard method://[user@]host[:port]/path.  
Solution: Use ftp://[user@]host[:#]port/path, which supports both the new and the previous style. Also added a bit of dav/cadaver support. (Charles Campbell)  
Files: runtime/plugin/netrw.vim

#### Patch 6.1.065

Problem: VMS: The colorscheme, keymap and compiler menus are not filled in.  
Solution: Ignore case when looking for ".vim" files. (Coen Engelbarts)  
Files: runtime/menu.vim

#### Patch 6.1.066 (extra)

Problem: When calling system() in a plugin reading stdin hangs.  
Solution: Don't set the terminal to RAW mode when it wasn't in RAW mode before the system() call.  
Files: src/os\_amiga.c, src/os\_msdos.c, src/os\_riscos.c, src/os\_unix.c, src/os\_win16.c, src/os\_win32.c

#### Patch 6.1.067

Problem: ":set viminfo+=f0" is not working. (Benji Fisher)  
Solution: Check the "f" flag instead of "" in 'viminfo'.  
Files: src/mark.c

#### Patch 6.1.068

Problem: When a file is reloaded after it was changed outside of Vim, diff mode isn't updated. (Michael Naumann)  
Solution: Invalidate the diff info so that it's updated when needed.  
Files: src/fileio.c

#### Patch 6.1.069

Problem: When 'showmatch' is set and "\$" is in 'coptions', using "C}<Esc>" may forget to remove the "\$". (Preben Guldberg)  
Solution: Restore dollar\_vcol after displaying the matching cursor position.  
Files: src/search.c

#### Patch 6.1.070 (depends on 6.1.060)

Problem: Compiler warning for signed/unsigned mismatch. (Mike Williams)  
Solution: Add a typecast to int.  
Files: src/ops.c

#### Patch 6.1.071

Problem: When 'selection' is exclusive, g CTRL-G in Visual mode counts one character too much. (David Necas)  
Solution: Subtract one from the end position.  
Files: src/ops.c

#### Patch 6.1.072

Problem: When a file name in a tags file starts with http:// or something else for which there is a BufReadCmd autocommand, the file isn't

opened anyway.  
Solution: Check if there is a matching BufReadCmd autocommand and try to open the file.  
Files: src/fileio.c, src/proto/fileio.pro, src/tag.c

Patch 6.1.073 (extra)

Problem: BC5: Can't easily specify a tiny, small, normal, big or huge version.  
Solution: Allow selecting the version with the FEATURES variable. (Ajit Thakkar)  
Files: src/Make\_bc5.mak

Patch 6.1.074

Problem: When 'cdpath' includes "../..", changing to a directory in which we currently already are doesn't work. ff\_check\_visited() adds the directory both when using it as the root for searching and for the actual matches. (Stephen Rasku)  
Solution: Use a separate list for the already searched directories.  
Files: src/misc2.c

Patch 6.1.075 (depends on 6.1.072)

Problem: Can't compile fileio.c on MS-Windows.  
Solution: Add a declaration for the "p" pointer. (Madoka Machitani)  
Files: src/fileio.c

Patch 6.1.076 (extra)

Problem: Macintosh: explorer plugin doesn't work on Mac Classic. IME doesn't work. Dialog boxes don't work on Mac OS X  
Solution: Fix explorer plugin and key modifiers. (Axel Kielhorn)  
Fix IME support. (Muraoka Taro)  
Disable dialog boxes. (Benji Fisher)  
Files: src/edit.c, src/feature.h, src/gui\_mac.c, src/os\_mac.c

Patch 6.1.077

Problem: On a Debian system with ACL linking fails. (Lubomir Host)  
Solution: When the "acl" library is used, check if the "attr" library is present and use it.  
Files: src/auto/configure, src/configure.in, src/link.sh

Patch 6.1.078

Problem: When using 'foldmethod' "marker" and the end marker appears before the start marker in the file, no fold is found. (Nazri Ramliy)  
Solution: Don't let the fold depth go negative.  
Files: src/fold.c

Patch 6.1.079

Problem: When using "s" in Visual block mode with 'virtualedit' set, when the selected block is after the end of some lines the wrong text is inserted and some lines are skipped. (Servatius Brandt)  
Solution: Insert the right text and extend short lines.  
Files: src/ops.c

Patch 6.1.080

Problem: When using gcc with /usr/local already in the search path, adding it again causes problems.  
Solution: Adjust configure.in to avoid adding /usr/local/include and /usr/local/lib when using GCC and they are already used. (Johannes Zellner)  
Files: src/auto/configure, src/configure.in

Patch 6.1.081

Problem: ":help CTRL-\\_CTRL-N" doesn't work. (Christian J. Robinson)

Solution: Double the backslash to avoid the special meaning of "\\_".  
Files: src/ex\_cmds.c

Patch 6.1.082

Problem: On MS-Windows the vimrc\_example.vim script is sourced and then mswin.vim. This enables using select mode, but since "p" is mapped it doesn't replace the selection.

Solution: Remove the mapping of "p" from vimrc\_example.vim, it's obsolete. (Vlad Sandrini)

Files: runtime/vimrc\_example.vim

Patch 6.1.083

Problem: When \$LANG is "sk" or "sk\_sk", the Slovak menu file isn't found. (Martin Lacko)

Solution: Guess the right menu file based on the system.

Files: runtime/lang/menu\_sk\_sk.vim

Patch 6.1.084 (depends on 6.1.080)

Problem: "include" and "lib" are mixed up when checking the directories gcc already searches.

Solution: Swap the variable names. (SunHo Kim)

Files: src/auto/configure, src/configure.in

Patch 6.1.085

Problem: When using CTRL-O CTRL-\ CTRL-N from Insert mode, the displayed mode "(insert)" isn't removed. (Benji Fisher)

Solution: Clear the command line.

Files: src/normal.c

Patch 6.1.086 (depends on 6.1.049)

Problem: The guifg color for CursorIM doesn't take effect.

Solution: Use the foreground color when it's defined. (Muraoka Taro)

Files: src/gui.c

Patch 6.1.087

Problem: A thesaurus with Japanese characters has problems with characters in different word classes.

Solution: Only separate words with single-byte non-word characters. (Muraoka Taro)

Files: src/edit.c

Patch 6.1.088 (extra)

Problem: Win32: no debugging info is generated. Tags file excludes .cpp files.

Solution: Add "/map" to compiler flags. Add "\*.cpp" to ctags command. (Muraoka Taro)

Files: src/Make\_mvc.mak

Patch 6.1.089

Problem: On BSDI systems there is no ss\_sp field in stack\_t. (Robert Jan)

Solution: Use ss\_base instead.

Files: src/auto/configure, src/configure.in, src/config.h.in, src/os\_unix.c

Patch 6.1.090

Problem: CTRL-F gets stuck when 'scrolloff' is non-zero and there is a mix of long wrapping lines and a non-wrapping line.

Solution: Check that CTRL-F scrolls at least one line.

Files: src/move.c

Patch 6.1.091

Problem: GTK: Can't change preeditstate without setting 'imactivatekey'.

Solution: Add some code to change preeditstate for OnTheSpot. (Yasuhiro Matsumoto)  
Files: src/mbyte.c

Patch 6.1.092

Problem: ":mapclear <buffer>" doesn't work. (Srikanth Adayapalam)  
Solution: Allow an argument for ":mapclear".  
Files: src/ex\_cmds.h

Patch 6.1.093 (extra)

Problem: Mac and MS-Windows GUI: when scrolling while ":s" is working the results can be messed up, because the cursor is moved.  
Solution: Disallow direct scrolling when not waiting for a character.  
Files: src/gui\_mac.c, src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c

Patch 6.1.094

Problem: Cygwin: Passing a file name that has backslashes isn't handled very well.  
Solution: Convert file name arguments to Posix. (Chris Metcalf)  
Files: src/main.c

Patch 6.1.095

Problem: When using signs can free an item on the stack.  
Overruling sign colors doesn't work. (Srikanth Sankaran)  
Solution: Don't free the item on the stack. Use NULL instead of "none" for the value of the color.  
Files: src/gui\_x11.c

Patch 6.1.096

Problem: When erasing the right halve of a double-byte character, it may cause further characters to be erased. (Yasuhiro Matsumoto)  
Solution: Make sure only one character is erased.  
Files: src/screen.c

Patch 6.1.097 (depends on 6.1.090)

Problem: When 'scrolloff' is set to a huge value, CTRL-F at the end of the file scrolls one line. (Lubomir Host)  
Solution: Don't scroll when CTRL-F detects the end-of-file.  
Files: src/move.c

Patch 6.1.098

Problem: MS-Windows: When the xxd program is under "c:\program files" the "Convert to Hex" menu doesn't work. (Brian Mathis)  
Solution: Put the path to xxd in double quotes.  
Files: runtime/menu.vim

Patch 6.1.099

Problem: Memory corrupted when closing a fold with more than 99999 lines.  
Solution: Allocate more space for the fold text. (Walter Briscoe)  
Files: src/eval.c

Patch 6.1.100 (extra, depends on 6.1.088)

Problem: Win32: VC5 and earlier don't support the /mapinfo option.  
Solution: Add "/mapinfo" only when "MAP=lines" is specified. (Muraoka Taro)  
Files: src/Make\_mvc.mak

Patch 6.1.101

Problem: After using ":options" the tabstop of a new window is 15. Entry in ":options" window for 'autowriteall' is wrong. (Antoine J Mechelynck) Can't insert a space in an option value.  
Solution: Use ":setlocal" instead of ":set". Change "aw" to "awa". Don't map space in Insert mode.

Files: runtime/optwin.vim

Patch 6.1.102

Problem: Unprintable and multi-byte characters in a statusline item are not truncated correctly. (Yasuhiro Matsumoto)

Solution: Count the width of characters instead of the number of bytes.

Files: src/buffer.c

Patch 6.1.103

Problem: A function returning from a while loop, with 'verbose' set to 12 or higher, doesn't mention the return value. A function with the 'abort' attribute may return -1 while the verbose message says something else.

Solution: Move the verbose message about returning from a function to call\_func(). (Servatius Brandt)

Files: src/eval.c

Patch 6.1.104

Problem: GCC 3.1 appears to have an optimizer problem that makes test 3 crash.

Solution: For GCC 3.1 add -fno-strength-reduce to avoid the optimizer bug. Filter out extra info from "gcc --version".

Files: src/auto/configure, src/configure.in

Patch 6.1.105

Problem: Win32: The default for 'shellpipe' doesn't redirect stderr. (Dion Nicolaas)

Solution: Redirect stderr, depending on the shell (like for 'shellredir').

Files: src/option.c

Patch 6.1.106

Problem: The maze program crashes.

Solution: Change "11" to "27" and it works. (Greg Roelofs)

Files: runtime/macros/maze/mazeansi.c

Patch 6.1.107

Problem: When 'list' is set the current line in the error window may be displayed wrong. (Muraoka Taro)

Solution: Don't continue the line after the \$ has been displayed and the rightmost column is reached.

Files: src/screen.c

Patch 6.1.108

Problem: When interrupting a filter command such as "!!sleep 20" the file becomes read-only. (Mark Brader)

Solution: Only set the read-only flag when opening a buffer is interrupted. When the shell command was interrupted, read the output that was produced so far.

Files: src/ex\_cmds.c, src/fileio.c

Patch 6.1.109

Problem: When 'eadirection' is "hor", using CTRL-W = doesn't equalize the window heights. (Roman Neuhauser)

Solution: Ignore 'eadirection' for CTRL-W =

Files: src/window.c

Patch 6.1.110

Problem: When using ":badd file" when "file" is already present but not listed, it stays unlisted. (David Frey)

Solution: Set 'buflisted'.

Files: src/buffer.c



## Patch 6.1.111

Problem: It's not possible to detect using the Unix sources on Win32 or Mac.  
Solution: Add has("macunix") and has("win32unix").  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 6.1.112

Problem: When using ":argdo", ":bufdo" or ":windo", CTRL-O doesn't go to the cursor position from before this command but every position where the argument was executed.  
Solution: Only remember the cursor position from before the ":argdo", ":bufdo" and ":windo".  
Files: src/ex\_cmds2.c, src/mark.c

## Patch 6.1.113

Problem: ":bufdo bwipe" only wipes out half the buffers. (Roman Neuhauser)  
Solution: Decide what buffer to go to next before executing the command.  
Files: src/ex\_cmds2.c

## Patch 6.1.114

Problem: ":python import vim", ":python vim.current.buffer[0:0] = []" gives a lalloc(0) error. (Chris Southern)  
Solution: Don't allocate an array when it's size is zero.  
Files: src/if\_python.c

## Patch 6.1.115

Problem: "das" on the white space at the end of a paragraph does not delete the "." the sentence ends with.  
Solution: Don't exclude the last character when it is not white space.  
Files: src/search.c

## Patch 6.1.116

Problem: When 'endofline' is changed while 'binary' is set a file should be considered modified. (Olaf Buddenhagen)  
Solution: Remember the 'eol' value when editing started and consider the file changed when the current value is different and 'binary' is set. Also fix that the window title isn't updated when 'ff' or 'bin' changes.  
Files: src/option.c, src/structs.h

## Patch 6.1.117

Problem: Small problem with editing a file over ftp: and with Cygwin.  
Solution: Remove a dot from a ":normal" command. Use "cygdrive" where appropriate. (Charles Campbell)  
Files: runtime/plugin/netrw.vim

## Patch 6.1.118

Problem: When a file in diff mode is reloaded because it changed outside of Vim, other windows in diff mode are not always updated. (Michael Naumann)  
Solution: After reloading a file in diff mode mark all windows in diff mode for redraw.  
Files: src/diff.c

## Patch 6.1.119 (extra)

Problem: With the Sniff interface, using Sniff 4.0.X on HP-UX, there may be a crash when connecting to Sniff.  
Solution: Initialize sniff\_rq\_sep such that its value can be changed. (Martin Egloff)  
Files: src/if\_sniff.c

## Patch 6.1.120 (depends on 6.1.097)

Problem: When 'scrolloff' is non-zero and there are folds, CTRL-F at the

end of the file scrolls part of a closed fold. (Lubomir Host)  
Solution: Adjust the first line to the start of a fold.  
Files: src/move.c

Patch 6.1.121 (depends on 6.1.098)

Problem: When starting Select mode from Insert mode, then using the Paste menu entry, the cursor is left before the last pasted character. (Mario Schweigler)  
Solution: Set the cursor for Insert mode one character to the right.  
Files: runtime/menu.vim

Patch 6.1.122

Problem: ":file name" creates a new buffer to hold the old buffer name, which becomes the alternate file. This buffer is unexpectedly listed.  
Solution: Create the buffer for the alternate name unlisted.  
Files: src/ex\_cmds.c

Patch 6.1.123

Problem: A ":match" command with more than one argument doesn't report an error.  
Solution: Check for extra characters. (Servatius Brandt)  
Files: src/ex\_docmd.c

Patch 6.1.124

Problem: When trying to exit and there is a hidden buffer that had 'eol' off and 'bin' set exiting isn't possible. (John McGowan)  
Solution: Set b\_start\_eol when clearing the buffer.  
Files: src/buffer.c

Patch 6.1.125

Problem: Explorer plugin asks for saving a modified buffer even when it's open in another window as well.  
Solution: Count the number of windows using the buffer.  
Files: runtime/plugin/explorer.vim

Patch 6.1.126

Problem: Adding the choices in the syntax menu is consuming much of the startup time of the GUI while it's not often used.  
Solution: Only add the choices when the user wants to use them.  
Files: Makefile, runtime/makemenu.vim, runtime/menu.vim, runtime/synmenu.vim, src/Makefile

Patch 6.1.127

Problem: When using "--remote file" and the server has 'insertmode' set, commands are inserted instead of being executed. (Niklas Volbers)  
Solution: Go to Normal mode again after the ":drop" command.  
Files: src/main.c

Patch 6.1.128

Problem: The expression "input('very long prompt')" puts the cursor in the wrong line (column is OK).  
Solution: Add the wrapped lines to the indent. (Yasuhiro Matsumoto)  
Files: src/ex\_getln.c

Patch 6.1.129

Problem: On Solaris editing "file/" and then "file" results in using the same buffer. (Jim Battle)  
Solution: Before using stat(), check that there is no illegal trailing slash.  
Files: src/auto/configure, src/config.h.in, src/configure.in, src/macros.h src/misc2.c, src/proto/misc2.pro

## Patch 6.1.130

Problem: The documentation for some of the 'errorformat' items is unclear.

Solution: Add more examples and explain hard to understand items. (Stefan Roemer)

Files: runtime/doc/quickfix.txt

## Patch 6.1.131

Problem: X11 GUI: when expanding a CSI byte in the input stream to K\_CSI, the CSI byte itself isn't copied.

Solution: Copy the CSI byte.

Files: src/gui\_x11.c

## Patch 6.1.132

Problem: Executing a register in Ex mode may cause commands to be skipped. (John McGowan)

Solution: In Ex mode use an extra check if the register contents was consumed, to avoid input goes into the typeahead buffer.

Files: src/ex\_docmd.c

## Patch 6.1.133

Problem: When drawing double-wide characters in the statusline, may clear half of a character. (Yasuhiro Matsumoto)

Solution: Force redraw of the next character by setting the attributes instead of putting a NUL in ScreenLines[]. Do put a NUL in ScreenLines[] when overwriting half of a double-wide character.

Files: src/screen.c

## Patch 6.1.134

Problem: An error for a trailing argument of ":match" should not be given after ":if 0". (Servatius Brandt)

Solution: Only do the check when executing commands.

Files: src/ex\_docmd.c

## Patch 6.1.135

Problem: Passing a command to the shell that includes a newline always has a backslash before the newline.

Solution: Remove one backslash before the newline. (Servatius Brandt)

Files: src/ex\_docmd.c

## Patch 6.1.136

Problem: When \$TERM is "linux" the default for 'background' is "dark", even though the GUI uses a light background. (Hugh Allen)

Solution: Don't mark the option as set when defaulting to "dark" for the linux console. Also reset 'background' to "light" when the GUI has a light background.

Files: src/option.c

## Patch 6.1.137

Problem: Converting to HTML has a clumsy way of dealing with tabs which may change the highlighting.

Solution: Replace tabs with spaces after converting a line to HTML. (Preben Guldberg)

Files: runtime/syntax/2html.vim

## Patch 6.1.138 (depends on 6.1.126)

Problem: Adding extra items to the Syntax menu can't be done when the "Show individual choices" menu is used.

Solution: Use ":runtime!" instead of ":source", so that all synmenu.vim files in the runtime path are loaded. (Servatius Brandt)

Also fix that a translated menu can't be removed.

Files: runtime/menu.vim

## Patch 6.1.139

Problem: Cygwin: PATH\_MAX is not defined.  
Solution: Include limits.h. (Dan Sharp)  
Files: src/main.c

## Patch 6.1.140

Problem: Cygwin: ":args `ls \*.c`" does not work if the shell command produces CR NL line separators.  
Solution: Remove the CR characters ourselves. (Pavol Juhas)  
Files: src/os\_unix.c

## Patch 6.1.141

Problem: ":wincmd gx" may cause problems when mixed with other commands.  
":wincmd c" doesn't close the window immediately. (Benji Fisher)  
Solution: Pass the extra command character directly instead of using the stuff buffer and call ex\_close() directly.  
Files: src/ex\_docmd.c, src/normal.c, src/proto/normal.pro, src/proto/window.pro, src/window.c

## Patch 6.1.142

Problem: Defining paragraphs without a separating blank line isn't possible. Paragraphs can't be formatted automatically.  
Solution: Allow defining paragraphs with lines that end in white space. Added the 'w' and 'a' flags in 'formatoptions'.  
Files: runtime/doc/change.txt, src/edit.c, src/misc1.c, src/normal.c, src/option.h, src/ops.c, src/proto/edit.pro, src/proto/ops.pro, src/vim.h

## Patch 6.1.143 (depends on 6.1.142)

Problem: Auto formatting near the end of the file moves the cursor to a wrong position. In Insert mode some lines are made one char too narrow. When deleting a line undo might not always work properly.  
Solution: Don't always move to the end of the line in the last line. Don't position the cursor past the end of the line in Insert mode. After deleting a line save the cursor line for undo.  
Files: src/edit.c, src/ops.c, src/normal.c

## Patch 6.1.144

Problem: Obtaining the size of a line in screen characters can be wrong. A pointer may wrap around zero.  
Solution: In win\_linetabsz() check for a MAXCOL length argument. (Jim Dunleavy)  
Files: src/charset.c

## Patch 6.1.145

Problem: GTK: Drag&drop with more than 3 files may cause a crash. (Mickael Marchand)  
Solution: Rewrite the code that parses the received list of files to be more robust.  
Files: src/charset.c, src/gui\_gtk\_x11.c

## Patch 6.1.146

Problem: MS-Windows: When \$HOME is constructed from \$HOMEDRIVE and \$HOMEPATH, it is not used for storing the \_viminfo file. (Normal Diamond)  
Solution: Set \$HOME with the value obtained from \$HOMEDRIVE and \$HOMEPATH.  
Files: src/misc1.c

## Patch 6.1.147 (extra)

Problem: MS-Windows: When a dialog has no default button, pressing Enter ends it anyway and all buttons are selected.

Solution: Don't end a dialog when there is no default button. Don't select all button when there is no default. (Vince Negri)

Files: src/gui\_w32.c

Patch 6.1.148 (extra)

Problem: MS-Windows: ACL is not properly supported.

Solution: Add an access() replacement that also works for ACL. (Mike Williams)

Files: runtime/doc/editing.txt, src/os\_win32.c

Patch 6.1.149 (extra)

Problem: MS-Windows: Can't use diff mode from the file explorer.

Solution: Add a "diff with Vim" context menu entry. (Dan Sharp)

Files: GvimExt/gvimext.cpp, GvimExt/gvimext.h

Patch 6.1.150

Problem: OS/2, MS-Windows and MS-DOS: When 'shellslash' is set getcwd() still uses backslash. (Yegappan Lakshmanan)

Solution: Adjust slashes in getcwd().

Files: src/eval.c

Patch 6.1.151 (extra)

Problem: Win32: The NTFS substream isn't copied.

Solution: Copy the substream when making a backup copy. (Muraoka Taro)

Files: src/fileio.c, src/os\_win32.c, src/proto/os\_win32.pro

Patch 6.1.152

Problem: When \$LANG is iso8859-1 translated menus are not used.

Solution: Change iso8859 to iso\_8859.

Files: runtime/menu.vim

Patch 6.1.153

Problem: Searching in included files may search recursively when the path starts with "../". (Sven Berkvens-Matthijsse)

Solution: Compare full file names, use inode/device when possible.

Files: src/search.c

Patch 6.1.154 (extra)

Problem: DJGPP: "vim -h" leaves the cursor in a wrong position.

Solution: Don't position the cursor using uninitialized variables. (Jim Dunleavy)

Files: src/os\_msdos.c

Patch 6.1.155

Problem: Win32: Cursor may sometimes disappear in Insert mode.

Solution: Change "hor10" in 'guicursor' to "hor15". (Walter Briscoe)

Files: src/option.c

Patch 6.1.156

Problem: Conversion between DBCS and UCS-2 isn't implemented cleanly.

Solution: Clean up a few things.

Files: src/mbyte.c, src/structs.h

Patch 6.1.157

Problem: 'hlsearch' highlights only the second comma in ".,,.,," with "/,\@<=[^,]\*". (Preben Guldberg)

Solution: Also check for an empty match to start just after a previous match.

Files: src/screen.c

Patch 6.1.158

Problem: "zs" and "ze" don't work correctly with ":set nowrap siso=1".

(Preben Guldberg)  
Solution: Take 'siso' into account when computing the horizontal scroll position for "zs" and "ze".  
Files: src/normal.c

#### Patch 6.1.159

Problem: When expanding an abbreviation that includes a multi-byte character too many characters are deleted. (Andrey Urazov)  
Solution: Delete the abbreviation counting characters instead of bytes.  
Files: src/getchar.c

#### Patch 6.1.160

Problem: ":%read file.gz" doesn't work. (Preben Guldberg)  
Solution: Don't use the '[' mark after it has become invalid.  
Files: runtime/plugin/gzip.vim

#### Patch 6.1.161 (depends on 6.1.158)

Problem: Warning for signed/unsigned compare. Can set 'siso' to a negative value. (Mike Williams)  
Solution: Add a typecast. Add a check for 'siso' being negative.  
Files: src/normal.c, src/option.c

#### Patch 6.1.162

Problem: Python interface: Didn't initialize threads properly.  
Solution: Call PyEval\_InitThreads() when starting up.  
Files: src/if\_python.c

#### Patch 6.1.163

Problem: Win32: Can't compile with Python after 6.1.162.  
Solution: Dynamically load PyEval\_InitThreads(). (Dan Sharp)  
Files: src/if\_python.c

#### Patch 6.1.164

Problem: If 'modifiable' is off, converting to xxd fails and 'filetype' is changed to "xxd" anyway.  
Solution: Don't change 'filetype' when conversion failed.  
Files: runtime/menu.vim

#### Patch 6.1.165

Problem: Making changes in several lines and then a change in one of these lines that splits it in two or more lines, undo information was corrupted. May cause a crash. (Dave Fishburn)  
Solution: When skipping to save a line for undo because it was already saved, move it to become the last saved line, so that when the command changes the line count other saved lines are not involved.  
Files: src/undo.c

#### Patch 6.1.166

Problem: When 'autoindent' is set and mswin.vim has been sourced, pasting with CTRL-V just after auto-indenting removes the indent. (Shlomi Fish)  
Solution: First insert an "x" and delete it again, so that the auto-indent remains.  
Files: runtime/mswin.vim

#### Patch 6.1.167

Problem: When giving a negative argument to ":retab" strange things start happening. (Hans Ginzel)  
Solution: Check for a negative value.  
Files: src/ex\_cmds.c

#### Patch 6.1.168

Problem: Pressing CTRL-C at the hit-enter prompt doesn't end the prompt.  
Solution: Make CTRL-C stop the hit-enter prompt.  
Files: src/message.c

#### Patch 6.1.169

Problem: bufexists() finds a buffer by using the name of a symbolic link to it, but bufnr() doesn't. (Yegappan Lakshmanan)  
Solution: When bufnr() can't find a buffer, try using the same method as bufexists().  
Files: src/eval.c

#### Patch 6.1.170

Problem: Using ":mksession" uses the default session file name, but "vim -S" doesn't. (Hans Ginzel)  
Solution: Use the default session file name if "-S" is the last command line argument or another option follows.  
Files: runtime/doc/starting.txt, src/main.c

#### Patch 6.1.171

Problem: When opening a line just above a closed fold with "O" and the comment leader is automatically inserted, the cursor is displayed in the first column. (Sung-Hyun Nam)  
Solution: Update the flag that indicates the cursor is in a closed fold.  
Files: src/miscl.c

#### Patch 6.1.172

Problem: Command line completion of ":tag /pat" does not show the same results as the tags the command actually finds. (Gilles Roy)  
Solution: Don't modify the pattern to make it a regexp.  
Files: src/ex\_getln.c, src/tag.c

#### Patch 6.1.173

Problem: When using remote control to edit a position in a file and this file is the current buffer and it's modified, the window is split and the ":drop" command fails.  
Solution: Don't split the window, keep editing the same buffer. Use the ":drop" command in VisVim to avoid the problem there.  
Files: src/ex\_cmds.c, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, VisVim/Commands.cpp

#### Patch 6.1.174

Problem: It is difficult to know in a script whether an option not only exists but really works.  
Solution: Add "exists('+option')".  
Files: runtime/doc/eval.txt, src/eval.c

#### Patch 6.1.175

Problem: When reading commands from a pipe and a CTRL-C is pressed, Vim will hang. (Piet Delpoort)  
Solution: Don't keep reading characters to clear typeahead when an interrupt was detected, stop when a single CTRL-C is read.  
Files: src/getchar.c, src/ui.c

#### Patch 6.1.176

Problem: When the stack limit is very big a false out-of-stack error may be detected.  
Solution: Add a check for overflow of the stack limit computation. (Jim Dunleavy)  
Files: src/os\_unix.c

#### Patch 6.1.177 (depends on 6.1.141)

Problem: ":wincmd" does not allow a following command. (Gary Johnson)

Solution: Check for a following " | cmd". Also give an error for trailing characters.

Files: src/ex\_docmd.c

#### Patch 6.1.178

Problem: When 'expandtab' is set "r<C-V><Tab>" still expands the Tab. (Bruce deVisser)

Solution: Replace with a literal Tab.

Files: src/normal.c

#### Patch 6.1.179 (depends on 6.1.091)

Problem: When using X11R5 XIMPreserveState is undefined. (Albert Chin)

Solution: Include the missing definitions.

Files: src/mbyte.c

#### Patch 6.1.180

Problem: Use of the GUI code for forking is inconsistent.

Solution: Define MAY\_FORK and use it for later #ifdefs. (Ben Fowlwer)

Files: src/gui.c

#### Patch 6.1.181

Problem: If the terminal doesn't wrap from the last char in a line to the next line, the last column is blanked out. (Peter Karp)

Solution: Don't output a space to mark the wrap, but the same character again.

Files: src/screen.c

#### Patch 6.1.182 (depends on 6.1.142)

Problem: It is not possible to auto-format comments only. (Moshe Kaminsky)

Solution: When the 'a' and 'c' flags are in 'formatoptions' only auto-format comments.

Files: runtime/doc/change.txt, src/edit.c

#### Patch 6.1.183

Problem: When 'fencs' is empty and 'enc' is utf-8, reading a file with illegal bytes gives "CONVERSION ERROR" even though no conversion is done. 'readonly' is set, even though writing the file results in an unmodified file.

Solution: For this specific error use "ILLEGAL BYTE" and don't set 'readonly'.

Files: src/fileio.c

#### Patch 6.1.184 (extra)

Problem: The extra mouse buttons found on some mice don't work.

Solution: Support two extra buttons for MS-Windows. (Michael Geddes)

Files: runtime/doc/term.txt, src/edit.c, src/ex\_getln.c, src/gui.c, src/gui\_w32.c, src/gui\_w48.c, src/keymap.h, src/message.c, src/miscl.c, src/misc2.c, src/normal.c, src/vim.h

#### Patch 6.1.185 (depends on 6.1.182)

Problem: Can't compile without +comments feature.

Solution: Add #ifdef FEAT\_COMMENTS. (Christian J. Robinson)

Files: src/edit.c

#### Patch 6.1.186 (depends on 6.1.177)

Problem: ":wincmd" does not allow a following comment. (Aric Blumer)

Solution: Check for a following double quote.

Files: src/ex\_docmd.c

#### Patch 6.1.187

Problem: Using ":doarg" with 'hidden' set and the current file is the only argument and was modified gives an error message. (Preben



Guldborg)  
Solution: Don't try re-editing the same file.  
Files: src/ex\_cmds2.c

Patch 6.1.188 (depends on 6.1.173)  
Problem: Unused variable in the small version.  
Solution: Move the declaration for "p" inside #ifdef FEAT\_LISTCMD5.  
Files: src/ex\_cmds2.c

Patch 6.1.189  
Problem: inputdialog() doesn't work when 'c' is in 'guioptions'. (Aric Blumer)  
Solution: Fall back to the input() function in this situation.  
Files: src/eval.c

Patch 6.1.190 (extra)  
Problem: VMS: doesn't build with GTK GUI. Various other problems.  
Solution: Fix building for GTK. Improved Perl, Python and TCL support.  
Improved VMS documentation. (Zoltan Arpadffy)  
Added Vimtutor for VMS (T. R. Wyant)  
Files: runtime/doc/os\_vms.txt, src/INSTALLvms.txt, src/gui\_gtk\_f.h,  
src/if\_tcl.c, src/main.c, src/gui\_gtk\_vms.h, src/Make\_vms.mms,  
src/os\_vms.opt, src/proto/if\_tcl.pro, vimtutor.com,  
src/testdir/Make\_vms.mms

Patch 6.1.191  
Problem: When using "vim -s script" and redirecting the output, the delay for the "Output is not to a terminal" warning slows Vim down too much.  
Solution: Don't delay when reading commands from a script.  
Files: src/main.c

Patch 6.1.192  
Problem: ":diffsplit" doesn't add "hor" to 'scrollopt'. (Gary Johnson)  
Solution: Add "hor" to 'scrollopt' each time ":diffsplit" is used.  
Files: src/diff.c, src/main.c

Patch 6.1.193  
Problem: Crash in in\_id\_list() for an item with a "containedin" list. (Dave Fishburn)  
Solution: Check for a negative syntax id, used for keywords.  
Files: src/syntax.c

Patch 6.1.194  
Problem: When "t\_ti" is set but it doesn't cause swapping terminal pages, "ZZ" may cause the shell prompt to appear on top of the file-write message.  
Solution: Scroll the text up in the Vim page before swapping to the terminal page. (Michael Schroeder)  
Files: src/os\_unix.c

Patch 6.1.195  
Problem: The quickfix and preview windows always keep their height, while other windows can't fix their height.  
Solution: Add the 'winfixheight' option, so that a fixed height can be specified for any window. Also fix that the wildmenu may resize a one-line window to a two-line window if 'ls' is zero.  
Files: runtime/doc/options.txt, runtime/optwin.vim, src/ex\_cmds.c,  
src/ex\_getln.c, src/globals.h, src/option.c, src/quickfix.c,  
src/screen.c, src/structs.h, src/window.c

Patch 6.1.196 (depends on 6.1.084)

Problem: On Mac OS X 10.2 generating osdef.h fails.  
Solution: Add -no-cpp-precomp to avoid using precompiled header files, which disables printing the search path. (Ben Fowler)  
Files: src/auto/configure, src/configure.in

#### Patch 6.1.197

Problem: ":help <C-V><C-\><C-V><C-N>" (resulting in <lc><0e>) gives an error message. (Servatius Brandt)  
Solution: Double the backslash in "CTRL-\".  
Files: src/ex\_cmds.c

#### Patch 6.1.198 (extra) (depends on 6.1.076)

Problem: Mac OS X: Dialogues don't work.  
Solution: Fix a crashing problem for some GUI dialogues. Fix a problem when saving to a new file from the GUI. (Peter Cucka)  
Files: src/feature.h, src/gui\_mac.c

#### Patch 6.1.199

Problem: 'guifontwide' doesn't work on Win32.  
Solution: Output each wide character separately. (Michael Geddes)  
Files: src/gui.c

#### Patch 6.1.200

Problem: ":syn sync fromstart" is not skipped after ":if 0". This can make syntax highlighting very slow.  
Solution: Check "eap->skip" appropriately. (Rob West)  
Files: src/syntax.c

#### Patch 6.1.201 (depends on 6.1.192)

Problem: Warning for illegal pointer combination. (Zoltan Arpadffy)  
Solution: Add a typecast.  
Files: src/diff.c

#### Patch 6.1.202 (extra)(depends on 6.1.148)

Problem: Win32: filewritable() doesn't work properly on directories.  
Solution: fix filewritable(). (Mike Williams)  
Files: src/os\_win32.c

#### Patch 6.1.203

Problem: ":%s/~//" causes a crash after ":%s/x//". (Gary Holloway)  
Solution: Avoid reading past the end of a line when "~" is empty.  
Files: src/regexp.c

#### Patch 6.1.204 (depends on 6.1.129)

Problem: Warning for an illegal pointer on Solaris.  
Solution: Add a typecast. (Derek Wyatt)  
Files: src/misc2.c

#### Patch 6.1.205

Problem: The gzip plugin changes the alternate file when editing a compressed file. (Oliver Fuchs)  
Solution: Temporarily remove the 'a' and 'A' flags from 'cpo'.  
Files: runtime/plugin/gzip.vim

#### Patch 6.1.206

Problem: The script generated with ":mksession" doesn't work properly when some commands are mapped.  
Solution: Use ":normal!" instead of ":normal". And use ":wincmd" where possible. (Muraoka Taro)  
Files: src/ex\_docmd.c, src/fold.c

#### Patch 6.1.207

Problem: Indenting a Java file hangs below a line with a comment after a command.

Solution: Break out of a loop. (Andre Pang)  
Also line up } with matching {.

Files: runtime/indent/java.vim

#### Patch 6.1.208

Problem: Can't use the buffer number from the Python interface.

Solution: Add buffer.number. (Michal Vitecek)

Files: src/if\_python.c

#### Patch 6.1.209

Problem: Printing doesn't work on Mac OS classic.

Solution: Use a ":" for path separator when opening the resource file. (Axel Kielhorn)

Files: src/ex\_cmds2.c

#### Patch 6.1.210

Problem: When there is an iconv() conversion error when reading a file there can be an error the next time iconv() is used.

Solution: Reset the state of the iconv() descriptor. (Yasuhiro Matsumoto)

Files: src/fileio.c

#### Patch 6.1.211

Problem: The message "use ! to override" is confusing.

Solution: Make it "add ! to override".

Files: src/buffer.c, src/eval.c, src/ex\_docmd.c, src/fileio.c,  
src/globals.h

#### Patch 6.1.212

Problem: When Vim was started with "-R" ":new" creates a buffer 'noreadonly' while ":enew" has 'readonly' set. (Preben Guldberg)

Solution: Don't set 'readonly' in a new empty buffer for ":enew".

Files: src/ex\_docmd.c

#### Patch 6.1.213

Problem: Using CTRL-W H may cause a big gap to appear below the last window. (Aric Blumer)

Solution: Don't set the window height when there is a vertical split. (Yasuhiro Matsumoto)

Files: src/window.c

#### Patch 6.1.214

Problem: When installing Vim and the runtime files were checked out from CVS the CVS directories will also be installed.

Solution: Avoid installing the CVS dirs and their contents.

Files: src/Makefile

#### Patch 6.1.215

Problem: Win32: ":pwd" uses backslashes even when 'shellslash' is set. (Xiangjiang Ma)

Solution: Adjust backslashes before printing the message.

Files: src/ex\_docmd.c

#### Patch 6.1.216

Problem: When dynamically loading the iconv library, the error codes may be confused.

Solution: Use specific error codes for iconv and redefine them for dynamic loading. (Yasuhiro Matsumoto)

Files: src/fileio.c, src/mbyte.c, src/vim.h

#### Patch 6.1.217

Problem: When sourcing the same Vim script using a different name (symbolic link or MS-Windows 8.3 name) it is listed twice with ":scriptnames". (Tony Mechelynck)  
Solution: Turn the script name into a full path before using it. On Unix compare inode/device numbers.  
Files: src/ex\_cmds2.c

#### Patch 6.1.218

Problem: No error message for using the function argument "5+". (Servatius Brandt)  
Solution: Give an error message if a function or variable is expected but is not found.  
Files: src/eval.c

#### Patch 6.1.219

Problem: When using ":amenu :b l<CR>" with a Visual selection and 'insertmode' is set, Vim does not return to Insert mode. (Mickael Marchand)  
Solution: Add the command CTRL-\ CTRL-G that goes to Insert mode if 'insertmode' is set and to Normal mode otherwise. Append this to menus defined with ":amenu".  
Files: src/edit.c, src/ex\_getln.c, src/normal.c

#### Patch 6.1.220

Problem: When using a BufReadPost autocommand that changes the line count, e.g., "\$-ljoin", reloading a file that was changed outside Vim does not work properly. (Alan G Isaac)  
Solution: Make the buffer empty before reading the new version of the file. Save the lines in a dummy buffer, so that they can be put back when reading the file fails.  
Files: src/buffer.c, src/ex\_cmds.c, src/fileio.c, src/globals.h, src/proto/buffer.pro

#### Patch 6.1.221

Problem: Changing case may not work properly, depending on the current locale.  
Solution: Add the 'casemap' option to let the user chose how changing case is to be done.  
Also fix lowering case when an UTF-8 character doesn't keep the same byte length.  
Files: runtime/doc/options.txt, src/ascii.h, src/auto/configure, src/buffer.c, src/charset.c, src/config.h.in, src/configure.in, src/diff.c, src/edit.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/gui\_amiga.c, src/gui\_mac.c, src/gui\_photon.c, src/gui\_w48.c, src/gui\_beos.cc, src/macros.h, src/main.c, src/mbyte.c, src/menu.c, src/message.c, src/misc1.c, src/misc2.c, src/option.c, src/os\_msdos.c, src/os\_mswin.c, src/proto/charset.pro, src/regexp.c, src/option.h, src/syntax.c

#### Patch 6.1.222 (depends on 6.1.219)

Problem: Patch 6.1.219 was incomplete.  
Solution: Add the changes for ":amenu".  
Files: src/menu.c

#### Patch 6.1.223 (extra)

Problem: Win32: When IME is activated 'iminsert' is set, but it might never be reset when IME is disabled. (Muraoka Taro)  
All systems: 'iminsert' is set to 2 when leaving Insert mode, even when langmap is being used. (Peter Valach)  
Solution: Don't set "b\_p\_iminsert" in \_OnImeNotify(). (Muraoka Taro)  
Don't store the status of the input method in 'iminsert' when

'iminsert' is one. Also for editing the command line and for arguments to Normal mode commands.

Files: src/edit.c, src/ex\_getln.c, src/gui\_w32.c, src/normal.c

#### Patch 6.1.224

Problem: "expand('\$VAR')" returns an empty string when the expanded \$VAR is not an existing file. (Aric Blumer)

Solution: Included non-existing files, as documented.

Files: src/eval.c

#### Patch 6.1.225

Problem: Using <C-O><C-^> in Insert mode has a delay when starting "vim -u NONE" and ":set nocp hidden". (Emmanuel) do\_ecmd() uses fileinfo(), the redraw is done after a delay to give the user time to read the message.

Solution: Put the message from fileio() in "keep\_msg", so that the redraw is done before the delay (still needed to avoid the mode message overwrites the fileinfo() message).

Files: src/buffer.c

#### Patch 6.1.226

Problem: Using ":debug" with a ":normal" command may cause a hang. (Colin Keith)

Solution: Save the typeahead buffer when obtaining a debug command.

Files: src/ex\_cmds2.c, src/getchar.c, src/proto/getchar.pro

#### Patch 6.1.227

Problem: It is possible to use a variable name "asdf:asdf" and ":let j:asdf = 5" does not give an error message. (Mikolaj Machowski)

Solution: Check for a ":" inside the variable name.

Files: src/eval.c

#### Patch 6.1.228 (extra)

Problem: Win32: The special output function for Hangul is used too often, causing special handling for other situations to be skipped. bInComposition is always FALSE, causing ImeGetTempComposition() always to return NULL.

Solution: Remove HanExtTextOut(). Delete the dead code around bInComposition and ImeGetTempComposition().

Files: src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c

#### Patch 6.1.229

Problem: Win32: Conversion to/from often used codepages requires the iconv library, which is not always available.

Solution: Use standard MS-Windows functions for the conversion when possible. (mostly by Glenn Maynard)  
Also fixes missing declaration for patch 6.1.220.

Files: src/fileio.c

#### Patch 6.1.230 (extra)

Problem: Win16: building doesn't work.

Solution: Exclude the XBUTTON handling. (Vince Negri)

Files: src/gui\_w48.c

#### Patch 6.1.231

Problem: Double clicking with the mouse to select a word does not work for multi-byte characters.

Solution: Use vim\_iswordc() instead of vim\_isIDc(). This means 'iskeyword' is used instead of 'isident'. Also fix that mixing ASCII with multi-byte word characters doesn't work, the mouse class for punctuation and word characters was mixed up.

Files: src/normal.c

Patch 6.1.232 (depends on 6.1.226)

Problem: Using `ex_normal_busy` while it might not be available. (Axel Kielhorn)

Solution: Only use `ex_normal_busy` when `FEAT_EX_EXTRA` is defined.

Files: `src/ex_cmds2.c`

Patch 6.1.233

Problem: `":help expr-||"` does not work.

Solution: Don't use the `'|'` as a command separator

Files: `src/ex_cmds.c`

Patch 6.1.234 (depends on 6.1.217)

Problem: Get a warning for using a negative value for `st_dev`.

Solution: Don't assign a negative value to `st_dev`.

Files: `src/ex_cmds2.c`

Patch 6.1.235 (depends on 6.1.223)

Problem: `'iminsert'` is changed from 1 to 2 when leaving Insert mode. (Peter Valach)

Solution: Check `"State"` before resetting it to `NORMAL`.

Files: `src/edit.c`

Patch 6.1.236

Problem: Memory leaks when appending lines for `":diffget"` or `":diffput"` and when reloading a changed buffer.

Solution: Free a line after calling `ml_append()`.

Files: `src/diff.c`, `src/fileio.c`

Patch 6.1.237

Problem: Putting in Visual block mode does not work correctly when `"$"` was used or when the first line is short. (Christian Michon)

Solution: First delete the selected text and then put the new text. Save and restore registers as necessary.

Files: `src/globals.h`, `src/normal.c`, `src/ops.c`, `src/proto/ops.pro`, `src/vim.h`

Patch 6.1.238 (extra)

Problem: Win32: The `"icon="` argument for the `":menu"` command does not search for the bitmap file.

Solution: Expand environment variables and search for the bitmap file. (Vince Negri)

Make it consistent, use the same mechanism for X11 and GTK.

Files: `src/gui.c`, `src/gui_gtk.c`, `src/gui_w32.c`, `src/gui_x11.c`, `src/proto/gui.pro`

Patch 6.1.239

Problem: Giving an error for missing `:endif` or `:endwhile` when being interrupted.

Solution: Don't give these messages when interrupted.

Files: `src/ex_docmd.c`, `src/os_unix.c`

Patch 6.1.240 (extra)

Problem: Win32 with BCC 5: CPU may be defined in the environment, which causes a wrong argument for the compiler. (Walter Briscoe)

Solution: Use `CPUNR` instead of `CPU`.

Files: `src/Make_bc5.mak`

Patch 6.1.241

Problem: Something goes wrong when drawing or undrawing the cursor.

Solution: Remember when the cursor invalid in a better way.

Files: `src/gui.c`

## Patch 6.1.242

Problem: When pasting a large number of lines on the command line it is not possible to interrupt. (Jean Jordaan)  
Solution: Check for an interrupt after each pasted line.  
Files: src/ops.c

## Patch 6.1.243 (extra)

Problem: Win32: When the OLE version is started and wasn't registered, a message pops up to suggest registering, even when this isn't possible (when the registry is not writable).  
Solution: Check if registering is possible before asking whether it should be done. (Walter Briscoe)  
Also avoid restarting Vim after registering.  
Files: src/if\_ole.cpp

## Patch 6.1.244

Problem: Patch 6.1.237 was missing the diff for vim.h. (Igor Goldenberg)  
Solution: Include it here.  
Files: src/vim.h

## Patch 6.1.245

Problem: Comparing with ignored case does not work properly for Unicode with a locale where case folding an ASCII character results in a multi-byte character. (Glenn Maynard)  
Solution: Handle ignore-case compare for Unicode differently.  
Files: src/mbyte.c

## Patch 6.1.246

Problem: ":blast" goes to the first buffer if the last one is unlisted. (Andrew Stryker)  
Solution: From the last buffer search backwards for the first listed buffer instead of forwards.  
Files: src/ex\_docmd.c

## Patch 6.1.247

Problem: ACL support doesn't always work properly.  
Solution: Add a configure argument to disable ACL "--disable-acl". (Thierry Vignaud)  
Files: src/auto/configure, src/configure.in

## Patch 6.1.248

Problem: Typing 'q' at the more-prompt for ":let" does not quit the listing. (Hari Krishna Dara)  
Solution: Quit the listing when got\_int is set.  
Files: src/eval.c

## Patch 6.1.249

Problem: Can't expand a path on the command line if it includes a "|" as a trail byte of a multi-byte character.  
Solution: Check for multi-byte characters. (Yasuhiro Matsumoto)  
Files: src/ex\_docmd.c

## Patch 6.1.250

Problem: When changing the value of 'lines' inside the expression set with 'diffexpr' Vim might crash. (Dave Fishburn)  
Solution: Don't allow changing the screen size while updating the screen.  
Files: src/globals.h, src/option.c, src/screen.c

## Patch 6.1.251

Problem: Can't use completion for ":lcd" and ":lchdir" like ":cd".  
Solution: Expand directory names for these commands. (Servatius Brandt)

Files: src/ex\_docmd.c

Patch 6.1.252

Problem: "vi}" does not include a line break when the "}" is at the start of a following line. (Kamil Burzynski)

Solution: Include the line break.

Files: src/search.c

Patch 6.1.253 (extra)

Problem: Win32 with Cygwin: Changes the path of arguments in a wrong way. (Xiangjiang Ma)

Solution: Don't use cygwin\_conv\_to\_posix\_path() for the Win32 version.

Update the Cygwin makefile to support more features. (Dan Sharp)

Files: src/Make\_cyg.mak, src/if\_ole.cpp, src/main.c

Patch 6.1.254

Problem: exists("foo{bar}") does not work. ':unlet v{"a"}r' does not work. ':let v{a}r1 v{a}r2' does not work. ":func F{(1)}" does not work. ":delfunc F{" does not give an error message. ':delfunc F{"F"}' does not work.

Solution: Support magic braces for the exists() argument. (Vince Negri)  
Check for trailing comments explicitly for ":unlet". Add support for magic braces in further arguments of ":let". Look for a parenthesis only after the function name. (Servatius Brandt)  
Also expand magic braces for "exists('\*expr')". Give an error message for an invalid ":delfunc" argument. Allow quotes in the ":delfunc" argument.

Files: src/eval.c, src/ex\_cmds.h, src/ex\_docmd.c

Patch 6.1.255 (depends on 6.1.254)

Problem: Crash when loading menu.vim a second time. (Christian Robinson)  
":unlet garbage foo" tries unletting "foo" after an error message. (Servatius Brandt)

Very long function arguments cause very long messages when 'verbose' is 14 or higher.

Solution: Avoid reading from uninitialized memory.  
Break out of a loop after an invalid argument for ":unlet".  
Truncate long function arguments to 80 characters.

Files: src/eval.c

Patch 6.1.256 (depends on 6.1.255)

Problem: Defining a function after ":if 0" could still cause an error message for an existing function.

Leaking memory when there are trailing characters for ":delfunc".

Solution: Check the "skip" flag. Free the memory. (Servatius Brandt)

Files: src/eval.c

Patch 6.1.257

Problem: ":cwindow" always sets the previous window to the last but one window. (Benji Fisher)

Solution: Set the previous window properly.

Files: src/globals.c, src/quickfix.c, src/window.c

Patch 6.1.258

Problem: Buffers menu doesn't work properly for multibyte buffer names.

Solution: Use a pattern to get the left and right part of the name. (Yasuhiro Matsumoto)

Files: runtime/menu.vim

Patch 6.1.259 (extra)

Problem: Mac: with 'patchmode' is used filenames are truncated.

Solution: Increase the BASENAMELEN for Mac OS X. (Ed Ralston)



Files: src/os\_mac.h

Patch 6.1.260 (depends on 6.1.104)

Problem: GCC 3.2 still seems to have an optimizer problem. (Zvi Har'El)

Solution: Use the same configure check as used for GCC 3.1.

Files: src/auto/configure, src/configure.in

Patch 6.1.261

Problem: When deleting a line in a buffer which is not the current buffer, using the Perl interface Delete(), the cursor in the current window may move. (Chris Houser)

Solution: Don't adjust the cursor position when changing another buffer.

Files: src/if\_perl.xs

Patch 6.1.262

Problem: When jumping over folds with "z[", "zj" and "zk" the previous position is not remembered. (Hari Krishna Dara)

Solution: Set the previous context mark before jumping.

Files: src/fold.c

Patch 6.1.263

Problem: When typing a multi-byte character that triggers an abbreviation it is not inserted properly.

Solution: Handle adding the typed multi-byte character. (Yasuhiro Matsumoto)

Files: src/getchar.c

Patch 6.1.264 (depends on patch 6.1.254)

Problem: exists() does not work for built-in functions. (Steve Wall)

Solution: Don't check for the function name to start with a capital.

Files: src/eval.c

Patch 6.1.265

Problem: libcall() can be used in 'foldexpr' to call any system function. rename(), delete() and remote\_send() can also be used in 'foldexpr'. These are security problems. (Georgi Guninski)

Solution: Don't allow using libcall(), rename(), delete(), remote\_send() and similar functions in the sandbox.

Files: src/eval.c

Patch 6.1.266 (depends on 6.1.265)

Problem: Win32: compile error in eval.c. (Bill McCarthy)

Solution: Move a variable declaration.

Files: src/eval.c

Patch 6.1.267

Problem: Using "p" to paste into a Visual selected area may cause a crash.

Solution: Allocate enough memory for saving the register contents. (Muraoka Taro)

Files: src/ops.c

Patch 6.1.268

Problem: When triggering an abbreviation with a multi-byte character, this character is not correctly inserted after expanding the abbreviation. (Taro Muraoka)

Solution: Add ABBR\_OFF to all characters above 0xff.

Files: src/edit.c, src/ex\_getln.c, src/getchar.c

Patch 6.1.269

Problem: After using input() text written with ":redir" gets extra indent. (David Fishburn)

Solution: Restore msg\_col after using input().

Files: src/ex\_getln.c

Patch 6.1.270 (depends on 6.1.260)

Problem: GCC 3.2.1 still seems to have an optimizer problem.

Solution: Use the same configure check as used for GCC 3.1.

Files: src/auto/configure, src/configure.in

Patch 6.1.271

Problem: When compiling without the +syntax feature there are errors.

Solution: Don't use some code for syntax highlighting. (Roger Cornelius)

Make test 45 work without syntax highlighting.

Also fix an error in a pattern matching: "%(" was not supported.

Files: src/ex\_cmds2.c, src/regexp.c, src/testdir/test45.in

Patch 6.1.272

Problem: After using ":set define<" a crash may happen. (Christian Robinson)

Solution: Make a copy of the option value in allocated memory.

Files: src/option.c

Patch 6.1.273

Problem: When the cursor doesn't blink, redrawing an exposed area may hide the cursor.

Solution: Always draw the cursor, also when it didn't move. (Muraoka Taro)

Files: src/gui.c

Patch 6.1.274 (depends on 6.1.210)

Problem: Resetting the iconv() state after each error is wrong for an incomplete sequence.

Solution: Don't reset the iconv() state.

Files: src/fileio.c

Patch 6.1.275

Problem: When using "v" in a startup script, get warning message that terminal cannot highlight. (Charles Campbell)

Solution: Only give the message after the terminal has been initialized.

Files: src/normal.c

Patch 6.1.276

Problem: "gvim --remote file" doesn't prompt for an encryption key.

Solution: The further characters the client sends to the server are used.

Added inputsave() and inputrestore() to allow prompting the user directly and not using typeahead.

Also fix possible memory leak for ":normal".

Files: src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/getchar.c, src/main.c, src/proto/getchar.pro, src/proto/ui.pro, src/runtime/doc/eval.txt, src/structs.h, src/ui.c, src/vim.h

Patch 6.1.277 (depends on 6.1.276)

Problem: Compilation error when building with small features.

Solution: Define trash\_input\_buf() when needed. (Kelvin Lee)

Files: src/ui.c

Patch 6.1.278

Problem: When using signs the line number of a closed fold doesn't line up with the other line numbers. (Kamil Burzynski)

Solution: Insert two spaces for the sign column.

Files: src/screen.c

Patch 6.1.279

Problem: The prototype for msg() and msg\_attr() do not match the function definition. This may cause trouble for some compilers. (Nix)

Solution: Use va\_list for systems that have stdarg.h. Use "int" instead of "void" for the return type.

Files: src/auto/configure, src/config.h.in, src/configure.in,  
src/proto.h, src/message.c

Patch 6.1.280

Problem: It's possible to use an argument "firstline" or "lastline" for a function but using "a:firstline" or "a:lastline" in the function won't work. (Benji Fisher)

Solution: Give an error message for these arguments.  
Also avoid that the following function body causes a whole row of errors, skip over it after an error in the first line.

Files: src/eval.c

Patch 6.1.281

Problem: In Insert mode CTRL-X CTRL-G leaves the cursor after the ruler.

Solution: Set the cursor position before waiting for the argument of CTRL-G.  
(Yasuhiro Matsumoto)

Files: src/edit.c

Patch 6.1.282

Problem: Elvis uses "se" in a modeline, Vim doesn't recognize this.

Solution: Also accept "se " where "set " is accepted in a modeline.  
(Yasuhiro Matsumoto)

Files: src/buffer.c

Patch 6.1.283

Problem: For ":sign" the icon file name cannot contain a space.

Solution: Handle backslashes in the file name. (Yasuhiro Matsumoto)

Files: src/ex\_cmds.c

Patch 6.1.284

Problem: On Solaris there is a warning for "struct utimbuf".

Solution: Move including "utime.h" to outside the function. (Derek Wyatt)

Files: src/fileio.c

Patch 6.1.285

Problem: Can't wipe out a buffer with 'bufhide' option.

Solution: Add "wipe" value to 'bufhide'. (Yegappan Lakshmanan)

Files: runtime/doc/options.txt, src/buffer.c, src/option.c,  
src/quickfix.c

Patch 6.1.286

Problem: 'showbreak' cannot contain multi-byte characters.

Solution: Allow using all printable characters for 'showbreak'.

Files: src/charset.c, src/move.c, src/option.c

Patch 6.1.287 (depends on 6.1.285)

Problem: Effect of "delete" and "wipe" in 'bufhide' were mixed up.

Solution: Wipe out when wiping out is asked for.

Files: src/buffer.c

Patch 6.1.288

Problem: ":silent function F" hangs. (Hari Krishna Dara)

Solution: Don't use msg\_col, it is not incremented when using ":silent".  
Also made the function output look a bit better. Don't translate "function".

Files: src/eval.c

Patch 6.1.289 (depends on 6.1.278)

Problem: Compiler warning for pointer. (Axel Kielhorn)

Solution: Add a typecast for " ".

Files: src/screen.c

## Patch 6.1.290 (extra)

Problem: Truncating long text for message box may break multi-byte character.  
Solution: Adjust to start of multi-byte character. (Yasuhiro Matsumoto)  
Files: src/os\_mswin.c

## Patch 6.1.291 (extra)

Problem: Win32: CTRL-@ doesn't work. Don't even get a message for it.  
Solution: Recognize the keycode for CTRL-@. (Yasuhiro Matsumoto)  
Files: src/gui\_w48.c

## Patch 6.1.292 (extra, depends on 6.1.253)

Problem: Win32: Can't compile with new MingW compiler.  
Borland 5 makefile doesn't generate pathdef.c.  
Solution: Remove -wwide-multiply argument. (Rene de Zwart)  
Various fixes for other problems in Win32 makefiles. (Dan Sharp)  
Files: src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_ming.mak,  
src/Make\_mvc.mak

## Patch 6.1.293

Problem: byte2line() returns a wrong result for some values.  
Solution: Change ">=" to ">" in ml\_find\_line\_or\_offset(). (Bradford C Smith)  
Add one to the line number when at the end of a block.  
Files: src/memline.c

## Patch 6.1.294

Problem: Can't include a multi-byte character in a string by its hex value.  
(Benji Fisher)  
Solution: Add "\u....": a character specified with up to four hex numbers  
and stored according to the value of 'encoding'.  
Files: src/eval.c

## Patch 6.1.295 (extra)

Problem: Processing the cs.po file generates an error. (Rahul Agrawal)  
Solution: Fix the printf format characters in the translation.  
Files: src/po/cs.po

## Patch 6.1.296

Problem: Win32: When cancelling the font dialog 'guifont' remains set to  
"\*.  
Solution: Restore the old value of 'guifont' (Yasuhiro Matsumoto)  
Files: src/option.c

## Patch 6.1.297

Problem: "make test" fails in test6 in an UTF-8 environment. (Benji Fisher)  
Solution: Before executing the BufReadPost autocommands save the current  
fileencoding, so that the file isn't marked changed.  
Files: src/fileio.c

## Patch 6.1.298

Problem: When using signs and the first line of a closed fold has a sign  
it can be redrawn as if the fold was open. (Kamil Burzynski)  
Solution: Don't redraw a sign inside a closed fold.  
Files: src/screen.c

## Patch 6.1.299

Problem: ":edit +set\ ro file" doesn't work.  
Solution: Halve the number of backslashes in the "+cmd" argument.  
Files: src/ex\_docmd.c

## Patch 6.1.300 (extra)

Problem: Handling of ETO\_IGNORELANGUAGE is confusing.

Solution: Clean up the handling of ETO\_IGNORELANGUAGE. (Glenn Maynard)  
Files: src/gui\_w32.c

Patch 6.1.301 (extra)

Problem: French translation of file-save dialog doesn't show file name.  
Solution: Insert a star in the printf string. (Francois Terrot)  
Files: src/po/fr.po

Patch 6.1.302

Problem: Counting lines of the Visual area is incorrect for closed folds.  
(Mikolaj Machowski)  
Solution: Correct the start and end for the closed fold.  
Files: src/normal.c

Patch 6.1.303 (extra)

Problem: The Top/Bottom/All text does not always fit in the ruler when  
translated to Japanese. Problem with a character being wider when  
in a bold font.  
Solution: Use ETO\_PDY to specify the width of each character. (Yasuhiro  
Matsumoto)  
Files: src/gui\_w32.c

Patch 6.1.304 (extra, depends on 6.1.292)

Problem: Win32: Postscript is always enabled in the MingW Makefile.  
Pathdef.c isn't generated properly with Make\_bc5.mak. (Yasuhiro  
Matsumoto)  
Solution: Change an ifdef to an ifeq. (Madoka Machitani)  
Use the Borland make redirection to generate pathdef.c. (Maurice  
Barnum)  
Files: src/Make\_bc5.mak, src/Make\_ming.mak

Patch 6.1.305

Problem: When 'verbose' is 14 or higher, a function call may cause reading  
uninitialized data. (Walter Briscoe)  
Solution: Check for end-of-string in trunc\_string().  
Files: src/message.c

Patch 6.1.306

Problem: The AIX VisualAge cc compiler doesn't define \_\_STDC\_\_.  
Solution: Use \_\_EXTENDED\_\_ like \_\_STDC\_\_. (Jess Thrysoee)  
Files: src/os\_unix.h

Patch 6.1.307

Problem: When a double-byte character has an illegal tail byte the display  
is messed up. (Yasuhiro Matsumoto)  
Solution: Draw "XX" instead of the wrong character.  
Files: src/screen.c

Patch 6.1.308

Problem: Can't reset the Visual mode returned by visualmode().  
Solution: Use an optional argument to visualmode(). (Charles Campbell)  
Files: runtime/doc/eval.txt, src/eval.c, src/normal.c,  
src/structs.h

Patch 6.1.309

Problem: The tutor doesn't select German if the locale name is  
"German\_Germany.1252". (Joachim Hofmann)  
Solution: Check for "German" in the locale name. Also check for  
".ge". And include the German and Greek tutors.  
Files: runtime/tutor/tutor.de, runtime/tutor/tutor.vim,  
runtime/tutor/tutor.gr, runtime/tutor/tutor.gr.cp737

Patch 6.1.310 (depends on 6.1.307)

Problem: All double-byte characters are displayed as "XX".  
Solution: Use ">= 32" instead of "< 32". (Yasuhiro Matsumoto)  
Files: src/screen.c

Patch 6.1.311 (extra)

Problem: VMS: path in window title doesn't include necessary separator.  
file version doesn't always work properly with Unix.  
Crashes because of memory overwrite in GUI.  
Didn't always handle files with lowercase and correct path.  
Solution: Fix the problems. Remove unnecessary file name translations.  
(Zoltan Arpadffy)  
Files: src/buffer.c, src/ex\_cmds2.c, src/fileio.c, src/memline.c,  
src/misc1.c, src/misc2.c, src/os\_unix.c, src/os\_vms.c, src/tag.c

Patch 6.1.312

Problem: When using ":silent" debugging is also done silently.  
Solution: Disable silence while at the debug prompt.  
Files: src/ex\_cmds2.c

Patch 6.1.313

Problem: When a ":drop fname" command is used and "fname" is open in  
another window, it is also opened in the current window.  
Solution: Change to the window with "fname" instead.  
Don't redefine the argument list when dropping only one file.  
Files: runtime/doc/windows.txt, src/ex\_cmds2.c, src/ex\_cmds.c,  
src/ex\_docmd.c, src/proto/ex\_cmds2.pro, src/proto/ex\_docmd.pro

Patch 6.1.314 (depends on 6.1.126)

Problem: Missing backslash in "Generic Config file" syntax menu.  
Solution: Insert the backslash. (Zak Beck)  
Files: runtime/makemenu.vim, runtime/synmenu.vim

Patch 6.1.315 (extra)

Problem: A very long hostname may lead to an unterminated string. Failing  
to obtain a hostname may result in garbage. (Walter Briscoe)  
Solution: Add a NUL at the end of the hostname buffer.  
Files: src/os\_mac.c, src/os\_msdos.c, src/os\_unix.c, src/os\_win16.c,  
src/os\_win32.c

Patch 6.1.316

Problem: When exiting with "wq" and there is a hidden buffer, after the  
"file changed" dialog there is a warning for a changed buffer.  
(Ajit Thakkar)  
Solution: Do update the buffer timestamps when exiting.  
Files: src/fileio.c

Patch 6.1.317

Problem: Closing a window may cause some of the remaining windows to be  
positioned wrong if there is a mix of horizontal and vertical  
splits. (Stefan Ingi Valdimarsson)  
Solution: Update the frame sizes before updating the window positions.  
Files: src/window.c

Patch 6.1.318

Problem: auto/pathdef.c can include wrong quotes when a compiler flag  
includes quotes.  
Solution: Put a backslash before the quotes in compiler flags. (Shinra Aida)  
Files: src/Makefile

Patch 6.1.319 (depends on 6.1.276)

Problem: Using "--remote +cmd file" does not execute "cmd".

Solution: Call `inputrestore()` in the same command line as `inputsave()`, otherwise it will never get executed.  
Files: `src/main.c`

Patch 6.1.320 (depends on 6.1.313)

Problem: When a `":drop one\ file"` command is used the file `"one\ file"` is opened, the backslash is not removed. (Taro Muraoka)

Solution: Handle backslashes correctly. Always set the argument list to keep it simple.

Files: `runtime/doc/windows.txt`, `src/ex_cmds.c`

Patch 6.1.321

Problem: When `'mouse'` includes `'n'` but not `'v'`, don't allow starting Visual mode with the mouse.

Solution: Don't use `MOUSE_MAY_VIS` when there is no `'v'` in `'mouse'`. (Flemming Madsen)

Files: `src/normal.c`

Patch 6.1.322 (extra, depends on 6.1.315)

Problem: Win32: The host name is always `"PC "` plus the real host name.

Solution: Don't insert `"PC "` before the host name.

Files: `src/os_win32.c`

Patch 6.1.323

Problem: `":registers"` doesn't stop listing for a `"q"` at the more prompt. (Hari Krishna Dara)

Solution: Check for interrupt and `got_int`.

Files: `src/ops.c`, `src/proto/ops.pro`

Patch 6.1.324

Problem: Crash when dragging a vertical separator when `<LeftMouse>` is remapped to jump to another window.

Solution: Pass the window pointer to the function doing the dragging instead of always using the current window. (Daniel Elstner)  
Also fix that starting a drag changes window focus.

Files: `src/normal.c`, `src/proto/window.pro`, `src/ui.c`, `src/vim.h`, `src/window.c`

Patch 6.1.325

Problem: Shift-Tab is not automatically recognized in an xterm.

Solution: Add `<Esc>[Z` as the termcap code. (Andrew Pimlott)

Files: `src/term.c`

Patch 6.1.326

Problem: Using a search pattern may read from uninitialized data (Yasuhiro Matsumoto)

Solution: Initialize pointers to `NULL`.

Files: `src/regexp.c`

Patch 6.1.327

Problem: When opening the `"mbyte.txt"` help file the utf-8 characters are unreadable, because the fileencoding is forced to be `latin1`.

Solution: Check for utf-8 encoding first in help files. (Daniel Elstner)

Files: `runtime/doc/mbyte.txt`, `src/fileio.c`

Patch 6.1.328

Problem: Prototype for `enc_canon_search()` is missing.

Solution: Add the prototype. (Walter Briscoe)

Files: `src/mbyte.c`

Patch 6.1.329

Problem: When editing a file `"a b c"` replacing `"%"` in `":Cmd %"` or `":next %"`

does not work properly. (Hari Krishna Dara)  
Solution: Always escape spaces when expanding "%". Don't split argument for  
<f-args> in a user command when only one argument is used.  
Files: src/ex\_docmd.c

## Patch 6.1.330

Problem: GTK, Motif and Athena: Keypad keys produce the same code as  
non-keypad keys, making it impossible to map them separately.  
Solution: Use different termcap codes for the keypad keys. (Neil Bird)  
Files: src/gui\_gtk\_x11.c, src/gui\_x11.c

## Patch 6.1.331

Problem: When translating the help files, "LOCAL ADDITIONS" no longer marks  
the spot where help files from plugins are to be listed.  
Solution: Add a "local-additions" tag and use that to find the right spot.  
Files: runtime/doc/help.txt, src/ex\_cmds.c

## Patch 6.1.332 (extra)

Problem: Win32: Loading Perl dynamically doesn't work with Perl 5.8.  
Perl 5.8 also does not work with Cygwin and Ming.  
Solution: Adjust the function calls. (Taro Muraoka)  
Adjust the cyg and ming makefiles. (Dan Sharp)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak,  
src/if\_perl.xs

## Patch 6.1.333 (extra)

Problem: Win32: Can't handle Unicode text on the clipboard.  
Can't pass NUL byte, it becomes a line break. (Bruce DeVisser)  
Solution: Support Unicode for the clipboard (Ron Aaron and Glenn Maynard)  
Also support copy/paste of NUL bytes.  
Files: src/os\_mswin.c, src/os\_win16.c src/os\_win32.c

## Patch 6.1.334 (extra, depends on 6.1.303)

Problem: Problem with drawing Hebrew characters.  
Solution: Only use ETO\_PDY for Windows NT and the like. (Yasuhiro Matsumoto)  
Files: src/gui\_w32.c

## Patch 6.1.335 (extra)

Problem: Failure of obtaining the cursor position and window size is  
ignored.  
Solution: Remove a semicolon after an "if". (Walter Briscoe)  
Files: src/gui\_w32.c

## Patch 6.1.336 (extra)

Problem: Warning for use of function prototypes of smmsg().  
Solution: Define HAVE\_STDARG\_H. (Walter Briscoe)  
Files: src/os\_win32.h

## Patch 6.1.337

Problem: When using "finish" in debug mode in function B() for ":call  
A(B())" does not stop after B() is finished.  
Solution: Increase debug\_level while evaluating a function.  
Files: src/ex\_docmd.c

## Patch 6.1.338

Problem: When using a menu that checks out the current file from Insert  
mode, there is no warning for the changed file until exiting  
Insert mode. (Srikanth Sankaran)  
Solution: Add a check for need\_check\_timestamps in the Insert mode loop.  
Files: src/edit.c

## Patch 6.1.339



Problem: Completion doesn't allow "g:" in ":let g:did\_<Tab>". (Benji Fisher)  
Solution: Return "g:var" for global variables when that is what is being expanded. (Flemming Madsen)  
Files: src/eval.c

Patch 6.1.340 (extra, depends on 6.1.332)

Problem: Win32: Can't compile the Perl interface with nmake.  
Solution: Don't compare the version number as a string but as a number. (Juergen Kraemer)  
Files: src/Make\_mvc.mak

Patch 6.1.341

Problem: In Insert mode with 'rightleft' set the cursor is drawn halfway a double-wide character. For CTRL-R and CTRL-K in Insert mode the " or ? is not displayed.  
Solution: Draw the cursor in the next character cell. Display the " or ? over the right half of the double-wide character. (Yasuhiro Matsumoto) Also fix that cancelling a digraph doesn't redraw a double-byte character correctly.  
Files: src/edit.c, src/gui.c, src/mbyte.c

Patch 6.1.342 (depends on 6.1.341)

Problem: With 'rightleft' set typing "c" on a double-wide character causes the cursor to be displayed one cell to the left.  
Solution: Draw the cursor in the next character cell. (Yasuhiro Matsumoto)  
Files: src/gui.c

Patch 6.1.343 (depends on 6.1.342)

Problem: Cannot compile with the +multi\_byte feature but without +rightleft. Cannot compile without the GUI.  
Solution: Fix the #ifdefs. (partly by Nam SungHyun)  
Files: src/gui.c, src/mbyte.c, src/ui.c

Patch 6.1.344

Problem: When using ":silent filetype" the output is still put in the message history. (Hari Krishna Dara)  
Solution: Don't add messages in the history when ":silent" is used.  
Files: src/message.c

Patch 6.1.345 (extra)

Problem: Win32: 'imdisable' doesn't work.  
Solution: Make 'imdisable' work. (Yasuhiro Matsumoto)  
Files: src/gui\_w32.c

Patch 6.1.346

Problem: The scroll wheel can only scroll the current window.  
Solution: Make the scroll wheel scroll the window that the mouse points to. (Daniel Elstner)  
Files: src/edit.c, src/gui.c, src/normal.c, src/term.c

Patch 6.1.347

Problem: When using cscope to list matching tags, the listed number is sometimes not equal to what cscope uses. (Vihren Milev)  
Solution: For cscope tags use only one table, don't give tags in the current file a higher priority.  
Files: src/tag.c

Patch 6.1.348

Problem: Wildmode with wildmenu: ":set wildmode=list,full", ":colorscheme <tab>" results in "zellner" instead of the first entry. (Anand Hariharan)

Solution: Don't call ExpandOne() from globpath(). (Flemming Madsen)  
Files: src/ex\_getln.c

#### Patch 6.1.349

Problem: "vim --serverlist" when no server was ever started gives an error message without "\n".

"vim --serverlist" doesn't exit when the X server can't be contacted, it starts Vim unexpectedly. (Ricardo Signes)  
Solution: Don't give an error when no Vim server was ever started. Treat failing of opening the display equal to errors inside the remote\*() functions. (Flemming Madsen)

Files: src/if\_xcmdsrv.c, src/main.c

#### Patch 6.1.350

Problem: When entering a buffer with ":bnext" for the first time, using an autocommand to restore the last used cursor position doesn't work. (Paolo Giarusso)

Solution: Don't use the last known cursor position of the current Vim invocation if an autocommand changed the position.

Files: src/buffer.c

#### Patch 6.1.351 (depends on 6.1.349)

Problem: Crash when starting Vim the first time in an X server. (John McGowan)

Solution: Don't call xFree() with a fixed string.

Files: src/if\_xcmdsrv.c

#### Patch 6.1.352 (extra, depends on 6.1.345)

Problem: Win32: Crash when setting "imdisable" in \_vimrc.

Solution: Don't call IME functions when imm32.dll was not loaded (yet). Also add typecasts to avoid Compiler warnings for ImmAssociateContext() argument.

Files: src/gui\_w32.c

#### Patch 6.1.353 (extra, depends on 6.1.334)

Problem: Problem with drawing Arabic characters.

Solution: Don't use ETO\_PDY, do use padding.

Files: src/gui\_w32.c

#### Patch 6.1.354 (extra, depends on 6.1.333)

Problem: MS-Windows 98: Notepad can't paste text copied from Vim when 'encoding' is "utf-8".

Solution: Also make CF\_TEXT available on the clipboard. (Ron Aaron)

Files: src/os\_mswin.c

#### Patch 6.1.355

Problem: In a regexp '\n' will never match anything in a string.

Solution: Make '\n' match a newline character.

Files: src/buffer.c, src/edit.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/misc1.c, src/option.c, src/os\_mac.c, src/os\_unix.c, src/quickfix.c, src/regexp.c, src/search.c, src/syntax.c, src/tag.c, src/vim.h

#### Patch 6.1.356 (extra, depends on, well, eh, several others)

Problem: Compiler warnings for using convert\_setup() and a few other things.

Solution: Add typecasts.

Files: src/mbyte.c, src/os\_mswin.c, src/proto/os\_win32.pro, src/os\_win32.c

#### Patch 6.1.357

Problem: CR in the quickfix window jumps to the error under the cursor, but this doesn't work in Insert mode. (Srikanth Sankaran)

Solution: Handle CR in Insert mode in the quickfix window.  
Files: src/edit.c

Patch 6.1.358

Problem: The tutor doesn't select another locale version properly.  
Solution: Insert the "let" command. (Yasuhiro Matsumoto)  
Files: runtime/tutor/tutor.vim

Patch 6.1.359 (extra)

Problem: Mac Carbon: Vim doesn't get focus when started from the command line. Crash when using horizontal scroll bar.  
Solution: Set Vim as the frontprocess. Fix scrolling. (Peter Cucka)  
Files: src/gui\_mac.c

Patch 6.1.360 (depends on 6.1.341)

Problem: In Insert mode CTRL-K ESC messes up a multi-byte character. (Anders Helmersson)  
Solution: Save all bytes of a character when displaying a character temporarily.  
Files: src/edit.c, src/proto/screen.pro, src/screen.c

Patch 6.1.361

Problem: Cannot jump to a file mark with ":'M".  
Solution: Allow jumping to another file for a mark in an Ex address when it is the only thing in the command line.  
Files: src/ex\_docmd.c

Patch 6.1.362

Problem: tgetent() may return zero for success. tgetflag() may return -1 for an error.  
Solution: Check tgetflag() for returning a positive value. Add an autoconf check for the value that tgetent() returns.  
Files: src/auto/configure, src/config.h.in, src/configure.in, src/term.c

Patch 6.1.363

Problem: byte2line() can return one more than the number of lines.  
Solution: Return -1 if the offset is one byte past the end.  
Files: src/memline.c

Patch 6.1.364

Problem: That the FileChangedShell autocommand event never nests makes it difficult to reload a file in a normal way.  
Solution: Allow nesting for the FileChangedShell event but do not allow triggering itself again.  
Also avoid autocommands for the cmdline window in rare cases.  
Files: src/ex\_getln.c, src/fileio.c, src/window.c

Patch 6.1.365 (depends on 6.1.217)

Problem: Setting a breakpoint in a sourced file with a relative path name doesn't work. (Servatius Brandt)  
Solution: Expand the file name to a full path.  
Files: src/ex\_cmds2.c

Patch 6.1.366

Problem: Can't use Vim with Netbeans.  
Solution: Add the Netbeans interface. Includes support for sign icons and "-fg" and "-bg" arguments for GTK. Add the 'autochdir' option. (Gordon Prieur, George Hernandez, Dave Weatherford)  
Make it possible to display both a sign with a text and one with line highlighting in the same line.  
Add support for Agide, interface version 2.1.  
Also fix that when 'iskeyword' includes '?' the "\*" command

doesn't work properly on a word that includes "?" (Bill McCarthy):  
 Don't escape "?" to "\?" when searching forward.

Files: runtime/doc/Makefile, runtime/doc/netbeans.txt,  
 runtime/doc/options.txt, runtime/doc/varsious.txt,  
 src/Makefile, src/auto/configure, src/buffer.c, src/config.h.in,  
 src/config.mk.in, src/configure.in, src/edit.c, src/ex\_cmds.c,  
 src/ex\_docmd.c, src/feature.h, src/fileio.c, src/globals.h,  
 src/gui.c, src/gui\_beval.c, src/gui\_gtk\_x11.c, src/gui\_x11.c,  
 src/main.c, src/memline.c, src/misc1.c, src/misc2.c, src/move.c,  
 src/nbdebug.c, src/nbdebug.h, src/netbeans.c, src/normal.c,  
 src/ops.c, src/option.c, src/option.h, src/proto/buffer.pro,  
 src/proto/gui\_beval.pro, src/proto/gui\_gtk\_x11.pro,  
 src/proto/gui\_x11.pro, src/proto/misc2.pro,  
 src/proto/netbeans.pro, src/proto/normal.pro, src/proto/ui.pro,  
 src/proto.h, src/screen.c, src/structs.h, src/ui.c, src/undo.c,  
 src/vim.h, src/window.c, src/workshop.c

Patch 6.1.367 (depends on 6.1.365)

Problem: Setting a breakpoint in a function doesn't work. For a sourced  
 file it doesn't work when symbolic links are involved. (Servatius  
 Brandt)

Solution: Expand the file name in the same way as do\_source() does. Don't  
 prepend the path to a function name.

Files: src/ex\_cmds2.c

Patch 6.1.368

Problem: Completion for ":map" does not include <silent> and <script>.  
 ":mkexrc" do not save the <silent> attribute of mappings.

Solution: Add "<silent>" to the generated map commands when appropriate.  
 (David Elstner)

Add <silent> and <script> to command line completion.

Files: src/getchar.c

Patch 6.1.369 (extra)

Problem: VMS: Vim hangs when attempting to edit a read-only file in the  
 terminal. Problem with VMS filenames for quickfix.

Solution: Rewrite low level input. Remove version number from file name in  
 a couple more places. Fix crash after patch 6.1.362. Correct  
 return code for system(). (Zoltan Arpadffy, Tomas Stehlik)

Files: src/misc1.c, src/os\_unix.c, src/os\_vms.c, src/proto/os\_vms.pro,  
 src/os\_vms\_conf.h, src/quickfix.c, src/ui.c

Patch 6.1.370

Problem: #ifdef nesting is unclear.

Solution: Insert spaces to indicate the nesting.

Files: src/os\_unix.c

Patch 6.1.371

Problem: "%V" in 'statusline' doesn't show "0-1" in an empty line.

Solution: Add one to the column when comparing with virtual column (Andrew  
 Pimlott)

Files: src/buffer.c

Patch 6.1.372

Problem: With 16 bit ints there are compiler warnings. (Walter Briscoe)

Solution: Change int into long.

Files: src/structs.h, src/syntax.c

Patch 6.1.373

Problem: The default page header for printing is not translated.

Solution: Add \_() around the two places where "Page" is used. (Mike  
 Williams) Translate the default value of the 'titleold' and

'printhead' options.  
Files: src/ex\_cmds2.c, src/option.c

Patch 6.1.374 (extra)

Problem: MS-Windows: Cannot build GvimExt with MingW or Cygwin.  
Solution: Add makefile and modified resource files. (Rene de Zwart)  
Also support Cygwin. (Alejandro Lopez\_Valencia)  
Files: GvimExt/Make\_cyg.mak, GvimExt/Make\_ming.mak, GvimExt/Makefile,  
GvimExt/gvimext\_ming.def, GvimExt/gvimext\_ming.rc

Patch 6.1.375

Problem: MS-Windows: '!dir "%'" does not work for a file name with spaces.  
(Xiangjiang Ma)  
Solution: Don't insert backslashes for spaces in a shell command.  
Files: src/ex\_docmd.c

Patch 6.1.376

Problem: "vim --version" and "vim --help" have a non-zero exit code.  
That is unusual. (Petesea)  
Solution: Use a zero exit code.  
Files: src/main.c

Patch 6.1.377

Problem: Can't add words to 'lispwords' option.  
Solution: Add P\_COMMA and P\_NODUP flags. (Haakon Riiser)  
Files: src/option.c

Patch 6.1.378

Problem: When two buffer-local user commands are ambiguous, a full match  
with a global user command isn't found. (Hari Krishna Dara)  
Solution: Detect this situation and accept the global command.  
Files: src/ex\_docmd.c

Patch 6.1.379

Problem: Linux with kernel 2.2 can't use the alternate stack in combination  
with threading, causes an infinite loop.  
Solution: Don't use the alternate stack in this situation.  
Files: src/os\_unix.c

Patch 6.1.380

Problem: When 'winminheight' is zero and the quickfix window is zero lines,  
entering the window doesn't make it higher. (Christian J.  
Robinson)  
Solution: Make sure the current window is at least one line high.  
Files: src/window.c

Patch 6.1.381

Problem: When a BufWriteCmd is used and it leaves the buffer modified, the  
window may still be closed. (Hari Krishna Dara)  
Solution: Return FAIL from buf\_write() when the buffer is still modified  
after a BufWriteCmd autocommand was used.  
Files: src/fileio.c

Patch 6.1.382 (extra)

Problem: Win32 GUI: When using two monitors, the code that checks/fixes the  
window size and position (e.g. when a font changes) doesn't work  
properly. (George Reilly)  
Solution: Handle a double monitor situation. (Helmut Stiegler)  
Files: src/gui\_w32.c

Patch 6.1.383

Problem: The filling of the status line doesn't work properly for

multi-byte characters. (Nam SungHyun)  
There is no check for going past the end of the buffer.  
Solution: Properly distinguish characters and bytes. Properly check for  
running out of buffer space.  
Files: src/buffer.c, src/ex\_cmds2.c, src/proto/buffer.pro, src/screen.c

#### Patch 6.1.384

Problem: It is not possible to find if a certain patch has been included.  
(Lubomir Host)  
Solution: Support using has() to check if a patch was included.  
Files: runtime/doc/eval.txt, src/eval.c, src/proto/version.pro,  
src/version.c

#### Patch 6.1.385 (depends on 6.1.383)

Problem: Can't compile without the multi-byte feature.  
Solution: Move an #ifdef. (Christian J. Robinson)  
Files: src/buffer.c

#### Patch 6.1.386

Problem: Get duplicate tags when running ":helptags".  
Solution: Do the other halve of moving a section to another help file.  
Files: runtime/tagsrch.txt

#### Patch 6.1.387 (depends on 6.1.373)

Problem: Compiler warning for pointer cast.  
Solution: Add (char\_u \*).  
Files: src/option.c

#### Patch 6.1.388 (depends on 6.1.384)

Problem: Compiler warning for pointer cast.  
Solution: Add (char \*). Only include has\_patch() when used.  
Files: src/eval.c, src/version.c

#### Patch 6.1.389 (depends on 6.1.366)

Problem: Balloon evaluation doesn't work for GTK.  
has("balloon\_eval") doesn't work.  
Solution: Add balloon evaluation for GTK. Also improve displaying of signs.  
(Daniel Elstner)  
Also make ":gui" start the netbeans connection and avoid using  
netbeans functions when the connection is not open.  
Files: src/Makefile, src/feature.h, src/gui.c, src/gui.h,  
src/gui\_beval.c, src/gui\_beval.h, src/gui\_gtk.c,  
src/gui\_gtk\_x11.c, src/eval.c, src/memline.c, src/menu.c,  
src/netbeans.c, src/proto/gui\_beval.pro, src/proto/gui\_gtk.pro,  
src/structs.h, src/syntax.c, src/ui.c, src/workshop.c

#### Patch 6.1.390 (depends on 6.1.389)

Problem: It's not possible to tell Vim to save and exit through the  
Netbeans interface. Would still try to send balloon eval text  
after the connection is closed.  
Can't use Unicode characters for sign text.  
Solution: Add functions "saveAndExit" and "getModified". Check for a  
working connection before sending a balloonText event.  
various other cleanups.  
Support any character for sign text. (Daniel Elstner)  
Files: runtime/doc/netbeans.txt, runtime/doc/sign.txt, src/ex\_cmds.c,  
src/netbeans.c, src/screen.c

#### Patch 6.1.391

Problem: ml\_get() error when using virtualedit. (Charles Campbell)  
Solution: Get a line from a specific window, not the current one.  
Files: src/charset.c

Patch 6.1.392 (depends on 6.1.383)

Problem: Highlighting in the 'statusline' is in the wrong position when an item is truncated. (Zak Beck)

Solution: Correct the start of 'statusline' items properly for a truncated item.

Files: src/buffer.c

Patch 6.1.393

Problem: When compiled with Python and threads, detaching the terminal may cause Vim to loop forever.

Solution: Add -pthread to \$CFLAGS when using Python and gcc. (Daniel Elstner)

Files: src/auto/configure,, src/configure.in

Patch 6.1.394 (depends on 6.1.390)

Problem: The netbeans interface doesn't recognize multibyte glyph names.

Solution: Check the number of cells rather than bytes to decide whether a glyph name is not a filename. (Daniel Elstner)

Files: src/netbeans.c

Patch 6.1.395 (extra, depends on 6.1.369)

Problem: VMS: OLD\_VMS is never defined. Missing function prototype.

Solution: Define OLD\_VMS in Make\_vms.mms. Add vms\_sys\_status() to os\_vms.pro. (Zoltan Arpadffy)

Files: src/Make\_vms.mms, src/proto/os\_vms.pro

Patch 6.1.396 (depends on 6.1.330)

Problem: Compiler warnings for using enum.

Solution: Add typecast to char\_u.

Files: src/gui\_gtk\_x11.c, src/gui\_x11.c

Patch 6.1.397 (extra)

Problem: The install program may use a wrong path for the diff command if there is a space in the install directory path.

Solution: Use double quotes around the path if necessary. (Alejandro Lopez-Valencia) Also use double quotes around the file name arguments.

Files: src/dosinst.c

Patch 6.1.398

Problem: Saving the typeahead for debug mode causes trouble for a test script. (Servatius Brandt)

Solution: Add the ":debuggreedy" command to avoid saving the typeahead.

Files: runtime/doc/repeat.txt, src/ex\_cmds.h, src/ex\_cmds2.c, src/ex\_docmd.c, src/proto/ex\_cmds2.pro

Patch 6.1.399

Problem: Warning for unused variable.

Solution: Remove the variable two\_or\_more.

Files: src/ex\_cmds.c

Patch 6.1.400 (depends on 6.1.381)

Problem: When a BufWriteCmd wipes out the buffer it may still be accessed.

Solution: Don't try accessing a buffer that has been wiped out.

Files: src/fileio.c

Patch 6.1.401 (extra)

Problem: Building the Win16 version with Borland 5.01 doesn't work.

"make test" doesn't work with Make\_dos.mak. (Walter Briscoe)

Solution: Various fixes to the w16 makefile. (Walter Briscoe)

Don't use deltree. Use "mkdir \tmp" instead of "mkdir /tmp".

Files: src/Make\_w16.mak, src/testdir/Make\_dos.mak

Patch 6.1.402

Problem: When evaluating a function name with curly braces, an error is not handled consistently.

Solution: Accept the result of a curly braces expression when an error was encountered. Skip evaluating an expression in curly braces when skipping. (Servatius Brandt)

Files: src/eval.c

Patch 6.1.403 (extra)

Problem: MS-Windows 16 bit: compiler warnings.

Solution: Add typecasts. (Walter Briscoe)

Files: src/ex\_cmds2.c, src/gui\_w48.c, src/os\_mswin.c, src/os\_win16.c, src/syntax.c

Patch 6.1.404 (extra)

Problem: Various small problems.

Solution: Fix comments. Various small additions, changes in indent, removal of unused items and fixes.

Files: Makefile, README.txt, runtime/menu.vim, runtime/vimrc\_example.vim, src/INSTALL, src/INSTALLole.txt, src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_ming.mak, src/Makefile, src/config.h.in, src/edit.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/getchar.c, src/gui.c, src/gui\_gtk.c, src/gui\_photon.c, src/if\_cscope.c, src/if\_python.c, src/keymap.h, src/mark.c, src/mbyte.c, src/message.c, src/misc1.c, src/misc2.c, src/normal.c, src/option.c, src/os\_os2\_cfg.h, src/os\_win32.c, src/proto/getchar.pro, src/proto/message.pro, src/proto/regexp.pro, src/screen.c, src/structs.h, src/syntax.c, src/term.c, src/testdir/test15.in, src/testdir/test15.ok, src/vim.rc, src/xxd/Make\_cyg.mak, src/xxd/Makefile

Patch 6.1.405

Problem: A few files are missing from the toplevel Makefile.

Solution: Add the missing files.

Files: Makefile

Patch 6.1.406 (depends on 6.1.392)

Problem: When a statusline item doesn't fit arbitrary text appears. (Christian J. Robinson)

Solution: When there is just enough room but not for the "<" truncate the statusline item like there is no room.

Files: src/buffer.c

Patch 6.1.407

Problem: ":set scrollbind | help" scrollbinds the help window. (Andrew Pimlott)

Solution: Reset 'scrollbind' when opening a help window.

Files: src/ex\_cmds.c

Patch 6.1.408

Problem: When 'rightleft' is set unprintable character 0x0c is displayed as ">c0<".

Solution: Reverse the text of the hex character.

Files: src/screen.c

Patch 6.1.409

Problem: Generating tags for the help doesn't work for some locales.

Solution: Set LANG=C LC\_ALL=C in the environment for "sort". (Daniel Elstner)



Files: runtime/doc/Makefile

Patch 6.1.410 (depends on 6.1.390)

Problem: Linking error when compiling with Netbeans but without sign icons.  
(Malte Neumann)

Solution: Don't define buf\_signcount() when sign icons are unavailable.

Files: src/buffer.c

Patch 6.1.411

Problem: When 'virtualedit' is set, highlighting a Visual block beyond the end of a line may be wrong.

Solution: Correct the virtual column when the end of the line is before the displayed part of the line. (Muraoka Taro)

Files: src/screen.c

Patch 6.1.412

Problem: When swapping terminal screens and using ":gui" to start the GUI, the shell prompt may be after a hit-enter prompt.

Solution: Output a newline in the terminal when starting the GUI and there was a hit-enter prompt..

Files: src/gui.c

Patch 6.1.413

Problem: When 'clipboard' contains "unnamed", "p" in Visual mode doesn't work correctly.

Solution: Save the register before overwriting it and put the resulting text on the clipboard afterwards. (Muraoka Taro)

Files: src/normal.c, src/ops.c

Patch 6.1.414 (extra, depends on 6.1.369)

Problem: VMS: Vim busy waits when waiting for input.

Solution: Delay for a short while before getting another character. (Zoltan Arpadffy)

Files: src/os\_vms.c

Patch 6.1.415

Problem: When there is a vertical split and a quickfix window, reducing the size of the Vim window may result in a wrong window layout and a crash.

Solution: When reducing the window size and there is not enough space for 'winfixheight' set the frame height to the larger height, so that there is a retry while ignoring 'winfixheight'. (Yasuhiro Matsumoto)

Files: src/window.c

Patch 6.1.416 (depends on 6.1.366)

Problem: When using the Netbeans interface, a line with a sign cannot be changed.

Solution: Respect the GUARDEDOFFSET for sign IDs when checking for a guarded area.

Files: src/netbeans.c

Patch 6.1.417

Problem: Unprintable multi-byte characters are not handled correctly. Multi-byte characters above 0xffff are displayed as another character.

Solution: Handle unprintable multi-byte characters. Display multi-byte characters above 0xffff with a marker. Recognize UTF-16 words and BOM words as unprintable. (Daniel Elstner)

Files: src/charset.c, src/mbyte.c, src/screen.c

Patch 6.1.418

Problem: The result of `strftime()` is in the current locals. Need to convert it to 'encoding'.

Solution: Obtain the current locale and convert the argument for `strftime()` to it and the result back to 'encoding'. (Daniel Elstner)

Files: `src/eval.c`, `src/ex_cmds.c`, `src/ex_cmds2.c`, `src/mbyte.c`, `src/proto/mbyte.pro`, `src/option.c`, `src/os_mswin.c`

#### Patch 6.1.419

Problem: Vim doesn't compile on AIX 5.1.

Solution: Don't define `_NO_PROTO` on this system. (Uribarri)

Files: `src/auto/configure`, `src/configure.in`

#### Patch 6.1.420 (extra)

Problem: `convert_input()` has an unnecessary `STRLEN()`. Conversion from UCS-2 to a codepage uses word count instead of byte count.

Solution: Remove the `STRLEN()` call. (Daniel Elstner)  
Always use byte count for `string_convert()`.

Files: `src/gui_w32.c`, `src/mbyte.c`

#### Patch 6.1.421 (extra, depends on 6.1.354)

Problem: MS-Windows 9x: When putting text on the clipboard it can be in the wrong encoding.

Solution: Convert text to the active codepage for `CF_TEXT`. (Glenn Maynard)

Files: `src/os_mswin.c`

#### Patch 6.1.422

Problem: Error in `.vimrc` doesn't cause hit-enter prompt when swapping screens. (Neil Bird)

Solution: Set `msg_didany` also when sending a message to the terminal directly.

Files: `src/message.c`

#### Patch 6.1.423

Problem: Can't find arbitrary text in help files.

Solution: Added the `":helpgrep"` command.

Files: `runtime/doc/variables.txt`, `src/ex_cmds.h`, `src/ex_docmd.c`, `src/proto/quickfix.pro`, `src/quickfix.c`

#### Patch 6.1.424 (extra)

Problem: Win32: `gvim` compiled with VC++ 7.0 run on Windows 95 does not show menu items.

Solution: Define `$WINVER` to avoid an extra item is added to `MENUITEMINFO`. (Muraoka Taro)

Files: `src/Make_mvc.mak`

#### Patch 6.1.425

Problem: `":helptags $VIMRUNTIME/doc"` does not add the "help-tags" tag.

Solution: Do add the "help-tags" tag for that specific directory.

Files: `src/ex_cmds.c`

#### Patch 6.1.426

Problem: `"--remote-wait +cmd file"` waits forever. (Valery Kondakoff)

Solution: Don't wait for the `" +cmd"` argument to have been edited.

Files: `src/main.c`

#### Patch 6.1.427

Problem: Several error messages for regexp patterns are not translated.

Solution: Use `_()` properly. (Muraoka Taro)

Files: `src/regexp.c`

#### Patch 6.1.428

Problem: FreeBSD: wait() may hang when compiled with Python support and doing a system() call in a startup script.  
Solution: Use waitpid() instead of wait() and poll every 10 msec, just like what is done in the GUI.  
Files: src/os\_unix.c

Patch 6.1.429 (depends on 6.1.390)  
Problem: Crash when using showmarks.vim plugin. (Charles Campbell)  
Solution: Check for sign\_get\_text() returning a NULL pointer.  
Files: src/screen.c

Patch 6.1.430  
Problem: In Lisp code backslashed parens should be ignored for "%". (Dorai)  
Solution: Skip over backslashed parens.  
Files: src/search.c

Patch 6.1.431  
Problem: Debug commands end up in redirected text.  
Solution: Disable redirection while handling debug commands.  
Files: src/ex\_cmds2.c

Patch 6.1.432 (depends on 6.1.375)  
Problem: MS-Windows: ":make %:p" inserts extra backslashes. (David Rennalls)  
Solution: Don't add backslashes, handle it like ":%cmd".  
Files: src/ex\_docmd.c

Patch 6.1.433  
Problem: ":popup" only works for Win32.  
Solution: Add ":popup" support for GTK. (Daniel Elstner)  
Files: runtime/doc/gui.txt, src/ex\_docmd.c, src/gui\_gtk.c, src/menu.c, src/proto/gui\_gtk.pro

Patch 6.1.434 (extra)  
Problem: Win32: When there are more than 32767 lines, the scrollbar has a roundoff error.  
Solution: Make a click on an arrow move one line. Also move the code to gui\_w48.c, there is hardly any difference between the 16 bit and 32 bit versions. (Walter Briscoe)  
Files: src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c

Patch 6.1.435  
Problem: ":winsize x" resizes the Vim window to the minimal size. (Andrew Pimlott)  
Solution: Give an error message for wrong arguments of ":winsize" and ":winpos".  
Files: src/ex\_docmd.c

Patch 6.1.436  
Problem: When a long UTF-8 file contains an illegal byte it's hard to find out where it is. (Ron Aaron)  
Solution: Add the line number to the error message.  
Files: src/fileio.c

Patch 6.1.437 (extra, depends on 6.1.421)  
Problem: Using multi-byte functions when they are not available.  
Solution: Put the clipboard conversion inside an #ifdef. (Vince Negri)  
Also fix a pointer type mistake. (Walter Briscoe)  
Files: src/os\_mswin.c

Patch 6.1.438  
Problem: When Perl has thread support Vim cannot use the Perl interface.  
Solution: Add a configure check and disable Perl when it will not work.

(Aron Griffis)  
Files: src/auto/configure, src/configure.in

Patch 6.1.439

Problem: Netbeans: A "create" function doesn't actually create a buffer, following functions may fail.

Solution: Create a Vim buffer without a name when "create" is called.  
(Gordon Prieur)

Files: runtime/doc/netbeans.txt, src/netbeans.c

Patch 6.1.440

Problem: The "@\*" command doesn't obtain the actual contents of the clipboard. (Hari Krishna Dara)

Solution: Obtain the clipboard text before executing the command.

Files: src/ops.c

Patch 6.1.441

Problem: "zj" and "zk" cannot be used as a motion command after an operator. (Ralf Hetzel)

Solution: Accept these commands as motion commands.

Files: src/normal.c

Patch 6.1.442

Problem: Unicode 3.2 defines more space and punctuation characters.

Solution: Add the new characters to the Unicode tables. (Raphael Finkel)

Files: src/mbyte.c

Patch 6.1.443 (extra)

Problem: Win32: The gvimext.dll build with Borland 5.5 requires another DLL.

Solution: Build a statically linked version by default. (Dan Sharp)

Files: GvimExt/Make\_bc5.mak

Patch 6.1.444 (extra)

Problem: Win32: Enabling a build with gettext support is not consistent.

Solution: Use "GETTEXT" for Borland and msvc makefiles. (Dan Sharp)

Files: src/Make\_bc5.mak, src/Make\_mvc.mak

Patch 6.1.445 (extra)

Problem: DJGPP: get warning for argument of putenv()

Solution: Define HAVE\_PUTENV to use DJGPP's putenv(). (Walter Briscoe)

Files: src/os\_msdos.h

Patch 6.1.446 (extra)

Problem: Win32: The MingW makefile uses a different style of arguments than other makefiles.

Dynamic IME is not supported for Cygwin.

Solution: Use "no" and "yes" style arguments. Remove the use of the dyn-ming.h include file. (Dan Sharp)

Do not include the ime.h file and adjust the makefile. (Alejandro Lopez-Valencia)

Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/gui\_w32.c,  
src/if\_perl.xs, src/if\_python.c, src/if\_ruby.c, src/os\_win32.c

Patch 6.1.447

Problem: "make install" uses "make" directly for generating help tags.

Solution: Use \$(MAKE) instead of "make". (Tim Mooney)

Files: src/Makefile

Patch 6.1.448

Problem: 'titlestring' has a default maximum width of 50 chars per item.

Solution: Remove the default maximum (also for 'statusline').

Files: src/buffer.c

Patch 6.1.449

Problem: When "l" and "a" are in 'formatoptions', auto-formatting always moves a newly added character to the next line. (Servatius Brandt)

Solution: Don't move a single character to the next line when it was just typed.

Files: src/edit.c

Patch 6.1.450

Problem: Termcap entry "kB" for back-tab is not recognized.

Solution: Use back-tab as the shift-tab code.

Files: src/keymap.h, src/misc2.c, src/term.c

Patch 6.1.451

Problem: GUI: When text in the find dialog contains a slash, a backslash is inserted the next time it is opened. (Mezz)

Solution: Remove escaped backslashes and question marks. (Daniel Elstner)

Files: src/gui.c

Patch 6.1.452 (extra, after 6.1.446)

Problem: Win32: IME support doesn't work for MSVC.

Solution: Use \_MSC\_VER instead of \_\_MSVC. (Alejandro Lopez-Valencia)

Files: src/gui\_w32.c

Patch 6.1.453 (after 6.1.429)

Problem: When compiled without sign icons but with sign support, adding a sign may cause a crash.

Solution: Check for the text sign to exist before using it. (Kamil Burzynski)

Files: src/screen.c

Patch 6.1.454 (extra)

Problem: Win32: pasting Russian text in Vim with 'enc' set to cp1251 results in utf-8 bytes. (Perelyubskiy)

Conversion from DBCS to UCS2 does not work when 'encoding' is not the active codepage.

Solution: Introduce enc\_codepage and use it for conversion to 'encoding' (Glenn Maynard)

Use MultiByteToWideChar() and WideCharToMultiByte() instead of iconv(). Should do most needed conversions without iconv.dll.

Files: src/globals.h, src/gui\_w32.c, src/mbyte.c, src/os\_mswin.c, src/proto/mbyte.pro, src/proto/os\_mswin.pro, src/structs.h

Patch 6.1.455

Problem: Some Unicode characters can be one or two character cells wide.

Solution: Add the 'ambiwidth' option to tell Vim how to display these characters. (Jungshik Shin)

Also reset the script ID when setting an option to its default value, so that ":verbose set" won't give wrong info.

Files: runtime/doc/options.txt, src/mbyte.c, src/option.c, src/option.h

Patch 6.1.456 (extra, after 6.1.454)

Problem: Win32: IME doesn't work.

Solution: ImmGetCompositionStringW() returns the size in bytes, not words. (Yasuhiro Matsumoto) Also fix typecast problem.

Files: src/gui\_w32.c, src/os\_mswin.c

Patch 6.1.457

Problem: An empty register in viminfo causes conversion to fail.

Solution: Don't convert an empty string. (Yasuhiro Matsumoto)

Files: src/ex\_cmds.c, src/mbyte.c

## Patch 6.1.458

Problem: Compiler warning for pointer.  
Solution: Add a typecast.  
Files: src/ex\_cmds.c

## Patch 6.1.459 (extra)

Problem: Win32: libcall() may return an invalid pointer and cause Vim to crash.  
Solution: Add a strict check for the returned pointer. (Bruce Mellows)  
Files: src/os\_mswin.c

## Patch 6.1.460

Problem: GTK: after scrolling the text one line with a key, clicking the arrow of the scrollbar does not always work. (Nam SungHyun)  
Solution: Always update the scrollbar thumb when the value changed, even when it would not move, like for RISCOS. (Daniel Elstner)  
Files: src/gui.c, src/gui.h

## Patch 6.1.461

Problem: When a keymap is active, typing a character in Select mode does not use it. (Benji Fisher)  
Solution: Apply Insert mode mapping to the character typed in Select mode.  
Files: src/normal.c

## Patch 6.1.462

Problem: When autocommands wipe out a buffer, a crash may happen. (Hari Krishna Dara)  
Solution: Don't decrement the window count of a buffer before calling the autocommands for it. When re-using the current buffer, watch out for autocommands changing the current buffer.  
Files: src/buffer.c, src/ex\_cmds.c, src/proto/buffer.pro

## Patch 6.1.463

Problem: When writing a compressed file, the file name that gzip stores in the file is the weird temporary file name. (David Rennalls)  
Solution: Use the real file name when possible.  
Files: runtime/plugin/gzip.vim

## Patch 6.1.464

Problem: Crash when using C++ syntax highlighting. (Gerhard Hochholzer)  
Solution: Check for a negative index.  
Files: src/syntax.c

## Patch 6.1.465 (after 6.1.454)

Problem: Compile error when using cygwin.  
Solution: Change #ifdef WIN32 to #ifdef WIN3264. (Alejandro Lopez-Valencia)  
Define WIN32 after including windows.h  
Files: src/mbyte.c

## Patch 6.1.466

Problem: The "-f" argument is a bit obscure.  
Solution: Add the "--nofork" argument. Improve the help text a bit.  
Files: runtime/doc/starting.txt, src/main.c

## Patch 6.1.467

Problem: Setting the window title doesn't work for Chinese.  
Solution: Use an X11 function to convert text to a text property. (Kentaro Nakazawa)  
Files: src/os\_unix.c

## Patch 6.1.468

Problem: ":mksession" also stores folds for buffers which will not be restored.  
Solution: Only store folds for a buffer with 'buftype' empty and help files.  
Files: src/ex\_docmd.c

Patch 6.1.469

Problem: 'listchars' cannot contain multi-byte characters.  
Solution: Handle multi-byte UTF-8 list characters. (Matthew Samsonoff)  
Files: src/message.c, src/option.c, src/screen.c

Patch 6.1.470 (lang)

Problem: Polish messages don't show up correctly on MS-Windows.  
Solution: Convert messages to cp1250. (Mikolaj Machowski)  
Also add English message translations, because it got in the way of the patch.  
Files: Makefile, src/po/Makefile, src/po/en\_gb.po, src/po/pl.po

Patch 6.1.471

Problem: ":jumps" output continues after pressing "q" at the more-prompt. (Hari Krishna Dara)  
Solution: Check for "got\_int" being set.  
Files: src/mark.c

Patch 6.1.472

Problem: When there is an authentication error when connecting to the X server Vim exits.  
Solution: Use XSetIOErrorHandler() to catch the error and longjmp() to avoid the exit. Also do this in the main loop, so that when the X server exits a Vim running in a console isn't killed.  
Files: src/globals.h, src/main.c, src/os\_unix.c

Patch 6.1.473

Problem: Referring to \$curwin or \$curbuf in Perl 5.6 causes a crash.  
Solution: Add "pTHX\_" to cur\_val(). (Yasuhiro Matsumoto)  
Files: src/if\_perl.xs

Patch 6.1.474

Problem: When opening the command-line window in Ex mode it's impossible to go back. (Pavol Juhas)  
Solution: Reset "exmode\_active" and restore it when the command-line window is closed.  
Files: src/ex\_getln.c

Patch 6.2f.001

Problem: The configure check for Ruby didn't work properly for Ruby 1.8.0.  
Solution: Change the way the Ruby check is done. (Aron Griffis)  
Files: src/auto/configure, src/configure.in

Patch 6.2f.002

Problem: The output of ":ls" doesn't show whether a buffer had read errors.  
Solution: Add the "x" flag in the ":ls" output.  
Files: runtime/doc/windows.txt, src/buffer.c

Patch 6.2f.003

Problem: Test49 doesn't properly test the behavior of ":catch" without an argument.  
Solution: Update test49. (Servatius Brandt)  
Files: src/testdir/test49.ok, src/testdir/test49.vim

Patch 6.2f.004

Problem: "vim --version" always uses CR/LF in the output.

Solution: Omit the CR.  
Files: src/message.c, src/os\_unix.c

Patch 6.2f.005

Problem: Two error messages without a colon after the number.  
Solution: Add the colon. (Taro Muraoka)  
Files: src/if\_cscope.c

Patch 6.2f.006

Problem: When saving a file takes a while and Vim regains focus this can result in a "file changed outside of Vim" warning and ml\_get() errors. (Mike Williams)  
Solution: Add the "b\_saving" flag to avoid checking the timestamp while the buffer is being saved. (Michael Schaap)  
Files: src/fileio.c, src/structs.h

Patch 6.2f.007

Problem: Irix compiler complains about multiple defined symbols. vsnprintf() is not available. (Charles Campbell)  
Solution: Insert EXTERN for variables in globals.h. Change the configure check for vsnprintf() from compiling to linking.  
Files: src/auto/configure, src/configure.in, src/globals.h

Patch 6.2f.008

Problem: The Aap recipe doesn't work with Aap 0.149.  
Solution: Change targetarg to TARGETARG. Update the mysign file.  
Files: src/main.aap, src/mysign

Patch 6.2f.009 (extra)

Problem: Small problem when building with Borland 5.01.  
Solution: Use mkdir() instead of \_mkdir(). (Walter Briscoe)  
Files: src/dosinst.h

Patch 6.2f.010

Problem: Warning for missing prototypes.  
Solution: Add missing prototypes. (Walter Briscoe)  
Files: src/if\_cscope.c

Patch 6.2f.011

Problem: The configure script doesn't work with autoconf 2.5x.  
Solution: Add square brackets around a header check. (Aron Griffis)  
Note: touch src/auto/configure after applying this patch.  
Files: src/configure.in

Patch 6.2f.012

Problem: ":echoerr" doesn't work correctly inside try/endtry.  
Solution: Don't reset did\_emsg inside a try/endtry. (Servatius Brandt)  
Files: src/eval.c

Patch 6.2f.013 (extra)

Problem: Macintosh: Compiler warning for a trigraph.  
Solution: Insert a backslash before each question mark. (Peter Cucka)  
Files: src/os\_mac.h

Patch 6.2f.014 (extra)

Problem: Macintosh: ex\_eval is not included in the project file.  
Solution: Add ex\_eval. (Dany St-Amant)  
Files: src/os\_mac.pbproj/project.pbproj

Patch 6.2f.015 (extra)

Problem: Win32: When changing header files not all source files involved are recompiled.



Solution: Improve the dependency rules. (Dan Sharp)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak

Patch 6.2f.016

Problem: "vim --version > ff" on non-Unix systems results in a file with a missing line break at the end. (Bill McCarthy)  
Solution: Add a line break.  
Files: src/main.c

Patch 6.2f.017

Problem: Unix: starting Vim in the background and then bringing it to the foreground may cause the terminal settings to be wrong.  
Solution: Check for tcsetattr() to return an error, retry when it does. (Paul Tapper)  
Files: src/os\_unix.c

Patch 6.2f.018

Problem: Mac OS X 10.2: OK is defined to zero in cursus.h while Vim uses one. Redefining it causes a warning message.  
Solution: Undefine OK before defining it to one. (Taro Muraoka)  
Files: src/vim.h

Patch 6.2f.019

Problem: Mac OS X 10.2: COLOR\_BLACK and COLOR\_WHITE are defined in curses.h.  
Solution: Rename them to PRCOLOR\_BLACK and PRCOLOR\_WHITE.  
Files: src/ex\_cmds2.c

Patch 6.2f.020

Problem: Win32: test50 produces beeps and fails with some versions of diff.  
Solution: Remove empty lines and convert the output to dos fileformat.  
Files: src/testdir/test50.in

Patch 6.2f.021

Problem: Running configure with "--enable-netbeans" disables Netbeans. (Gordon Prieur)  
Solution: Fix the tests in configure.in where the default is to enable a feature. Fix that "--enable-acl" reported "yes" confusingly.  
Files: src/auto/configure, src/configure.in, src/mysign

Patch 6.2f.022

Problem: A bogus value for 'foldmarker' is not rejected, possibly causing a hang. (Derek Wyatt)  
Solution: Check for a non-empty string before and after the comma.  
Files: src/option.c

Patch 6.2f.023

Problem: When the help files are not in \$VIMRUNTIME but 'helpfile' is correct Vim still can't find the help files.  
Solution: Also look for a tags file in the directory of 'helpfile'.  
Files: src/tag.c

Patch 6.2f.024

Problem: When 'delcombine' is set and a character has more than two composing characters "x" deletes them all.  
Solution: Always delete only the last composing character.  
Files: src/misc1.c

Patch 6.2f.025

Problem: When reading a file from stdin that has DOS line endings but a missing end-of-line for the last line 'fileformat' becomes "unix". (Bill McCarthy)

Solution: Don't add the missing line break when re-reading the text from the buffer.

Files: src/fileio.c

#### Patch 6.2f.026

Problem: When typing new text at the command line, old composing characters may be displayed.

Solution: Don't read composing characters from after the end of the text to be displayed.

Files: src/ex\_getln.c, src/mbyte.c, src/message.c, src/proto/mbyte.pro, src/screen.c

#### Patch 6.2f.027

Problem: Compiler warnings for unsigned char pointers. (Tony Leneis)

Solution: Add typecasts to char pointer.

Files: src/quickfix.c

#### Patch 6.2f.028

Problem: GTK: When 'imactivatekey' is empty and XIM is inactive it can't be made active again. Cursor isn't updated immediately when changing XIM activation. Japanese XIM may hang when using 'imactivatekey'. Can't activate XIM after typing fFtT command or ":sh".

Solution: Properly set the flag that indicates the IM is active. Update the cursor right away. Do not send a key-release event. Handle Normal mode and running an external command differently. (Yasuhiro Matsumoto)

Files: src/mbyte.c

#### Patch 6.2f.029

Problem: Mixing use of int and enum.

Solution: Adjust argument type of cs\_usage\_msg(). Fix wrong typedef.

Files: src/if\_cscope.c, src/if\_cscope.h

#### Patch 6.2f.030 (after 6.2f.028)

Problem: Cursor moves up when using XIM.

Solution: Reset im\_preedit\_cursor. (Yasuhiro Matsumoto)

Files: src/mbyte.c

#### Patch 6.2f.031

Problem: Crash when listing a function argument in the debugger. (Ron Aaron)

Solution: Init the name field of an argument to NULL.

Files: src/eval.c

#### Patch 6.2f.032

Problem: When a write fails for a ":silent!" while inside try/endtry the BufWritePost autocommands are not triggered.

Solution: Check the emsg\_silent flag in should\_abort(). (Servatius Brandt)

Files: src/ex\_eval.c, src/testdir/test49.ok, src/testdir/test49.vim

#### Patch 6.2f.033

Problem: Cscope: re-entrance problem for ":cscope" command. Checking for duplicate database didn't work well for Win95. Didn't check for duplicate databases after an empty entry.

Solution: Don't set postponed\_split too early. Remember first empty database entry. (Sergey Khorev)

Files: src/if\_cscope.c

#### Patch 6.2f.034

Problem: The netbeans interface cannot be used on systems without vsnprintf(). (Tony Leneis)

Solution: Use EMSG(), EMSGN() and EMSG2() instead.

Files: src/auto/configure, src/configure.in, src/netbeans.c

## Patch 6.2f.035

Problem: The configure check for the netbeans interface doesn't work if the socket and nsl libraries are required.

Solution: Check for the socket and nsl libraries before the netbeans check.

Files: src/auto/configure, src/configure.in

## Patch 6.2f.036

Problem: Moving leftwards over text with an illegal UTF-8 byte moves one byte instead of one character.

Solution: Ignore an illegal byte after the cursor position.

Files: src/mbyte.c

## Patch 6.2f.037

Problem: When receiving a Netbeans command at the hit-enter or more prompt the screen is redrawn but Vim is still waiting at the prompt.

Solution: Quit the prompt like a CTRL-C was typed.

Files: src/netbeans.c

## Patch 6.2f.038

Problem: The dependency to run autoconf causes a patch for configure.in to run autoconf, even though the configure script was updated as well.

Solution: Only run autoconf with "make autoconf".

Files: src/Makefile

## Patch 6.2f.039

Problem: CTRL-W K makes the new top window very high.

Solution: When 'equalalways' is set equalize the window heights.

Files: src/window.c

=====
  
VERSION 6.3

\*version-6.3\*

This section is about improvements made between version 6.2 and 6.3.

This is mainly a bug-fix release. There are also a few new features. The major number of new items is in the runtime files and translations.

## Changed

\*changed-6.3\*

-----

The intro message also displays a note about sponsoring Vim, mixed randomly with the message about helping children in Uganda.

Included the translated menus, keymaps and tutors with the normal runtime files. The separate "lang" archive now only contains translated messages.

Made the translated menu file names a bit more consistent. Use "latin1" for "iso\_8859-1" and "iso\_8859-15".

Removed the "file\_select.vim" script from the distribution. It's not more useful than other scripts that can be downloaded from [www.vim.org](http://www.vim.org).

The "runtime/doc/tags" file is now always in unix fileformat. On MS-Windows it used to be dos fileformat, but ":helptags" generates a unix format file.

## Added

\*added-6.3\*

-----

## New commands:

|               |                                              |
|---------------|----------------------------------------------|
| :cNfile       | go to last error in previous file            |
| :cpfile       | idem                                         |
| :changes      | print the change list                        |
| :keepmarks    | following command keeps marks where they are |
| :keepjumps    | following command keeps jumplist and marks   |
| :lockmarks    | following command keeps marks where they are |
| :redrawstatus | force a redraw of the status line(s)         |

## New options:

|             |                                         |
|-------------|-----------------------------------------|
| 'antialias' | Mac OS X: use smooth, antialiased fonts |
| 'helplang'  | preferred help languages                |

## Syntax files:

- Arch inventory (Nikolai Weibull)
- Calendar (Nikolai Weibull)
- Ch (Wayne Cheng)
- Controllable Regex Mutilator (Nikolai Weibull)
- D (Jason Mills)
- Desktop (Mikolaj Machowski)
- Dircolors (Nikolai Weibull)
- Elinks configuration (Nikolai Weibull)
- FASM (Ron Aaron)
- GrADS scripts (Stefan Fronzek)
- Icewm menu (James Mahler)
- LDIF (Zak Johnson)
- Locale input, fdcc. (Dwayne Bailey)
- Pinfo config (Nikolai Weibull)
- Pyrex (Marco Barisione)
- Relax NG Compact (Nikolai Weibull)
- Slice (Morel Bodin)
- VAX Macro Assembly (Tom Uijldert)
- grads (Stefan Fronzek)
- libao (Nikolai Weibull)
- mplayer (Nikolai Weibull)
- rst (Nikolai Weibull)
- tcsh (Gautam Iyer)
- yaml (Nikolai Weibull)

## Compiler plugins:

- ATT dot (Marcos Macedo)
- Apple Project Builder (Alexander von Below)
- Intel (David Harrison)
- bdf (Nikolai Weibull)
- icc (Peter Puck)
- javac (Doug Kearns)
- neato (Marcos Macedo)
- onsgmls (Robert B. Rowsome)
- perl (Christian J. Robinson)
- rst (Nikolai Weibull)
- se (SmartEiffel) (Doug Kearns)
- tcl (Doug Kearns)
- xmlwf (Robert B. Rowsome)

## Filetype plugins:

- Aap (Bram Moolenaar)
- Ch (Wayne Cheng)
- Css (Nikolai Weibull)
- Pyrex (Marco Barisione)
- Rst (Nikolai Weibull)

## Indent scripts:

- Aap (Bram Moolenaar)
- Ch (Wayne Cheng)
- DocBook (Nikolai Weibull)
- MetaPost (Eugene Minkovskii)
- Objective-C (Kazunobu Kuriyama)
- Pyrex (Marco Barisione)
- Rst (Nikolai Weibull)
- Tcsh (Gautam Iyer)
- XFree86 configuration file (Nikolai Weibull)
- Zsh (Nikolai Weibull)

## Keymaps:

- Greek for cp1253 (Panagiotis Louridas)
- Hungarian (Magyar) (Laszlo Zavaleta)
- Persian-Iranian (Behnam Esfahbod)

## Message translations:

- Catalan (Ernest Adroque)
- Russian (Vassily Ragosin)
- Swedish (Johan Svedberg)

## Menu translations:

- Catalan (Ernest Adroque)
- Russian (Tim Alexeevsky)
- Swedish (Johan Svedberg)

## Tutor translations:

- Catalan (Ernest Adroque)
- Russian in cp1251 (Alexey Froloff)
- Slovak in cp1250 and iso8859-2 (Lubos Celko)
- Swedish (Johan Svedberg)
- Korean (Kee-Won Seo)
- UTF-8 version of the Japanese tutor (Yasuhiro Matsumoto) Use this as the original, create the other Japanese tutor by conversion.

Included "russian.txt" help file. (Vassily Ragosin)

Include Encapsulated PostScript and PDF versions of the Vim logo in the extra archive.

The help highlighting finds the highlight groups and shows them in the color that is actually being used. (idea from Yakov Lerner)

The big Win32 version is now compiled with Ruby interface, version 1.8. For Python version 2.3 is used. For Perl version 5.8 is used.

The "ftdetect" directory is mentioned in the documentation. The DOS install program creates it.

Fixed

\*fixed-6.3\*

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Test 42 failed on MS-Windows. Set and reset 'fileformat' and 'binary' options here and there. (Walter Briscoe)

The explorer plugin didn't work for double-byte 'encoding's.

Use "copy /y" in Make\_bc5.mak to avoid a prompt for overwriting.

Patch 6.2.001

Problem: The ":stopinsert" command doesn't have a help tag.  
Solution: Add the tag. (Antoine J. Mechelynck)  
Files: runtime/doc/insert.txt, runtime/doc/tags

Patch 6.2.002

Problem: When compiled with the +multi\_byte feature but without +eval, displaying UTF-8 characters may cause a crash. (Karsten Hopp)  
Solution: Also set the default for 'ambiwidth' when compiled without the +eval feature.  
Files: src/option.c

Patch 6.2.003

Problem: GTK 2: double-wide characters below 256 are not displayed correctly.  
Solution: Check the cell width for characters above 127. (Yasuhiro Matsumoto)  
Files: src/gui\_gtk\_x11.c

Patch 6.2.004

Problem: With a line-Visual selection at the end of the file a "p" command puts the text one line upwards.  
Solution: Detect that the last line was deleted and put forward. (Taro Muraoka)  
Files: src/normal.c

Patch 6.2.005

Problem: GTK: the "Find" and "Find and Replace" tools don't work. (Aschwin Marsman)  
Solution: Show the dialog after creating it. (David Necas)  
Files: src/gui\_gtk.c

Patch 6.2.006

Problem: The Netbeans code contains an obsolete function that uses "vim61" and sets the fall-back value for \$VIMRUNTIME.  
Solution: Delete the obsolete function.  
Files: src/main.c, src/netbeans.c, src/proto/netbeans.pro

Patch 6.2.007

Problem: Listing tags for Cscope doesn't always work.  
Solution: Avoid using smgs\_attr(). (Sergey Khorev)  
Files: src/if\_cscope.c

Patch 6.2.008

Problem: XIM with GTK 2: After backspacing preedit characters are wrong.  
Solution: Reset the cursor position. (Yasuhiro Matsumoto)  
Files: src/mbyte.c

Patch 6.2.009

Problem: Win32: The self-installing executable "Full" selection only selects some of the items to install. (Salman Mohsin)  
Solution: Change commas to spaces in between section numbers.  
Files: nsis/gvim.nsi

Patch 6.2.010

Problem: When 'virtualedit' is effective and a line starts with a multi-byte character, moving the cursor right doesn't work.  
Solution: Obtain the right character to compute the column offset. (Taro Muraoka)  
Files: src/charset.c

Patch 6.2.011

Problem: Alpha OSF1: stat() is a macro and doesn't allow an #ifdef halfway.

(Moshe Kaminsky)  
Solution: Move the `#ifdef` outside of `stat()`.  
Files: `src/os_unix.c`

#### Patch 6.2.012

Problem: May hang when polling for a character.  
Solution: Break the wait loop when not waiting for a character.  
Files: `src/os_unix.c`

#### Patch 6.2.013 (extra)

Problem: Win32: The registry key for uninstalling GvimExt still uses "6.1".  
Solution: Change the version number to "6.2". (Ajit Thakkar)  
Files: `src/GvimExt/GvimExt.reg`

#### Patch 6.2.014 (after 6.2.012)

Problem: XSMP doesn't work when using `poll()`.  
Solution: Use `xsmc_idx` instead of `gpm_idx`. (Neil Bird)  
Files: `src/os_unix.c`

#### Patch 6.2.015

Problem: The `+xsmc` feature is never enabled.  
Solution: Move the `#define` for `USE_XSMP` to below where `WANT_X11` is defined.  
(Alexey Froloff)  
Files: `src/feature.h`

#### Patch 6.2.016

Problem: Using `":cscope find"` with `'cscopequickfix'` does not always split the window. (Gary Johnson)  
Win32: `":cscope add"` could make the script that contains it read-only until the corresponding `":cscope kill"`.  
Errors during `":cscope add"` may not be handled properly.  
Solution: When using the quickfix window may need to split the window.  
Avoid file handle inheritance for the script.  
Check for a failed connection and/or process. (Sergey Khorev)  
Files: `src/ex_cmds2.c`, `src/if_cscope.c`

#### Patch 6.2.017

Problem: `Test11` sometimes prompts the user, because a file would have been changed outside of Vim. (Antonio Colombo)  
Solution: Add a `FileChangedShell` autocommand to avoid the prompt.  
Files: `src/testdir/test11.in`

#### Patch 6.2.018

Problem: When using the XSMP protocol and reading from `stdin` Vim may wait for a key to be pressed.  
Solution: Avoid that `RealWaitForChar()` is used recursively.  
Files: `src/os_unix.c`

#### Patch 6.2.019 (lang)

Problem: Loading the Portuguese menu causes an error message.  
Solution: Join two lines. (Jose Pedro Oliveira, JosE9 de Paula)  
Files: `runtime/lang/menu_pt_br.vim`

#### Patch 6.2.020

Problem: The "Syntax/Set syntax only" menu item causes an error message.  
(Oyvind Holm)  
Solution: Set the script-local variable in a function. (Benji Fisher)  
Files: `runtime/synmenu.vim`

#### Patch 6.2.021

Problem: The user manual section on exceptions contains small mistakes.  
Solution: Give a good example of an error that could be missed and other

improvements. (Servatius Brandt)  
Files: runtime/doc/usr\_41.txt

Patch 6.2.022 (extra)

Problem: Win32: After deleting a menu item it still appears in a tear-off window.

Solution: Set the mode to zero for the deleted item. (Yasuhiro Matsumoto)

Files: src/gui\_w32.c

Patch 6.2.023 (extra)

Problem: Win32: Make\_ivc.mak does not clean everything.

Solution: Delete more files in the clean rule. (Walter Briscoe)

Files: src/Make\_ivc.mak

Patch 6.2.024 (extra)

Problem: Win32: Compiler warnings for typecasts.

Solution: Use DWORD instead of WORD. (Walter Briscoe)

Files: src/gui\_w32.c

Patch 6.2.025

Problem: Missing prototype for sigaltstack().

Solution: Add the prototype when it is not found in a header file.

Files: src/os\_unix.c

Patch 6.2.026

Problem: Warning for utimes() argument.

Solution: Add a typecast.

Files: src/fileio.c

Patch 6.2.027

Problem: Warning for uninitialized variable.

Solution: Set mb\_l to one when not using multi-byte characters.

Files: src/message.c

Patch 6.2.028

Problem: Cscope connection may kill Vim process and others.

Solution: Check for pid being larger than one. (Khorev Sergey)

Files: src/if\_cscope.c

Patch 6.2.029

Problem: When using the remote server functionality Vim may leak memory. (Srikanth Sankaran)

Solution: Free the result of XListProperties().

Files: src/if\_xcmdsrv.c

Patch 6.2.030

Problem: Mac: Warning for not being able to use precompiled header files.

Solution: Don't redefine select. Use -no-cpp-precomp for compiling, so that function prototypes are still found.

Files: src/os\_unix.c, src/osdef.sh

Patch 6.2.031

Problem: The langmenu entry in the options window doesn't work. (Rodolfo Lima)

With GTK 1 the ":options" command causes an error message.

(Michael Naumann)

Solution: Change "lmenu" to "langmenu". Only display the 'tbis' option for GTK 2.

Files: runtime/optwin.vim

Patch 6.2.032

Problem: The lpc filetype is never recognized. (Shizhu Pan)



Solution: Check for g:lpc\_syntax\_for\_c instead of the local variable  
lpc\_syntax\_for\_c. (Benji Fisher)  
Files: runtime/filetype.vim

Patch 6.2.033 (extra)

Problem: Mac: Various compiler warnings.  
Solution: Don't include Classic-only headers in Unix version.  
Remove references to several unused variables. (Ben Fowler)  
Fix double definition of DEFAULT\_TERM.  
Use int instead of unsigned short for pixel values, so that the  
negative error values are recognized.  
Files: src/gui\_mac.c, src/term.c

Patch 6.2.034

Problem: Mac: Compiler warning for redefining DEFAULT\_TERM.  
Solution: Fix double definition of DEFAULT\_TERM.  
Files: src/term.c

Patch 6.2.035

Problem: Mac: Compiler warnings in Python interface.  
Solution: Make a difference between pure Mac and Unix-Mac. (Peter Cucka)  
Files: src/if\_python.c

Patch 6.2.036 (extra)

Problem: Mac Unix version: If foo is a directory, then ":e f<Tab>" should  
expand to ":e foo/" instead of ":e foo" . (Vadim Zeitlin)  
Solution: Define DONT\_ADD\_PATHSEP\_TO\_DIR only for pure Mac. (Benji Fisher)  
Files: src/os\_mac.h

Patch 6.2.037

Problem: Win32: converting an encoding name to a codepage could result in  
an arbitrary number.  
Solution: make encname2codepage() return zero if the encoding name doesn't  
contain a codepage number.  
Files: src/mbyte.c

Patch 6.2.038 (extra)

Problem: Warning messages when using the MingW compiler. (Bill McCarthy)  
Can't compile console version without +mouse feature.  
Solution: Initialize variables, add parenthesis.  
Add an #ifdef around g\_nMouseClicked. (Ajit Thakkar)  
Files: src/eval.c, src/os\_win32.c, src/gui\_w32.c, src/dosinst.c

Patch 6.2.039 (extra)

Problem: More warning messages when using the MingW compiler.  
Solution: Initialize variables. (Bill McCarthy)  
Files: src/os\_mswin.c

Patch 6.2.040

Problem: FreeBSD: Crash while starting up when compiled with +xsmp feature.  
Solution: Pass a non-NULL argument to IceAddConnectionWatch().  
Files: src/os\_unix.c

Patch 6.2.041 (extra, after 6.2.033)

Problem: Mac: Compiler warnings for conversion types, missing prototype,  
missing return type.  
Solution: Change sscanf "%hd" to "%d", the argument is an int now. Add  
gui\_mch\_init\_check() prototype. Add "int" to termLib functions.  
Files: src/gui\_mac.c, src/proto/gui\_mac.pro, src/termLib.c.

Patch 6.2.042 (extra)

Problem: Cygwin: gcc 3.2 has an optimizer problem, sometimes causing a

crash.  
Solution: Add -fno-strength-reduce to the compiler arguments. (Dan Sharp)  
Files: src/Make\_cyg.mak

Patch 6.2.043

Problem: Compiling with both netbeans and workshop doesn't work.  
Solution: Move the shellRectangle() function to gui\_x11.c. (Gordon Prieur)  
Files: src/gui\_x11.c, src/integration.c, src/netbeans.c,  
src/proto/netbeans.pro

Patch 6.2.044

Problem: ":au filetype detect" gives an error for a non-existing event name,  
but it's actually a non-existing group name. (Antoine Mechelynck)  
Solution: Make the error message clearer.  
Files: src/fileio.c

Patch 6.2.045

Problem: Obtaining the '(' mark changes the '' mark. (Gary Holloway)  
Solution: Don't set the '' mark when searching for the start/end of the  
current sentence/paragraph.  
Files: src/mark.c

Patch 6.2.046

Problem: When evaluating an argument of a function throws an exception the  
function is still called. (Hari Krishna Dara)  
Solution: Don't call the function when an exception was thrown.  
Files: src/eval.c

Patch 6.2.047 (extra)

Problem: Compiler warnings when using MingW. (Bill McCarthy)  
Solution: Give the s\_dwLastClickTime variable a type. Initialize dwEndTime.  
Files: src/os\_win32.c

Patch 6.2.048

Problem: The Python interface doesn't compile with Python 2.3 when  
dynamically loaded.  
Solution: Use dll\_PyObject\_Malloc and dll\_PyObject\_Free. (Paul Moore)  
Files: src/if\_python.c

Patch 6.2.049

Problem: Using a "-range=" argument with ":command" doesn't work and  
doesn't generate an error message.  
Solution: Generate an error message.  
Files: src/ex\_docmd.c

Patch 6.2.050

Problem: Test 32 didn't work on MS-Windows.  
Solution: Write the temp file in Unix fileformat. (Walter Briscoe)  
Files: src/testdir/test32.in

Patch 6.2.051

Problem: When using "\=submatch(0)" in a ":s" command, line breaks become  
NUL characters.  
Solution: Change NL to CR characters, so that they become line breaks.  
Files: src/regexp.c

Patch 6.2.052

Problem: A few messages are not translated.  
Solution: Add \_() to the messages. (Muraoka Taro)  
Files: src/ex\_cmds.c

Patch 6.2.053

Problem: Prototype for bzero() doesn't match most systems.  
Solution: Use "void \*" instead of "char \*" and "size\_t" instead of "int".  
Files: src/osdef1.h.in

## Patch 6.2.054

Problem: A double-byte character with a second byte that is a backslash causes problems inside a string.  
Solution: Skip over multi-byte characters in a string properly. (Yasuhiro Matsumoto)  
Files: src/eval.c

## Patch 6.2.055

Problem: Using col('.') from CTRL-O in Insert mode does not return the correct value for multi-byte characters.  
Solution: Correct the cursor position when it is necessary, move to the first byte of a multi-byte character. (Yasuhiro Matsumoto)  
Files: src/edit.c

## Patch 6.2.056 (extra)

Problem: Building with Sniff++ doesn't work.  
Solution: Use the multi-threaded libc when needed. (Holger Ditting)  
Files: src/Make\_mvc.mak

## Patch 6.2.057 (extra)

Problem: Mac: With -DMACOS\_X putenv() is defined twice, it is in a system library. Get a warning for redefining OK. Unused variables in os\_mac.c  
Solution: Define HAVE\_PUTENV. Undefine OK after including curses.h. Remove declarations for unused variables.  
Files: src/os\_mac.c, src/os\_mac.h, src/vim.h

## Patch 6.2.058

Problem: When 'autochdir' is set ":bnext" to a buffer without a name causes a crash.  
Solution: Don't call vim\_chdirfile() when the file name is NULL. (Taro Muraoka)  
Files: src/buffer.c

## Patch 6.2.059

Problem: When 'scrolloff' is a large number and listing completion results on the command line, then executing a command that jumps close to where the cursor was before, part of the screen is not updated. (Yakov Lerner)  
Solution: Don't skip redrawing part of the window when it was scrolled.  
Files: src/screen.c

## Patch 6.2.060 (extra)

Problem: Win32: When 'encoding' is set to "iso-8859-7" copy/paste to/from the clipboard gives a lalloc(0) error. (Kriton Kyrimis)  
Solution: When the string length is zero allocate one byte. Also fix that when the length of the Unicode text is zero (conversion from 'encoding' to UCS-2 was not possible) the normal text is used.  
Files: src/os\_mswin.c

## Patch 6.2.061

Problem: GUI: Using the left mouse button with the shift key should work like "\*" but it scrolls instead. (Martin Beller)  
Solution: Don't recognize an rxvt scroll wheel event when using the GUI.  
Files: src/term.c

## Patch 6.2.062

Problem: When one buffer uses a syntax with "containedin" and another

buffer does not, redrawing depends on what the current buffer is.  
(Brett Pershing Stahlman)

Solution: Use "syn\_buf" instead of "curbuf" to get the b\_syn\_containedin flag.

Files: src/syntax.c

Patch 6.2.063

Problem: When using custom completion end up with no matches.

Solution: Make cmd\_numfiles and cmd\_files local to completion to avoid that they are overwritten when ExpandOne() is called recursively by f\_glob().

Files: src/eval.c, src/ex\_docmd.c, src/ex\_getln.c, src/proto/ex\_getln.pro, src/misc1.c, src/structs.h, src/tag.c

Patch 6.2.064

Problem: resolve() only handles one symbolic link, need to repeat it to resolve all of them. Then need to simplify the file name.

Solution: Make resolve() resolve all symbolic links and simplify the result. Add simplify() to just simplify a file name. Fix that test49 doesn't work if /tmp is a symbolic link. (Servatius Brandt)

Files: runtime/doc/eval.txt, src/eval.c, src/tag.c, src/testdir/test49.vim

Patch 6.2.065

Problem: ":windo 123" only updates other windows when entering them.  
(Walter Briscoe)

Solution: Update the topline before going to the next window.

Files: src/ex\_cmds2.c

Patch 6.2.066 (extra)

Problem: Ruby interface doesn't work with Ruby 1.8.0.

Solution: Change "defout" to "stdout". (Aron Griffis)  
Change dynamic loading. (Taro Muraoka)

Files: src/if\_ruby.c, src/Make\_mvc.mak

Patch 6.2.067

Problem: When searching for a string that starts with a composing character the command line isn't drawn properly.

Solution: Don't count the space to draw the composing character on and adjust the cursor column after drawing the string.

Files: src/message.c

Patch 6.2.068

Problem: Events for the netbeans interface that include a file name with special characters don't work properly.

Solution: Use nb\_quote() on the file name. (Sergey Khorev)

Files: src/netbeans.c

Patch 6.2.069 (after 6.2.064)

Problem: Unused variables "limit" and "new\_st" and unused label "fail" in some situation. (Bill McCarthy)

Solution: Put the declarations inside an #ifdef. (Servatius Brandt)

Files: src/eval.c, src/tag.c

Patch 6.2.070 (after 6.2.069)

Problem: Still unused variable "new\_st". (Bill McCarthy)

Solution: Move the declaration to the right block this time.

Files: src/tag.c

Patch 6.2.071

Problem: 'statusline' can only contain 50 % items. (Antony Scriven)

Solution: Allow 80 items and mention it in the docs.

Files: runtime/doc/option.txt, src/vim.h

Patch 6.2.072

Problem: When using expression folding, foldexpr() mostly returns -1 for the previous line, which makes it difficult to write a fold expression.

Solution: Make the level of the previous line available while still looking for the end of a fold.

Files: src/fold.c

Patch 6.2.073

Problem: When adding detection of a specific filetype for a plugin you need to edit "filetype.vim".

Solution: Source files from the "ftdetect" directory, so that a filetype detection plugin only needs to be dropped in a directory.

Files: runtime/doc/filetype.txt, runtime/doc/usr\_05.txt,  
runtime/doc/usr\_41.txt, runtime/filetype.vim

Patch 6.2.074

Problem: Warnings when compiling the Python interface. (Ajit Thakkar)

Solution: Use ANSI function declarations.

Files: src/if\_python.c

Patch 6.2.075

Problem: When the temp file for writing viminfo can't be used "NULL" appears in the error message. (Ben Lavender)

Solution: Print the original file name when there is no temp file name.

Files: src/ex\_cmds.c

Patch 6.2.076

Problem: The tags listed for cscope are in the wrong order. (Johannes Stezenbach)

Solution: Remove the reordering of tags for the current file. (Sergey Khorev)

Files: src/if\_cscope.c

Patch 6.2.077

Problem: When a user function specifies custom completion, the function gets a zero argument instead of an empty string when there is no word before the cursor. (Preben Guldberg)

Solution: Don't convert an empty string to a zero.

Files: src/eval.c

Patch 6.2.078

Problem: "make test" doesn't work if Vim wasn't compiled yet. (Ed Avis)

Solution: Build Vim before running the tests.

Files: src/Makefile

Patch 6.2.079

Problem: ":w ++enc=utf-8 !cmd" doesn't work.

Solution: Check for the "++" argument before the "!".

Files: src/ex\_docmd.c

Patch 6.2.080

Problem: When 't\_ti' is not empty but doesn't swap screens, using "ZZ" in an unmodified file doesn't clear the last line.

Solution: Call msg\_clr\_eos() when needed. (Michael Schroeder)

Files: src/os\_unix.c

Patch 6.2.081

Problem: Problem when using a long multibyte string for the statusline.

Solution: Use the right pointer to get the cell size. (Taro Muraoka)

Files: src/buffer.c

Patch 6.2.082

Problem: Can't compile with Perl 5.8.1.

Solution: Rename "e\_number" to "e\_number\_exp". (Sascha Blank)

Files: src/digraph.c, src/globals.h

Patch 6.2.083

Problem: When a compiler uses ^^^ to mark a word the information is not visible in the quickfix window. (Srikanth Sankaran)

Solution: Don't remove the indent for a line that is not recognized as an error message.

Files: src/quickfix.c

Patch 6.2.084

Problem: "g\_" in Visual mode always goes to the character after the line. (Jean-Rene David)

Solution: Ignore the NUL at the end of the line.

Files: src/normal.c

Patch 6.2.085

Problem: ":verbose set ts" doesn't say an option was set with a "-c" or "--cmd" argument.

Solution: Remember the option was set from a Vim argument.

Files: src/main.c, src/ex\_cmds2.c, src/vim.h

Patch 6.2.086

Problem: "{" and "}" stop inside a closed fold.

Solution: Only stop once inside a closed fold. (Stephen Riehm)

Files: src/search.c

Patch 6.2.087

Problem: CTRL-^ doesn't use the 'confirm' option. Same problem with ":bnext". (Yakov Lerner)

Solution: Put up a dialog for a changed file when 'confirm' is set in more situations.

Files: src/buffer.c, src/ex\_cmds.c

Patch 6.2.088

Problem: When 'sidescrolloff' is set 'showmatch' doesn't work correctly if the match is less than 'sidescrolloff' off from the side of the window. (Roland Stahn)

Solution: Set 'sidescrolloff' to zero while displaying the match.

Files: src/search.c

Patch 6.2.089

Problem: ":set isk+=" adds a comma. (Mark Waggoner)

Solution: Don't add a comma when the added value is empty.

Files: src/option.c

Patch 6.2.090 (extra)

Problem: Win32: MingW compiler complains about #pragmas. (Bill McCarthy)

Solution: Put an #ifdef around the #pragmas.

Files: src/os\_win32.c

Patch 6.2.091

Problem: When an autocommand is triggered when a file is dropped on Vim and it produces output, messages from a following command may be scrolled unexpectedly. (David Rennalls)

Solution: Save and restore msg\_scroll in handle\_drop().

Files: src/ex\_docmd.c

## Patch 6.2.092

Problem: Invalid items appear in the help file tags. (Antonio Colombo)  
Solution: Only accept tags with white space before the first "\*".  
Files: runtime/doc/doctags.c, src/ex\_cmds.c

## Patch 6.2.093

Problem: ":nnoremenu" also defines menu for Visual mode. (Klaus Bosau)  
Solution: Check the second command character for an "o", not the third.  
Files: src/menu.c

## Patch 6.2.094

Problem: Can't compile with GTK and tiny features.  
Solution: Include handle\_drop() and vim\_chdirfile() when FEAT\_DND is defined.  
Do not try to split the window.  
Files: src/ex\_docmd.c, src/misc2.c

## Patch 6.2.095

Problem: The message "Cannot go to buffer x" is confusing for ":buf 6".  
(Frans English)  
Solution: Make it "Buffer x does not exist".  
Files: src/buffer.c

## Patch 6.2.096

Problem: Win32: ":let @\* = '" put a newline on the clipboard. (Klaus Bosau)  
Solution: Put zero bytes on the clipboard for an empty string.  
Files: src/ops.c

## Patch 6.2.097

Problem: Setting or resetting 'insertmode' in a BufEnter autocommand doesn't always have immediate effect. (Nagger)  
Solution: When 'insertmode' is set, set need\_start\_insertmode, when it's reset set stop\_insert\_mode.  
Files: src/option.c

## Patch 6.2.098 (after 6.2.097)

Problem: Can't build Vim with tiny features. (Christian J. Robinson)  
Solution: Declare stop\_insert\_mode always.  
Files: src/edit.c, src/globals.h

## Patch 6.2.099 (extra)

Problem: Test 49 fails. (Mikolaj Machowski)  
Solution: The Polish translation must not change "E116" to "R116".  
Files: src/po/pl.po

## Patch 6.2.100

Problem: "make proto" fails when compiled with the Perl interface.  
Solution: Remove "-fno.\*" from PERL\_CFLAGS, cproto sees it as its option.  
Files: src/auto/configure, src/configure.in

## Patch 6.2.101

Problem: When using syntax folding, opening a file slows down a lot when it's size increases by only 20%. (Gary Johnson)  
Solution: The array with cached syntax states is leaking entries. After cleaning up the list obtain the current entry again.  
Files: src/syntax.c

## Patch 6.2.102

Problem: The macros equal() and CR conflict with a Carbon header file.  
Solution: Rename equal() to equalpos(). Rename CR to CAR.  
Do this in the non-extra files only.  
Files: src/ascii.h, src/buffer.c, src/charset.c, src/edit.c, src/eval.c,

```
src/ex_cmds.c, src/ex_cmds2.c, src/ex_getln.c, src/fileio.c,
src/getchar.c, src/gui.c, src/gui_athena.c, src/gui_gtk_x11.c,
src/gui_motif.c, src/macros.h, src/mark.c, src/message.c,
src/misc1.c, src/misc2.c, src/normal.c, src/ops.c, src/os_unix.c,
src/regexp.c, src/search.c, src/ui.c, src/workshop.c
```

Patch 6.2.103 (extra)

Problem: The macros equal() and CR conflict with a Carbon header file.

Solution: Rename equal() to equalpos(). Rename CR to CAR.

Do this in the extra files only.

Files: src/gui\_photon.c, src/gui\_w48.c

Patch 6.2.104

Problem: Unmatched braces in the table with options.

Solution: Move the "}," outside of the #ifdef. (Yakov Lerner)

Files: src/option.c

Patch 6.2.105

Problem: When the cursor is past the end of the line when calling  
get\_c\_indent() a crash might occur.

Solution: Don't look past the end of the line. (NJ Verenini)

Files: src/misc1.c

Patch 6.2.106

Problem: Tag searching gets stuck on a very long line in the tags file.

Solution: When skipping back to search the first matching tag remember the  
offset where searching started looking for a line break.

Files: src/tag.c

Patch 6.2.107 (extra)

Problem: The NetBeans interface cannot be used on Win32.

Solution: Add support for the NetBeans for Win32. Add support for reading  
XPM files on Win32. Also fixes that a sign icon with a space in  
the file name did not work through the NetBeans interface.  
(Sergey Khorev)

Also: avoid repeating error messages when the connection is lost.

Files: Makefile, runtime/doc/netbeans.txt, src/Make\_bc5.mak,  
src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak,  
src/bigvim.bat, src/feature.h, src/gui\_beval.c, src/gui\_beval.h,  
src/gui\_w32.c, src/gui\_w48.c, src/menu.c, src/nbdebug.c,  
src/nbdebug.h, src/netbeans.c, src/os\_mswin.c, src/os\_win32.h,  
src/proto/gui\_beval.pro, src/proto/gui\_w32.pro,  
src/proto/netbeans.pro, src/proto.h, src/version.c, src/vim.h,  
src/xpm\_w32.c, src/xpm\_w32.h

Patch 6.2.108

Problem: Crash when giving a message about ignoring case in a tag. (Manfred  
Kuehn)

Solution: Use a longer buffer for the message.

Files: src/tag.c

Patch 6.2.109

Problem: Compiler warnings with various Amiga compilers.

Solution: Add typecast, prototypes, et al. that are also useful for other  
systems. (Flavio Stanchina)

Files: src/eval.c, src/ops.c

Patch 6.2.110

Problem: When \$LANG includes the encoding, a menu without an encoding name  
is not found.

Solution: Also look for a menu file without any encoding.

Files: runtime/menu.vim



## Patch 6.2.111

Problem: Encoding "cpl251" is not recognized.

Solution: Add "cpl251" to the table of encodings. (Alexey Froloff)

Files: src/mbyte.c

## Patch 6.2.112

Problem: After applying patches test32 fails. (Antonio Colombo)

Solution: Have "make clean" in the testdir delete \*.rej and \*.orig files.  
Use this when doing "make clean" in the src directory.

Files: src/Makefile, src/testdir/Makefile

## Patch 6.2.113

Problem: Using ":startinsert" after "\$" works like "a" instead of "i".  
(Ajit Thakkar)

Solution: Reset "w\_curswant" for ":startinsert" and reset o\_eol in edit().

Files: src/edit.c, src/ex\_docmd.c

## Patch 6.2.114

Problem: When stdout is piped through "tee", the size of the screen may not be correct.

Solution: Use stdin instead of stdout for ioctl() when stdin is a tty and stdout isn't.

Files: src/os\_unix.c

## Patch 6.2.115 (extra)

Problem: Compiler warnings with various Amiga compilers.

Solution: Add typecast, prototypes, et al. Those changes that are Amiga-specific. (Flavio Stanchina)

Files: src/fileio.c, src/memfile.c, src/os\_amiga.c, src/os\_amiga.h, src/vim.h

## Patch 6.2.116 (extra)

Problem: German keyboard with Numlock set different from system startup causes problems.

Solution: Ignore keys with code 0xff. (Helmut Stiegler)

Files: src/gui\_w48.c

## Patch 6.2.117

Problem: Breakpoints in loops of sourced files and functions are not detected. (Hari Krishna Dara)

Solution: Check for breakpoints when using lines that were previously read.  
(Servatius Brandt)

Files: src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/proto/eval.pro, src/proto/ex\_cmds2.pro

## Patch 6.2.118 (extra)

Problem: Mac: Compiling is done in a non-standard way.

Solution: Use the Unix method for Mac OS X, with autoconf. Add "CARBONGUI" to Makefile and configure. (Eric Kow)

Move a few prototypes from os\_mac.pro to gui\_mac.pro.

Files: src/Makefile, src/auto/configure, src/configure.in, src/config.mk.in, src/gui\_mac.c, src/os\_mac.h, src/os\_macosx.c, src/proto/gui\_mac.pro, src/proto/os\_mac.pro, src/infplist.xml, src/vim.h

## Patch 6.2.119 (after 6.2.107)

Problem: When packing the MS-Windows archives a few files are missing.  
(Guopeng Wen)

Solution: Add gui\_beval.\* to the list of generic source files.

Files: Makefile

## Patch 6.2.120

Problem: Win32 GUI: The console dialogs are not supported on MS-Windows, disabling the 'c' flag of 'guioptions'. (Servatius Brandt)  
Solution: Define FEAT\_CON\_DIALOG also for GUI-only builds.  
Files: src/feature.h

## Patch 6.2.121 (after 6.2.118)

Problem: Not all make programs support "+=". (Charles Campbell)  
Solution: Use a normal assignment.  
Files: src/Makefile

## Patch 6.2.122 (after 6.2.119)

Problem: Not all shells can expand [^~]. File missing. (Guopeng Wen)  
Solution: Use a simpler pattern. Add the Aap recipe for the maze program and a clean version of the source code.  
Files: Makefile, runtime/macros/maze/Makefile, runtime/macros/maze/README.txt, runtime/macros/maze/main.aap, runtime/macros/maze/mazeclean.c

## Patch 6.2.123 (after 6.2.118)

Problem: Running configure fails. (Tony Leneis)  
Solution: Change "==" to "=" for a test.  
Files: src/auto/configure, src/configure.in

## Patch 6.2.124 (after 6.2.121)(extra)

Problem: Mac: Recursive use of M4FLAGS causes problems. When running Vim directly it can't find the runtime files. (Emily Jackson)  
Using GNU constructs causes warnings with other make programs. (Ronald Schild)  
Solution: Use another name for the M4FLAGS variable.  
Don't remove "Vim.app" from the path.  
Update the explanation for compiling on the Mac. (Eric Kow)  
Don't use \$(shell ) and \$(addprefix ).  
Files: src/INSTALLmac.txt, src/Makefile, src/misc1.c

## Patch 6.2.125 (after 6.2.107)

Problem: The "winsock2.h" file isn't always available.  
Solution: Don't include this header file.  
Files: src/netbeans.c

## Patch 6.2.126

Problem: Typing CTRL-C at a confirm() prompt doesn't throw an exception.  
Solution: Reset "mapped\_ctrl\_c" in get\_keystroke(), so that "got\_int" is set in \_OnChar().  
Files: src/misc1.c

## Patch 6.2.127 (extra)

Problem: Win32 console: Typing CTRL-C doesn't throw an exception.  
Solution: Set got\_int immediately when CTRL-C is typed, don't wait for mch\_breakcheck() being called.  
Files: src/os\_win32.c

## Patch 6.2.128 (after 6.2.118)

Problem: src/auto/configure is not consistent with src/configure.in.  
Solution: Use the newly generated configure script.  
Files: src/auto/configure

## Patch 6.2.129

Problem: When 'number' is set 'wrapmargin' does not work Vi-compatible. (Yasuhiro Matsumoto)  
Solution: Reduce the textwidth when 'number' is set. Also for 'foldcolumn' and similar things.

Files: src/edit.c

Patch 6.2.130 (extra)

Problem: Win32 console: When 'restorescreen' is not set exiting Vim causes the screen to be cleared. (Michael A. Mangino)

Solution: Don't clear the screen when exiting and 'restorescreen' isn't set.

Files: src/os\_win32.c

Patch 6.2.131 (extra)

Problem: Win32: Font handles are leaked.

Solution: Free italic, bold and bold-italic handles before overwriting them. (Michael Wookey)

Files: src/gui\_w48.c

Patch 6.2.132 (extra)

Problem: Win32: console version doesn't work on latest Windows Server 2003.

Solution: Copy 12000 instead of 15000 cells at a time to avoid running out of memory.

Files: src/os\_win32.c

Patch 6.2.133

Problem: When starting the GUI a bogus error message about 'imactivatekey' may be given.

Solution: Only check the value of 'imactivatekey' when the GUI is running.

Files: src/gui.c, src/option.c

Patch 6.2.134 (extra)

Problem: Win32: When scrolling parts of the window are redrawn when this isn't necessary.

Solution: Only invalidate parts of the window when they are obscured by other windows. (Michael Wookey)

Files: src/gui\_w48.c

Patch 6.2.135

Problem: An item <> in the ":command" argument is interpreted as <args>.

Solution: Avoid that <> is recognized as <args>.

Files: src/ex\_docmd.c

Patch 6.2.136

Problem: ":e ++enc=latin1 newfile" doesn't set 'fenc' when the file doesn't exist. (Mirosław Dobrzanski-Neumann)

Solution: Set 'fileencoding' to the specified encoding when editing a file that does not exist.

Files: src/fileio.c

Patch 6.2.137

Problem: "d:cmd<CR>" cannot be repeated with ".". Breaks repeating "d%" when using the matchit plugin.

Solution: Store the command to be repeated. This is restricted to single-line commands.

Files: src/ex\_docmd.c, src/globals.h, src/normal.c, src/vim.h

Patch 6.2.138 (extra)

Problem: Compilation problem on VMS with dynamic buffer on the stack.

Solution: Read one byte less than the size of the buffer, so that we can check for the string length without an extra buffer.

Files: src/os\_vms.c

Patch 6.2.139

Problem: Code is repeated in the two Perl files.

Solution: Move common code from if\_perl.xs and if\_perlsfio.c to vim.h. Also fix a problem with generating prototypes.

Files: src/if\_perl.xs, src/if\_perlsfio.c, src/vim.h

Patch 6.2.140 (after 6.2.121)

Problem: Mac: Compiling with Python and Perl doesn't work.

Solution: Adjust the configure check for Python to use "-framework Python" for Python 2.3 on Mac OS/X.  
Move "-ldl" after "DynaLoader.a" in the link command.  
Change "perllibs" to "PERL\_LIBS".

Files: src/auto/configure, src/configure.in, src/config.mk.in

Patch 6.2.141 (extra)

Problem: Mac: The b\_FSSpec field is sometimes unused.

Solution: Change the #ifdef to FEAT\_CW\_EDITOR and defined it in feature.h

Files: src/fileio.c, src/gui\_mac.c, src/structs.h, src/feature.h

Patch 6.2.142 (after 6.2.124)

Problem: Mac: building without GUI through configure doesn't work.  
When the system is slow, unpacking the resource file takes too long.

Solution: Don't always define FEAT\_GUI\_MAC when MACOS is defined, define it in the Makefile.

Add a configure option to skip Darwin detection.  
Use a Python script to unpack the resources to avoid a race condition. (Taro Muraoka)

Files: Makefile, src/Makefile, src/auto/configure, src/configure.in, src/dehqx.py, src/vim.h

Patch 6.2.143

Problem: Using "K" on Visually selected text doesn't work if it ends in a multi-byte character.

Solution: Include all the bytes of the last character. (Taro Muraoka)

Files: src/normal.c

Patch 6.2.144

Problem: When "g:html\_use\_css" is set the HTML header generated by the 2html script is wrong.

Solution: Add the header after adding HREF for links.  
Also use ":normal!" instead of ":normal" to avoid mappings getting in the way.

Files: runtime/syntax/2html.vim

Patch 6.2.145 (after 6.2.139)

Problem: Undefined "bool" doesn't work for older systems. (Wojtek Pilorz)

Solution: Only undefine "bool" on Mac OS.

Files: src/vim.h

Patch 6.2.146

Problem: On some systems the prototype for iconv() is wrong, causing a warning message.

Solution: Use a cast (void \*) to avoid the warning. (Charles Campbell)

Files: src/fileio.c, src/mbyte.c

Patch 6.2.147

Problem: ":s/pat/\=col('.')" always replaces with "1".

Solution: Set the cursor to the start of the match before substituting. (Helmut Stiegler)

Files: src/ex\_cmds.c

Patch 6.2.148

Problem: Can't break an Insert into several undoable parts.

Solution: Add the CTRL-G u command.

Files: runtime/doc/insert.txt, src/edit.c

## Patch 6.2.149

Problem: When the cursor is on a line past 21,474,748 the indicated percentage of the position is invalid. With that many lines "100%" causes a negative cursor line number, resulting in a crash. (Daniel Goujot)

Solution: Divide by 100 instead of multiplying. Avoid overflow when computing the line number for "100%".

Files: src/buffer.c, src/ex\_cmds2.c, src/normal.c

## Patch 6.2.150

Problem: When doing "vim - < file" lines are broken at NUL chars. (Daniel Goujot)

Solution: Change NL characters back to NUL when reading from the temp buffer.

Files: src/fileio.c

## Patch 6.2.151

Problem: When doing "vim --remote +startinsert file" some commands are inserted as text. (Klaus Bosau)

Solution: Put all the init commands in one Ex line, not using a <CR>, so that Insert mode isn't started too early.

Files: src/main.c

## Patch 6.2.152

Problem: The cursor() function doesn't reset the column offset for 'virtualedit'.

Solution: Reset the offset to zero. (Helmut Stiegler)

Files: src/eval.c

## Patch 6.2.153

Problem: Win32: ":lang german" doesn't use German messages.

Solution: Add a table to translate the Win32 language names to two-letter language codes.

Files: src/ex\_cmds2.c

## Patch 6.2.154

Problem: Python bails out when giving a warning message. (Eugene Minkovskii)

Solution: Set sys.argv[] to an empty string.

Files: src/if\_python.c

## Patch 6.2.155

Problem: Win32: Using ":tjump www" in a help file gives two results. (Dave Roberts)

Solution: Ignore differences between slashes and backslashes when checking for identical tag matches.

Files: src/tag.c

## Patch 6.2.156 (after 6.2.125)

Problem: Win32: Netbeans fails to build, EINTR is not defined.

Solution: Redefine EINTR to WSAEINTR. (Mike Williams)

Files: src/netbeans.c

## Patch 6.2.157

Problem: Using "%p" in 'errorformat' gives a column number that is too high.

Solution: Set the flag to use the number as a virtual column. (Lefteris Koutsoloukas)

Files: src/quickfix.c

## Patch 6.2.158

Problem: The sed command on Solaris and HP-UX doesn't work for a line that doesn't end in a newline.  
Solution: Add a newline when feeding text to sed. (Mark Waggoner)  
Files: src/configure.in, src/auto/configure

## Patch 6.2.159

Problem: When using expression folding and 'foldopen' is "undo" an undo command doesn't always open the fold.  
Solution: Save and restore the KeyTyped variable when evaluating 'foldexpr'. (Taro Muraoka)  
Files: src/fold.c

## Patch 6.2.160

Problem: When 'virtualedit' is "all" and 'selection' is "exclusive", selecting a double-width character below a single-width character may cause a crash.  
Solution: Avoid overflow on unsigned integer decrement. (Taro Muraoka)  
Files: src/normal.c

## Patch 6.2.161 (extra)

Problem: VMS: Missing header file. Reading input busy loops.  
Solution: Include termdef.h. Avoid the use of a wait function in vms\_read(). (Frank Ries)  
Files: src/os\_unix.h, src/os\_vms.c

## Patch 6.2.162

Problem: ":redraw" doesn't always display the text that includes the cursor position, e.g. after ":call cursor(1, 0)". (Eugene Minkovskii)  
Solution: Call update\_topline() before redrawing.  
Files: src/ex\_docmd.c

## Patch 6.2.163

Problem: "make install" may also copy AAPDIR directories.  
Solution: Delete AAPDIR directories, just like CVS directories.  
Files: src/Makefile

## Patch 6.2.164 (after 6.2.144)

Problem: When "g:html\_use\_css" is set the HTML header generated by the 2html script is still wrong.  
Solution: Search for a string instead of jumping to a fixed line number. Go to the start of the line before inserting the header. (Jess Thrysoee)  
Files: runtime/syntax/2html.vim

## Patch 6.2.165

Problem: The configure checks hang when using autoconf 2.57.  
Solution: Invoke AC\_PROGRAM\_EGREP to set \$EGREP. (Aron Griffis)  
Files: src/auto/configure, src/configure.in

## Patch 6.2.166

Problem: When \$GZIP contains "-N" editing compressed files doesn't work properly.  
Solution: Add "-n" to "gzip -d" to avoid restoring the file name. (Oyvind Holm)  
Files: runtime/plugin/gzip.vim

## Patch 6.2.167

Problem: The Python interface leaks memory when assigning lines to a buffer. (Sergey Khorev)  
Solution: Do not copy the line when calling ml\_replace().  
Files: src/if\_python.c

## Patch 6.2.168

Problem: Python interface: There is no way to get the indices from a range object.  
Solution: Add the "start" and "end" attributes. (Maurice S. Barnum)  
Files: src/if\_python.c, runtime/doc/if\_pyth.txt

## Patch 6.2.169

Problem: The prototype for \_Xmblen() appears in a recent XFree86 header file, causing a warning for our prototype. (Hisashi T Fujinaka)  
Solution: Move the prototype to an osdef file, so that it's filtered out.  
Files: src/mbyte.c, src/osdef2.h.in

## Patch 6.2.170

Problem: When using Sun WorkShop the current directory isn't changed to where the file is.  
Solution: Set the 'autochdir' option when using WorkShop. And avoid using the basename when 'autochdir' is not set.  
Files: src/gui\_x11.c, src/ex\_cmds.c

## Patch 6.2.171 (after 6.2.163)

Problem: The "-or" argument of "find" doesn't work for SysV systems.  
Solution: Use "-o" instead. (Gordon Prieur)  
Files: src/Makefile

## Patch 6.2.172 (after 6.2.169)

Problem: The prototype for \_Xmblen() still causes trouble.  
Solution: Include the X11 header file that defines the prototype.  
Files: src/osdef2.h.in, src/osdef.sh

## Patch 6.2.173 (extra)

Problem: Win32: Ruby interface doesn't work with Ruby 1.8.0 for other compilers than MSVC.  
Solution: Fix the BC5, Cygwin and Mingw makefiles. (Dan Sharp)  
Files: src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_ming.mak

## Patch 6.2.174

Problem: After the ":intro" message only a mouse click in the last line gets past the hit-return prompt.  
Solution: Accept a click at or below the hit-return prompt.  
Files: src/gui.c, src/message.c

## Patch 6.2.175

Problem: Changing 'backupext' in a \*WritePre autocommand doesn't work. (William Natter)  
Solution: Move the use of p\_bex to after executing the \*WritePre autocommands. Also avoids reading allocated memory after freeing.  
Files: src/fileio.c

## Patch 6.2.176

Problem: Accented characters in translated help files are not handled correctly. (Fabien Vayssiere)  
Solution: Include "192-255" in 'iskeyword' for the help window.  
Files: src/ex\_cmds.c

## Patch 6.2.177 (extra)

Problem: VisVim: Opening a file with a space in the name doesn't work. (Rob Retter) Arbitrary commands are being executed. (Neil Bird)  
Solution: Put a backslash in front of every space in the file name. (Gerard Blais) Terminate the CTRL-\ CTRL-N command with a NUL.  
Files: src/VisVim/Commands.cpp, src/VisVim/VisVim.rc

## Patch 6.2.178

Problem: People who don't know how to exit Vim try pressing CTRL-C.  
Solution: Give a message how to exit Vim when CTRL-C is pressed and it doesn't cancel anything.  
Files: src/normal.c

Patch 6.2.179 (extra)

Problem: The en\_gb messages file isn't found on case sensitive systems.  
Solution: Rename en\_gb to en\_GB. (Mike Williams)  
Files: src/po/en\_gb.po, src/po/en\_GB.po, src/po/Make\_ming.mak,  
src/po/Make\_mvc.mak, src/po/Makefile, src/po/README\_mvc.txt

Patch 6.2.180

Problem: Compiling with GTK2 on Win32 doesn't work.  
Solution: Include gdkwin32.h instead of gdkx.h. (Srinath Avadhanula)  
Files: src/gui\_gtk.c, src/gui\_gtk\_f.c, src/gui\_gtk\_x11.c, src/mbyte.c

Patch 6.2.181 (after 6.2.171)

Problem: The "-o" argument of "find" has lower priority than the implied "and" with "-print".  
Solution: Add parenthesis around the "-o" expression. (Gordon Prieur)  
Files: src/Makefile

Patch 6.2.182 (after 6.2.094)

Problem: Compilation with tiny features fails because of missing get\_past\_head() function.  
Solution: Adjust the #ifdef for get\_past\_head().  
Files: src/misc1.c

Patch 6.2.183 (after 6.2.178)

Problem: Warning for char/unsigned char mixup.  
Solution: Use MSG() instead of msg(). (Tony Leneis)  
Files: src/normal.c

Patch 6.2.184

Problem: With 'formatoptions' set to "law" inserting text may cause the paragraph to be ended. (Alan Schmitt)  
Solution: Temporarily add an extra space to make the paragraph continue after moving the word after the cursor to the next line.  
Also format when pressing Esc.  
Files: src/edit.c, src/normal.c, src/proto/edit.pro

Patch 6.2.185

Problem: Restoring a session with zero-height windows does not work properly. (Charles Campbell)  
Solution: Accept a zero argument to ":resize" as intended. Add a window number argument to ":resize" to be able to set the size of other windows, because the current window cannot be zero-height.  
Fix the explorer plugin to avoid changing the window sizes. Add the winrestcmd() function for this.  
Files: runtime/doc/eval.txt, runtime/plugin/explorer.vim, src/eval.c, src/ex\_cmds.h, src/ex\_docmd.c, src/proto/window.pro, src/window.c

Patch 6.2.186 (after 6.2.185)

Problem: Documentation file eval.txt contains examples without indent.  
Solution: Insert the indent. Also fix other mistakes.  
Files: runtime/doc/eval.txt

Patch 6.2.187

Problem: Using Insure++ reveals a number of bugs. (Dominique Pelle)  
Solution: Initialize variables where needed. Free allocated memory to avoid leaks. Fix comparing tags to avoid reading past allocated memory.  
Files: src/buffer.c, src/diff.c, src/fileio.c, src/mark.c, src/misc1.c,



src/misc2.c, src/ops.c, src/option.c, src/tag.c, src/ui.c

Patch 6.2.188 (extra)

Problem: MS-Windows: Multi-byte characters in a filename cause trouble for the window title.

Solution: Return when the wide function for setting the title did its work.

Files: src/gui\_w48.c

Patch 6.2.189

Problem: When setting 'viminfo' after editing a new buffer its marks are not stored. (Keith Roberts)

Solution: Set the "b\_marks\_read" flag when skipping to read marks from the viminfo file.

Files: src/fileio.c

Patch 6.2.190

Problem: When editing a compressed files, marks are lost.

Solution: Add the ":lockmarks" modifier and use it in the gzip plugin.

Make exists() also check for command modifiers, so that the existence of ":lockmarks" can be checked for.

Also add ":keepmarks" to avoid that marks are deleted when filtering text.

When deleting lines put marks 'A' - 'Z' and '0' - '9' at the first deleted line instead of clearing the mark. They were kept in the viminfo file anyway.

Avoid that the gzip plugin puts deleted text in registers.

Files: runtime/doc/motion.txt, runtime/plugin/gzip.vim, src/ex\_cmds.c, src/ex\_docmd.c, src/mark.c, src/structs.h

Patch 6.2.191

Problem: The intro message is outdated. Information about sponsoring and registering is missing.

Solution: Show info about sponsoring and registering Vim in the intro message now and then. Add help file about sponsoring.

Files: runtime/doc/help.txt, runtime/doc/sponsor.txt, runtime/doc/tags, runtime/menu.vim, src/version.c

Patch 6.2.192

Problem: Using CTRL-T and CTRL-D with "gR" messes up the text. (Jonathan Hankins)

Solution: Avoid calling change\_indent() recursively.

Files: src/edit.c

Patch 6.2.193

Problem: When recalling a search pattern from the history from a ":s,a/c," command the '/' ends the search string. (JC van Winkel)

Solution: Store the separator character with the history entries. Escape characters when needed, replace the old separator with the new one. Also fixes that recalling a "/" search for a "?" command messes up trailing flags.

Files: src/eval.c, src/ex\_getln.c, src/normal.c, src/proto/ex\_getln.pro, src/search.c, src/tag.c

Patch 6.2.194 (after 6.2.068)

Problem: For NetBeans, instead of writing the file and sending an event about it, tell NetBeans to write the file.

Solution: Add the "save" command, "netbeansBuffer" command and "buttonRelease" event to the netbeans protocol. Updated the interface to version 2.2. (Gordon Prieur)

Also: open a fold when the cursor has been positioned.

Also: fix memory leak, free result of nb\_quote().

Files: runtime/doc/netbeans.txt, src/fileio.c, src/netbeans.c,

src/normal.c, src/proto/netbeans.pro, src/structs.h

Patch 6.2.195 (after 6.2.190)

Problem: Compiling fails for missing CPO\_REMMARK symbol.

Solution: Add the patch I forgot to include...

Files: src/option.h

Patch 6.2.196 (after 6.2.191)

Problem: Rebuilding the documentation doesn't use the sponsor.txt file.

Solution: Add sponsor.txt to the Makefile. (Christian J. Robinson)

Files: runtime/doc/Makefile

Patch 6.2.197

Problem: It is not possible to force a redraw of status lines. (Gary Johnson)

Solution: Add the ":redrawstatus" command.

Files: runtime/doc/varsious.txt, src/ex\_cmds.h, src/ex\_docmd.c, src/screen.c

Patch 6.2.198

Problem: A few messages are not translated. (Ernest Adrogue)

Solution: Mark the messages to be translated.

Files: src/ex\_cmds.c

Patch 6.2.199 (after 6.2.194)

Problem: Vim doesn't work perfectly well with NetBeans.

Solution: When NetBeans saves the file, reset the timestamp to avoid "file changed" warnings. Close a buffer in a proper way. Don't try giving a debug message with an invalid pointer. Send a newDotAndMark message when needed. Report a change by the "r" command to NetBeans. (Gordon Prieur)

Files: src/netbeans.c, src/normal.c

Patch 6.2.200

Problem: When recovering a file, 'fileformat' is always the default, thus writing the file may result in differences. (Penelope Fudd)

Solution: Before recovering the file try reading the original file to obtain the values of 'fileformat', 'fileencoding', etc.

Files: src/memline.c

Patch 6.2.201

Problem: When 'autowriteall' is set ":qall" still refuses to exit if there is a modified buffer. (Antoine Mechelynck)

Solution: Attempt writing modified buffers as intended.

Files: src/ex\_cmds2.c

Patch 6.2.202

Problem: Filetype names of CHILL and ch script are confusing.

Solution: Rename "ch" to "chill" and "chscript" to "ch".

Files: runtime/filetype.vim, runtime/makemenu.vim, runtime/synmenu.vim  
runtime/syntax/ch.vim, runtime/syntax/chill.vim

Patch 6.2.203

Problem: With characterwise text that has more than one line, "3P" works wrong. "3p" has the same problem. There also is a display problem. (Daniel Goujot)

Solution: Perform characterwise puts with a count in the right position.

Files: src/ops.c

Patch 6.2.204 (after 6.2.086)

Problem: "]" in a file with closed folds moves to the end of the file. (Nam SungHyun)

Solution: Find one position in each closed fold, then move to after the fold.  
Files: src/search.c

Patch 6.2.205 (extra)

Problem: MS-Windows: When the taskbar is at the left or top of the screen, the Vim window placement is wrong.

Solution: Compute the size and position of the window correctly. (Taro Muraoka)

Files: src/gui\_w32.c, src/gui\_w48.c

Patch 6.2.206

Problem: Multi-byte characters cannot be used as hotkeys in a console dialog. (Mattias Erkiesson)

Solution: Handle multi-byte characters properly. Also put () or [] around default hotkeys.

Files: src/message.c, src/macros.h

Patch 6.2.207

Problem: When 'encoding' is a multi-byte encoding, expanding an abbreviation that starts where insertion started results in characters before the insertion to be deleted. (Xiangjiang Ma)

Solution: Stop searching leftwards for the start of the word at the position where insertion started.

Files: src/getchar.c

Patch 6.2.208

Problem: When using fold markers, three lines in a row have the start marker and deleting the first one with "dd", a nested fold is not deleted. (Kamil Burzynski)

Using marker folding, a level 1 fold doesn't stop when it is followed by "{{2", starting a level 2 fold.

Solution: Don't stop updating folds at the end of a change when the nesting level of folds is larger than the fold level.

Correctly compute the number of folds that start at "{{2". Also avoid a crash for a NULL pointer.

Files: src/fold.c

Patch 6.2.209

Problem: A bogus fold is created when using "P" while the cursor is in the middle of a closed fold. (Kamil Burzynski)

Solution: Correct the line number where marks are modified for closed folds.

Files: src/ops.c

Patch 6.2.210 (extra)

Problem: Mac OSX: antialiased fonts are not supported.

Solution: Add the 'antialias' option to switch on antialiasing on Mac OSX 10.2 and later. (Peter Cucka)

Files: runtime/doc/options.txt, src/gui\_mac.c, src/option.h, src/option.c

Patch 6.2.211 (extra)

Problem: Code for handling file dropped on Vim is duplicated.

Solution: Move the common code to gui\_handle\_drop().

Add code to drop the files in the window under the cursor.

Support drag&drop on the Macintosh. (Taro Muraoka)

When dropping a directory name edit that directory (using the explorer plugin)

Fix that changing directory with Shift pressed didn't work for relative path names.

Files: src/fileio.c, src/gui.c, src/gui\_gtk\_x11.c, src/gui\_mac.c, src/gui\_w48.c, src/proto/fileio.pro, src/proto/gui.pro

Patch 6.2.212 (after 6.2.199)

Problem: NetBeans: Replacing with a count is not handled correctly.  
Solution: Move reporting the change outside of the loop for the count.  
(Gordon Prieur)  
Files: src/normal.c

Patch 6.2.213 (after 6.2.208)

Problem: Using marker folding, "{{{1" doesn't start a new fold when already  
at fold level 1. (Servatius Brandt)  
Solution: Correctly compute the number of folds that start at "{{{1".  
Files: src/fold.c

Patch 6.2.214 (after 6.2.211) (extra)

Problem: Warning for an unused variable.  
Solution: Delete the declaration. (Bill McCarthy)  
Files: src/gui\_w48.c

Patch 6.2.215

Problem: NetBeans: problems saving an unmodified file.  
Solution: Add isNetbeansModified() function. Disable netbeans\_unmodified().  
(Gordon Prieur)  
Files: src/fileio.c, src/netbeans.c, src/proto/netbeans.pro,  
runtime/doc/netbeans.txt, runtime/doc/tags

Patch 6.2.216 (after 6.2.206)

Problem: Multi-byte characters still cannot be used as hotkeys in a console  
dialog. (Mattias Erkiesson)  
Solution: Make get\_keystroke() handle multi-byte characters.  
Files: src/misc1.c

Patch 6.2.217

Problem: GTK: setting the title doesn't always work correctly.  
Solution: Invoke gui\_mch\_settitle(). (Tomas Stehlik)  
Files: src/os\_unix.c

Patch 6.2.218

Problem: Warning for function without prototype.  
Solution: Add argument types to the msgCB field of the BalloonEval struct.  
Files: src/gui\_beval.h

Patch 6.2.219

Problem: Syntax highlighting hangs on an empty match of an item with a  
nextgroup. (Charles Campbell)  
Solution: Remember that the item has already matched and don't match it  
again at the same position.  
Files: src/syntax.c

Patch 6.2.220

Problem: When a Vim server runs in a console a remote command isn't handled  
before a key is typed. (Joshua Neuheisel)  
Solution: Don't try reading more input when a client-server command has been  
received.  
Files: src/os\_unix.c

Patch 6.2.221

Problem: No file name completion for ":cscope add".  
Solution: Add the XFILE flag to ":cscope". (Gary Johnson)  
Files: src/ex\_cmds.h

Patch 6.2.222

Problem: Using "--remote" several times on a row only opens some of the  
files. (Dany St-Amant)  
Solution: Don't delete all typeahead when the server receives a command from

Files: a client, only delete typed characters.  
src/main.c

#### Patch 6.2.223

Problem: Cscope: Avoid a hang when cscope waits for a response while Vim waits for a prompt.

Solution: Error messages from Cscope mess up the display.  
Detect the hit-enter message and respond by sending a return character to cscope. (Gary Johnson)  
Use EMSG() and strerror() when possible. Replace perror() with PERROR() everywhere, add emsg3().

Files: src/diff.c, src/if\_cscope.c, src/integration.c, src/message.c,  
src/proto/message.pro, src/misc2.c, src/netbeans.c, src/vim.h

#### Patch 6.2.224

Problem: Mac: Can't compile with small features. (Axel Kielhorn)

Solution: Also include vim\_chdirfile() when compiling for the Mac.

Files: src/misc2.c

#### Patch 6.2.225

Problem: NetBeans: Reported modified state isn't exactly right.

Solution: Report a file being modified in the NetBeans way.

Files: src/netbeans.c

#### Patch 6.2.226 (after 6.2.107) (extra)

Problem: The "ws2-32.lib" file isn't always available.

Solution: Use "WSock32.lib" instead. (Taro Muraoka, Dan Sharp)

Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak

#### Patch 6.2.227 (extra)

Problem: The "PC" symbol is defined but not used anywhere.

Solution: Remove "-DPC" from the makefiles.

Files: src/Make\_bc3.mak, src/Make\_bc5.mak, src/Make\_cyg.mak,  
src/Make\_ming.mak

#### Patch 6.2.228

Problem: Receiving CTRL-\ CTRL-N after typing "f" or "m" doesn't switch Vim back to Normal mode. Same for CTRL-\ CTRL-G.

Solution: Check if the character typed after a command is CTRL-\ and obtain another character to check for CTRL-N or CTRL-G, waiting up to 'ttimeoutlen' msec.

Files: src/normal.c

#### Patch 6.2.229

Problem: ":function" with a name that uses magic curlies does not work inside a function. (Servatius Brandt)

Solution: Skip over the function name properly.

Files: src/eval.c

#### Patch 6.2.230 (extra)

Problem: Win32: a complex pattern may cause a crash.

Solution: Use \_\_try and \_\_except to catch the exception and handle it gracefully, when possible. Add myresetstkoflw() to reset the stack overflow. (Benjamin Peterson)

Files: src/Make\_bc5.mak, src/os\_mswin.c src/os\_win32.c, src/os\_win32.h,  
src/proto/os\_win32.pro, src/regexp.c

#### Patch 6.2.231 (after 6.2.046)

Problem: Various problems when an error exception is raised from within a builtin function. When it is invoked while evaluating arguments to a function following arguments are still evaluated. When invoked with a line range it will be called for remaining lines.

Solution: Update "force\_abort" also after calling a builtin function, so that aborting() always returns the correct value. (Servatius Brandt)

Files: src/eval.c, src/ex\_eval.c, src/proto/ex\_eval.pro, src/testdir/test49.ok, src/testdir/test49.vim

#### Patch 6.2.232

Problem: ":python vim.command('python print 2\*2')" crashes Vim. (Eugene Minkovskii)

Solution: Disallow executing a Python command recursively and give an error message.

Files: src/if\_python.c

#### Patch 6.2.233

Problem: On Mac OSX adding -pthread for Python only generates a warning. The test for Perl threads rejects Perl while it's OK. Tcl doesn't work at all.

Solution: The test for Ruby fails if ruby exists but there are no header files. The Ruby library isn't detected properly. Avoid adding -pthread on Mac OSX. Accept Perl threads when it's not the 5.5 threads. Use the Tcl framework for header files. For Ruby rename cWindow to cVimWindow to avoid a name clash. (Ken Scott) Only enable Ruby when the header files can be found. Use "-lruby" instead of "libruby.a" when it can't be found.

Files: src/auto/configure, src/configure.in, src/if\_ruby.c

#### Patch 6.2.234

Problem: GTK 2 GUI: ":sp" and the ":q" leaves the cursor on the command line.

Solution: Flush output before removing scrollbars. Also do this in other places where gui\_mch\_\*() functions are invoked.

Files: src/ex\_cmds.c, src/option.c, src/window.c

#### Patch 6.2.235 (extra)

Problem: Win32: Cursor isn't removed with a 25x80 window and doing: "1830ia<Esc>400a-<Esc>0w0". (Yasuhiro Matsumoto)

Solution: Remove the call to gui\_undraw\_cursor() from gui\_mch\_insert\_lines().

Files: src/gui\_w48.c

#### Patch 6.2.236

Problem: Using gvim with Agide gives "connection lost" error messages.

Solution: Only give the "connection lost" message when the buffer was once owned by NetBeans.

Files: src/netbeans.c, src/structs.h

#### Patch 6.2.237

Problem: GTK 2: Thai text is drawn wrong. It changes when moving the cursor over it.

Solution: Disable the shaping engine, it moves combining characters to a wrong position and combines characters, while drawing the cursor doesn't combine characters.

Files: src/gui\_gtk\_x11.c

#### Patch 6.2.238 (after 6.2.231)

Problem: ":function" does not work inside a while loop. (Servatius Brandt)

Solution: Add get\_while\_line() and pass it to do\_one\_cmd() when in a while loop, so that all lines are stored and can be used again when repeating the loop.

Adjust test 49 so that it checks for the fixed problems. (Servatius Brandt)

Files: src/digraph.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_eval.c,

```
src/proto/ex_cmds2.pro, src/proto/ex_docmd.pro,
src/testdir/test49.in, src/testdir/test49.ok,
src/testdir/test49.vim
```

## Patch 6.2.239

Problem: GTK 2: With closed folds the arrow buttons of a vertical scrollbar often doesn't scroll. (Moshe Kaminsky)

Solution: Hackish solution: Detect that the button was pressed from the mouse pointer position.

Files: src/gui\_gtk.c, src/gui.c

## Patch 6.2.240

Problem: GTK 2: Searching for bitmaps for the toolbar doesn't work as with other systems. Need to explicitly use "icon=name". (Ned Konz, Christian J. Robinson)

Solution: Search for icons like done for Motif.

Files: src/gui\_gtk.c

## Patch 6.2.241

Problem: GTK 2: Search and Search/Replace dialogs are synced, that makes no sense. Buttons are sometimes greyed-out. (Jeremy Messenger)

Solution: Remove the code to sync the two dialogs. Adjust the code to react to an empty search string to also work for GTK2. (David Necas)

Files: src/gui\_gtk.c

## Patch 6.2.242

Problem: Gnome: "vim --help" only shows the Gnome arguments, not the Vim arguments.

Solution: Don't let the Gnome code remove the "--help" argument and don't exit at the end of usage().

Files: src/gui\_gtk\_x11.c, src/main.c

## Patch 6.2.243 (extra)

Problem: Mac: Dropping a file on a Vim icon causes a hit-enter prompt.

Solution: Move the dropped files to the global argument list, instead of the usual drop handling. (Eckehard Berns)

Files: src/main.c, src/gui\_mac.c

## Patch 6.2.244

Problem: ':echo "\xf7"' displays the illegal byte as if it was a character and leaves "cho" after it.

Solution: When checking the length of a UTF-8 byte sequence and it's shorter than the number of bytes available, assume it's an illegal byte.

Files: src/mbyte.c

## Patch 6.2.245

Problem: Completion doesn't work for ":keepmarks" and ":lockmarks".

Solution: Add the command modifiers to the table of commands. (Madoka Machitani)

Files: src/ex\_cmds.h, src/ex\_docmd.c

## Patch 6.2.246

Problem: Mac: Starting Vim from Finder doesn't show error messages.

Solution: Recognize that output is being displayed by stderr being "/dev/console". (Eckehard Berns)

Files: src/main.c, src/message.c

## Patch 6.2.247 (after 6.2.193)

Problem: When using a search pattern from the viminfo file the last character is replaced with a '/'.

Solution: Store the separator character in the right place. (Kelvin Lee)

Files: src/ex\_getln.c

## Patch 6.2.248

Problem: GTK: When XIM is enabled normal "2" and keypad "2" cannot be distinguished.

Solution: Detect that XIM changes the keypad key to the expected ASCII character and fall back to the non-XIM code. (Neil Bird)

Files: src/gui\_gtk\_x11.c, src/mbyte.c, src/proto/mbyte.pro

## Patch 6.2.249

Problem: ":cnext" moves to the error in the next file, but there is no method to go back.

Solution: Add ":cpfile" and ":cNfile".

Files: src/ex\_cmds.h, src/quickfix.c, src/vim.h, runtime/doc/quickfix.txt

## Patch 6.2.250

Problem: Memory leaks when using signs. (Xavier de Gaye)

Solution: Delete the list of signs when unloading a buffer.

Files: src/buffer.c

## Patch 6.2.251

Problem: GTK: The 'v' flag in 'guioptions' doesn't work. (Steve Hall)  
Order of buttons is reversed for GTK 2.2.4. Don't always get focus back after handling a dialog.

Solution: Make buttons appear vertically when desired. Reverse the order in which buttons are added to a dialog. Move mouse pointer around when the dialog is done and we don't have focus.

Files: src/gui\_gtk.c

## Patch 6.2.252 (extra, after 6.2.243)

Problem: Mac: Dropping a file on a Vim icon causes a hit-enter prompt for Mac OS classic.

Solution: Remove the #ifdef from the code that fixes it for Mac OSX.

Files: src/gui\_mac.c

## Patch 6.2.253

Problem: When 'tagstack' is not set a ":tag id" command does not work after a ":tjump" command.

Solution: Set "new\_tag" when 'tagstack' isn't set. (G. Narendran)

Files: src/tag.c

## Patch 6.2.254

Problem: May run out of space for error messages.

Solution: Keep room for two more bytes.

Files: src/quickfix.c

## Patch 6.2.255

Problem: GTK: A new item in the popup menu is put just after instead of just before the right item. (Gabriel Zachmann)

Solution: Don't increment the menu item index.

Files: src/gui\_gtk.c

## Patch 6.2.256

Problem: Mac: "macroman" encoding isn't recognized, need to use "8bit-macroman".

Solution: Recognize "macroman" with an alias "mac". (Eckehard Berns)

Files: src/mbyte.c

## Patch 6.2.257 (after 6.2.250)

Problem: Signs are deleted for ":bdel", but they could still be useful.

Solution: Delete signs only for ":bwipe".

Files: src/buffer.c



## Patch 6.2.258

Problem: GUI: can't disable (grey-out) a popup menu item. (Ajit Thakkar)  
Solution: Loop over the popup menus for all modes.  
Files: src/menu.c

## Patch 6.2.259

Problem: If there are messages when exiting, on the console there is a hit-enter prompt while the message can be read; in the GUI the message may not be visible.  
Solution: Use the hit-enter prompt when there is an error message from writing the viminfo file or autocommands, or when there is any output in the GUI and 'verbose' is set. Don't use a hit-enter prompt for the non-GUI version unless there is an error message.  
Files: src/main.c

## Patch 6.2.260

Problem: GTK 2: Can't quit a dialog with <Esc>.  
GTK 1 and 2: <Enter> always gives a result, even when the default button has been disabled.  
Solution: Handle these keys explicitly. When no default button is specified use the first one (works mostly like it was before).  
Files: src/gui\_gtk.c

## Patch 6.2.261

Problem: When 'autoindent' and 'cindent' are set and a line is recognized as a comment, starting a new line won't do 'cindent' formatting.  
Solution: Also use 'cindent' formatting for lines that are used as a comment. (Servatius Brandt)  
Files: src/misc1.c

## Patch 6.2.262

Problem: 1 CTRL-W w beeps, even though going to the first window is possible. (Charles Campbell)  
Solution: Don't beep.  
Files: src/window.c

## Patch 6.2.263

Problem: Lint warnings: Duplicate function prototypes, duplicate macros, use of a zero character instead of a zero pointer, unused variable. Clearing allocated memory in a complicated way.  
Solution: Remove the function prototypes from farsi.h. Remove the duplicated lines in keymap.h. Change getvcol() argument from NUL to NULL. Remove the "col" variable in regmatch(). Use lalloc\_clear() instead of lalloc(). (Walter Briscoe)  
Files: src/farsi.h, src/keymap.h, src/ops.c, src/regexp.c, src/search.c

## Patch 6.2.264 (after 6.2.247)

Problem: Writing past allocated memory when using a command line from the viminfo file.  
Solution: Store the NUL in the right place.  
Files: src/ex\_getln.c

## Patch 6.2.265

Problem: Although ":set" is not allowed in the sandbox, ":let &opt = val" works.  
Solution: Do allow changing options in the sandbox, but not the ones that can't be changed from a modeline.  
Files: src/ex\_cmds.h, src/options.c

## Patch 6.2.266

Problem: When redirecting output and using ":silent", line breaks are missing from output of ":map" and ":tselect". Alignment of

columns is wrong.  
Solution: Insert a line break where "msg\_didout" was tested. Update msg\_col when redirecting and using ":silent".  
Files: src/getchar.c, src/message.c

Patch 6.2.267 (extra)

Problem: Win32: "&&" in a tearoff menu is not shown. (Luc Hermitte)  
Solution: Use the "name" item from the menu instead of the "dname" item.  
Files: src/gui\_w32.c, src/menu.c

Patch 6.2.268

Problem: GUI: When changing 'guioptions' part of the window may be off screen. (Randall Morris)  
Solution: Adjust the size of the window when changing 'guioptions', but only when adding something.  
Files: src/gui.c

Patch 6.2.269

Problem: Diff mode does not highlight a change in a combining character. (Raphael Finkel)  
Solution: Make diff\_find\_change() multi-byte aware: find the start byte of a character that contains a change.  
Files: src/diff.c

Patch 6.2.270

Problem: Completion in Insert mode, then repeating with ".", doesn't handle composing characters in the completed text. (Raphael Finkel)  
Solution: Don't skip over composing chars when adding completed text to the redo buffer.  
Files: src/getchar.c

Patch 6.2.271

Problem: NetBeans: Can't do "tail -f" on the log. Passing socket info with an argument or environment variable is not secure.  
Solution: Wait after initializing the log. Allow passing the socket info through a file. (Gordon Prieur)  
Files: runtime/doc/netbeans.txt, src/main.c, src/netbeans.c

Patch 6.2.272

Problem: When the "po" directory exists, but "po/Makefile" doesn't, building fails. Make loops when the "po" directory has been deleted after running configure.  
Solution: Check for the "po/Makefile" instead of just the "po" directory. Check this again before trying to run make with that Makefile.  
Files: src/auto/configure, src/configure.in, src/Makefile

Patch 6.2.273

Problem: Changing the sort order in an explorer window for an empty directory produces error messages. (Doug Kearns)  
Solution: When an invalid range is used for a function that is not going to be executed, skip over the arguments anyway.  
Files: src/eval.c

Patch 6.2.274

Problem: ":print" skips empty lines when 'list' is set and there is no "eol" in 'listchars'. (Yakov Lerner)  
Solution: Skip outputting a space for an empty line only when 'list' is set and the end-of-line character is not empty.  
Files: src/message.c

Patch 6.2.275 (extra, after 6.2.267)

Problem: Warning for uninitialized variable when using gcc.

Solution: Initialize "acLen" to zero. (Bill McCarthy)  
Files: src/gui\_w32.c

Patch 6.2.276

Problem: ":echo X()" does not put a line break between the message that X()  
displays and the text that X() returns. (Yakov Lerner)  
Solution: Invoke msg\_start() after evaluating the argument.  
Files: src/eval.c

Patch 6.2.277

Problem: Vim crashes when a ":runtime ftplugin/ada.vim" causes a recursive  
loop. (Robert Nowotniak)  
Solution: Restore "msg\_list" before returning from do\_cmdline().  
Files: src/ex\_docmd.c

Patch 6.2.278

Problem: Using "much" instead of "many".  
Solution: Correct the error message.  
Files: src/eval.c

Patch 6.2.279

Problem: There is no default choice for a confirm() dialog, now that it is  
possible not to have a default choice.  
Solution: Make the first choice the default choice.  
Files: runtime/doc/eval.txt, src/eval.c

Patch 6.2.280

Problem: "do" and ":diffget" don't work in the first line and the last line  
of a buffer. (Aron Griffis)  
Solution: Find a difference above the first line and below the last line.  
Also fix a few display updating bugs.  
Files: src/diff.c, src/fold.c, src/move.c

Patch 6.2.281

Problem: PostScript printing doesn't work on Mac OS X 10.3.2.  
Solution: Adjust the header file. (Mike Williams)  
Files: runtime/print/prolog.ps

Patch 6.2.282

Problem: When using CTRL-O to go back to a help file, it becomes listed.  
(Andrew Nesbit)  
Using ":tag" or ":tjump" in a help file doesn't keep the help file  
settings (e.g. for 'iskeyword').  
Solution: Don't mark a buffer as listed when its help flag is set. Put all  
the option settings for a help buffer together in do\_ecmd().  
Files: src/ex\_cmds.c

Patch 6.2.283

Problem: The "local additions" in help.txt are used without conversion,  
causing latin1 characters showing up wrong when 'enc' is utf-8.  
(Antoine J. Mechelynck)  
Solution: Convert the text to 'encoding'.  
Files: src/ex\_cmds.c

Patch 6.2.284

Problem: Listing a function puts "endfunction" in the message history.  
Typing "q" at the more prompt isn't handled correctly when listing  
variables and functions. (Hara Krishna Dara)  
Solution: Don't use msg() for "endfunction". Check "got\_int" regularly.  
Files: src/eval.c

Patch 6.2.285

Problem: GUI: In a single wrapped line that fills the window, "gj" in the last screen line leaves the cursor behind. (Ivan Tarasov)  
Solution: Undraw the cursor before scrolling the text up.  
Files: src/gui.c

Patch 6.2.286

Problem: When trying to rename a file and it doesn't exist, the destination file is deleted anyway. (Luc Deux)  
Solution: Don't delete the destination when the source doesn't exist. (Taro Muraoka)  
Files: src/fileio.c

Patch 6.2.287 (after 6.2.264)

Problem: Duplicate lines are added to the viminfo file.  
Solution: Compare with existing entries without an offset. Also fixes reading very long history lines from viminfo.  
Files: src/ex\_getln.c

Patch 6.2.288 (extra)

Problem: Mac: An external program can't be interrupted.  
Solution: Don't use the 'c' key for backspace. (Eckehard Berns)  
Files: src/gui\_mac.c

Patch 6.2.289

Problem: Compiling the Tcl interface with thread support causes ":make" to fail. (Juergen Salk)  
Solution: Use \$TCL\_DEFS from the Tcl config script to obtain the required compile flags for using the thread library.  
Files: src/auto/configure, src/configure.in

Patch 6.2.290 (extra)

Problem: Mac: The mousewheel doesn't work.  
Solution: Add mousewheel support. Also fix updating the thumb after a drag and then using another way to scroll. (Eckehard Berns)  
Files: src/gui\_mac.c

Patch 6.2.291 (extra)

Problem: Mac: the plus button and close button don't do anything.  
Solution: Make the plus button maximize the window and the close button close Vim. (Eckehard Berns)  
Files: src/gui.c, src/gui\_mac.c

Patch 6.2.292

Problem: Motif: When removing GUI arguments from argv[] a "ps -ef" shows the last argument repeated.  
Solution: Set argv[argc] to NULL. (Michael Jarvis)  
Files: src/gui\_x11.c

Patch 6.2.293 (after 6.2.255)

Problem: GTK: A new item in a menu is put before the tearoff item.  
Solution: Do increment the menu item index for non-popup menu items.  
Files: src/gui\_gtk.c

Patch 6.2.294 (extra)

Problem: Mac: Cannot use modifiers with Space, Tab, Enter and Escape.  
Solution: Handle all modifiers for these keys. (Eckehard Berns)  
Files: src/gui\_mac.c

Patch 6.2.295

Problem: When in debug mode, receiving a message from a remote client causes a crash. Evaluating an expression causes Vim to wait for "cont" to be typed, without a prompt. (Hari Krishna Dara)

Solution: Disable debugging when evaluating an expression for a client.  
(Michael Geddes) Don't try reading into the typeahead buffer when it may have been filled in another way.

Files: src/ex\_getln.c, src/getchar.c, src/if\_xcmds.c, src/main.c,  
src/misc1.c, src/proto/getchar.pro, src/proto/main.pro,  
src/proto/os\_unix.pro, src/proto/ui.pro, src/structs.h,  
src/os\_unix.c, src/ui.c

Patch 6.2.296 (extra)

Problem: Same as 6.2.295.

Solution: Extra files for patch 6.2.295.

Files: src/os\_amiga.c, src/os\_msdos.c, src/os\_riscos.c, src/os\_win32.c,  
src/proto/os\_amiga.pro, src/proto/os\_msdos.pro,  
src/proto/os\_riscos.pro, src/proto/os\_win32.pro

Patch 6.2.297 (after 6.2.232)

Problem: Cannot invoke Python commands recursively.

Solution: With Python 2.3 and later use the available mechanisms to invoke Python recursively. (Matthew Mueller)

Files: src/if\_python.c

Patch 6.2.298

Problem: A change always sets the '.' mark and an insert always sets the '^' mark, even when this is not wanted.  
Cannot go back to the position of older changes without undoing those changes.

Solution: Add the ":keepjumps" command modifier.

Add the "g," and "g;" commands.

Files: runtime/doc/motion.txt, src/ex\_cmds.h, src/ex\_docmd.c, src/edit.c,  
src/mark.c, src/misc1.c, src/normal.c, src/proto/mark.pro,  
src/structs.h, src/undo.c

Patch 6.2.299

Problem: Can only use one language for help files.

Solution: Add the 'helplang' option to select the preferred language(s).

Make ":helptags" generate tags files for all languages.

Files: runtime/doc/options.txt, runtime/doc/variables.txt, src/Makefile,  
src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_cmds.h, src/ex\_getln.c,  
src/normal.c, src/option.c, src/option.h, src/proto/ex\_cmds.pro,  
src/proto/ex\_cmds2.pro, src/proto/option.pro, src/structs.h,  
src/tag.c, src/vim.h

Patch 6.2.300 (after 6.2.297)

Problem: Cannot build Python interface with Python 2.2 or earlier.

Solution: Add a semicolon.

Files: src/if\_python.c

Patch 6.2.301

Problem: The "select all" item from the popup menu doesn't work for Select mode.

Solution: Use the same commands as for the "Edit.select all" menu.

(Benji Fisher)

Files: runtime/menu.vim

Patch 6.2.302

Problem: Using "CTRL-O ." in Insert mode doesn't work properly. (Benji Fisher)

Solution: Restore "restart\_edit" after an insert command that was not typed.  
Avoid waiting with displaying the mode when there is no text to be overwritten.

Fix that "CTRL-O ." sometimes doesn't put the cursor back after the end-of-line. Only reset the flag that CTRL-O was used past

the end of the line when restarting editing. Update "o\_lnum" number when inserting text and "o\_eol" is set.

Files: src/edit.c, src/normal.c

Patch 6.2.303

Problem: Cannot use Unicode digraphs while 'encoding' is not Unicode.

Solution: Convert the character from Unicode to 'encoding' when needed. Use the Unicode digraphs for the Macintosh. (Eckehard Berns)

Files: src/digraph.c

Patch 6.2.304 (extra, after 6.2.256)

Problem: Mac: No proper support for 'encoding'. Conversion without iconv() is not possible.

Solution: Convert input from 'termencoding' to 'encoding'. Add mac\_string\_convert(). Convert text for the clipboard when needed. (Eckehard Berns)

Files: src/gui\_mac.c, src/mbyte.c, src/structs.h, src/vim.h

Patch 6.2.305 (after 6.2.300)

Problem: Win32: Cannot build Python interface with Python 2.3. (Ajit Thakkar)

Solution: Add two functions to the dynamic loading feature.

Files: src/if\_python.c

Patch 6.2.306 (extra)

Problem: Win32: Building console version with BCC 5.5 gives a warning for get\_cmd\_args() prototype missing. (Ajit Thakkar)

Solution: Don't build os\_w32exe.c for the console version.

Files: src/Make\_bc5.mak

Patch 6.2.307 (after 6.2.299)

Problem: Installing help files fails.

Solution: Expand wildcards for translated help files separately.

Files: src/Makefile

Patch 6.2.308

Problem: Not all systems have "whoami", resulting in an empty user name.

Solution: Use "logname" when possible, "whoami" otherwise. (David Boyce)

Files: src/Makefile

Patch 6.2.309

Problem: "3grx" waits for two ESC to be typed. (Jens Paulus)

Solution: Append the ESC to the stuff buffer when redoing the "gr" insert.

Files: src/edit.c

Patch 6.2.310

Problem: When setting 'undolevels' to -1, making a change and setting 'undolevels' to a positive value an "undo list corrupt" error occurs. (Madoka Machitani)

Solution: Sync undo before changing 'undolevels'.

Files: src/option.c

Patch 6.2.311 (after 6.2.298)

Problem: When making several changes in one line the changelist grows quickly. There is no error message for reaching the end of the changelist. Reading changelist marks from viminfo doesn't work properly.

Solution: Only make a new entry in the changelist when making a change in another line or 'textwidth' columns away. Add E662, E663 and E664 error messages. Put a changelist mark from viminfo one position before the end.

Files: runtime/doc/motion.txt, src/mark.c, src/misc1.c, src/normal.c

## Patch 6.2.312 (after 6.2.299)

Problem: "make install" clears the screen when installing the docs.  
Solution: Execute ":helptags" in silent mode.  
Files: runtime/doc/Makefile

## Patch 6.2.313

Problem: When opening folds in a diff window, other diff windows no longer show the same text.  
Solution: Sync the folds in diff windows.  
Files: src/diff.c, src/fold.c, src/move.c, src/proto/diff.pro, src/proto/move.pro

## Patch 6.2.314

Problem: When 'virtualedit' is set "rx" may cause a crash with a blockwise selection and using "\$". (Moritz Orbach)  
Solution: Don't try replacing chars in a line that has no characters in the block.  
Files: src/ops.c

## Patch 6.2.315

Problem: Using CTRL-C in a Visual mode mapping while 'insertmode' is set stops Vim from returning to Insert mode.  
Solution: Don't reset "restart\_edit" when a CTRL-C is found and 'insertmode' is set.  
Files: src/normal.c

## Patch 6.2.316 (after 6.2.312)

Problem: "make install" tries connecting to the X server when installing the docs. (Stephen Thomas)  
Solution: Add the "-X" argument.  
Files: runtime/doc/Makefile

## Patch 6.2.317 (after 6.2.313)

Problem: When using "zi" in a diff window, other diff windows are not adjusted. (Richard Curnow)  
Solution: Distribute a change in 'foldenable' to other diff windows.  
Files: src/normal.c

## Patch 6.2.318

Problem: When compiling with \_THREAD\_SAFE external commands don't echo typed characters.  
Solution: Don't set the terminal mode to TMODE\_SLEEP when it's already at TMODE\_COOK.  
Files: src/os\_unix.c

## Patch 6.2.319 (extra)

Problem: Building gvimext.dll with Mingw doesn't work properly.  
Solution: Use gcc instead of dllwrap. Use long option names. (Alejandro Lopez-Valencia)  
Files: src/GvimExt/Make\_ming.mak

## Patch 6.2.320

Problem: Win32: Adding and removing the menubar resizes the Vim window. (Jonathon Merz)  
Solution: Don't let a resize event change 'lines' unexpectedly.  
Files: src/gui.c

## Patch 6.2.321

Problem: When using modeless selection, wrapping lines are not recognized, a line break is always inserted.  
Solution: Add LineWraps[] to remember whether a line wrapped or not.

Files: src/globals.h, src/screen.c, src/ui.c

Patch 6.2.322

Problem: With 'showcmd' set, after typing "dd" the next "d" may not be displayed. (Jens Paulus)

Solution: Redraw the command line after updating the screen, scrolling may have set "clear\_cmdline".

Files: src/screen.c

Patch 6.2.323

Problem: Win32: expanding "~/file" in an autocommand pattern results in backslashes, while this pattern should only have forward slashes.

Solution: Make expanding environment variables respect 'shellslash' and set p\_ssl when expanding the autocommand pattern.

Files: src/fileio.c, src/misc1.c, src/proto/fileio.pro

Patch 6.2.324 (extra)

Problem: Win32: when "vimrun.exe" has a path with white space, such as "Program Files", executing external commands may fail.

Solution: Put double quotes around the path to "vimrun".

Files: src/os\_win32.c

Patch 6.2.325

Problem: When \$HOME includes a space, doing ":set tags=~/tags" doesn't work, the space is used to separate file names. (Brett Stahlman)

Solution: Escape the space with a backslash.

Files: src/option.c

Patch 6.2.326

Problem: ":windo set syntax=foo" doesn't work. (Tim Chase)

Solution: Don't change 'eventignore' for ":windo".

Files: src/ex\_cmds2.c

Patch 6.2.327

Problem: When formatting text all marks in the formatted lines are lost. A word is not joined to a previous line when this would be possible. (Mikolaj Machowski)

Solution: Try to keep marks in the same position as much as possible. Also keep mark positions when joining lines. Start auto-formatting in the previous line when appropriate. Add the "gw" operator: Like "gq" but keep the cursor where it is.

Files: runtime/doc/change.txt, src/edit.c, src/globals.h, src/mark.c, src/misc1.c, src/normal.c, src/ops.c, src/proto/edit.pro, src/proto/mark.pro, src/proto/ops.pro, src/structs.h, src/vim.h

Patch 6.2.328

Problem: XIM with GTK: It is hard to understand what XIM is doing.

Solution: Add xim\_log() to log XIM events and help with debugging.

Files: src/mbyte.c

Patch 6.2.329

Problem: "[:=" does not work Vi compatible. (Antony Scriven)

Solution: Print the last line number instead of the current line. Don't print "line".

Files: src/ex\_cmds.h, src/ex\_docmd.c

Patch 6.2.330 (extra, after 6.2.267)

Problem: Win32: Crash when tearing off a menu.

Solution: Terminate a string with a NUL. (Yasuhiro Matsumoto)

Files: src/gui\_w32.c

Patch 6.2.331 (after 6.2.327)



Problem: "gwap" leaves cursor in the wrong line.  
Solution: Remember the cursor position before finding the ends of the paragraph.  
Files: src/normal.c, src/ops.c, src/structs.h

Patch 6.2.332 (extra)

Problem: Amiga: Compile error for string array. Compiling the Amiga GUI doesn't work.  
Solution: Use a char pointer instead. Move including "gui\_amiga.h" to after including "vim.h". Add a semicolon. (Ali Akcaagac)  
Files: src/gui\_amiga.c, src/os\_amiga.c

Patch 6.2.333 (extra)

Problem: Win32: printing doesn't work with specified font charset.  
Solution: Use the specified font charset. (Mike Williams)  
Files: src/os\_mswin.c

Patch 6.2.334 (extra, after 6.2.296)

Problem: Win32: evaluating client expression in debug mode requires typing "cont".  
Solution: Use eval\_client\_expr\_to\_string().  
Files: src/os\_mswin.c

Patch 6.2.335

Problem: The ":sign" command cannot be followed by another command.  
Solution: Add TRLBAR to the command flags.  
Files: src/ex\_cmds.h

Patch 6.2.336 (after 6.2.327)

Problem: Mixup of items in an expression.  
Solution: Move "== NUL" to the right spot.  
Files: src/edit.c

Patch 6.2.337 (extra, after 6.2.319)

Problem: Building gvimext.dll with Mingw doesn't work properly.  
Solution: Fix white space and other details. (Alejandro Lopez-Valencia)  
Files: src/GvimExt/Make\_ming.mak

Patch 6.2.338 (after 6.2.331)

Problem: When undoing "gwap" the cursor is always put at the start of the paragraph. When undoing auto-formatting the cursor may be above the change.  
Solution: Try to move the cursor back to where it was or to the first line that actually changed.  
Files: src/normal.c, src/ops.c, src/undo.c

Patch 6.2.339

Problem: Crash when using many different highlight groups and a User highlight group. (Juergen Kraemer)  
Solution: Do not use the sg\_name\_u pointer when it is NULL. Also simplify use of the highlight group table.  
Files: src/syntax.c

Patch 6.2.340

Problem: ":reg" doesn't show the actual contents of the clipboard if it was filled outside of Vim. (Stuart MacDonald)  
Solution: Obtain the clipboard contents before displaying it.  
Files: src/ops.c

Patch 6.2.341 (extra)

Problem: Win32: When the path to diff.exe contains a space and using the vimrc generated by the install program, diff mode does not work.

Solution: Put the first double quote just before the space instead of before the path.

Files: src/dosinst.c

Patch 6.2.342 (extra)

Problem: Win32: macros are not always used as expected.

Solution: Define WINVER to 0x0400 instead of 0x400. (Alejandro Lopez-Valencia)

Files: src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_mvc.mak

Patch 6.2.343

Problem: Title doesn't work with some window managers. X11: Setting the text property for the window title is hard coded.

Solution: Use STRING format when possible. Use the UTF-8 function when it's available and 'encoding' is utf-8. Use XStringListToTextProperty(). Do the same for the icon name. (David Harrison)

Files: src/os\_unix.c

Patch 6.2.344 (extra, after 6.2.337)

Problem: Cannot build gvimext.dll with MingW on Linux.

Solution: Add support for cross compiling. (Ronald Hoellwarth)

Files: src/GvimExt/Make\_ming.mak

Patch 6.2.345 (extra)

Problem: Win32: Copy/paste between two Vims fails if 'encoding' is not set properly or there are illegal bytes.

Solution: Use a raw byte format. Always set it when copying. When pasting use the raw format if 'encoding' is the same.

Files: src/os\_mswin.c, src/os\_win16.c, src/os\_win32.c, src/vim.h

Patch 6.2.346

Problem: Win32 console: After using "chcp" Vim does not detect the different codepage.

Solution: Use GetConsoleCP() and when it is different from GetACP() set 'termencoding'.

Files: src/option.c

Patch 6.2.347 (extra)

Problem: Win32: XP theme support is missing.

Solution: Add a manifest and refer to it from the resource file. (Michael Wookey)

Files: Makefile, src/gvim.exe.mnf, src/vim.rc

Patch 6.2.348

Problem: Win32: "vim c:\dir\{test}" doesn't work, because the 'isfname' default value doesn't contain parenthesis.

Solution: Temporarily add '(' and ')' to 'isfname' when expanding file name arguments.

Files: src/main.c

Patch 6.2.349

Problem: Finding a match using 'matchpairs' may cause a crash. 'matchpairs' is not used for 'showmatch'.

Solution: Don't look past the NUL in 'matchpairs'. Use 'matchpairs' for 'showmatch'. (Dave Olszewski)

Files: src/misc1.c, src/normal.c, src/proto/search.pro, src/search.c

Patch 6.2.350

Problem: Not enough info about startup timing.

Solution: Add a few more TIME\_MSG() calls.

Files: src/main.c

## Patch 6.2.351

Problem: Win32: \$HOME may be set to %USERPROFILE%.  
Solution: Expand %VAR% at the start of \$HOME.  
Files: src/misc1.c

## Patch 6.2.352 (after 6.2.335)

Problem: ":sign texthl=||" does not work.  
Solution: Remove the check for a following command. Give an error for extra arguments after "buff=1".  
Files: src/ex\_cmds.c, src/ex\_cmds.h

## Patch 6.2.353 (extra)

Problem: Win32: Supported server name length is limited. (Paul Bossi)  
Solution: Use MAX\_PATH instead of 25.  
Files: src/os\_mswin.c

## Patch 6.2.354 (extra)

Problem: Win32: When the mouse pointer is on a tear-off menu it is hidden when typing but is not redisplayed when moved. (Markx Hackmann)  
Solution: Handle the pointer move event for the tear-off menu window.  
Files: src/gui\_w32.c

## Patch 6.2.355 (after 6.2.303)

Problem: When 'encoding' is a double-byte encoding different from the current locale, the width of characters is not correct. Possible failure and memory leak when using iconv, Unicode digraphs and 'encoding' is not "utf-8".  
Solution: Use iconv() to discover the actual width of characters. Add the "vc\_fail" field to vimconv\_T. When converting a digraph, init the conversion type to NONE and cleanup afterwards.  
Files: src/digraph.c, src/mbyte.c, src/structs.h

## Patch 6.2.356

Problem: When using a double-byte 'encoding' and 'selection' is "exclusive", "vy" only yanks the first byte of a double-byte character. (Xiangjiang Ma)  
Solution: Correct the column in unadjust\_for\_sel() to position on the first byte, always include the trailing byte of the selected text.  
Files: src/normal.c

## Patch 6.2.357 (after 6.2.321)

Problem: Memory leak when resizing the Vim window.  
Solution: Free the LineWraps array.  
Files: src/screen.c

## Patch 6.2.358 (after 6.2.299)

Problem: Memory leak when using ":help" and the language doesn't match.  
Solution: Free the array with matching tags.  
Files: src/ex\_cmds.c

## Patch 6.2.359 (after 6.2.352)

Problem: Compiler warning for long to int type cast.  
Solution: Add explicit type cast.  
Files: src/ex\_cmds.c

## Patch 6.2.360

Problem: "100|" in an empty line results in a ruler "1,0-100". (Pavol Juhas)  
Solution: Recompute w\_virtcol if the target column was not reached.  
Files: src/misc2.c

## Patch 6.2.361 (extra)

Problem: Win32: Run gvim, ":set go=m", use Alt-Tab, keep Alt pressed while pressing Esc, then release Alt: Cursor disappears and typing a key causes a beep. (Hari Krishna Dara)

Solution: Don't ignore the WM\_SYSKEYUP event when the menu is disabled.

Files: src/gui\_w32.c

## Patch 6.2.362 (extra, after 6.2.347)

Problem: Win32: The manifest causes gvim not to work. (Dave Roberts)

Solution: Change "x86" to "X86". (Serge Pirotte)

Files: src/gvim.exe.mnf

## Patch 6.2.363

Problem: In an empty file with 'showmode' off, "i" doesn't change the ruler from "0-1" to "1". Typing "x<BS>" does show "1", but then <Esc> doesn't make it "0-1" again. Same problem for ruler in statusline. (Andrew Pimlott)

Solution: Remember the "empty line" flag with Insert mode and 'ed to it.

Files: src/screen.c

## Patch 6.2.364

Problem: HTML version of the documentation doesn't mention the encoding, which is a problem for mbyte.txt.

Solution: Adjust the awk script. (Ilya Sher)

Files: runtime/doc/makehtml.awk

## Patch 6.2.365

Problem: The configure checks for Perl and Python may add compile and link arguments that break building Vim.

Solution: Do a sanity check: try building with the arguments.

Files: src/auto/configure, src/configure.in

## Patch 6.2.366

Problem: When the GUI can't start because no valid font is found, there is no error message. (Ugen)

Solution: Add an error message.

Files: src/gui.c

## Patch 6.2.367

Problem: Building the help tags file while installing may fail if there is another Vim in \$PATH.

Solution: Specify the just installed Vim executable. (Gordon Prieur)

Files: src/Makefile

## Patch 6.2.368

Problem: When 'autochdir' is set, closing a window doesn't change to the directory of the new current window. (Salman Halim)

Solution: Handle 'autochdir' always when a window becomes the current one.

Files: src/window.c

## Patch 6.2.369

Problem: Various memory leaks: when using globpath(), when searching for help tags files, when defining a function inside a function, when giving an error message through an exception, for the final "." line in ":append", in expression "cond ? a : b" that fails and for missing ")" in an expression. Using NULL pointer when adding first user command and for pointer computations with regexp. (tests by Dominique Pelle)

Solution: Fix the leaks by freeing the allocated memory. Don't use the array of user commands when there are no entries. Use a macro instead of a function call for saving and restoring regexp states.

Files: src/eval.c, src/ex\_cmds.c, src/ex\_docmd.c, src/ex\_getln.c,  
src/misc2.c, src/regexp.c, src/screen.c, src/tag.c

Patch 6.2.370 (extra, after 6.2.341)

Problem: Win32: When the path to diff.exe contains a space and using the  
vimrc generated by the install program, diff mode may not work.  
(Alejandro Lopez-Valencia)

Solution: Do not use double quotes for arguments that do not have a space.

Files: src/dosinst.c

Patch 6.2.371

Problem: When 'virtualedit' is set and there is a Tab before the next "x",  
"dtx" does not delete the whole Tab. (Ken Hashishi)

Solution: Move the cursor to the last position of the Tab. Also for  
"df<Tab>".

Files: src/normal.c

Patch 6.2.372

Problem: When using balloon evaluation, no value is displayed for members  
of structures and items of an array.

Solution: Include ">", "." and "[\*]" in the expression.

Files: src/gui\_beval.c, src/normal.c, src/vim.h

Patch 6.2.373

Problem: When 'winminheight' is zero and a window is reduced to zero  
height, the ruler always says "Top" instead of the cursor  
position. (Antoine J. Mechelynck)

Solution: Don't recompute w\_topleft for a zero-height window.

Files: src/window.c

Patch 6.2.374

Problem: ":echo "hello" | silent normal n" removes the "hello" message.  
(Servatius Brandt)

Solution: Don't echo the search string when ":silent" was used. Also don't  
show the mode. In general: don't clear to the end of the screen.

Files: src/gui.c, src/message.c, src/os\_unix.c, src/proto/message.pro,  
src/screen.c, src/search.c, src/window.c

Patch 6.2.375

Problem: When changing 'guioptions' the hit-enter prompt may be below the  
end of the Vim window.

Solution: Call screen\_alloc() before showing the prompt.

Files: src/message.c

Patch 6.2.376

Problem: Win32: Ruby interface cannot be dynamically linked with Ruby 1.6.

Solution: Add #ifdefs around use of rb\_w32\_snprintf(). (Beno~~LEE~~t Cerrina)

Files: src/if\_ruby.c

Patch 6.2.377 (after 6.2.372)

Problem: Compiler warnings for signed/unsigned compare. (Michael Wookey)

Solution: Add type cast.

Files: src/normal.c

Patch 6.2.378 (extra, after 6.2.118)

Problem: Mac: cannot build with Project Builder.

Solution: Add remove\_tail\_with\_ext() to locate and remove the "build"  
directory from the runtime path. Include os\_unix.c when needed.  
(Dany St Amant)

Files: src/misc1.c, src/os\_macosx.c, src/vim.h

Patch 6.2.379

Problem: Using ":mkvimrc" in the ":options" window sets 'bufhidden' to "delete". (Michael Naumann)  
Solution: Do not add buffer-specific option values to a global vimrc file.  
Files: src/option.c

Patch 6.2.380 (extra)

Problem: DOS: "make test" fails when running it again. Can't "make test" with Borland C.  
Solution: Make sure ".out" files are deleted when they get in the way. Add a "test" target to the Borland C Makefile.  
Files: src/Make\_bc5.mak, src/testdir/Make\_dos.mak

Patch 6.2.381

Problem: Setting 'fileencoding' to a comma separated list (confusing it with 'fileencodings') does not result in an error message. Setting 'fileencoding' in an empty file marks it as modified. There is no "+" in the title after setting 'fileencoding'.  
Solution: Check for a comma in 'fileencoding'. Only consider a non-empty file modified by changing 'fileencoding'. Update the title after changing 'fileencoding'.  
Files: src/option.c

Patch 6.2.382

Problem: Running "make test" puts marks from test files in viminfo.  
Solution: Specify a different viminfo file to use.  
Files: src/testdir/test15.in, src/testdir/test49.in

Patch 6.2.383

Problem: ":hi foo term='bla" crashes Vim. (Antony Scriven)  
Solution: Check that the closing ' is there.  
Files: src/syntax.c

Patch 6.2.384

Problem: ":menu a.&b" ":unmenu a.b" only works if "&b" isn't translated.  
Solution: Also compare the names without '&' characters.  
Files: src/menu.c

Patch 6.2.385 (extra)

Problem: Win32: forward\_slash() and trash\_input\_buf() are undefined when compiling with small features. (Ajit Thakkar)  
Solution: Change the #ifdefs for forward\_slash(). Don't call trash\_input\_buf() if the input buffer isn't used.  
Files: src/fileio.c, src/os\_win32.c

Patch 6.2.386

Problem: Wasting time trying to read marks from the viminfo file for a buffer without a name.  
Solution: Skip reading marks when the buffer has no name.  
Files: src/fileio.c

Patch 6.2.387

Problem: There is no highlighting of translated items in help files.  
Solution: Search for a "help\_ab.vim" syntax file when the help file is called "\*.abx". Also improve the help highlighting a bit.  
Files: runtime/syntax/help.vim

Patch 6.2.388

Problem: GTK: When displaying some double-width characters they are drawn as single-width, because of conversion to UTF-8.  
Solution: Check the width that GTK uses and add a space if it's one instead of two.  
Files: src/gui\_gtk\_x11.c

## Patch 6.2.389

Problem: When working over a slow connection, it's very annoying that the last line is partly drawn and then cleared for every change.  
Solution: Don't redraw the bottom line if no rows were inserted or deleted.  
Don't draw the line if we know "@" lines will be used.  
Files: src/screen.c

## Patch 6.2.390

Problem: Using "r\*" in Visual mode on multi-byte characters only replaces every other character. (Tyson Roberts)  
Solution: Correct the cursor position after replacing each character.  
Files: src/ops.c

## Patch 6.2.391 (extra)

Problem: The ":highlight" command is not tested.  
Solution: Add a test script for ":highlight".  
Files: src/testdir/Makefile, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/test51.in,  
src/testdir/test51.ok

## Patch 6.2.392 (after 6.2.384)

Problem: Unused variable.  
Solution: Remove "dlen".  
Files: src/menu.c

## Patch 6.2.393

Problem: When using very long lines the viminfo file can become very big.  
Solution: Add the "s" flag to 'viminfo': skip registers with more than the specified Kbyte of text.  
Files: runtime/doc/options.txt, src/ops.c, src/option.c

## Patch 6.2.394 (after 6.2.391)

Problem: Test 51 fails on a terminal with 8 colors. (Tony Leneis)  
Solution: Use "DarkBlue" instead of "Blue" to avoid the "bold" attribute.  
Files: src/testdir/test51.in

## Patch 6.2.395

Problem: When using ":tag" or ":pop" the previous matching tag is used.  
But since the current file is different, the ordering of the tags may change.  
Solution: Remember what the current buffer was for when re-using cur\_match.  
Files: src/edit.c, src/ex\_cmds.c, src/proto/tag.pro, src/structs.h,  
src/tag.c

## Patch 6.2.396

Problem: When CTRL-T jumps to another file and an autocommand moves the cursor to the '"' mark, don't end up on the right line. (Michal Malecki)  
Solution: Set the line number after loading the file.  
Files: src/tag.c

## Patch 6.2.397

Problem: When using a double-byte 'encoding' mapping <M-x> doesn't work. (Yasuhiro Matsumoto)  
Solution: Do not set the 8th bit of the character but use a modifier.  
Files: src/gui\_gtk\_x11.c, src/gui\_x11.c, src/misc2.c

## Patch 6.2.398 (extra)

Problem: Win32 console: no extra key modifiers are supported.  
Solution: Encode the modifiers into the input stream. Also fix that special

keys are converted and stop working when 'tenc' is set. Also fix that when 'tenc' is initialized the input and output conversion is not setup properly until 'enc' or 'tenc' is set.

Files: src/getchar.c, src/option.c, src/os\_win32.c

#### Patch 6.2.399

Problem: A ":set" command that fails still writes a message when it is inside a try/catch block.

Solution: Include all the text of the message in the error message.

Files: src/charset.c, src/option.c

#### Patch 6.2.400

Problem: Can't compile if\_xcmds.c on HP-UX 11.0.

Solution: Include header file poll.h. (Malte Neumann)

Files: src/if\_xcmds.c

#### Patch 6.2.401

Problem: When opening a buffer that was previously opened, Vim does not restore the cursor position if the first line starts with white space. (Gregory Margo)

Solution: Don't skip restoring the cursor position if it is past the blanks in the first line.

Files: src/buffer.c

#### Patch 6.2.402

Problem: Mac: "make install" doesn't generate help tags. (Benji Fisher)

Solution: Generate help tags before copying the runtime files.

Files: src/Makefile

#### Patch 6.2.403

Problem: ":@y" checks stdin if there are more commands to execute. This fails if stdin is not connected, e.g., when starting the GUI from KDE. (Ned Konz)

Solution: Only check for a next command if there still is typeahead.

Files: src/ex\_docmd.c

#### Patch 6.2.404

Problem: Our own function to determine width of Unicode characters may get outdated. (Markus Kuhn)

Solution: Use wcwidth() when it is available. Also use iswprint().

Files: src/auto/configure, src/configure.in, src/config.h.in, src/mbyte.c

#### Patch 6.2.405

Problem: Cannot map zero without breaking the count before a command. (Benji Fisher)

Solution: Disable mapping zero when entering a count.

Files: src/getchar.c, src/globals.h, src/normal.c

#### Patch 6.2.406

Problem: ":help \zs", ":help \@=" and similar don't find useful help.

Solution: Prepend "/" to the arguments to find the desired help tag.

Files: src/ex\_cmds.c

#### Patch 6.2.407 (after 6.2.299)

Problem: ":help \@<=" doesn't find help.

Solution: Avoid that ":help \@<=" searches for the "<=" language.

Files: src/tag.c

#### Patch 6.2.408

Problem: ":compiler" is not consistent: Sets local options and a global variable. (Douglas Potts) There is no error message when a compiler is not supported.



Solution: Use ":compiler!" to set a compiler globally, otherwise it's local to the buffer and "b:current\_compiler" is used. Give an error when no compiler script could be found.  
Note: updated compiler plugins can be found at <ftp://ftp.vim.org/pub/vim/runtime/compiler/>  
Files: runtime/compiler/msvc.vim, runtime/doc/quickfix.txt, src/eval.c, src/ex\_cmds2.c

#### Patch 6.2.409

Problem: The cursor ends up in the last column instead of after the line when doing "i//<Esc>o" with 'indentexpr' set to "cindent(v:lnum)". (Toby Allsopp)  
Solution: Adjust the cursor as if in Insert mode.  
Files: src/misc1.c

#### Patch 6.2.410 (after 6.2.389)

Problem: In diff mode, when there are more filler lines than fit in the window, they are not drawn.  
Solution: Check for filler lines when skipping to draw a line that doesn't fit.  
Files: src/screen.c

#### Patch 6.2.411

Problem: A "\n" inside a string is not seen as a line break by the regular expression matching. (Hari Krishna Dara)  
Solution: Add the vim\_regexec\_nl() function for strings where "\n" is to be matched with a line break.  
Files: src/eval.c, src/ex\_eval.c, src/proto/regexp.c, src/regexp.c

#### Patch 6.2.412

Problem: Ruby: "ruby << EOF" inside a function doesn't always work. Also for ":python", ":tcl" and ":perl".  
Solution: Check for "<< marker" and skip until "marker" before checking for "endfunction".  
Files: src/eval.c

#### Patch 6.2.413 (after 6.2.411)

Problem: Missing prototype for vim\_regexec\_nl(). (Marcel Svitalsky)  
Solution: Now really include the prototype.  
Files: src/proto/regexp.pro

#### Patch 6.2.414

Problem: The function used for custom completion of user commands cannot have <SID> to make it local. (Hari Krishna Dara)  
Solution: Pass the SID of the script where the user command was defined on to the completion. Also clean up #ifdefs.  
Files: src/ex\_docmd.c, src/eval.c, src/ex\_getln.c, src/structs.h

#### Patch 6.2.415

Problem: Vim may crash after a sequence of events that change the window size. The window layout assumes a larger window than is actually available. (Servatius Brandt)  
Solution: Invoke win\_new\_shellsize() from screenalloc() instead of from set\_shellsize().  
Files: src/screen.c, src/term.c

#### Patch 6.2.416

Problem: Compiler warning for incompatible pointer.  
Solution: Remove the "&" in the call to poll(). (Xavier de Gaye)  
Files: src/os\_unix.c

#### Patch 6.2.417 (after 6.2.393)

Problem: Many people forget that the `'''` item in `'viminfo'` needs to be preceded with a backslash,  
Solution: Add `'<'` as an alias for the `'''` item.  
Files: `runtime/doc/options.txt`, `src/ops.c`, `src/option.c`

#### Patch 6.2.418

Problem: Using `":nnoremap <F12> :echo "cheese" and ":cabbr cheese xxx":` when pressing `<F12>` still uses the abbreviation. (Hari Krishna)  
Solution: Also apply `"noremap"` to abbreviations.  
Files: `src/getchar.c`

#### Patch 6.2.419 (extra)

Problem: Win32: Cannot open the Vim window inside another application.  
Solution: Add the `"-P"` argument to specify the window title of the application to run inside. (Zibo Zhao)  
Files: `runtime/doc/starting.txt`, `src/main.c`, `src/gui_w32.c`,  
`src/gui_w48.c`, `src/if_ole.cpp`, `src/os_mswin.c`,  
`src/proto/gui_w32.pro`

#### Patch 6.2.420

Problem: Cannot specify a file to be edited in binary mode without setting the global value of the `'binary'` option.  
Solution: Support `":edit ++bin file"`.  
Files: `runtime/doc/editing.txt`, `src/buffer.c`, `src/eval.c`, `src/ex_cmds.h`,  
`src/ex_docmd.c`, `src/fileio.c`, `src/misc2.c`

#### Patch 6.2.421

Problem: Cannot set the `'[` and `']` mark, which may be necessary when an autocommand simulates reading a file.  
Solution: Allow using `"m["` and `"m]"`.  
Files: `runtime/doc/motion.txt`, `src/mark.c`

#### Patch 6.2.422

Problem: In CTRL-X completion messages the `"/` makes them less readable.  
Solution: Remove the slashes. (Antony Scriven)  
Files: `src/edit.c`

#### Patch 6.2.423

Problem: `":vertical wincmd ]"` does not split vertically.  
Solution: Add `"postponed_split_flags"`.  
Files: `src/ex_docmd.c`, `src/globals.h`, `src/if_cscope.c`, `src/tag.c`

#### Patch 6.2.424

Problem: A `BufEnter` autocommand that sets an option stops `'mousefocus'` from working in Insert mode (Normal mode is OK). (Gregory Seidman)  
Solution: In the Insert mode loop invoke `gui_mouse_correct()` when needed.  
Files: `src/edit.c`

#### Patch 6.2.425

Problem: Vertical split and command line window: can only drag status line above the cmdline window on the righthand side, not lefthand side.  
Solution: Check the status line row instead of the window pointer.  
Files: `src/ui.c`

#### Patch 6.2.426

Problem: A syntax region end match with a matchgroup that includes a line break only highlights the last line with matchgroup. (Gary Holloway)  
Solution: Also use the line number of the position where the region highlighting ends.  
Files: `src/syntax.c`

## Patch 6.2.427 (extra)

Problem: When pasting a lot of text in a multi-byte encoding, conversion from 'termencoding' to 'encoding' may fail for some characters. (Kuang-che Wu)

Solution: When there is an incomplete byte sequence at the end of the read text keep it for the next time.

Files: src/mbyte.c, src/os\_amiga.c, src/os\_mswin.c, src/proto/mbyte.pro, src/proto/os\_mswin.pro, src/ui.c

## Patch 6.2.428

Problem: The X11 clipboard supports the Vim selection for char/line/block mode, but since the encoding is not included can't copy/paste between two Vims with a different 'encoding'.

Solution: Add a new selection format that includes the 'encoding'. Perform conversion when necessary.

Files: src/gui\_gtk\_x11.c, src/ui.c, src/vim.h

## Patch 6.2.429

Problem: Unix: glob() doesn't work for a directory with a single quote in the name. (Nazri Ramliy)

Solution: When using the shell to expand, only put double quotes around spaces and single quotes, not the whole thing.

Files: src/os\_unix.c

## Patch 6.2.430

Problem: BOM at start of a vim script file is not recognized and causes an error message.

Solution: Detect the BOM and skip over it. Also fix that after using ":scriptencoding" the iconv() file descriptor was not closed (memory leak).

Files: src/ex\_cmds2.c

## Patch 6.2.431

Problem: When using the horizontal scrollbar, the scrolling is limited to the length of the cursor line.

Solution: Make the scroll limit depend on the longest visible line. The cursor is moved when necessary. Including the 'h' flag in 'guioptions' disables this.

Files: runtime/doc/gui.txt, runtime/doc/options.txt, src/gui.c, src/misc2.c, src/option.h

## Patch 6.2.432 (after 6.2.430 and 6.2.431)

Problem: Lint warnings.

Solution: Add type casts.

Files: src/ex\_cmds2.c, src/gui.c

## Patch 6.2.433

Problem: Translating "VISUAL" and "BLOCK" separately doesn't give a good result. (Alejandro Lopez Valencia)

Solution: Use a string for each combination.

Files: src/screen.c

## Patch 6.2.434 (after 6.2.431)

Problem: Compiler warning. (Salman Halim)

Solution: Add type casts.

Files: src/gui.c

## Patch 6.2.435

Problem: When there are vertically split windows the minimal Vim window height is computed wrong.

Solution: Use frame\_minheight() to correctly compute the minimal height.

Files: src/window.c

## Patch 6.2.436

Problem: Running the tests changes the user's viminfo file.  
Solution: In test 49 tell the extra Vim to use the test viminfo file.  
Files: src/testdir/test49.vim

## Patch 6.2.437

Problem: ":mksession" always puts "set nocompatible" in the session file.  
This changes option settings. (Ron Aaron)  
Solution: Add an "if" to only change 'compatible' when needed.  
Files: src/ex\_docmd.c

## Patch 6.2.438

Problem: When the 'v' flag is present in 'coptions', backspacing and then  
typing text again: one character too much is overtyped before  
inserting is done again.  
Solution: Set "dollar\_vcol" to the right column.  
Files: src/edit.c

## Patch 6.2.439

Problem: GTK 2: Changing 'lines' may cause a mismatch between the window  
layout and the size of the window.  
Solution: Disable the hack with force\_shell\_resize\_idle().  
Files: src/gui\_gtk\_x11.c

## Patch 6.2.440

Problem: When 'lazyredraw' is set the window title is still updated.  
The size of the Visual area and the ruler are displayed too often.  
Solution: Postpone redrawing the window title. Only show the Visual area  
size when waiting for a character. Don't draw the ruler  
unnecessary.  
Files: src/buffer.c, src/normal.c, src/screen.c

## Patch 6.2.441

Problem: ":unabbreviate foo " doesn't work, because of the trailing space,  
while an abbreviation with a trailing space is not possible. (Paul  
Jolly)  
Solution: Accept a match with the lhs of an abbreviation without the  
trailing space.  
Files: src/getchar.c

## Patch 6.2.442

Problem: Cannot manipulate the command line from a function.  
Solution: Add getcmdline(), getcmdpos() and setcmdpos() functions and the  
CTRL-\ e command.  
Files: runtime/doc/cmdline.txt, runtime/doc/eval.txt, src/eval.c  
src/ex\_getln.c, src/ops.c, src/proto/ex\_getln.pro,  
src/proto/ops.pro

## Patch 6.2.443

Problem: With ":silent! echoerr something" you don't get the position of  
the error. msg() only writes the message itself and returns.  
Solution: Also redirect the position of the error.  
Files: src/message.c

## Patch 6.2.444

Problem: When adding the 'c' flag to a ":substitute" command it may replace  
more times than without the 'c' flag. Happens for a match that  
starts with "\ze" (Marcel Svitalsk) and when using "@<=" (Klaus  
Bosau).  
Solution: Correct "prev\_matchcol" when replacing the line. Don't replace  
the line when the pattern uses look-behind matching.

Files: src/ex\_cmds.c, src/proto/regexp.pro, src/regexp.c

Patch 6.2.445

Problem: Copying vimtutor to /tmp/something is not secure, a symlink may cause trouble.

Solution: Create a directory and create the file in it. Use "umask" to create the directory with mode 700. (Stefan Nordhausen)

Files: src/vimtutor

Patch 6.2.446 (after 6.2.404)

Problem: Using library functions wcwidth() and iswprint() results in display problems for Hebrew characters. (Ron Aaron)

Solution: Disable the code to use the library functions, use our own.

Files: src/mbyte.c

Patch 6.2.447 (after 6.2.440)

Problem: Now that the title is only updated when redrawing, it is no longer possible to show it while executing a function. (Madoka Machitani)

Solution: Make ":redraw" also update the title.

Files: src/ex\_docmd.c

Patch 6.2.448 (after 6.2.427)

Problem: Mac: conversion done when 'termencoding' differs from 'encoding' fails when pasting a longer text.

Solution: Check for an incomplete sequence at the end of the chunk to be converted. (Eckehard Berns)

Files: src/mbyte.c

Patch 6.2.449 (after 6.2.431)

Problem: Get error messages when switching files.

Solution: Check for a valid line number when calculating the width of the horizontal scrollbar. (Helmut Stiegler)

Files: src/gui.c

Patch 6.2.450

Problem: " #include" and " #define" are not recognized with the default option values for 'include' and 'defined'. (RG Kiran)

Solution: Adjust the default values to allow white space before the #.

Files: runtime/doc/options.txt, src/option.c

Patch 6.2.451

Problem: GTK: when using XIM there are various problems, including setting 'modified' and breaking undo at the wrong moment.

Solution: Add "xim\_changed\_while\_preediting", "preedit\_end\_col" and im\_is\_preediting(). (Yasuhiro Matsumoto)

Files: src/ex\_getln.c, src/globals.h, src/gui\_gtk.c, src/gui\_gtk\_x11.c, src/mbyte.c, src/misc1.c, src/proto/mbyte.pro, src/screen.c, src/undo.c

Patch 6.2.452

Problem: In diff mode, when DiffAdd and DiffText highlight settings are equal, an added line is highlighted with DiffChange. (Tom Schumm)

Solution: Remember the diff highlight type instead of the attributes.

Files: src/screen.c

Patch 6.2.453

Problem: ":s/foo\|\\nbar/x/g" does not replace two times in "foo\\nbar". (Pavel Papushev)

Solution: When the pattern can match a line break also try matching at the NUL at the end of a line.

Files: src/ex\_cmds.c, src/regexp.c

## Patch 6.2.454

Problem: `":let b:changedtick"` doesn't work. (Alan Schmitt) `":let b:changedtick = 99"` does not give an error message.  
Solution: Add code to recognize `":let b:changedtick"`.  
Files: `src/eval.c`

## Patch 6.2.455 (after 6.2.297)

Problem: In Python commands the current locale changes how certain Python functions work. (Eugene M. Minkovskii)  
Solution: Set the LC\_NUMERIC locale to "C" while executing a Python command.  
Files: `src/if_python.c`

## Patch 6.2.456 (extra)

Problem: Win32: Editing a file by its Unicode name (dropping it on Vim or using the file selection dialog) doesn't work. (Yakov Lerner, Alex Jakushev)  
Solution: Use wide character functions when file names are involved and convert from/to 'encoding' where needed.  
Files: `src/gui_w48.c`, `src/macros.h`, `src/memfile.c`, `src/memline.c`, `src/os_mswin.c`, `src/os_win32.c`

## Patch 6.2.457 (after 6.2.244)

Problem: When 'encoding' is "utf-8" and writing text with chars above 0x80 in latin1, conversion is wrong every 8200 bytes. (Oyvind Holm)  
Solution: Correct the `utf_ptr2len_check_len()` function and fix the problem of displaying 0xf7 in `utfc_ptr2len_check_len()`.  
Files: `src/mbyte.c`

## Patch 6.2.458

Problem: When 'virtualedit' is set "\$" doesn't move to the end of an unprintable character, causing "y\$" not to include that character. (Fred Ma)  
Solution: Set "coladd" to move the cursor to the end of the character.  
Files: `src/misc2.c`

## Patch 6.2.459 (after 6.2.454)

Problem: Variable "b" cannot be written. (Salman Halim)  
Solution: Compare strings properly.  
Files: `src/eval.c`

## Patch 6.2.460 (extra, after 6.2.456)

Problem: Compiler warnings for missing prototypes.  
Solution: Include the missing prototypes.  
Files: `src/proto/os_win32.pro`

## Patch 6.2.461

Problem: After using a search command "x" starts putting single characters in the numbered registers.  
Solution: Reset "use\_reg\_one" at the right moment.  
Files: `src/normal.c`

## Patch 6.2.462

Problem: Finding a matching parenthesis does not correctly handle a backslash in a trailing byte.  
Solution: Handle multi-byte characters correctly. (Taro Muraoka)  
Files: `src/search.c`

## Patch 6.2.463 (extra)

Problem: Win32: An NTFS file system may contain files with extra info streams. The current method to copy them creates one and then deletes it again. (Peter Toennies) Also, only three streams with hard coded names are copied.

Solution: Use BackupRead() to check which info streams the original file contains and only copy these streams.

Files: src/os\_win32.c

Patch 6.2.464 (extra, after 6.2.427)

Problem: Amiga: Compilation error with gcc. (Ali Akcaagac)

Solution: Move the #ifdef outside of Read().

Files: src/os\_amiga.c

Patch 6.2.465

Problem: When resizing the GUI window the window manager sometimes moves it left of or above the screen. (Michael McCarty)

Solution: Check the window position after resizing it and move it onto the screen when it isn't.

Files: src/gui.c

Patch 6.2.466 (extra, after 6.2.456)

Problem: Win32: Compiling with Borland C fails, and an un/signed warning.

Solution: Redefine wcsicmp() to wcscmpi() and add type casts. (Yasuhiro Matsumoto)

Files: src/os\_win32.c

Patch 6.2.467 (extra, after 6.2.463)

Problem: Win32: can't compile without multi-byte feature. (Ajit Thakkar)

Solution: Add #ifdefs around the info stream code.

Files: src/os\_win32.c

Patch 6.2.468

Problem: Compiler warnings for shadowed variables. (Matthias Mohr)

Solution: Delete superfluous variables and rename others.

Files: src/eval.c, src/ex\_docmd.c, src/ex\_eval.c, src/if\_cscope.c, src/fold.c, src/option.c, src/os\_unix.c, src/quickfix.c, src/regexp.c

Patch 6.2.469 (extra, after 6.2.456)

Problem: Win32: Can't create swap file when 'encoding' differs from the active code page. (Kriton Kyrimis)

Solution: In enc\_to\_ucs2() terminate the converted string with a NUL

Files: src/os\_mswin.c

Patch 6.2.470

Problem: The name returned by tempname() may be equal to the file used for shell output when ignoring case.

Solution: Skip 'O' and 'I' in tempname().

Files: src/eval.c

Patch 6.2.471

Problem: "-L/usr/lib" is used in the link command, even though it's supposed to be filtered out. "-lw" and "-ldl" are not automatically added when needed for "-lXmu". (Antonio Colombo)

Solution: Check for a space after the argument instead of before. Also remove "-R/usr/lib" if it's there. Check for "-lw" and "-ldl" before trying "-lXmu".

Files: src/auto/configure, src/configure.in, src/link.sh

Patch 6.2.472

Problem: When using a FileChangedShell autocommand that changes the current buffer, a buffer exists that can't be wiped out.

Also, Vim sometimes crashes when executing an external command that changes the buffer and a FileChangedShell autocommand is used. (Hari Krishna Dara)

Users are confused by the warning for a file being changed outside

of Vim.  
Solution: Avoid that the window counter for a buffer is incremented twice.  
Avoid that buf\_check\_timestamp() is used recursively.  
Add a hint to look in the help for more info.  
Files: src/ex\_cmds.c, src/fileio.c

## Patch 6.2.473

Problem: Using CTRL-J in a help buffer without a name causes a crash.  
Solution: Check for name to be present before using it. (Taro Muraoka)  
Files: src/tag.c

## Patch 6.2.474 (extra, after 6.2.456)

Problem: When Vim is starting up conversion is done unnecessarily. Failure to find the runtime files on Windows 98. (Randall W. Morris)  
Solution: Init enc\_codepage negative, only use it when not negative.  
Don't use GetFileAttributesW() on Windows 98 or earlier.  
Files: src/globals.h, src/gui\_w32.c, src/gui\_w48.c, src/os\_mswin.c, src/os\_win32.c

## Patch 6.2.475

Problem: Commands after "perl <<EOF" are parsed as Vim commands when they are not executed.  
Solution: Properly skip over the perl commands.  
Files: src/ex\_docmd.c, src/ex\_getln.c, src/if\_perl.xs, src/if\_python.c, src/if\_ruby.c, src/if\_tcl.c, src/misc2.c

## Patch 6.2.476

Problem: When reloading a hidden buffer changed outside of Vim and the current buffer is read-only, the reloaded buffer becomes read-only. (Hari Krishna Dara)  
Solution: Save the 'readonly' flag of the reloaded buffer instead of the current buffer.  
Files: src/fileio.c

## Patch 6.2.477

Problem: Using remote\_send(v:servername, "\<C-V>") causes Vim to hang. (Yakov Lerner)  
Solution: When the resulting string is empty don't set received\_from\_client.  
Files: src/main.c

## Patch 6.2.478

Problem: Win32: "--remote file" fails changing directory if the current directory name starts with a single quote. (Iestyn Walters)  
Solution: Add a backslash where it will be removed later.  
Files: src/main.c, src/misc2.c, src/proto/misc2.pro

## Patch 6.2.479

Problem: The error message for errors during recovery goes unnoticed.  
Solution: Avoid that the hit-enter prompt overwrites the message. Add a few lines to make the error stand out.  
Files: src/main.c, src/message.c, src/memline.c

## Patch 6.2.480

Problem: NetBeans: Using negative index in array. backslash at end of message may cause Vim to crash. (Xavier de Gaye)  
Solution: Initialize buf\_list\_used to zero. Check for trailing backslash.  
Files: src/netbeans.c

## Patch 6.2.481

Problem: When writing a file it is not possible to specify that hard and/or symlinks are to be broken instead of preserved.  
Solution: Add the "breaksymlink" and "breakhardlink" values to 'backupcopy'.



(Simon Ekstrand)  
Files: runtime/doc/options.txt, src/fileio.c, src/option.c, src/option.h

Patch 6.2.482

Problem: Repeating insert of CTRL-K 1 S doesn't work. The superscript 1 is considered to be a digit. (Juergen Kraemer)

Solution: In vim\_isdigit() only accept '0' to '9'. Use VIM\_ISDIGIT() for speed where possible. Also add vim\_isxdigit().

Files: src/buffer.c, src/charset.c, src/diff.c, src/digraph.c,  
src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c,  
src/ex\_docmd.c, src/ex\_eval.c, src/ex\_getln.c,  
src/if\_xcmdsrv.c, src/farsi.c, src/fileio.c, src/fold.c,  
src/getchar.c, src/gui.c, src/if\_cscope.c, src/macros.h,  
src/main.c, src/mark.c, src/mbyte.c, src/menu.c, src/misc1.c,  
src/misc2.c, src/normal.c, src/ops.c, src/option.c,  
src/proto/charset.pro, src/regexp.c, src/screen.c, src/search.c,  
src/syntax.c, src/tag.c, src/term.c, src/termlib.c

Patch 6.2.483 (extra, after 6.2.482)

Problem: See 6.2.482.

Solution: Extra part of patch 6.2.482.

Files: src/gui\_photon.c, src/gui\_w48.c, src/os\_msdos.c, src/os\_mswin.c

Patch 6.2.484

Problem: MS-Windows: With the included diff.exe, differences after a CTRL-Z are not recognized. (Peter Keresztes)

Solution: Write the files with unix fileformat and invoke diff with --binary if possible.

Files: src/diff.c

Patch 6.2.485

Problem: A BufWriteCmd autocommand cannot know if "!" was used or not. (Hari Krishna Dara)

Solution: Add the v:cmdbang variable.

Files: runtime/doc/eval.txt, src/eval.c, src/proto/eval.pro,  
src/fileio.c, src/vim.h

Patch 6.2.486 (6.2.482)

Problem: Diff for eval.c is missing.

Solution: Addition to patch 6.2.482.

Files: src/eval.c

Patch 6.2.487 (extra, after 6.2.456)

Problem: Compiler warnings for wrong prototype. (Alejandro Lopez Valencia)

Solution: Delete the prototype for Handle\_WM\_Notify().

Files: src/proto/gui\_w32.pro

Patch 6.2.488

Problem: Missing ")" in \*.ch filetype detection.

Solution: Add the ")". (Ciaran McCreesh)

Files: runtime/filetype.vim

Patch 6.2.489

Problem: When accidentally opening a session in Vim which has already been opened in another Vim there is a long row of ATTENTION prompts.

Need to quit each of them to get out. (Robert Webb)

Solution: Add the "Abort" alternative to the dialog.

Files: src/memline.c

Patch 6.2.490

Problem: With 'paragraph' it is not possible to use a single dot as a paragraph boundary. (Dorai Sitaram)

Solution: Allow using " " (two spaces) in 'paragraph' to match ".\$" or  
". \$"  
Files: src/search.c

Patch 6.2.491

Problem: Decrementing a position doesn't take care of multi-byte chars.  
Solution: Adjust the column for multi-byte characters. Remove mb\_dec().  
(Yasuhiro Matsumoto)  
Files: src/mbyte.c, src/misc2.c, src/proto/mbyte.pro

Patch 6.2.492

Problem: When using ":redraw" while there is a message, the next ":echo"  
still causes text to scroll. (Yasuhiro Matsumoto)  
Solution: Reset msg\_didout and msg\_col, so that after ":redraw" the next  
message overwrites an existing one.  
Files: src/ex\_docmd.c

Patch 6.2.493

Problem: "@x" doesn't work when 'insertmode' is set. (Benji Fisher)  
Solution: Put "restart\_edit" in the typeahead buffer, so that it's used  
after executing the register contents.  
Files: src/ops.c

Patch 6.2.494

Problem: Using diff mode with two windows, when moving horizontally in  
inserted lines, a fold in the other window may open.  
Solution: Compute the line number in the other window correctly.  
Files: src/diff.c

Patch 6.2.495 (extra, after 6.2.456)

Problem: Win32: The file dialog doesn't work on Windows 95.  
Solution: Put the wide code of gui\_mch\_browse() in gui\_mch\_browseW() and use  
it only on Windows NT/2000/XP.  
Files: src/gui\_w32.c, src/gui\_w48.c

Patch 6.2.496

Problem: FreeBSD 4.x: When compiled with the pthread library (Python) a  
complicated pattern may cause Vim to crash. Catching the signal  
doesn't work.  
Solution: When compiled with threads, instead of using the normal stacksize  
limit, use the size of the initial stack.  
Files: src/auto/configure, src/config.h.in, src/configure.in,  
src/os\_unix.c

Patch 6.2.497 (extra)

Problem: Russian messages are only available in one encoding.  
Solution: Convert the messages to MS-Windows codepages. (Vassily Ragosin)  
Files: src/po/Makefile

Patch 6.2.498

Problem: Non-latin1 help files are not properly supported.  
Solution: Support utf-8 help files and convert them to 'encoding' when  
needed.  
Files: src/fileio.c

Patch 6.2.499

Problem: When writing a file and halting the system, the file might be lost  
when using a journaling file system.  
Solution: Use fsync() to flush the file data to disk after writing a file.  
(Radim Kolar)  
Files: src/fileio.c

## Patch 6.2.500 (extra)

Problem: The DOS/MS-Windows the installer doesn't use the --binary flag for diff.  
Solution: Add --binary to the diff argument in MyDiff(). (Alejandro Lopez-Valencia)  
Files: src/dosinst.c

## Patch 6.2.501

Problem: Vim does not compile with MorphOS.  
Solution: Add a Makefile and a few changes to make Vim work with MorphOS. (Ali Akcaagac)  
Files: runtime/doc/os\_amiga.txt, src/INSTALLami.txt, src/Make\_morphos.mak, src/memfile.c, src/term.c

## Patch 6.2.502

Problem: Building fails for generating message files.  
Solution: Add dummy message files.  
Files: src/po/ca.po, src/po/ru.po, src/po/sv.po

## Patch 6.2.503

Problem: Mac: Can't compile MacRoman conversions without the GUI.  
Solution: Also link with the Carbon framework for the terminal version, for the MacRoman conversion functions. (Eckehard Berns)  
Remove -ltermcap from the GUI link command, it is not needed.  
Files: src/auto/configure, src/Makefile, src/configure.in

## Patch 6.2.504

Problem: Various problems with 'cindent', among which that a list of variable declarations is not indented properly.  
Solution: Fix the wrong indenting. Improve indenting of C++ methods. Add the 'i', 'b' and 'W' options to 'cinoptions'. (mostly by Helmut Stiegler)  
Improve indenting of preprocessor-continuation lines.  
Files: runtime/doc/indent.txt, src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 6.2.505

Problem: Help for -P argument is missing. (Ronald Hoellwarth)  
Solution: Add the patch that was missing in 6.2.419.  
Files: runtime/doc/starting.txt

## Patch 6.2.506 (extra)

Problem: Win32: When 'encoding' is a codepage then reading a utf-8 file only works when iconv is available. Writing a file in another codepage uses the wrong kind of conversion.  
Solution: Use internal conversion functions. Enable reading and writing files with 'fileencoding' different from 'encoding' for all valid codepages and utf-8 without the need for iconv.  
Files: src/fileio.c, src/testdir/Make\_dos.mak, src/testdir/test52.in, src/testdir/test52.ok

## Patch 6.2.507

Problem: The ownership of the file with the password for the NetBeans connection is not checked. "-nb={file}" doesn't work for GTK.  
Solution: Only accept the file when owned by the user and not accessible by others. Detect "-nb=" for GTK.  
Files: src/netbeans.c, src/gui\_gtk\_x11.c

## Patch 6.2.508

Problem: Win32: "v:lang" does not show the current language for messages if it differs from the other locale settings.  
Solution: Use the value of the \$LC\_MESSAGES environment variable.

Files: src/ex\_cmds2.c

Patch 6.2.509 (after 6.2.508)

Problem: Crash when \$LANG is not set.

Solution: Add check for NULL pointer. (Ron Aaron)

Files: src/ex\_cmds2.c

Patch 6.2.510 (after 6.2.507)

Problem: Warning for pointer conversion.

Solution: Add a type cast.

Files: src/gui\_gtk\_x11.c

Patch 6.2.511

Problem: Tags in Russian help files are in utf-8 encoding, which may be different from 'encoding'.

Solution: Use the "TAG\_FILE\_ENCODING" field in the tags file to specify the encoding of the tags. Convert help tags from 'encoding' to the tag file encoding when searching for matches, do the reverse when listing help tags.

Files: runtime/doc/tagsrch.txt, src/ex\_cmds.c, src/tag.c

Patch 6.2.512

Problem: Translating "\"\n" is useless. (Gerfried Fuchs)

Solution: Remove the \_() around it.

Files: src/main.c, src/memline.c

Patch 6.2.513 (after 6.2.507)

Problem: NetBeans: the check for owning the connection info file can be simplified. (Nikolay Molchanov)

Solution: Only check if the access mode is right.

Files: src/netbeans.c

Patch 6.2.514

Problem: When a highlight/syntax group name contains invalid characters there is no warning.

Solution: Add an error for unprintable characters and a warning for other invalid characters.

Files: src/syntax.c

Patch 6.2.515

Problem: When using the options window 'swapfile' is reset.

Solution: Use ":setlocal" instead of ":set".

Files: runtime/optwin.vim

Patch 6.2.516

Problem: The sign column cannot be seen, looks like there are two spaces before the text. (Rob Retter)

Solution: Add the SignColumn highlight group.

Files: runtime/doc/options.txt, runtime/doc/sign.txt, src/option.c, src/screen.c, src/syntax.c, src/vim.h

Patch 6.2.517

Problem: Using "r\*" in Visual mode on multi-byte characters replaces too many characters. In Visual Block mode replacing with a multi-byte character doesn't work.

Solution: Adjust the operator end for the difference in byte length of the original and the replaced character. Insert all bytes of a multi-byte character, take care of double-wide characters.

Files: src/ops.c

Patch 6.2.518

Problem: Last line of a window is not updated after using "J" and then "D".

(Adri Verhoef)  
Solution: When no line is found below a change that doesn't need updating,  
update all lines below the change.  
Files: src/screen.c

#### Patch 6.2.519

Problem: Mac: cannot read/write files in MacRoman format.  
Solution: Do internal conversion from/to MacRoman to/from utf-8 and latin1.  
(Eckehard Berns)  
Files: src/fileio.c

#### Patch 6.2.520 (extra)

Problem: The NSIS installer is outdated.  
Solution: Make it work with NSIS 2.0. Also include console executables for  
Win 95/98/ME and Win NT/2000/XP. Use LZWA compression. Use  
"/oname" to avoid having to rename files before running NSIS.  
Files: Makefile, nsis/gvim.nsi

#### Patch 6.2.521

Problem: When using silent Ex mode the "changing a readonly file" warning  
is omitted but the one second wait isn't. (Yakov Lerner)  
Solution: Skip the delay when "silent\_mode" is set.  
Files: src/misc1.c

#### Patch 6.2.522

Problem: GUI: when changing 'cmdheight' in the gvimrc file the window  
layout is messed up. (Keith Dart)  
Solution: Skip updating the window layout when changing 'cmdheight' while  
still starting up.  
Files: src/option.c

#### Patch 6.2.523

Problem: When loading a session and aborting when a swap file already  
exists, the user is left with useless windows. (Robert Webb)  
Solution: Load one file before creating the windows.  
Files: src/ex\_docmd.c

#### Patch 6.2.524 (extra, after 6.2.520)

Problem: Win32: (un)installing gvimext.dll may fail if it was used.  
The desktop and start menu links are created for the current user  
instead of all users.  
Using the home directory as working directory for the links is a  
bad idea for multi-user systems.  
Cannot use Vim from the "Open With..." menu.  
Solution: Force a reboot if necessary. (Alejandro Lopez-Valencia) Also use  
macros for the directory of the source and runtime files. Use  
"CSIDL\_COMMON\_\*" instead of "CSIDL\_\*" when possible.  
Do not specify a working directory in the links.  
Add Vim to the "Open With..." menu. (Giuseppe Bilotta)  
Files: nsis/gvim.nsi, src/dosinst.c, src/dosinst.h, src/uninstal.c

#### Patch 6.2.525

Problem: When the history contains a very long line ":history" causes a  
crash. (Volker Kiefel)  
Solution: Shorten the history entry to fit it in one line.  
Files: src/ex\_getln.c

#### Patch 6.2.526

Problem: When s:lang is "ja" the Japanese menus are not used.  
Solution: Add 'encoding' to the language when there is no charset.  
Files: runtime/menu.vim

## Patch 6.2.527

Problem: The 2html script uses ":wincmd p", which breaks when using some autocommands.  
Solution: Remember the window numbers and jump to them with ":wincmd w". Also add XHTML support. (Panagiotis Issaris)  
Files: runtime/syntax/2html.vim

## Patch 6.2.528

Problem: NetBeans: Changes of the "~" command are not reported.  
Solution: Call netbeans\_inserted() after performing "~". (Gordon Prieur)  
Also change NetBeans debugging to append to the log file.  
Also fix that "~" in Visual block mode changes too much if there are multi-byte characters.  
Files: src/nbdebug.c, src/normal.c, src/ops.c

## Patch 6.2.529 (extra)

Problem: VisVim only works for Admin. Doing it for one user doesn't work. (Alexandre Gouraud)  
Solution: When registering the module fails, simply continue.  
Files: src/VisVim/VisVim.cpp

## Patch 6.2.530

Problem: Warning for missing prototype on the Amiga.  
Solution: Include time.h  
Files: src/version.c

## Patch 6.2.531

Problem: In silent ex mode no messages are given, which makes debugging very difficult.  
Solution: Do output messages when 'verbose' is set.  
Files: src/message.c, src/ui.c

## Patch 6.2.532 (extra)

Problem: Compiling for Win32s with VC 4.1 doesn't work.  
Solution: Don't use CP\_UTF8 if it's not defined. Don't use CSIDL\_COMMON\* when not defined.  
Files: src/dosinst.h, src/fileio.c

Win32 console: After patch 6.2.398 Ex mode did not work. (Yasuhiro Matsumoto)

## Patch 6.3a.001

Problem: Win32: if testing for the "--binary" option fails, diff isn't used at all.  
Solution: Handle the "ok" flag properly. (Yasuhiro Matsumoto)  
Files: src/diff.c

## Patch 6.3a.002

Problem: NetBeans: An insert command from NetBeans beyond the end of a buffer crashes Vim. (Xavier de Gaye)  
Solution: Use a local pos\_T structure for the position.  
Files: src/netbeans.c

## Patch 6.3a.003

Problem: E315 error with auto-formatting comments. (Henry Van Roessel)  
Solution: Pass the line number to same\_leader().  
Files: src/ops.c

## Patch 6.3a.004

Problem: Test32 fails on Windows XP for the DJGPP version. Renaming test11.out fails.  
Solution: Don't try renaming, create new files to use for the test.  
Files: src/testdir/test32.in, src/testdir/test32.ok

## Patch 6.3a.005

Problem: ":checkpath!" does not use 'includeexpr'.

Solution: Use a file name that was found directly. When a file was not found and the located name is empty, use the rest of the line.

Files: src/search.c

## Patch 6.3a.006

Problem: "yip" moves the cursor to the first yanked line, but not to the first column. Looks like not all text was yanked. (Jens Paulus)

Solution: Move the cursor to the first column.

Files: src/search.c

## Patch 6.3a.007

Problem: 'cindent' recognizes "enum" but not "typedef enum".

Solution: Skip over "typedef" before checking for "enum". (Helmut Stiegler)  
Also avoid that searching for this item goes too far back.

Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 6.3a.008 (extra)

Problem: Windows 98: Some of the wide functions are not implemented, resulting in file I/O to fail. This depends on what Unicode support is installed.

Solution: Handle the failure and fall back to non-wide functions.

Files: src/os\_win32.c

## Patch 6.3a.009

Problem: Win32: Completion of filenames does not work properly when 'encoding' differs from the active code page.

Solution: Use wide functions for expanding wildcards when appropriate.

Files: src/misc1.c

## Patch 6.3a.010 (extra)

Problem: Win32: Characters in the window title that do not appear in the active codepage are replaced by a question mark.

Solution: Use DefWindowProcW() instead of DefWindowProc() when possible.

Files: src/glbl\_ime.cpp, src/globals.h, src/proto/gui\_w16.pro, src/proto/gui\_w32.pro, src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c

## Patch 6.3a.011

Problem: Using the explorer plugin changes a local directory to the global directory.

Solution: Don't use ":chdir" to restore the current directory. Make "expand('%:p') remove "/../" and "/./" items from the path.

Files: runtime/plugin/explorer.vim, src/eval.c, src/os\_unix.c

## Patch 6.3a.012 (extra)

Problem: On Windows 98 the installer doesn't work, don't even get the "I agree" button. The check for the path ending in "vim" makes the browse dialog hard to use. The default path when no previous Vim is installed is "c:\vim" instead of "c:\Program Files\Vim".

Solution: Remove the background gradient command. Change the .onVerifyInstDir function to a leave function for the directory page. Don't let the install program default to c:\vim when no path could be found.

Files: nsis/gvim.nsi, src/dosinst.c

## Patch 6.3a.013 (extra)

Problem: Win32: Characters in the menu that are not in the active codepage are garbled.

Solution: Convert menu strings from 'encoding' to the active codepage.

Files: src/gui\_w32.c, src/gui\_w48.c

## Patch 6.3a.014

Problem: Using multi-byte text and highlighting in a statusline causes gaps to appear. (Helmut Stiegler)  
Solution: Advance the column by text width instead of number of bytes. Add the vim\_strnsize() function.  
Files: src/charset.c, src/proto/charset.pro, src/screen.c

## Patch 6.3a.015

Problem: Using the "select all" menu item when 'insertmode' is set and clicking the mouse button doesn't return to Insert mode. The Buffers/Delete menu doesn't offer a choice to abandon a changed buffer. (Jens Paulus)  
Solution: Don't use CTRL-\ CTRL-N. Add ":confirm" for the Buffers menu items.  
Files: runtime/menu.vim

## Patch 6.3a.016

Problem: After cancelling the ":confirm" dialog the error message and hit-enter prompt may not be displayed properly.  
Solution: Flush output after showing the dialog.  
Files: src/message.c

## Patch 6.3a.017

Problem: servername() doesn't work when Vim was started with the "-X" argument or when the "exclude" in 'clipboard' matches the terminal name. (Robert Nowotniak)  
Solution: Force connecting to the X server when using client-server commands.  
Files: src/eval.c, src/globals.h, src/os\_unix.c

## Patch 6.3a.018 (after 6.3a.017)

Problem: Compiler warning for return value of make\_connection().  
Solution: Use void return type.  
Files: src/eval.c

## Patch 6.3a.019 (extra)

Problem: Win32: typing non-latin1 characters doesn't work.  
Solution: Invoke \_OnChar() directly to avoid that the argument is truncated to a byte. Convert the UTF-16 character to bytes according to 'encoding' and ignore 'termencoding'. Same for \_OnSysChar().  
Files: src/gui\_w32.c, src/gui\_w48.c

## Patch 6.3a.020 (extra)

Problem: Missing support for AROS (AmigaOS reimplementation). Amiga GUI doesn't work.  
Solution: Add AROS support. (Adam Chodorowski)  
Fix Amiga GUI problems. (Georg Steger, Ali Akcaagac)  
Files: Makefile, src/Make\_aros.mak, src/gui\_amiga.c, src/gui\_amiga.h, src/memfile.c, src/os\_amiga.c, src/term.c

## Patch 6.3a.021 (after 6.3a.017)

Problem: Can't compile with X11 but without GUI.  
Solution: Put use of "gui.in\_use" inside an #ifdef.  
Files: src/eval.c

## Patch 6.3a.022

Problem: When typing Tabs when 'softtabstop' is used and 'list' is set a tab is counted for two spaces.  
Solution: Use the "L" flag in 'coptions' to tell whether a tab is counted as two spaces or as 'tabstop'. (Antony Scriven)  
Files: runtime/doc/options.txt, src/edit.c



## Patch 6.3a.023

Problem: Completion on the command line doesn't handle backslashes properly. Only the tail of matches is shown, even when not completing filenames.

Solution: When turning the string into a pattern double backslashes. Don't omit the path when not expanding files or directories.

Files: src/ex\_getln.c

## Patch 6.3a.024

Problem: The "save all" toolbar item fails for buffers that don't have a name. When using ":wa" or closing the Vim window and there are nameless buffers, browsing for a name may cause the name being given to the wrong buffer or not stored properly. ":browse" only worked for one file.

Solution: Use ":confirm browse" for "save all". Pass buffer argument to setfname(). Restore "browse" flag and "forceit" after doing the work for one file.

Files: runtime/menu.vim, src/buffer.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/memline.c, src/message.c, src/window.c, src/proto/buffer.pro, src/proto/ex\_cmds2.pro, src/proto/memline.pro

## Patch 6.3a.025

Problem: Setting 'virtualedit' moves the cursor. (Benji Fisher)

Solution: Update the virtual column before using it.

Files: src/option.c

## Patch 6.3a.026 (extra, after 6.3a.008)

Problem: Editing files on Windows 98 doesn't work when 'encoding' is "utf-8" (Antoine Mechelynck)

Warning for missing function prototype.

Solution: For all wide functions check if it failed because it is not implemented. Use ANSI function declaration for char\_to\_string().

Files: src/gui\_w48.c, src/os\_mswin.c, src/os\_win32.c

## Patch 6.3a.027 (extra, after 6.3a.026)

Problem: Compiler warning for function argument.

Solution: Declare both char and WCHAR arrays.

Files: src/gui\_w48.c

## Patch 6.3a.028

Problem: ":normal ." doesn't work inside a function, because redo is saved and restored. (Benji Fisher)

Solution: Make a copy of the redo buffer when executing a function.

Files: src/getchar.c

## Patch 6.3b.001 (extra)

Problem: Bcc 5: The generated auto/pathdef can't be compiled.

Solution: Fix the way quotes and backslashes are escaped.

Files: src/Make\_bc5.mak

## Patch 6.3b.002

Problem: Win32: conversion during file write fails when a double-byte character is split over two writes.

Solution: Fix the conversion retry without a trailing byte. (Taro Muraoka)

Files: src/fileio.c

## Patch 6.3b.003 (extra)

Problem: Win32: When compiling with Borland C 5.5 and 'encoding' is "utf-8" then Vim can't open files under MS-Windows 98. (Antoine J. Mechelynck)

Solution: Don't use `_wstat()`, `_wopen()` and `_wfopen()` in this situation.  
Files: `src/os_mswin.c`, `src/os_win32.c`

Patch 6.3b.004

Problem: `":helpgrep"` includes a trailing CR in the text line.  
Solution: Remove the CR.  
Files: `src/quickfix.c`

Patch 6.3b.005

Problem: `":echo &g:ai"` results in the local option value. (Salman Halim)  
Solution: Pass the flags from `find_option_end()` to `get_option_value()`.  
Files: `src/eval.c`

Patch 6.3b.006

Problem: When using `"mswin.vim"`, CTRL-V in Insert mode leaves cursor before last pasted character. (Mathew Davis)  
Solution: Use the same `Paste()` function as in `menu.vim`.  
Files: `runtime/mswin.vim`

Patch 6.3b.007

Problem: Session file doesn't restore view on windows properly. (Robert Webb)  
Solution: Restore window sizes both before and after restoring the view, so that the view, cursor position and size are restored properly.  
Files: `src/ex_docmd.c`

Patch 6.3b.008

Problem: Using `":finally"` in a user command doesn't always work. (Hari Krishna Dara)  
Solution: Don't assume that using `getexline()` means the command was typed.  
Files: `src/ex_docmd.c`

Patch 6.3b.009 (extra)

Problem: Win32: When the `-P` argument is not found in a window title, there is no error message.  
Solution: When the window can't be found give an error message and exit. Also use `try/except` to catch failing to open the MDI window. (Michael Wookey)  
Files: `src/gui_w32.c`

Patch 6.3b.010

Problem: Win32: Using the `"-D"` argument and expanding arguments may cause a hang, because the terminal isn't initialized yet. (Vince Negri)  
Solution: Don't go into debug mode before the terminal is initialized.  
Files: `src/main.c`

Patch 6.3b.011

Problem: Using CTRL-\ e while obtaining an expression aborts the command line. (Hari Krishna Dara)  
Solution: Insert the CTRL-\ e as typed.  
Files: `src/ex_getln.c`

Patch 6.3b.012 (after 6.3b.010)

Problem: Can't compile with tiny features. (Norbert Tretkowski)  
Solution: Add `#ifdefs`.  
Files: `src/main.c`

Patch 6.3b.013

Problem: Loading a session file results in editing the wrong file in the first window when this is not the file at the current position in the argument list. (Robert Webb)  
Solution: Check `w_arg_idx_invalid` to decide whether to edit a file.

Files: src/ex\_docmd.c

Patch 6.3b.014

Problem: ":runtime! foo\*.vim" may using freed memory when a sourced script changes the value of 'runtimepath'.

Solution: Make a copy of 'runtimepath' when looping over the matches.

Files: src/ex\_cmds2.c

Patch 6.3b.015

Problem: Get lalloc(0) error when using "p" in Visual mode while 'clipboard' contains "autoselect,unnamed". (Mark Wagonner)

Solution: Avoid allocating zero bytes. Obtain the clipboard when necessary.

Files: src/ops.c

Patch 6.3b.016

Problem: When 'virtualedit' is used "x" doesn't delete the last character of a line that has as many characters as 'columns'. (Yakov Lerner)

Solution: When the cursor isn't moved let oneright() return FAIL.

Files: src/edit.c

Patch 6.3b.017

Problem: Win32: "vim --remote-wait" doesn't exit when the server finished editing the file. (David Fishburn)

Solution: In the rrhelper plugin change backslashes to forward slashes and escape special characters.

Files: runtime/plugin/rrhelper.vim

Patch 6.3b.018

Problem: The list of help files in the "local additions" table doesn't recognize utf-8 encoding. (Yasuhiro Matsumoto)

Solution: Recognize utf-8 characters.

Files: src/ex\_cmds.c

Patch 6.3b.019

Problem: When \$VIMRUNTIME is not a full path name the "local additions" table lists all the help files.

Solution: Use fullpathcmp() instead of fnamecmp() to compare the directory names.

Files: src/ex\_cmds.c

Patch 6.3b.020

Problem: When using CTRL-^ when entering a search string, the item in the statusline that indicates the keymap is not updated. (Ilya Dogolazky)

Solution: Mark the statuslines for updating.

Files: src/ex\_getln.c

Patch 6.3b.021

Problem: The swapfile is not readable for others, the ATTENTION prompt does not show all info when someone else is editing the same file. (Marcel Svitalsky)

Solution: Use the protection of original file for the swapfile and set it after creating the swapfile.

Files: src/fileio.c

Patch 6.3b.022

Problem: Using "4v" to select four times the old Visual area may put the cursor beyond the end of the line. (Jens Paulus)

Solution: Correct the cursor column.

Files: src/normal.c

Patch 6.3b.023

Problem: When "3dip" starts in an empty line, white lines after the non-white lines are not deleted. (Jens Paulus)  
 Solution: Include the white lines.  
 Files: src/search.c

## Patch 6.3b.024

Problem: "2daw" does not delete leading white space like "daw" does. (Jens Paulus)  
 Solution: Include the white space when a count is used.  
 Files: src/search.c

## Patch 6.3b.025

Problem: Percentage in ruler isn't updated when a line is deleted. (Jens Paulus)  
 Solution: Check for a change in line count when deciding to update the ruler.  
 Files: src/screen.c, src/structs.h

## Patch 6.3b.026

Problem: When selecting "abort" at the ATTENTION prompt for a file that is already being edited Vim crashes.  
 Solution: Don't abort creating a new buffer when we really need it.  
 Files: src/buffer.c, src/vim.h

## Patch 6.3b.027

Problem: Win32: When enabling the menu in a maximized window, Vim uses more lines than what is room for. (Shizhu Pan)  
 Solution: When deciding to call shell\_resized(), also compare the text area size with Rows and Columns, not just with screen\_Rows and screen\_Columns.  
 Files: src/gui.c

## Patch 6.3b.028

Problem: When in diff mode, setting 'rightleft' causes a crash. (Eddine)  
 Solution: Check for last column differently when 'rightleft' is set.  
 Files: src/screen.c

## Patch 6.3b.029

Problem: Win32: warning for uninitialized variable.  
 Solution: Initialize to zero.  
 Files: src/miscl.c

## Patch 6.3b.030

Problem: After Visually selecting four characters, changing it to other text, Visually selecting and yanking two characters: "." changes four characters, another "." changes two characters. (Robert Webb)  
 Solution: Don't store the size of the Visual area when redo is active.  
 Files: src/normal.c

## =====

## \*version-6.4\*

VERSION 6.4

This section is about improvements made between version 6.3 and 6.4.

This is a bug-fix release. There are also a few new features. The major number of new items is in the runtime files and translations.

The big MS-Windows version now uses:

Ruby version 1.8.3  
 Perl version 5.8.7  
 Python version 2.4.2

Changed

\*changed-6.4\*

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Removed runtime/tools/tcltags, Exuberant ctags does it better.

Added

\*added-6.4\*

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Alsaconf syntax file (Nikolai Weibull)  
 Eruby syntax, indent, compiler and ftplugin file (Doug Kearns)  
 Esterel syntax file (Maurizio Tranchero)  
 Mathematica indent file (Steve Layland)  
 Netrc syntax file (Nikolai Weibull)  
 PHP compiler file (Doug Kearns)  
 Pascal indent file (Neil Carter)  
 Prescribe syntax file (Klaus Muth)  
 Rubyunit compiler file (Doug Kearns)  
 SMTPrC syntax file (Kornel Kielczewski)  
 Sudoers syntax file (Nikolai Weibull)  
 TPP syntax file (Gerfried Fuchs)  
 VHDL ftplugin file (R. Shankar)  
 Verilog-AMS syntax file (S. Myles Prather)

Bulgarian keymap (Alberto Mardegan)  
 Canadian keymap (Eric Joanis)

Hungarian menu translations in UTF-8 (Kantra Gergely)  
 Ukrainian menu translations (Bohdan Vlasyuk)

Irish message translations (Kevin Patrick Scannell)

Configure also checks for tclsh8.4.

Fixed

\*fixed-6.4\*

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"dFxd;" deleted the character under the cursor, "d;" didn't remember the exclusiveness of the motion.

When using "set laststatus=2 cmdheight=2" in the .gvimrc you may only get one line for the cmdline. (Christian Robinson) Invoke command\_height() after the GUI has started up.

Gcc would warn "dereferencing type-punned pointer will break strict -aliasing rules". Avoid using typecasts for variable pointers.

Gcc 3.x interprets the -MM argument differently. Change "-I /path" to "-isystem /path" for "make depend".

Patch 6.3.001

Problem: ":browse split" gives the file selection dialog twice. (Gordon Bazeley) Same problem for ":browse diffpatch".

Solution: Reset cmdmod.browse before calling do\_ecmd().

Files: src/diff.c, src/ex\_docmd.c

Patch 6.3.002

Problem: When using translated help files with non-ASCII latin1 characters in the first line the utf-8 detection is wrong.

Solution: Properly detect utf-8 characters. When a mix of encodings is

detected continue with the next language and avoid a "no matches" error because of "got\_int" being set. Add the directory name to the error message for a duplicate tag.

Files: src/ex\_cmds.c

#### Patch 6.3.003

Problem: Crash when using a console dialog and the first choice does not have a default button. (Darin Ohashi)

Solution: Allocate two more characters for the [] around the character for the default choice.

Files: src/message.c

#### Patch 6.3.004

Problem: When searching for a long string (140 chars in a 80 column terminal) get three hit-enter prompts. (Robert Webb)

Solution: Avoid the hit-enter prompt when giving the message for wrapping around the end of the buffer. Don't give that message again when the string was not found.

Files: src/message.c, src/search.c

#### Patch 6.3.005

Problem: Crash when searching for a pattern with a character offset and starting in a closed fold. (Frank Butler)

Solution: Check for the column to be past the end of the line. Also fix that a pattern with a character offset relative to the end isn't read back from the viminfo properly.

Files: src/search.c

#### Patch 6.3.006

Problem: ":breakadd file \*foo" prepends the current directory to the file pattern. (Hari Krishna Dara)

Solution: Keep the pattern as-is.

Files: src/ex\_cmds2.c

#### Patch 6.3.007

Problem: When there is a buffer with 'buftype' set to "nofile" and using a ":cd" command, the swap file is not deleted when exiting.

Solution: Use the full path of the swap file also for "nofile" buffers.

Files: src/fileio.c

#### Patch 6.3.008

Problem: Compiling fails under OS/2.

Solution: Include "e\_screenmode" also for OS/2. (David Sanders)

Files: src/globals.h

#### Patch 6.3.009 (after 6.3.006)

Problem: ":breakadd file /path/foo.vim" does not match when a symbolic link is involved. (Servatius Brandt)

Solution: Do expand the pattern when it does not start with "\*".

Files: runtime/doc/repeat.txt, src/ex\_cmds2.c

#### Patch 6.3.010

Problem: When writing to a named pipe there is an error for fsync() failing.

Solution: Ignore the fsync() error for devices.

Files: src/fileio.c

#### Patch 6.3.011

Problem: Crash when the completion function of a user-command uses a "normal :cmd" command. (Hari Krishna Dara)

Solution: Save the command line when invoking the completion function.

Files: src/ex\_getln.c

## Patch 6.3.012

Problem: Internal lalloc(0) error when using a complicated multi-line pattern in a substitute command. (Luc Hermitte)  
Solution: Avoid going past the end of a line.  
Files: src/ex\_cmds.c

## Patch 6.3.013

Problem: Crash when editing a command line and typing CTRL-R = to evaluate a function that uses "normal :cmd". (Hari Krishna Dara)  
Solution: Save and restore the command line when evaluating an expression for CTRL-R =.  
Files: src/ex\_getln.c, src/ops.c, src/proto/ex\_getln.pro, src/proto/ops.pro

## Patch 6.3.014

Problem: When using Chinese or Taiwanese the default for 'helplang' is wrong. (Simon Liang)  
Solution: Use the part of the locale name after "zh\_".  
Files: src/option.c

## Patch 6.3.015

Problem: The string that winrestcmd() returns may end in garbage.  
Solution: NUL-terminate the string. (Walter Briscoe)  
Files: src/eval.c

## Patch 6.3.016

Problem: The default value for 'define' has "\s" before '#'.  
Solution: Add a star after "\s". (Herculano de Lima Einloft Neto)  
Files: src/option.c

## Patch 6.3.017

Problem: "8zz" may leave the cursor beyond the end of the line. (Niko Maatjes)  
Solution: Correct the cursor column after moving to another line.  
Files: src/normal.c

## Patch 6.3.018

Problem: ":0argadd zero" added the argument after the first one, instead of before it. (Adri Verhoef)  
Solution: Accept a zero range for ":argadd".  
Files: src/ex\_cmds.h

## Patch 6.3.019

Problem: Crash in startup for debug version. (David Rennals)  
Solution: Move the call to nbdebug\_wait() to after allocating NameBuff.  
Files: src/main.c

## Patch 6.3.020

Problem: When 'encoding' is "utf-8" and 'delcombine' is set, "dw" does not delete a word but only a combining character of the first character, if there is one. (Raphael Finkel)  
Solution: Correctly check that one character is being deleted.  
Files: src/misc1.c

## Patch 6.3.021

Problem: When the last character of a file name is a multi-byte character and the last byte is a path separator, the file cannot be edited.  
Solution: Check for the last byte to be part of a multi-byte character. (Taro Muraoka)  
Files: src/fileio.c

## Patch 6.3.022 (extra)

Problem: Win32: When the last character of a file name is a multi-byte character and the last byte is a path separator, the file cannot be written. A trail byte that is a space makes that a file cannot be opened from the command line.

Solution: Recognize double-byte characters when parsing the command line. In mch\_stat() check for the last byte to be part of a multi-byte character. (Taro Muraoka)

Files: src/gui\_w48.c, src/os\_mswin.c

## Patch 6.3.023

Problem: When the "to" part of a mapping starts with its "from" part, abbreviations for the same characters is not possible. For example, when <Space> is mapped to something that starts with a space, typing <Space> does not expand abbreviations.

Solution: Only disable expanding abbreviations when a mapping is not remapped, don't disable it when the RHS of a mapping starts with the LHS.

Files: src/getchar.c, src/vim.h

## Patch 6.3.024

Problem: In a few places a string in allocated memory is not terminated with a NUL.

Solution: Add ga\_append(NUL) in script\_get(), gui\_do\_findrepl() and serverGetVimNames().

Files: src/ex\_getln.c, src/gui.c, src/if\_xcmdsrv.c, src/os\_mswin.c

## Patch 6.3.025 (extra)

Problem: Missing NUL for list of server names.

Solution: Add ga\_append(NUL) in serverGetVimNames().

Files: src/os\_mswin.c

## Patch 6.3.026

Problem: When ~/.vim/after/syntax/syncolor.vim contains a command that reloads the colors an endless loop and/or a crash may occur.

Solution: Only free the old value of an option when it was originally allocated. Limit recursiveness of init\_highlight() to 5 levels.

Files: src/option.c, src/syntax.c

## Patch 6.3.027

Problem: VMS: Writing a file may insert extra CR characters. Not all terminals are recognized correctly. Vt320 doesn't support colors. Environment variables are not expanded correctly.

Solution: Use another method to write files. Add vt320 termcap codes for colors. (Zoltan Arpadffy)

Files: src/fileio.c, src/misc1.c, src/os\_unix.c, src/structs.h, src/term.c

## Patch 6.3.028

Problem: When appending to a file the BOM marker may be written. (Alex Jakushev)

Solution: Do not write the BOM marker when appending.

Files: src/fileio.c

## Patch 6.3.029

Problem: Crash when inserting a line break. (Walter Briscoe)

Solution: In the syntax highlighting code, don't use an old state after a change was made, current\_col may be past the end of the line.

Files: src/syntax.c

## Patch 6.3.030

Problem: GTK 2: Crash when sourcing a script that deletes the menus, sets



'encoding' to "utf-8" and loads the menus again. GTK error message when tooltip text is in a wrong encoding.  
Solution: Don't copy characters from the old screen to the new screen when switching 'encoding' to utf-8, they may be invalid. Only set the tooltip when it is valid utf-8.

Files: src/gui\_gtk.c, src/mbyte.c, src/proto/mbyte.pro, src/screen.c

#### Patch 6.3.031

Problem: When entering a mapping and pressing Tab halfway the command line isn't redrawn properly. (Adri Verhoef)

Solution: Reposition the cursor after drawing over the "..." of the completion attempt.

Files: src/ex\_getln.c

#### Patch 6.3.032

Problem: Using Python 2.3 with threads doesn't work properly.

Solution: Release the lock after initialization.

Files: src/if\_python.c

#### Patch 6.3.033

Problem: When a mapping ends in a Normal mode command of more than one character Vim doesn't return to Insert mode.

Solution: Check that the mapping has ended after obtaining all characters of the Normal mode command.

Files: src/normal.c

#### Patch 6.3.034

Problem: VMS: crash when using ":help".

Solution: Avoid using "tags-??", some Open VMS systems can't handle the "?" wildcard. (Zoltan Arpadffy)

Files: src/tag.c

#### Patch 6.3.035 (extra)

Problem: RISC OS: Compile errors.

Solution: Change e\_screnmode to e\_screenmode. Change the way \_\_riscosify\_control is set. Improve the makefile. (Andy Wingate)

Files: src/os\_riscos.c, src/search.c, src/Make\_ro.mak

#### Patch 6.3.036

Problem: ml\_get errors when the whole file is a fold, switching 'foldmethod' and doing "zj". (Christian J. Robinson) Was not deleting the fold but creating a fold with zero lines.

Solution: Delete the fold properly.

Files: src/fold.c

#### Patch 6.3.037 (after 6.3.032)

Problem: Warning for unused variable.

Solution: Change the #ifdefs for the saved thread stuff.

Files: src/if\_python.c

#### Patch 6.3.038 (extra)

Problem: Win32: When the "file changed" dialog pops up after a click that gives gvim focus and not moving the mouse after that, the effect of the click may occur when moving the mouse later. (Ken Clark) Happened because the release event was missed.

Solution: Clear the s\_button\_pending variable when any input is received.

Files: src/gui\_w48.c

#### Patch 6.3.039

Problem: When 'number' is set and inserting lines just above the first displayed line (in another window on the same buffer), the line numbers are not updated. (Hitier Sylvain)

Solution: When 'number' is set and lines are inserted/deleted redraw all lines below the change.

Files: src/screen.c

#### Patch 6.3.040

Problem: Error handling does not always work properly and may cause a buffer to be marked as if it's viewed in a window while it isn't. Also when selecting "Abort" at the attention prompt.

Solution: Add enter\_cleanup() and leave\_cleanup() functions to move saving/restoring things for error handling to one place. Clear a buffer read error when it's unloaded.

Files: src/buffer.c, src/ex\_docmd.c, src/ex\_eval.c, src/proto/ex\_eval.pro, src/structs.h, src/vim.h

#### Patch 6.3.041 (extra)

Problem: Win32: When the path to a file has Russian characters, ":cd %:p:h" doesn't work. (Valery Kondakoff)

Solution: Use a wide function to change directory.

Files: src/os\_mswin.c

#### Patch 6.3.042

Problem: When there is a closed fold at the top of the window, CTRL-X CTRL-E in Insert mode reduces the size of the fold instead of scrolling the text up. (Gautam)

Solution: Scroll over the closed fold.

Files: src/move.c

#### Patch 6.3.043

Problem: 'hlsearch' highlighting sometimes disappears when inserting text in PHP code with syntax highlighting. (Marcel Svitalsky)

Solution: Don't use pointers to remember where a match was found, use an index. The pointers may become invalid when searching in other lines.

Files: src/screen.c

#### Patch 6.3.044 (extra)

Problem: Mac: When 'linespace' is non-zero the Insert mode cursor leaves pixels behind. (Richard Sandilands)

Solution: Erase the character cell before drawing the text when needed.

Files: src/gui\_mac.c

#### Patch 6.3.045

Problem: Unusual characters in an option value may cause unexpected behavior, especially for a modeline. (Ciaran McCreesh)

Solution: Don't allow setting termcap options or 'printdevice' in a modeline. Don't list options for "termcap" and "all" in a modeline. Don't allow unusual characters in 'filetype', 'syntax', 'backupext', 'keymap', 'patchmode' and 'langmenu'.

Files: src/option.c, runtime/doc/options.txt

#### Patch 6.3.046

Problem: ":registers" doesn't show multi-byte characters properly. (Valery Kondakoff)

Solution: Get the length of each character before displaying it.

Files: src/ops.c

#### Patch 6.3.047 (extra)

Problem: Win32 with Borland C 5.5 on Windows XP: A new file is created with read-only attributes. (Tony Mechelynck)

Solution: Don't use the \_wopen() function for Borland.

Files: src/os\_win32.c

## Patch 6.3.048 (extra)

Problem: Build problems with VMS on IA64.  
Solution: Add dependencies to the build file. (Zoltan Arpadffy)  
Files: src/Make\_vms.mms

## Patch 6.3.049 (after 6.3.045)

Problem: Compiler warning for "char" vs "char\_u" mixup. (Zoltan Arpadffy)  
Solution: Add a typecast.  
Files: src/option.c

## Patch 6.3.050

Problem: When SIGHUP is received while busy exiting, non-reentrant functions such as free() may cause a crash.  
Solution: Ignore SIGHUP when exiting because of an error. (Scott Anderson)  
Files: src/miscl.c, src/main.c

## Patch 6.3.051

Problem: When 'wildmenu' is set and completed file names contain multi-byte characters Vim may crash.  
Solution: Reserve room for multi-byte characters. (Yasuhiro Matsumoto)  
Files: src/screen.c

## Patch 6.3.052 (extra)

Problem: Windows 98: typed keys that are not ASCII may not work properly. For example with a Russian input method. (Jiri Jezdinsky)  
Solution: Assume that the characters arrive in the current codepage instead of UCS-2. Perform conversion based on that.  
Files: src/gui\_w48.c

## Patch 6.3.053

Problem: Win32: ":loadview" cannot find a file with non-ASCII characters. (Valerie Kondakoff)  
Solution: Use mch\_open() instead of open() to open the file.  
Files: src/ex\_cmds2.c

## Patch 6.3.054

Problem: When 'insertmode' is set <C-L>4ixxx<C-L> hangs Vim. (Jens Paulus)  
Vim is actually still working but redraw is disabled.  
Solution: When stopping Insert mode with CTRL-L don't put an Esc in the redo buffer but a CTRL-L.  
Files: src/edit.c

## Patch 6.3.055 (after 6.3.013)

Problem: Can't use getcmdline(), getcmdpos() or setcmdpos() with <C-R>= when editing a command line. Using <C-\>e may crash Vim. (Peter Winters)  
Solution: When moving ccline out of the way for recursive use, make it available to the functions that need it. Also save and restore ccline when calling get\_expr\_line(). Make ccline.cmbuf NULL at the end of getcmdline().  
Files: src/ex\_getln.c

## Patch 6.3.056

Problem: The last characters of a multi-byte file name may not be displayed in the window title.  
Solution: Avoid to remove a multi-byte character where the last byte looks like a path separator character. (Yasuhiro Matsumoto)  
Files: src/buffer.c, src/ex\_getln.c

## Patch 6.3.057

Problem: When filtering lines folds are not updated. (Carl Osterwisch)

Solution: Update folds for filtered lines.  
Files: src/ex\_cmds.c

Patch 6.3.058

Problem: When 'foldcolumn' is equal to the window width and 'wrap' is on Vim may crash. Disabling the vertical split feature breaks compiling. (Peter Winters)

Solution: Check for zero room for wrapped text. Make compiling without vertical splits possible.

Files: src/move.c, src/quickfix.c, src/screen.c, src/netbeans.c

Patch 6.3.059

Problem: Crash when expanding an ":edit" command containing several spaces with the shell. (Brian Hirt)

Solution: Allocate enough space for the quotes.

Files: src/os\_unix.c

Patch 6.3.060

Problem: Using CTRL-R CTRL-O in Insert mode with an invalid register name still causes something to be inserted.

Solution: Check the register name for being valid.

Files: src/edit.c

Patch 6.3.061

Problem: When editing a utf-8 file in an utf-8 xterm and there is a multi-byte character in the last column, displaying is messed up. (Joël Rio)

Solution: Check for a multi-byte character, not a multi-column character.

Files: src/screen.c

Patch 6.3.062

Problem: ":normal! gQ" hangs.

Solution: Quit getcmdline() and do\_exmode() when out of typeahead.

Files: src/ex\_getln.c, src/ex\_docmd.c

Patch 6.3.063

Problem: When a CursorHold autocommand changes to another window (temporarily) 'mousefocus' stops working.

Solution: Call gui\_mouse\_correct() after triggering CursorHold.

Files: src/gui.c

Patch 6.3.064

Problem: line2byte(line("\$") + 1) sometimes returns the wrong number. (Charles Campbell)

Solution: Flush the cached line before counting the bytes.

Files: src/memline.c

Patch 6.3.065

Problem: The euro digraph doesn't always work.

Solution: Add an "e=" digraph for Unicode euro character and adjust the help files.

Files: src/digraph.c, runtime/doc/digraph.txt

Patch 6.3.066

Problem: Backup file may get wrong permissions.

Solution: Use permissions of original file for backup file in more places.

Files: src/fileio.c

Patch 6.3.067 (after 6.3.066)

Problem: Newly created file gets execute permission.

Solution: Check for "perm" to be negative before using it.

Files: src/fileio.c

## Patch 6.3.068

Problem: When editing a compressed file xxx.gz which is a symbolic link to the actual file a ":write" renames the link.

Solution: Resolve the link, so that the actual file is renamed and compressed.

Files: runtime/plugin/gzip.vim

## Patch 6.3.069

Problem: When converting text with illegal characters Vim may crash.

Solution: Avoid that too much is subtracted from the length. (Da Woon Jung)

Files: src/mbyte.c

## Patch 6.3.070

Problem: After ":set number linebreak wrap" and a vertical split, moving the vertical separator far left will crash Vim. (Georg Dahn)

Solution: Avoid dividing by zero.

Files: src/charset.c

## Patch 6.3.071

Problem: The message for CTRL-X mode is still displayed after an error for 'thesaurus' or 'dictionary' being empty.

Solution: Clear "edit\_submode".

Files: src/edit.c

## Patch 6.3.072

Problem: Crash in giving substitute message when language is Chinese and encoding is utf-8. (Yongwei)

Solution: Make the msg\_buf size larger when using multi-byte.

Files: src/vim.h

## Patch 6.3.073

Problem: Win32 GUI: When the Vim window is partly above or below the screen, scrolling causes display errors when the taskbar is not on that side.

Solution: Use the SW\_INVALIDATE flag when the Vim window is partly below or above the screen.

Files: src/gui\_w48.c

## Patch 6.3.074

Problem: When mswin.vim is used and 'insertmode' is set, typing text in Select mode and then using CTRL-V results in <SNR>99\_Pastegi. (Georg Dahn)

Solution: When restart\_edit is set use "d" instead of "c" to remove the selected text to avoid calling edit() twice.

Files: src/normal.c

## Patch 6.3.075

Problem: After unloading another buffer, syntax highlighting in the current buffer may be wrong when it uses "containedin". (Eric Arnold)

Solution: Use "buf" instead of "curbuf" in syntax\_clear().

Files: src/syntax.c

## Patch 6.3.076

Problem: Crash when using cscope and there is a parse error (e.g., line too long). (Alexey I. Froloff)

Solution: Pass the actual number of matches to cs\_manage\_matches() and correctly handle the error situation.

Files: src/if\_cscope.c

## Patch 6.3.077 (extra)

Problem: VMS: First character input after ESC was not recognized.

Solution: Added TRM\$M\_TM\_TIMED in vms\_read(). (Zoltan Arpadffy)  
Files: src/os\_vms.c

Patch 6.3.078 (extra, after 6.3.077)

Problem: VMS: Performance issue after patch 6.3.077  
Solution: Add a timeout in the itemlist. (Zoltan Arpadffy)  
Files: src/os\_vms.c

Patch 6.3.079

Problem: Crash when executing a command in the command line window while  
syntax highlighting is enabled. (Pero Brbora)  
Solution: Don't use a pointer to a buffer that has been deleted.  
Files: src/syntax.c

Patch 6.3.080 (extra)

Problem: Win32: With 'encoding' set to utf-8 while the current codepage is  
Chinese editing a file with some specific characters in the name  
fails.  
Solution: Use \_wfullpath() instead of \_fullpath() when necessary.  
Files: src/os\_mswin.c

Patch 6.3.081

Problem: Unix: glob() may execute a shell command when it's not wanted.  
(Georgi Guninski)  
Solution: Verify the sandbox flag is not set.  
Files: src/os\_unix.c

Patch 6.3.082 (after 6.3.081)

Problem: Unix: expand() may execute a shell command when it's not wanted.  
(Georgi Guninski)  
Solution: A more generic solution than 6.3.081.  
Files: src/os\_unix.c

Patch 6.3.083

Problem: VMS: The vt320 termcap entry is incomplete.  
Solution: Add missing function keys. (Zoltan Arpadffy)  
Files: src/term.c

Patch 6.3.084 (extra)

Problem: Cygwin: compiling with DEBUG doesn't work. Perl path was ignored.  
Failure when \$(OUTDIR) already exists. "po" makefile is missing.  
Solution: Use changes tested in Vim 7. (Tony Mechelynck)  
Files: src/Make\_cyg.mak, src/po/Make\_cyg.mak

Patch 6.3.085

Problem: Crash in syntax highlighting code. (Marc Espie)  
Solution: Prevent current\_col going past the end of the line.  
Files: src/syntax.c

Patch 6.3.086 (extra)

Problem: Can't produce message translation file with msgfmt that checks  
printf strings.  
Solution: Fix the Russian translation.  
Files: src/po/ru.po, src/po/ru.cp1251.po

Patch 6.3.087

Problem: MS-DOS: Crash. (Jason Hood)  
Solution: Don't call fname\_case() with a NULL pointer.  
Files: src/ex\_cmds.c

Patch 6.3.088

Problem: Editing ".in" causes error E218. (Stefan Karlsson)

Solution: Require some characters before ".in". Same for ".orig" and others.  
Files: runtime/filetype.vim

## Patch 6.3.089

Problem: A session file doesn't work when created while the current directory contains a space or the directory of the session files contains a space. (Paolo Giarrusso)

Solution: Escape spaces with a backslash.  
Files: src/ex\_docmd.c

## Patch 6.3.090

Problem: A very big value for 'columns' or 'lines' may cause a crash.  
Solution: Limit the values to 10000 and 1000.  
Files: src/option.c

## Patch 6.4a.001

Problem: The Unix Makefile contained too many dependencies and a few uncommented lines.  
Solution: Run "make depend" with manual changes to avoid a gcc incompatibility. Comment a few lines.  
Files: src/Makefile

## Patch 6.4b.001

Problem: Vim reports "Vim 6.4a" in the ":version" output.  
Solution: Change "a" to "b". (Tony Mechelynck)  
Files: src/version.h

## Patch 6.4b.002

Problem: In Insert mode, pasting a multi-byte character after the end of the line leaves the cursor just before that character.  
Solution: Make sure "gP" leaves the cursor in the right place when 'virtualedit' is set.  
Files: src/ops.c

## Patch 6.4b.003 (after 6.4b.002)

Problem: The problem still exists when 'encoding' is set to "cp936".  
Solution: Fix the problem in getvvcol(), compute the coladd field correctly.  
Files: src/charset.c, src/ops.c

## Patch 6.4b.004

Problem: Selecting a {} block with "viB" includes the '}' when there is an empty line before it.  
Solution: Don't advance the cursor to include a line break when it's already at the line break.  
Files: src/search.c

vim:tw=78:ts=8:ft=help:norl:  
\*version7.txt\* For Vim version 8.0. Last change: 2016 Jul 17

## VIM REFERENCE MANUAL by Bram Moolenaar

\*vim7\* \*version-7.0\* \*version7.0\*

Welcome to Vim 7! A large number of features has been added. This file mentions all the new items, changes to existing features and bug fixes since Vim 6.x. Use this command to see the version you are using: >  
:version

See |vi\_diff.txt| for an overview of differences between Vi and Vim 7.0.  
See |version4.txt| for differences between Vim 3.x and Vim 4.x.  
See |version5.txt| for differences between Vim 4.x and Vim 5.x.

See |version6.txt| for differences between Vim 5.x and Vim 6.x.

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## ===== INCOMPATIBLE CHANGES

## \*incompatible-7\*

These changes are incompatible with previous releases. Check this list if you run into a problem when upgrading from Vim 6.x to 7.0.

A `":write file"` command no longer resets the 'modified' flag of the buffer, unless the '+' flag is in 'coptions' [`cpo-+`]. This was illogical, since the buffer is still modified compared to the original file. And when undoing all changes the file would actually be marked modified. It does mean that `":quit"` fails now.

`":helpgrep"` now uses a help window to display a match.

In an argument list double quotes could be used to include spaces in a file name. This caused a difference between `":edit"` and `":next"` for escaping double quotes and it is incompatible with some versions of Vi.

| Command                      | Vim 6.x file name    | Vim 7.x file name ~      |
|------------------------------|----------------------|--------------------------|
| <code>:edit foo\"888</code>  | <code>foo"888</code> | <code>foo"888</code>     |
| <code>:next foo\"888</code>  | <code>foo888</code>  | <code>foo"888</code>     |
| <code>:next a\"b c\"d</code> | <code>ab cd</code>   | <code>a"b and c"d</code> |

In a `|literal-string|` a single quote can be doubled to get one.

`":echo 'a''b'"` would result in `"a b"`, but now that two quotes stand for one it results in `"a'b"`.

When overwriting a file with `":w! fname"` there was no warning for when `"fname"` was being edited by another Vim. Vim now gives an error message `|E768|`.

The support for Mac OS 9 has been removed.

Files ending in `.tex` now have 'filetype' set to `"context"`, `"plaintex"`, or `"tex"`. `|ft-tex-plugin|`

## Minor incompatibilities:

For filetype detection: For many types, use `*./dir/filename` instead of `~/dir/filename`, so that it also works for other user's files.

For quite a few filetypes the indent settings have been moved from the filetype plugin to the indent plugin. If you used: >

```
:filetype plugin on
```

Then some indent settings may be missing. You need to use: >

```
:filetype plugin indent on
```

`":0verbose"` now sets 'verbose' to zero instead of one.

Removed the old and incomplete `"VimBuddy"` code.

Buffers without a name report `"No Name"` instead of `"No File"`. It was confusing for buffers with a name and 'buftype' set to `"nofile"`.

When `":file xxx"` is used in a buffer without a name, the alternate file name isn't set. This avoids creating buffers without a name, they are not useful.

The `"2html.vim"` script now converts closed folds to HTML. This means the HTML looks like it's displayed, with the same folds open and closed. Use `"zR"`, or `"let html_ignore_folding=1"`, if no folds should appear in the HTML. (partly by Carl Osterwisch)

Diff mode is now also converted to HTML as it is displayed.

Win32: The effect of the <F10> key depended on 'winaltkeys'. Now it depends on whether <F10> has been mapped or not. This allows mapping <F10> without changing 'winaltkeys'.

When 'octal' is in 'nrformats' and using CTRL-A on "08" it became "018", which is illogical. Now it becomes "9". The leading zero(s) is(are) removed to avoid the number becoming octal after incrementing "009" to "010".

When 'encoding' is set to a Unicode encoding, the value for 'fileencodings' now includes "default" before "latin1". This means that for files with 8-bit encodings the default is to use the encoding specified by the environment, if possible. Previously latin1 would always be used, which is wrong in a non-latin1 environment, such as Russian.

Previously Vim would exit when there are two windows, both of them displaying a help file, and using ":quit". Now only the window is closed.

"-w {scriptout}" only works when {scriptout} doesn't start with a digit. Otherwise it's used to set the 'window' option.

Previously <Home> and <xHome> could be mapped separately. This had the disadvantage that all mappings (with modifiers) had to be duplicated, since you can't be sure what the keyboard generates. Now all <xHome> are internally translated to <Home>, both for the keys and for mappings. Also for <xEnd>, <xF1>, etc.

":put" now leaves the cursor on the last inserted line.

When a .gvimrc file exists then 'compatible' is off, just like when a ".vimrc" file exists.

When making a string upper-case with "vlllU" or similar then the German sharp s is replaced with "SS". This does not happen with "~" to avoid backwards compatibility problems and because "SS" can't be changed back to a sharp s.

"gd" previously found the very first occurrence of a variable in a function, that could be the function argument without type. Now it finds the position where the type is given.

The line continuation in functions was not taken into account, line numbers in errors were logical lines, not lines in the sourced file. That made it difficult to locate errors. Now the line number in the sourced file is reported, relative to the function start. This also means that line numbers for ":breakadd func" are different.

When defining a user command with |:command| the special items could be abbreviated. This caused unexpected behavior, such as <li> being recognized as <linel>. The items can no longer be abbreviated.

When executing a FileChangedRO autocommand it is no longer allowed to switch to another buffer or edit another file. This is to prevent crashes (the event is triggered deep down in the code where changing buffers is not anticipated). It is still possible to reload the buffer.

At the |more-prompt| and the |hit-enter-prompt|, when the 'more' option is set, the 'k', 'u', 'g' and 'b' keys are now used to scroll back to previous messages. Thus they are no longer used as typeahead.

## Vim script enhancements

\*new-vim-script\*

-----

In Vim scripts the following types have been added:

|            |                            |
|------------|----------------------------|
| List       | ordered list of items      |
| Dictionary | associative array of items |
| Funcref    | reference to a function    |

Many functions and commands have been added to support the new types.

The |string()| function can be used to get a string representation of a variable. Works for Numbers, Strings and composites of them. Then |eval()| can be used to turn the string back into the variable value.

The |:let| command can now use "+=", "-=" and ".=": >

|                    |                                      |
|--------------------|--------------------------------------|
| :let var += expr   | " works like :let var = var + expr   |
| :let var -= expr   | " works like :let var = var - expr   |
| :let var .= string | " works like :let var = var . string |

With the |:profile| command you can find out where your function or script is wasting time.

In the Python interface vim.eval() also handles Dictionaries and Lists.  
|python-eval| (G. Sumner Hayes)

The |getscript| plugin was added as a convenient way to update scripts from [www.vim.org](http://www.vim.org) automatically. (Charles Campbell)

The |vimball| plugin was added as a convenient way to distribute a set of files for a plugin (plugin file, autoload script, documentation). (Charles Campbell)

## Spell checking

\*new-spell\*

-----

Spell checking has been integrated in Vim. There were a few implementations with scripts, but they were slow and/or required an external program.

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| The 'spell'        | option is used to switch spell checking on or off        |
| The 'spelllang'    | option is used to specify the accepted language(s)       |
| The 'spellfile'    | option specifies where new words are added               |
| The 'spellsuggest' | option specifies the methods used for making suggestions |

|                  |                                                              |
|------------------|--------------------------------------------------------------|
| The  ]s  and  [s | commands can be used to move to the next or previous error   |
| The  zg  and  zw | commands can be used to add good and wrong words             |
| The  z=          | command can be used to list suggestions and correct the word |
| The  :mkspell    | command is used to generate a Vim spell file from word lists |

The "undercurl" highlighting attribute was added to nicely point out spelling mistakes in the GUI (based on patch from Marcin Dalecki).  
The "guisp" color can be used to give it a color different from foreground and background.

The number of possible different highlight attributes was raised from about 220 to over 30000. This allows for the attributes of spelling to be combined with syntax highlighting attributes. This is also used for syntax highlighting and marking the Visual area.

Much more info here: |spell|.

## Omni completion

\*new-omni-completion\*

-----

This could also be called "intellisense", but that is a trademark. It is a smart kind of completion. The text in front of the cursor is inspected to figure out what could be following. This may suggest struct and class members, system functions, etc.

Use CTRL-X CTRL-O in Insert mode to start the completion. |i\_CTRL-X\_CTRL-O|

The 'omnifunc' option is set by filetype plugins to define the function that figures out the completion.

Currently supported languages:

|                                       |                    |
|---------------------------------------|--------------------|
| C                                     | ft-c-omni          |
| (X)HTML with CSS                      | ft-html-omni       |
| JavaScript                            | ft-javascript-omni |
| PHP                                   | ft-php-omni        |
| Python                                |                    |
| Ruby                                  | ft-ruby-omni       |
| SQL                                   | ft-sql-omni        |
| XML                                   | ft-xml-omni        |
| any language with syntax highlighting | ft-syntax-omni     |

You can add your own omni completion scripts.

When the 'completeopt' option contains "menu" then matches for Insert mode completion are displayed in a (rather primitive) popup menu.

## MzScheme interface

\*new-MzScheme\*

-----

The MzScheme interpreter is supported. |MzScheme|

The |:mzscheme| command can be used to execute MzScheme commands

The |:mzfile| command can be used to execute an MzScheme script file

This depends on Vim being compiled with the |+mzscheme| feature.

## Printing multi-byte text

\*new-print-multi-byte\*

-----

The |:hardcopy| command now supports printing multi-byte characters when using PostScript.

The 'printmbcharset' and 'printmbfont' options are used for this.

Also see |postscript-cjk-printing|. (Mike Williams)

## Tab pages

\*new-tab-pages\*

-----

A tab page is a page with one or more windows with a label (aka tab) at the top. By clicking on the label you can quickly switch between the tab pages. And with the keyboard, using the |gt| (Goto Tab) command. This is a convenient way to work with many windows.

To start Vim with each file argument in a separate tab page use the |-p| argument. The maximum number of pages can be set with 'tabpagemax'.

The line with tab labels is either made with plain text and highlighting or with a GUI mechanism. The GUI labels look better but are only available on a few systems. The line can be customized with 'tabline', 'guitablabel' and 'guitabtooltip'. Whether it is displayed is set with 'showtabline'. Whether to use the GUI labels is set with the 'e' flag in 'guioptions'.

The |:tab| command modifier can be used to have most commands that open a new window open a new tab page instead.

The |--remote-tab| argument can be used to edit a file in a new tab page in an already running Vim server.

Variables starting with "t:" are local to a tab page.

More info here: |tabpage|

Most of the GUI stuff was implemented by Yegappan Lakshmanan.

#### Undo branches

\*new-undo-branches\*

-----

Previously there was only one line of undo-redo. If, after undoing a number of changes, a new change was made all the undone changes were lost. This could lead to accidentally losing work.

Vim now makes an undo branch in this situation. Thus you can go back to the text after any change, even if they were undone. So long as you do not run into 'undolevels', when undo information is freed up to limit the memory used.

To be able to navigate the undo branches each change is numbered sequentially. The commands |g-| and |:earlier| go back in time, to older changes. The commands |g+| and |:later| go forward in time, to newer changes.

The changes are also timestamped. Use ":earlier 10m" to go to the text as it was about ten minutes earlier.

The |:undolist| command can be used to get an idea of which undo branches exist. The |:undo| command now takes an argument to directly jump to a specific position in this list. The |changenr()| function can be used to obtain the change number.

There is no graphical display of the tree with changes, navigation can be quite confusing.

#### Extended Unicode support

\*new-more-unicode\*

-----

Previously only two combining characters were displayed. The limit is now raised to 6. This can be set with the 'maxcombine' option. The default is still 2.

|ga| now shows all combining characters, not just the first two.

Previously only 16 bit Unicode characters were supported for displaying. Now the full 32 bit character set can be used. Unless manually disabled at compile time to save a bit of memory.

For pattern matching it is now possible to search for individual composing characters. |patterns-composing|

The `|8g8|` command searches for an illegal UTF-8 byte sequence.

More highlighting

*\*new-more-highlighting\**

-----

Highlighting matching parens:

When moving the cursor through the text and it is on a paren, then the matching paren can be highlighted. This uses the new `|CursorMoved|` autocommand event.

This means some commands are executed every time you move the cursor. If this slows you down too much switch it off with: `>`

`:NoMatchParen`

See `|matchparen|` for more information.

The plugin uses the `|:match|` command. It now supports three match patterns. The plugin uses the third one. The first one is for the user and the second one can be used by another plugin.

Highlighting the cursor line and column:

The `'cursorline'` and `'cursorcolumn'` options have been added. These highlight the screen line and screen column of the cursor. This makes the cursor position easier to spot. `'cursorcolumn'` is also useful to align text. This may make screen updating quite slow. The `CursorColumn` and `CursorLine` highlight groups allow changing the colors used. `|hl-CursorColumn|`  
`|hl-CursorLine|`

The number of possible different highlight attributes was raised from about 220 to over 30000. This allows for the attributes of spelling to be combined with syntax highlighting attributes. This is also used for syntax highlighting, marking the Visual area, `CursorColumn`, etc.

Translated manual pages

*\*new-manpage-trans\**

-----

The manual page of Vim and associated programs is now also available in several other languages.

French - translated by David Blanchet  
Italian - translated by Antonio Colombo  
Russian - translated by Vassily Ragosin  
Polish - translated by Mikolaj Machowski

The Unix Makefile installs the Italian manual pages in `.../man/it/man1/`, `.../man/it.ISO8859-1/man1/` and `.../man/it.UTF-8/man1/`. There appears to be no standard for what encoding goes in the "it" directory, the 8-bit encoded file is used there as a best guess.

Other languages are installed in similar places.

The translated pages are not automatically installed when Vim was configured with `"--disable-nls"`, but `"make install-languages install-tool-languages"` will do it anyway.

Internal grep

*\*new-vimgrep\**

-----

The `":vimgrep"` command can be used to search for a pattern in a list of files.

This is like the `":grep"` command, but no external program is used. Besides better portability, handling of different file encodings and using multi-line patterns, this also allows grepping in compressed and remote files. `|:vimgrep|`.

If you want to use the search results in a script you can use the `|getqflist()|` function.

To grep files in various directories the `***` pattern can be used. It expands into an arbitrary depth of directories. `***` can be used in all places where file names are expanded, thus also with `|:next|` and `|:args|`.

#### Scroll back in messages

`*new-scroll-back*`

-----

When displaying messages, at the `|more-prompt|` and the `|hit-enter-prompt|`, The `'k'`, `'u'`, `'g'` and `'b'` keys can be used to scroll back to previous messages. This is especially useful for commands such as `":syntax"`, `":autocommand"` and `":highlight"`. This is implemented in a generic way thus it works for all commands and highlighting is kept. Only works when the `'more'` option is set. Previously it only partly worked for `":clist"`.

The `|g<|` command can be used to see the last page of messages after you have hit `<Enter>` at the `|hit-enter-prompt|`. Then you can scroll further back.

#### Cursor past end of the line

`*new-onemore*`

-----

When the `'virtualedit'` option contains `"onemore"` the cursor can move just past the end of the line. As if it's on top of the line break.

This makes some commands more consistent. Previously the cursor was always past the end of the line if the line was empty. But it is far from Vi compatible. It may also break some plugins or Vim scripts. Use with care!

The patch was provided by Mattias Flodin.

#### POSIX compatibility

`*new-posix*`

-----

The POSIX test suite was used to verify POSIX compatibility. A number of problems have been fixed to make Vim more POSIX compatible. Some of them conflict with traditional Vi or expected behavior. The `$VIM_POSIX` environment variable can be set to get POSIX compatibility. See `|posix|`.

Items that were fixed for both Vi and POSIX compatibility:

- repeating `"R"` with a count only overwrites text once; added the `'X'` flag to `'coptions'` `|cpo-X|`
- a vertical movement command that moves to a non-existing line fails; added the `'-'` flag to `'coptions'` `|cpo--|`
- when preserving a file and doing `":q!"` the file can be recovered; added the `'&'` flag to `'coptions'` `|cpo-&|`
- The `'window'` option is partly implemented. It specifies how much CTRL-F and CTRL-B scroll when there is one window. The `"-w {number}"` argument is now accepted. `"-w {scriptout}"` only works when `{scriptout}` doesn't start with a digit.
- Allow `"-c{command}"` argument, no space between `"-c"` and `{command}`.
- When writing a file with `":w!"` don't reset `'readonly'` when `'Z'` is present in `'coptions'`.

- Allow 'l' and '#' flags for ":list", ":print" and ":number".
- Added the '.' flag to 'coptions': ":cd" fails when the buffer is modified.
- In Ex mode with an empty buffer ":read file" doesn't keep an empty line above or below the new lines.
- Remove a backslash before a NL for the ":global" command.
- When ":append", ":insert" or ":change" is used with ":global", get the inserted lines from the command. Can use backslash-NL to separate lines.
- Can use ":global /pat/ visual" to execute Normal mode commands at each matched line. Use "Q" to continue and go to the next line.
- The |:open| command has been partially implemented. It stops Ex mode, but redraws the whole screen, not just one line as open mode is supposed to do.
- Support using a pipe to read the output from and write input to an external command. Added the 'shelltemp' option and has("filterpipe").
- In ex silent mode the ":set" command output is displayed.
- The ":@" and ":@" give an error message when no register was used before.
- The search pattern "[\~]" matches '~', '^', '\_' and `.`.
- Autoindent for ":insert" is using the line below the insert.
- Autoindent for ":change" is using the first changed line.
- Editing Ex command lines is not done in cooked mode, because CTRL-D and CTRL-T cannot be handled then.
- In Ex mode, "1,3" prints three lines. "%" prints all lines.
- In Ex mode "undo" would undo all changes since Ex mode was started.
- Implemented the 'prompt' option.

#### Debugger support

\*new-debug-support\*

The 'balloonexpr' option has been added. This is a generic way to implement balloon functionality. You can use it to show info for the word under the mouse pointer.

#### Remote file explorer

\*new-netrw-explore\*

The netrw plugin now also supports viewing a directory, when "scp://" is used. Deleting and renaming files is possible.

To avoid duplicating a lot of code, the previous file explorer plugin has been integrated in the netrw plugin. This means browsing local and remote files works the same way.

":browse edit" and ":browse split" use the netrw plugin when it's available and a GUI dialog is not possible.

The netrw plugin is maintained by Charles Campbell.

#### Define an operator

\*new-define-operator\*

Previously it was not possible to define your own operator; a command that is followed by a {motion}. Vim 7 introduces the 'operatorfunc' option and the |g@| operator. This makes it possible to define a mapping that works like an operator. The actual work is then done by a function, which is invoked through the |g@| operator.

See |:map-operator| for the explanation and an example.

#### Mapping to an expression

\*new-map-expression\*



-----

The {rhs} argument of a mapping can be an expression. That means the resulting characters can depend on the context. Example: >

```
:inoremap <expr> . InsertDot()
```

Here the dot will be mapped to whatever InsertDot() returns.

This also works for abbreviations. See |:map-<expr>| for the details.

#### Visual and Select mode mappings

\*new-map-select\*

-----

Previously Visual mode mappings applied both to Visual and Select mode. With a trick to have the mappings work in Select mode like they would in Visual mode.

Commands have been added to define mappings for Visual and Select mode separately: |:xmap| and |:smap|. With the associated "noremap" and "unmap" commands.

The same is done for menus: |:xmenu|, |:smenu|, etc.

#### Location list

\*new-location-list\*

-----

The support for a per-window quickfix list (location list) is added. The location list can be displayed in a location window (similar to the quickfix window). You can open more than one location list window. A set of commands similar to the quickfix commands are added to browse the location list. (Yegappan Lakshmanan)

#### Various new items

\*new-items-7\*

-----

Normal mode commands: ~

a", a' and a`                      New text objects to select quoted strings. |a'|  
i", i' and i`                      (Taro Muraoka)

CTRL-W <Enter>                    In the quickfix window: opens a new window to show the  
                                         location of the error under the cursor.

|at| and |it| text objects select a block of text between HTML or XML tags.

<A-LeftMouse> ('mousemodel' "popup" or "popup-setpos")

<A-RightMouse> ('mousemodel' "extend")

Make a blockwise selection. |<A-LeftMouse>|

gF                                  Start editing the filename under the cursor and jump  
                                         to the line number following the file name.  
                                         (Yegappan Lakshmanan)

CTRL-W F                           Start editing the filename under the cursor in a new  
                                         window and jump to the line number following the file  
                                         name. (Yegappan Lakshmanan)

Insert mode commands: ~

CTRL-\ CTRL-O                    Execute a Normal mode command. Like CTRL-O but

without moving the cursor. |i\_CTRL-\\_CTRL-0|

Options: ~

|                  |                                                                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 'balloonexpr'    | expression for text to show in evaluation balloon                                                                                                              |
| 'completetfunc'  | The name of the function used for user-specified Insert mode completion. CTRL-X CTRL-U can be used in Insert mode to do any kind of completion. (Taro Muraoka) |
| 'completeopt'    | Enable popup menu and other settings for Insert mode completion.                                                                                               |
| 'cursorcolumn'   | highlight column of the cursor                                                                                                                                 |
| 'cursorline'     | highlight line of the cursor                                                                                                                                   |
| 'formatexpr'     | expression for formatting text with  gq  and when text goes over 'textwidth' in Insert mode.                                                                   |
| 'formatlistpat'  | pattern to recognize a numbered list for formatting. (idea by Hugo Haas)                                                                                       |
| 'fsync'          | Whether fsync() is called after writing a file. (Ciaran McCreesh)                                                                                              |
| 'guitablabel'    | expression for text to display in GUI tab page label                                                                                                           |
| 'guitabtooltip'  | expression for text to display in GUI tab page tooltip                                                                                                         |
| 'macatsui'       | Mac: use ATSUI text display functions                                                                                                                          |
| 'maxcombine'     | maximum number of combining characters displayed                                                                                                               |
| 'maxmempattern'  | maximum amount of memory to use for pattern matching                                                                                                           |
| 'mkspellmem'     | parameters for  :mkspell  memory use                                                                                                                           |
| 'mzquantum'      | Time in msec to schedule MzScheme threads.                                                                                                                     |
| 'numberwidth'    | Minimal width of the space used for the 'number' and 'relativenumber' option. (Emmanuel Renieris)                                                              |
| 'omnifunc'       | The name of the function used for omni completion.                                                                                                             |
| 'operatorfunc'   | function to be called for  g@  operator                                                                                                                        |
| 'printmbcharset' | CJK character set to be used for :hardcopy                                                                                                                     |
| 'printmbfont'    | font names to be used for CJK output of :hardcopy                                                                                                              |
| 'pumheight'      | maximum number of items to show in the popup menu                                                                                                              |
| 'quoteescape'    | Characters used to escape quotes inside a string. Used for the a", a' and a` text objects.  a'                                                                 |
| 'shelltemp'      | whether to use a temp file or pipes for shell commands                                                                                                         |
| 'showtabline'    | whether to show the tab pages line                                                                                                                             |
| 'spell'          | switch spell checking on/off                                                                                                                                   |
| 'spellcapcheck'  | pattern to locate the end of a sentence                                                                                                                        |
| 'spellfile'      | file where good and wrong words are added                                                                                                                      |
| 'spelllang'      | languages to check spelling for                                                                                                                                |
| 'spellsuggest'   | methods for spell suggestions                                                                                                                                  |
| 'synmaxcol'      | maximum column to look for syntax items; avoids very slow redrawing when there are very long lines                                                             |
| 'tabline'        | expression for text to display in the tab pages line                                                                                                           |
| 'tabpagemax'     | maximum number of tab pages to open for  -p                                                                                                                    |
| 'verbosefile'    | Log messages in a file.                                                                                                                                        |
| 'wildoptions'    | "tagfile" value enables listing the file name of matching tags for CTRL-D command line completion. (based on an idea from Yegappan Lakshmanan)                 |
| 'winfixwidth'    | window with fixed width, similar to 'winfixheight'                                                                                                             |

Ex commands: ~

Win32: The ":winpos" command now also works in the console. (Vipin Aravind)

|                |                                                    |
|----------------|----------------------------------------------------|
| :startreplace  | Start Replace mode. (Charles Campbell)             |
| :startgreplace | Start Virtual Replace mode.                        |
| :0file         | Removes the name of the buffer. (Charles Campbell) |

---

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| :diffoff     | Switch off diff mode in the current window or in all windows.                                           |
| :delmarks    | Delete marks.                                                                                           |
| :exusage     | Help for Ex commands (Nvi command).                                                                     |
| :viusage     | Help for Vi commands (Nvi command).                                                                     |
| :sort        | Sort lines in the buffer without depending on an external command. (partly by Bryce Wagner)             |
| :vimgrep     | Internal grep command, search for a pattern in files.                                                   |
| :vimgrepadd  | Like  :vimgrep  but don't make a new list.                                                              |
| :caddfile    | Add error messages to an existing quickfix list (Yegappan Lakshmanan).                                  |
| :cbuffer     | Read error lines from a buffer. (partly by Yegappan Lakshmanan)                                         |
| :cgetbuffer  | Create a quickfix list from a buffer but don't jump to the first error.                                 |
| :caddbuffer  | Add errors from the current buffer to the quickfix list.                                                |
| :cexpr       | Read error messages from a Vim expression (Yegappan Lakshmanan).                                        |
| :caddexpr    | Add error messages from a Vim expression to an existing quickfix list. (Yegappan Lakshmanan).           |
| :cgetexpr    | Create a quickfix list from a Vim expression, but don't jump to the first error. (Yegappan Lakshmanan). |
| :lfile       | Like  :cfile  but use the location list.                                                                |
| :lgetfile    | Like  :cgetfile  but use the location list.                                                             |
| :laddfile    | Like  :caddfile  but use the location list.                                                             |
| :lbuffer     | Like  :cbuffer  but use the location list.                                                              |
| :lgetbuffer  | Like  :cgetbuffer  but use the location list.                                                           |
| :laddbuffer  | Like  :caddbuffer  but use the location list.                                                           |
| :lexpr       | Like  :cexpr  but use the location list.                                                                |
| :lgetexpr    | Like  :cgetexpr  but use the location list.                                                             |
| :laddexpr    | Like  :caddexpr  but use the location list.                                                             |
| :ll          | Like  :cc  but use the location list.                                                                   |
| :llist       | Like  :clist  but use the location list.                                                                |
| :lnext       | Like  :cnext  but use the location list.                                                                |
| :lprevious   | Like  :cprevious  but use the location list.                                                            |
| :lNext       | Like  :cNext  but use the location list.                                                                |
| :lfirst      | Like  :cfirst  but use the location list.                                                               |
| :lrewind     | Like  :crewind  but use the location list.                                                              |
| :llast       | Like  :clast  but use the location list.                                                                |
| :lnfile      | Like  :cnfile  but use the location list.                                                               |
| :lpfile      | Like  :cpfile  but use the location list.                                                               |
| :lNfile      | Like  :cNfile  but use the location list.                                                               |
| :lolder      | Like  :colder  but use the location list.                                                               |
| :lnewer      | Like  :cnewer  but use the location list.                                                               |
| :lwindow     | Like  :cwindow  but use the location list.                                                              |
| :lopen       | Like  :copen  but use the location list.                                                                |
| :lclose      | Like  :cclose  but use the location list.                                                               |
| :lmake       | Like  :make  but use the location list.                                                                 |
| :lgrep       | Like  :grep  but use the location list.                                                                 |
| :lgrepadd    | Like  :grepadd  but use the location list.                                                              |
| :lvimgrep    | Like  :vimgrep  but use the location list.                                                              |
| :lvimgrepadd | Like  :vimgrepadd  but use the location list.                                                           |
| :lhelpgrep   | Like  :helpgrep  but use the location list.                                                             |
| :lcscope     | Like  :cscope  but use the location list.                                                               |
| :ltag        | Jump to a tag and add matching tags to a location list.                                                 |

---

|              |                                                    |
|--------------|----------------------------------------------------|
| :undojoin    | Join a change with the previous undo block.        |
| :undolist    | List the leafs of the undo tree.                   |
| :earlier     | Go back in time for changes in the text.           |
| :later       | Go forward in time for changes in the text.        |
| :for         | Loop over a  List .                                |
| :endfor      |                                                    |
| :lockvar     | Lock a variable, prevents it from being changed.   |
| :unlockvar   | Unlock a locked variable.                          |
| :mkspell     | Create a Vim spell file.                           |
| :spellgood   | Add a word to the list of good words.              |
| :spellwrong  | Add a word to the list of bad words                |
| :spelldump   | Dump list of good words.                           |
| :spellinfo   | Show information about the spell files used.       |
| :spellrepall | Repeat a spelling correction for the whole buffer. |
| :spellundo   | Remove a word from list of good and bad words.     |
| :mzscheme    | Execute MzScheme commands.                         |
| :mzfile      | Execute an MzScheme script file.                   |
| :nbkey       | Pass a key to NetBeans for processing.             |
| :profile     | Commands for Vim script profiling.                 |
| :profdel     | Stop profiling for specified items.                |
| :smap        | Select mode mapping.                               |
| :smapclear   |                                                    |
| :snoremap    |                                                    |
| :sunmap      |                                                    |
| :xmap        | Visual mode mapping, not used for Select mode.     |
| :xmapclear   |                                                    |
| :xnoremap    |                                                    |
| :xunmap      |                                                    |
| :smenu       | Select mode menu.                                  |
| :snoremenu   |                                                    |
| :sunmenu     |                                                    |
| :xmenu       | Visual mode menu, not used for Select mode.        |
| :xnoremenu   |                                                    |
| :xunmenu     |                                                    |
| :tabclose    | Close the current tab page.                        |
| :tabdo       | Perform a command in every tab page.               |
| :tabedit     | Edit a file in a new tab page.                     |
| :tabnew      | Open a new tab page.                               |
| :tabfind     | Search for a file and open it in a new tab page.   |
| :tabnext     | Go to the next tab page.                           |
| :tabprevious | Go to the previous tab page.                       |
| :tabNext     | Go to the previous tab page.                       |
| :tabfirst    | Go to the first tab page.                          |
| :tabrewind   | Go to the first tab page.                          |
| :tablast     | Go to the last tab page.                           |
| :tabmove     | Move the current tab page elsewhere.               |
| :tabonly     | Close all other tab pages.                         |
| :tabs        | List the tab pages and the windows they contain.   |

Ex command modifiers: ~

|            |                                                  |
|------------|--------------------------------------------------|
| :keepalt   | Do not change the alternate file.                |
| :noautocmd | Do not trigger autocommand events.               |
| :sandbox   | Execute a command in the sandbox.                |
| :tab       | When opening a new window create a new tab page. |

Ex command arguments: ~

|       |                                                                                                                                                                                                                                       |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ++bad | Specify what happens with characters that can't be converted and illegal bytes. (code example by Yasuhiro Matsumoto)<br>Also, when a conversion error occurs or illegal bytes are found include the line number in the error message. |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

New and extended functions: ~

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| add()            | append an item to a List                                                                         |
| append()         | append List of lines to the buffer                                                               |
| argv()           | without an argument return the whole argument list                                               |
| browse_dir()     | dialog to select a directory                                                                     |
| bufnr()          | takes an extra argument: create buffer                                                           |
| byteidx()        | index of a character (Ilya Sher)                                                                 |
| call()           | call a function with List as arguments                                                           |
| changenr()       | number of current change                                                                         |
| complete()       | set matches for Insert mode completion                                                           |
| complete_add()   | add match for 'completesfunc'                                                                    |
| complete_check() | check for key pressed, for 'completesfunc'                                                       |
| copy()           | make a shallow copy of a List or Dictionary                                                      |
| count()          | count nr of times a value is in a List or Dictionary                                             |
| cursor()         | also accepts an offset for 'virtualedit', and the first argument can be a list: [lnum, col, off] |
| deepcopy()       | make a full copy of a List or Dictionary                                                         |
| diff_filler()    | returns number of filler lines above line {lnum}.                                                |
| diff_hlID()      | returns the highlight ID for diff mode                                                           |
| empty()          | check if List or Dictionary is empty                                                             |
| eval()           | evaluate {string} and return the result                                                          |
| extend()         | append one List to another or add items from one Dictionary to another                           |
| feedkeys()       | put characters in the typeahead buffer                                                           |
| filter()         | remove selected items from a List or Dictionary                                                  |
| finddir()        | find a directory in 'path'                                                                       |
| findfile()       | find a file in 'path' (Johannes Zellner)                                                         |
| foldtextresult() | the text displayed for a closed fold at line "lnum"                                              |
| function()       | make a Funcref out of a function name                                                            |
| garbagecollect() | cleanup unused  Lists  and  Dictionaries  with circular references                               |
| get()            | get an item from a List or Dictionary                                                            |
| getbufline()     | get a list of lines from a specified buffer (Yegappan Lakshmanan)                                |
| getcmttype()     | return the current command-line type (Yegappan Lakshmanan)                                       |
| getfontname()    | get actual font name being used                                                                  |
| getfperm()       | get file permission string (Nikolai Weibull)                                                     |
| getftype()       | get type of file (Nikolai Weibull)                                                               |
| getline()        | with second argument: get List with buffer lines                                                 |

---

|                  |                                                         |
|------------------|---------------------------------------------------------|
| getloclist()     | list of location list items (Yegappan Lakshmanan)       |
| getpos()         | return a list with the position of cursor, mark, etc.   |
| getqflist()      | list of quickfix errors (Yegappan Lakshmanan)           |
| getreg()         | get contents of a register                              |
| gettabwinvar()   | get variable from window in specified tab page.         |
| has_key()        | check whether a key appears in a Dictionary             |
| haslocaldir()    | check if current window used  :lcd                      |
| hasmapto()       | check for a mapping to a string                         |
| index()          | index of item in List                                   |
| inputlist()      | prompt the user to make a selection from a list         |
| insert()         | insert an item somewhere in a List                      |
| islocked()       | check if a variable is locked                           |
| items()          | get List of Dictionary key-value pairs                  |
| join()           | join List items into a String                           |
| keys()           | get List of Dictionary keys                             |
| len()            | number of items in a List or Dictionary                 |
| map()            | change each List or Dictionary item                     |
| maparg()         | extra argument: use abbreviation                        |
| mapcheck()       | extra argument: use abbreviation                        |
| match()          | extra argument: count                                   |
| matcharg()       | return arguments of  :match  command                    |
| matchend()       | extra argument: count                                   |
| matchlist()      | list with match and submatches of a pattern in a string |
| matchstr()       | extra argument: count                                   |
| max()            | maximum value in a List or Dictionary                   |
| min()            | minimum value in a List or Dictionary                   |
| mkdir()          | create a directory                                      |
| pathshorten()    | reduce directory names to a single character            |
| printf()         | format text                                             |
| pumvisible()     | check whether the popup menu is displayed               |
| range()          | generate a List with numbers                            |
| readfile()       | read a file into a list of lines                        |
| reltime()        | get time value, possibly relative                       |
| reltimestr()     | turn a time value into a string                         |
| remove()         | remove one or more items from a List or Dictionary      |
| repeat()         | repeat "expr" "count" times (Christophe Poucet)         |
| reverse()        | reverse the order of a List                             |
| search()         | extra argument:                                         |
| searchdecl()     | search for declaration of variable                      |
| searchpair()     | extra argument: line to stop searching                  |
| searchpairpos()  | return a List with the position of the match            |
| searchpos()      | return a List with the position of the match            |
| setloclist()     | modify a location list (Yegappan Lakshmanan)            |
| setpos()         | set cursor or mark to a position                        |
| setqflist()      | modify a quickfix list (Yegappan Lakshmanan)            |
| settabwinvar()   | set variable in window of specified tab page            |
| sort()           | sort a List                                             |
| soundfold()      | get the sound-a-like equivalent of a word               |
| spellbadword()   | get a badly spelled word                                |
| spellsuggest()   | get suggestions for correct spelling                    |
| split()          | split a String into a List                              |
| str2nr()         | convert a string to a number, base 2, 8, 10 or 16       |
| stridx()         | extra argument: start position                          |
| strridx()        | extra argument: start position                          |
| string()         | string representation of a List or Dictionary           |
| system()         | extra argument: filters {input} through a shell command |
| tabpagebuflist() | List of buffers in a tab page                           |
| tabpagenr()      | number of current or last tab page                      |
| tabpagewinnr()   | window number in a tab page                             |
| tagfiles()       | List with tags file names                               |
| taglist()        | get list of matching tags (Yegappan Lakshmanan)         |
| tr()             | translate characters (Ron Aaron)                        |

|               |                                               |
|---------------|-----------------------------------------------|
| uniq()        | remove copies of repeated adjacent list items |
| values()      | get List of Dictionary values                 |
| winnr()       | takes an argument: what window to use         |
| winrestview() | restore the view of the current window        |
| winsaveview() | save the view of the current window           |
| writefile()   | write a list of lines into a file             |

User defined functions can now be loaded automatically from the "autoload" directory in 'runtimepath'. See |autoload-functions|.

New Vim variables: ~

|               |                                                        |
|---------------|--------------------------------------------------------|
| v:insertmode  | used for  InsertEnter  and  InsertChange  autocommands |
| v:val         | item value in a  map()  or  filter()  function         |
| v:key         | item key in a  map()  or  filter()  function           |
| v:profiling   | non-zero after a ":profile start" command              |
| v:fcs_reason  | the reason why  FileChangedShell  was triggered        |
| v:fcs_choice  | what should happen after  FileChangedShell             |
| v:beval_bufnr | buffer number for 'balloonexpr'                        |
| v:beval_winnr | window number for 'balloonexpr'                        |
| v:beval_lnum  | line number for 'balloonexpr'                          |
| v:beval_col   | column number for 'balloonexpr'                        |
| v:beval_text  | text under the mouse pointer for 'balloonexpr'         |
| v:scrollstart | what caused the screen to be scrolled up               |
| v:swapname    | name of the swap file for the  SwapExists  event       |
| v:swapchoice  | what to do for an existing swap file                   |
| v:swapcommand | command to be executed after handling  SwapExists      |
| v:char        | argument for evaluating 'formatexpr'                   |

New autocommand events: ~

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| ColorScheme          | after loading a color scheme                            |
| CursorHoldI          | the user doesn't press a key for a while in Insert mode |
| CursorMoved          | the cursor was moved in Normal mode                     |
| CursorMovedI         | the cursor was moved in Insert mode                     |
| FileChangedShellPost | after handling a file changed outside of Vim            |
| InsertEnter          | starting Insert or Replace mode                         |
| InsertChange         | going from Insert to Replace mode or back               |
| InsertLeave          | leaving Insert or Replace mode                          |
| MenuPopup            | just before showing popup menu                          |
| QuickFixCmdPre       | before :make, :grep et al. (Ciaran McCreesh)            |
| QuickFixCmdPost      | after :make, :grep et al. (Ciaran McCreesh)             |
| SessionLoadPost      | after loading a session file. (Yegappan Lakshmanan)     |
| ShellCmdPost         | after executing a shell command                         |
| ShellFilterPost      | after filtering with a shell command                    |
| SourcePre            | before sourcing a Vim script                            |
| SpellFileMissing     | when a spell file can't be found                        |
| SwapExists           | found existing swap file when editing a file            |
| TabEnter             | just after entering a tab page                          |

|            |                                                  |
|------------|--------------------------------------------------|
| TabLeave   | just before leaving a tab page                   |
| VimResized | after the Vim window size changed (Yakov Lerner) |

New highlight groups: ~

|              |                                                  |
|--------------|--------------------------------------------------|
| Pmenu        | Popup menu: normal item  hl-Pmenu                |
| PmenuSel     | Popup menu: selected item  hl-PmenuSel           |
| PmenuThumb   | Popup menu: scrollbar  hl-PmenuThumb             |
| PmenuSbar    | Popup menu: Thumb of the scrollbar  hl-PmenuSbar |
| TabLine      | tab pages line, inactive label  hl-TabLine       |
| TabLineSel   | tab pages line, selected label  hl-TabLineSel    |
| TabLineFill  | tab pages line, filler  hl-TabLineFill           |
| SpellBad     | badly spelled word  hl-SpellBad                  |
| SpellCap     | word with wrong caps  hl-SpellCap                |
| SpellRare    | rare word  hl-SpellRare                          |
| SpellLocal   | word only exists in other region  hl-SpellLocal  |
| CursorColumn | 'cursorcolumn'  hl-CursorColumn                  |
| CursorLine   | 'cursorline'  hl-CursorLine                      |
| MatchParen   | matching parens  pi_paren.txt   hl-MatchParen    |

New items in search patterns: ~

|                   |                                                   |
|-------------------|---------------------------------------------------|
| /\%d  \%d123      | search for character with decimal number          |
| /\]  [\d123]      | idem, in a collection                             |
| /\%o  \%o103      | search for character with octal number            |
| /\]  [\o103]      | idem, in a collection                             |
| /\%x  \%x1a       | search for character with 2 pos. hex number       |
| /\]  [\x1a]       | idem, in a collection                             |
| /\%u  \%u12ab     | search for character with 4 pos. hex number       |
| /\]  [\u12ab]     | idem, in a collection                             |
| /\%U  \%U1234abcd | search for character with 8 pos. hex number       |
| /\]  [\U1234abcd] | idem, in a collection                             |
|                   | (The above partly by Ciaran McCreesh)             |
| /[ [=  [[=a=]]    | an equivalence class (only for latin1 characters) |
| /[ [.  [[.a.]]    | a collation element (only works with single char) |
| /\%'m  \%'m       | match at mark m                                   |
| /\%<'m  \%<'m     | match before mark m                               |
| /\%>'m  \%>'m     | match after mark m                                |
| /\%V  \%V         | match in Visual area                              |

Nesting |/multi| items no longer is an error when an empty match is possible.

It is now possible to use \{0}, it matches the preceding atom zero times. Not useful, just for compatibility.

New Syntax/Indent/FTplugin files: ~

Moved all the indent settings from the filetype plugin to the indent file.  
Implemented b:undo\_indent to undo indent settings when setting 'filetype' to a different value.

a2ps syntax and ftplugin file. (Nikolai Weibull)  
ABAB/4 syntax file. (Marius van Wyk)



alsaconf ftplugin file. (Nikolai Weibull)  
AppendMatchGroup ftplugin file. (Dave Silvia)  
arch ftplugin file. (Nikolai Weibull)  
asterisk and asteriskvm syntax file. (Tilghman Leshner)  
BDF ftplugin file. (Nikolai Weibull)  
BibTeX indent file. (Dorai Sitaram)  
BibTeX Bibliography Style syntax file. (Tim Pope)  
BTM ftplugin file. (Bram Moolenaar)  
calendar ftplugin file. (Nikolai Weibull)  
Changelog indent file. (Nikolai Weibull)  
ChordPro syntax file. (Niels Bo Andersen)  
Cmake indent and syntax file. (Andy Cedilnik)  
conf ftplugin file. (Nikolai Weibull)  
context syntax and ftplugin file. (Nikolai Weibull)  
CRM114 ftplugin file. (Nikolai Weibull)  
cvs RC ftplugin file. (Nikolai Weibull)  
D indent file. (Jason Mills)  
Debian Sources.list syntax file. (Matthijs Mohlmann)  
dictconf and dictdconf syntax, indent and ftplugin files. (Nikolai Weibull)  
diff ftplugin file. (Bram Moolenaar)  
dircolours ftplugin file. (Nikolai Weibull)  
django and htmldjango syntax file. (Dave Hodder)  
doxygen syntax file. (Michael Geddes)  
elinks ftplugin file. (Nikolai Weibull)  
eterm ftplugin file. (Nikolai Weibull)  
evIEWS syntax file. (Vaidotas Zemlys)  
fetchmail RC ftplugin file. (Nikolai Weibull)  
FlexWiki syntax and ftplugin file. (George Reilly)  
Generic indent file. (Dave Silvia)  
gpg ftplugin file. (Nikolai Weibull)  
gretl syntax file. (Vaidotas Zemlys)  
groovy syntax file. (Alessio Pace)  
group syntax and ftplugin file. (Nikolai Weibull)  
grub ftplugin file. (Nikolai Weibull)  
Haskell ftplugin file. (Nikolai Weibull)  
help ftplugin file. (Nikolai Weibull)  
indent ftplugin file. (Nikolai Weibull)  
Javascript ftplugin file. (Bram Moolenaar)  
Kconfig ftplugin and syntax file. (Nikolai Weibull)  
ld syntax, indent and ftplugin file. (Nikolai Weibull)  
lftp ftplugin file. (Nikolai Weibull)  
libao config ftplugin file. (Nikolai Weibull)  
limits syntax and ftplugin file. (Nikolai Weibull)  
Lisp indent file. (Sergey Khorev)  
loginaccess and logindefs syntax and ftplugin file. (Nikolai Weibull)  
m4 ftplugin file. (Nikolai Weibull)  
mailaliases syntax file. (Nikolai Weibull)  
mailcap ftplugin file. (Nikolai Weibull)  
manconf syntax and ftplugin file. (Nikolai Weibull)  
matlab ftplugin file. (Jake Wasserman)  
Maxima syntax file. (Robert Dodier)  
MGL syntax file. (Gero Kuhlmann)  
modconf ftplugin file. (Nikolai Weibull)  
mplayer config ftplugin file. (Nikolai Weibull)  
Mrxvtrc syntax and ftplugin file. (Gautam Iyer)  
MuPAD source syntax, indent and ftplugin. (Dave Silvia)  
mutt RC ftplugin file. (Nikolai Weibull)  
nanorc syntax and ftplugin file. (Nikolai Weibull)  
netrc ftplugin file. (Nikolai Weibull)  
pamconf syntax and ftplugin file. (Nikolai Weibull)  
Pascal indent file. (Neil Carter)  
passwd syntax and ftplugin file. (Nikolai Weibull)

PHP compiler plugin. (Doug Kearns)  
pinfo ftplugin file. (Nikolai Weibull)  
plaintex syntax and ftplugin files. (Nikolai Weibull, Benji Fisher)  
procmail ftplugin file. (Nikolai Weibull)  
prolog ftplugin file. (Nikolai Weibull)  
protocols syntax and ftplugin file. (Nikolai Weibull)  
quake ftplugin file. (Nikolai Weibull)  
racc syntax and ftplugin file. (Nikolai Weibull)  
readline ftplugin file. (Nikolai Weibull)  
rhelpt syntax file. (Johannes Ranke)  
rnoweb syntax file. (Johannes Ranke)  
Relax NG compact ftplugin file. (Nikolai Weibull)  
Scheme indent file. (Sergey Khorev)  
screen ftplugin file. (Nikolai Weibull)  
sensors syntax and ftplugin file. (Nikolai Weibull)  
services syntax and ftplugin file. (Nikolai Weibull)  
setserial syntax and ftplugin file. (Nikolai Weibull)  
sieve syntax and ftplugin file. (Nikolai Weibull)  
SiSU syntax file. (Ralph Amissah)  
Sive syntax file. (Nikolai Weibull)  
slp config, reg and spi syntax and ftplugin files. (Nikolai Weibull)  
SML indent file. (Saikat Guha)  
SQL anywhere syntax and indent file. (David Fishburn)  
SQL indent file.  
SQL-Informix syntax file. (Dean L Hill)  
SQL: Handling of various variants. (David Fishburn)  
sshconfig ftplugin file. (Nikolai Weibull)  
Stata and SMCL syntax files. (Jeff Pitblado)  
sudoers ftplugin file. (Nikolai Weibull)  
sysctl syntax and ftplugin file. (Nikolai Weibull)  
terminfo ftplugin file. (Nikolai Weibull)  
trustees syntax file. (Nima Talebi)  
Vera syntax file. (David Eggum)  
udev config, permissions and rules syntax and ftplugin files. (Nikolai Weibull)  
updatedb syntax and ftplugin file. (Nikolai Weibull)  
VHDL indent file. (Gerald Lai)  
WSML syntax file. (Thomas Haselwanter)  
Xdefaults ftplugin file. (Nikolai Weibull)  
XFree86 config ftplugin file. (Nikolai Weibull)  
xinetd syntax, indent and ftplugin file. (Nikolai Weibull)  
xmodmap ftplugin file. (Nikolai Weibull)  
Xquery syntax file. (Jean-Marc Vanel)  
xsd (XML schema) indent file.  
YAML ftplugin file. (Nikolai Weibull)  
Zsh ftplugin file. (Nikolai Weibull)

#### New Keymaps: ~

Sinhala (Sri Lanka) (Harshula Jayasuriya)  
Tamil in TSCII encoding (Yegappan Lakshmanan)  
Greek in cp737 (Panagiotis Louridas)  
Polish-slash (HS6\_06)  
Ukrainian-jcuken (Anatoli Sakhnik)  
Kana (Edward L. Fox)

#### New message translations: ~

The Ukrainian messages are now also available in cp1251.  
Vietnamese message translations and menu. (Phan Vinh Thinh)

Others: ~

The `|:read|` command has the `|++edit|` argument. This means it will use the detected 'fileformat', 'fileencoding' and other options for the buffer. This also fixes the problem that editing a compressed file didn't set these options.

The Netbeans interface was updated for Sun Studio 10. The protocol number goes from 2.2 to 2.3. (Gordon Prieur)

Mac: When starting up Vim will load the `$VIMRUNTIME/macmap.vim` script to define default command-key mappings. (mostly by Benji Fisher)

Mac: Add the selection type to the clipboard, so that Block, line and character selections can be used between two Vims. (Eckehard Berns)  
Also fixes the problem that setting 'clipboard' to "unnamed" breaks using "yyp".

Mac: GUI font selector. (Peter Cucka)

Mac: support for multi-byte characters. (Da Woon Jung)  
This doesn't always work properly. If you see text drawing problems try switching the 'macatsui' option off.

Mac: Support the xterm mouse in the non-GUI version.

Mac: better integration with Xcode. Post a fake mouse-up event after the odoc event and the drag receive handler to work around a stall after Vim loads a file. Fixed an off-by-one line number error. (Da Woon Jung)

Mac: When started from Finder change directory to the file being edited or the user home directory.

Added the `t_SI` and `t_EI` escape sequences for starting and ending Insert mode. To be used to set the cursor shape to a bar or a block. No default values, they are not supported by termcap/terminfo.

GUI font selector for Motif. (Marcin Dalecki)

Nicer toolbar buttons for Motif. (Marcin Dalecki)

Mnemonics for the Motif find/replace dialog. (Marcin Dalecki)

Included a few improvements for Motif from Marcin Dalecki. Draw label contents ourselves to make them handle fonts in a way configurable by Vim and a bit less dependent on the X11 font management.

Autocommands can be defined local to a buffer. This means they will also work when the buffer does not have a name or no specific name. See `|autocmd-buflocal|`. (Yakov Lerner)

For xterm most combinations of modifiers with function keys are recognized. `|xterm-modifier-keys|`

When 'verbose' is set the output of `":highlight"` will show where a highlight item was last set.

When 'verbose' is set the output of the `":map"`, `":abbreviate"`, `":command"`, `":function"` and `":autocmd"` commands will show where it was last defined. (Yegappan Lakshmanan)

`":function /pattern"` lists functions matching the pattern.

"l`gd`" can be used like "`gd`" but ignores matches in a `{}` block that ends before the cursor position. Likewise for "`lgD`" and "`gD`".

'`scrolljump`' can be set to a negative number to scroll a percentage of the window height.

The `|v:scrollstart|` variable has been added to help find the location in your script that causes the hit-enter prompt.

To make it possible to handle the situation that a file is being edited that is already being edited by another Vim instance, the `|SwapExists|` event has been added. The `|v:swapname|`, `|v:swapchoice|` and `|v:swapcommand|` variables can be used, for example to use the `|client-server|` functionality to bring the other Vim to the foreground.

When starting Vim with a "`-t tag`" argument, there is an existing swapfile and the user selects "`quit`" or "`abort`" then exit Vim.

Undo now also restores the '`<`' and '`>`' marks. "`gv`" selects the same area as before the change and undo.

When editing a search pattern for a "`/`" or "`?`" command and '`incsearch`' is set CTRL-L can be used to add a character from the current match. CTRL-R CTRL-W will add a word, but exclude the part of the word that was already typed.

Ruby interface: add line number methods. (Ryan Paul)

The `$MYVIMRC` environment variable is set to the first found vimrc file.  
The `$MYGVIMRC` environment variable is set to the first found gvimrc file.

#### =====

#### IMPROVEMENTS

\*improvements-7\*

":`helpgrep`" accepts a language specifier after the pattern: "`pat@it`".

Moved the help for printing to a separate help file. It's quite a lot now.

When doing completion for "`!:cmd`", "`:r !cmd`" or "`:w !cmd`" executable files are found in `$PATH` instead of looking for ordinary files in the current directory.

When "`:silent`" is used and a backwards range is given for an Ex command the range is swapped automatically instead of asking if that is OK.

The pattern matching code was changed from a recursive function to an iterative mechanism. This avoids out-of-stack errors. State is stored in allocated memory, running out of memory can always be detected. Allows matching more complex things, but Vim may seem to hang while doing that.

Previously some options were always evaluated in the `|sandbox|`. Now that only happens when the option was set from a modeline or in secure mode. Applies to '`balloonexpr`', '`foldexpr`', '`foldtext`' and '`includeexpr`'. (Sumner Hayes)

Some commands and expressions could have nasty side effects, such as using CTRL-R = while editing a search pattern and the expression invokes a function that jumps to another window. The `|textlock|` has been added to prevent this from happening.

":`breakadd here`" and ":`breakdel here`" can be used to set or delete a breakpoint at the cursor.

It is now possible to define a function with: `>`  
:exe "`func Test()\n ... \n endfunc`"

The tutor was updated to make it simpler to use and text was added to explain a few more important commands. Used ideas from Gabriel Zachmann.

Unix: When `libcall()` fails obtain an error message with `dlerror()` and display it. (Johannes Zellner)

Mac and Cygwin: When editing an existing file make the file name the same case of the edited file. Thus when typing `":e os_UNIX.c"` the file name becomes `"os_unix.c"`.

Added `"nbsp"` in `'listchars'`. (David Blanchet)

Added the `"acwrite"` value for the `'buftype'` option. This is for a buffer that does not have a name that refers to a file and is written with `BufWriteCmd` autocommands.

For lisp indenting and matching parenthesis: (Sergey Khorev)

- square brackets are recognized properly
- `#\()`, `#\)`, `#\[` and `#\[` are recognized as character literals
- Lisp line comments (delimited by semicolon) are recognized

Added the `"count"` argument to `match()`, `matchend()` and `matchstr()`. (Ilya Sher)

`winnr()` takes an optional `"$"` or `"#"` argument. (Nikolai Weibull, Yegappan Lakshmanan)

Added `'s'` flag to `search()`: set `'` mark if cursor moved. (Yegappan Lakshmanan)

Added `'n'` flag to `search()`: don't move the cursor. (Nikolai Weibull)

Added `'c'` flag to `search()`: accept match at the cursor.

Added `'e'` flag to `search()`: move to end of the match. (Benji Fisher)

Added `'p'` flag to `search()`: return number of sub-pattern. (Benji Fisher)

These also apply to `searchpos()`, `searchpair()` and `searchpairpos()`.

The `search()` and `searchpair()` functions have an extra argument to specify where to stop searching. Speeds up searches that should not continue too far.

When uncompressing fails in the gzip plugin, give an error message but don't delete the raw text. Helps if the file has a `.gz` extension but is not actually compressed. (Andrew Pimlott)

When C, C++ or IDL syntax is used, may additionally load doxygen syntax. (Michael Geddes)

Support setting `'filetype'` and `'syntax'` to `"aaa.bbb"` for `"aaa"` plus `"bbb"` filetype or syntax.

The `":registers"` command now displays multi-byte characters properly.

VMS: In the usage message mention that a slash can be used to make a flag upper case. Add color support to the builtin vt320 terminal codes. (Zoltan Arpadffy)

For the `'%` item in `'viminfo'`, allow a number to set a maximum for the number of buffers.

For recognizing the file type: When a file looks like a shell script, check for an `"exec"` command that starts the tcl interpreter. (suggested by Alexios Zavras)

Support conversion between utf-8 and latin9 (iso-8859-15) internally, so that digraphs still work when `iconv` is not available.

When a session file is loaded while editing an unnamed, empty buffer that buffer is wiped out. Avoids that there is an unused buffer in the buffer list.

Win32: When libintl.dll supports `bind_textdomain_codeset()`, use it. (NAKADAIRA Yukihiro)

Win32: Vim was not aware of hard links on NTFS file systems. These are detected now for when 'backupcopy' is "auto". Also fixed a bogus "file has been changed since reading it" error for links.

When `foldtext()` finds no text after removing the comment leader, use the second line of the fold. Helps for C-style `/* */` comments where the first line is just `/*`.

When editing the same file from two systems (e.g., Unix and MS-Windows) there mostly was no warning for an existing swap file, because the name of the edited file differs (e.g., `y:\dir\file` vs `/home/me/dir/file`). Added a flag to the swap file to indicate it is in the same directory as the edited file. The used path then doesn't matter and the check for editing the same file is much more reliable.

Unix: When editing a file through a symlink the swap file would use the name of the symlink. Now use the name of the actual file, so that editing the same file twice is detected. (suggestions by Stefano Zacchiroli and James Vega)

Client-server communication now supports 'encoding'. When setting 'encoding' in a Vim server to "utf-8", and using `"vim --remote fname"` in a console, "fname" is converted from the console encoding to utf-8. Also allows Vims with different 'encoding' settings to exchange messages.

Internal: Changed `ga_room` into `ga_maxlen`, so that it doesn't need to be incremented/decremented each time.

When a register is empty it is not stored in the viminfo file.

Removed the `tbltags` script, it's obsolete.

`":redir @*>>"` and `":redir @+>>"` append to the clipboard. Better check for invalid characters after the register name. `|:redir|`

`":redir => variable"` and `":redir ==> variable"` write or append to a variable. (Yegappan Lakshmanan) `|:redir|`

`":redir @{a-z}>>"` appends to register a to z. (Yegappan Lakshmanan)

The 'verbosefile' option can be used to log messages in a file. Verbose messages are not displayed then. The `"-V{filename}"` argument can be used to log startup messages.

`":let g:"` lists global variables.  
`":let b:"` lists buffer-local variables.  
`":let w:"` lists window-local variables.  
`":let v:"` lists Vim variables.

The `stridx()` and `strridx()` functions take a third argument, where to start searching. (Yegappan Lakshmanan)

The `getreg()` function takes an extra argument to be able to get the expression for the '=' register instead of the result of evaluating it.

The `setline()` function can take a List argument to set multiple lines. When the line number is just below the last line the line is appended.

g CTRL-G also shows the number of characters if it differs from the number of bytes.

Completion for `:"debug"` and entering an expression for the `'='` register. Skip `:"` between range and command name. (Peter Winters)

CTRL-Q in Insert mode now works like CTRL-V by default. Previously it was ignored.

When "beep" is included in 'debug' a function or script that causes a beep will result in a message with the source of the error.

When completing buffer names, match with `"\(^|[\|/]\)"` instead of `"^"`, so that `:"buf stor<Tab>` finds both `"include/storage.h"` and `"storage/main.c"`.

To count items (pattern matches) without changing the buffer the 'n' flag has been added to `|:substitute|`. See `|count-items|`.

In a `|:substitute|` command the `\u`, `\U`, `\l` and `\L` items now also work for multi-byte characters.

The `"screen.linux"` `$TERM` name is recognized to set the default for 'background' to "dark". (Ciaran McCreesh) Also for "cygwin" and "putty".

The `|FileChangedShell|` autocommand event can now use the `|v:fcs_reason|` variable that specifies what triggered the event. `|v:fcs_choice|` can be used to reload the buffer or ask the user what to do.

Not all modifiers were recognized for xterm function keys. Added the possibility in term codes to end in `;*X` or `"0*X"`, where X is any character and the \* stands for the modifier code. Added the `<xUp>`, `<xDown>`, `<xLeft>` and `<xRight>` keys, to be able to recognize the two forms that xterm can send their codes in and still handle all possible modifiers.

`getwinvar()` now also works to obtain a buffer-local option from the specified window.

Added the `"%s"` item to 'errorformat'. (Yegappan Lakshmanan)  
Added the `"%>"` item to 'errorformat'.

For 'errorformat' it was not possible to have a file name that contains the character that follows after `"%f"`. For example, in `"%f:%l:%m"` the file name could not contain `":"`. Now include the first `":"` where the rest of the pattern matches. In the example a `":"` not followed by a line number is included in the file name. (suggested by Emanuele Giaquinta)

GTK GUI: use the GTK file dialog when it's available. Mix from patches by Grahame Bowland and Evan Webb.

Added `:"scriptnames"` to `bugreport.vim`, so that we can see what plugins were used.

Win32: If the user changes the setting for the number of lines a scroll wheel click scrolls it is now used immediately. Previously Vim would need to be restarted.

When using `@=` in an expression the value is expression `@=` contains. `:"let @= value"` can be used to set the register contents.

A ! can be added to ":popup" to have the popup menu appear at the mouse pointer position instead of the text cursor.

The table with encodings has been expanded with many MS-Windows codepages, such as cp1250 and cp737, so that these can also be used on Unix without prepending "8bit-".

When an encoding name starts with "microsoft-cp" ignore the "microsoft-" part.

Added the "customlist" completion argument to a user-defined command. The user-defined completion function should return the completion candidates as a Vim List and the returned results are not filtered by Vim. (Yegappan Lakshmanan)

Win32: Balloons can have multiple lines if common controls supports it. (Sergey Khorev)

For command-line completion the matches for various types of arguments are now sorted: user commands, variables, syntax names, etc.

When no locale is set, thus using the "C" locale, Vim will work with latin1 characters, using its own isupper()/toupper()/etc. functions.

When using an rxvt terminal emulator guess the value of 'background' using the COLORFGBG environment variable. (Ciaran McCreesh)

Also support t\_SI and t\_EI on Unix with normal features. (Ciaran McCreesh)

When 'foldcolumn' is one then put as much info in it as possible. This allows closing a fold with the mouse by clicking on the '-'.

input() takes an optional completion argument to specify the type of completion supported for the input. (Yegappan Lakshmanan)

"dp" works with more than two buffers in diff mode if there is only one where 'modifiable' is set.

The 'diffopt' option has three new values: "horizontal", "vertical" and "foldcolumn".

When the 'include' option contains \zs the file name found is what is being matched from \zs to the end or \ze. Useful to pass more to 'includeexpr'.

Loading plugins on startup now supports subdirectories in the plugin directory. |load-plugins|

In the foldcolumn always show the '+' for a closed fold, so that it can be opened easily. It may overwrite another character, esp. if 'foldcolumn' is 1.

It is now possible to get the W10 message again by setting 'readonly'. Useful in the FileChangedRO autocommand when checking out the file fails.

Unix: When open() returns EFBIG give an appropriate message.

":mksession" sets the SessionLoad variable to notify plugins. A modeline is added to the session file to set 'filetype' to "vim".

In the ATTENTION prompt put the "Delete it" choice before "Quit" to make it more logical. (Robert Webb)

When appending to a file while the buffer has no name the name of the appended file would be used for the current buffer. But the buffer contents is



actually different from the file content. Don't set the file name, unless the 'P' flag is present in 'coptions'.

When starting to edit a new file and the directory for the file doesn't exist then Vim will report "[New DIRECTORY]" instead of "[New File]" to give the user a hint that something might be wrong.

Win32: Preserve the hidden attribute of the viminfo file.

In Insert mode CTRL-A didn't keep the last inserted text when using CTRL-O and then a cursor key. Now keep the previously inserted text if nothing is inserted after the CTRL-O. Allows using CTRL-O commands to move the cursor without losing the last inserted text.

The exists() function now supports checking for autocmd group definition and for supported autocommand events. (Yegappan Lakshmanan)

Allow using ":global" in the sandbox, it doesn't do anything harmful by itself.

":saveas asdf.c" will set 'filetype' to c when it's empty. Also for ":w asdf.c" when it sets the filename for the buffer.

Insert mode completion for whole lines now also searches unloaded buffers.

The colortest.vim script can now be invoked directly with ":source" or ":runtime syntax/colortest.vim".

The 'statusline' option can be local to the window, so that each window can have a different value. (partly by Yegappan Lakshmanan)

The 'statusline' option and other options that support the same format can now use these new features:

- When it starts with "%!" the value is first evaluated as an expression before parsing the value.
- "%#HLname#" can be used to start highlighting with HLname.

When 'statusline' is set to something that causes an error message then it is made empty to avoid an endless redraw loop. Also for other options, such as 'tabline' and 'titlestring'. ":verbose set statusline" will mention that it was set in an error handler.

When there are several matching tags, the ":tag <name>" and CTRL-] commands jump to the [count] matching tag. (Yegappan Lakshmanan)

Win32: In the batch files generated by the install program, use \$VIMRUNTIME or \$VIM if it's set. Example provided by Mathias Michaelis. Also create a vimtutor.bat batch file.

The 'balloonexpr' option is now [global-local].

The system() function now runs in cooked mode, thus can be interrupted by CTRL-C.

=====

COMPILE TIME CHANGES

\*compile-changes-7\*

Dropped the support for the BeOS and Amiga GUI. They were not maintained and probably didn't work. If you want to work on this: get the Vim 6.x version and merge it back in.

When running the tests and one of them fails to produce "test.out" the

following tests are still executed. This helps when running out of memory.

When compiling with EXITFREE defined and the ccmalloc library, it is possible to detect memory leaks. Some memory will always be reported as leaked, such as allocated by X11 library functions and the memory allocated in alloc\_cmdbuff() to store the ":quit" command.

Moved the code for printing to src/hardcopy.c.

Moved some code from main() to separate functions to make it easier to see what is being done. Using a structure to avoid a lot of arguments to the functions.

Moved unix\_expandpath() to misc1.c, so that it can also be used by os\_mac.c without copying the code.

--- Mac ---

"make" now creates the Vim.app directory and "make install" copies it to its final destination. (Raf)

Put the runtime directory not directly in Vim.app but in Vim.app/Contents/Resources/vim, so that it's according to Mac specs.

Made it possible to compile with Motif, Athena or GTK without tricks and still being able to use the MacRoman conversion. Added the os\_mac\_conv.c file.

When running "make install" the runtime files are installed as for Unix. Avoids that too many files are copied. When running "make" a link to the runtime files is created to avoid a recursive copy that takes much time.

Configure will attempt to build Vim for both Intel and PowerPC. The --with-mac-arch configure argument can change it.

--- Win32 ---

The Make\_mvc.mak file was adjusted to work with the latest MS compilers, including the free version of Visual Studio 2005. (George Reilly)

INSTALLpc.txt was updated for the recent changes. (George Reilly)

The distributed executable is now produced with the free Visual C++ Toolkit 2003 and other free SDK chunks. msvcsetup.bat was added to support this.

Also generate the .pdb file that can be used to generate a useful crash report on MS-Windows. (George Reilly)

```
=====
BUG FIXES *bug-fixes-7*
```

When using PostScript printing on MS-DOS the default 'printexpr' used "lpr" instead of "copy". When 'printdevice' was empty the copy command did not work. Use "LPT1" then.

The GTK font dialog uses a font size zero when the font name doesn't include a size. Use a default size of 10.

This example in the documentation didn't work: >

```
:e `=foo . ".c"`
```

Skip over the expression in `=expr` when looking for comments, |, % and #.

When ":helpgrep" doesn't find anything there is no error message.

"L" and "H" did not take closed folds into account.

Win32: The "-P title" argument stopped at the first title that matched, even when it doesn't support MDI.

Mac GUI: CTRL-^ and CTRL-@ did not work.

"2daw" on "word." at the end of a line didn't include the preceding white space.

Win32: Using FindExecutable() doesn't work to find a program. Use SearchPath() instead. For executable() use \$PATHEXT when the program searched for doesn't have an extension.

When 'virtualedit' is set, moving the cursor up after appending a character may move it to a different column. Was caused by auto-formatting moving the cursor and not putting it back where it was.

When indent was added automatically and then moving the cursor, the indent was not deleted (like when pressing ESC). The "I" flag in 'coptions' can be used to make it work the old way.

When opening a command-line window, 'textwidth' gets set to 78 by the Vim filetype plugin. Reset 'textwidth' to 0 to avoid lines are broken.

After using cursor(line, col) moving up/down doesn't keep the same column.

Win32: Borland C before 5.5 requires using ".u." for LowPart and HighPart fields. (Walter Briscoe)

On Sinix SYS\_NMLN isn't always defined. Define it ourselves. (Cristiano De Michele)

Printing with PostScript may keep the printer waiting for more. Append a CTRL-D to the printer output. (Mike Williams)

When converting a string with a hex or octal number the leading '-' was ignored. ":echo '-05' + 0" resulted in 5 instead of -5.

Using "@:" to repeat a command line didn't work when it contains control characters. Also remove "<,'" when in Visual mode to avoid that it appears twice.

When using file completion for a user command, it would not expand environment variables like for a regular command with a file argument.

'cindent': When the argument of a #define looks like a C++ class the next line is indented too much.

When 'comments' includes multi-byte characters inserting the middle part and alignment may go wrong. 'cindent' also suffers from this for right-aligned items.

Win32: when 'encoding' is set to "utf-8" getenv() still returns strings in the active codepage. Convert to utf-8. Also for \$HOME.

The default for 'helplang' was "zh" for both "zh\_cn" and "zh\_tw". Now use "cn" or "tw" as intended.

When 'bin' is set and 'eol' is not set then line2byte() added the line break after the last line while it's not there.

Using `foldlevel()` in a `WinEnter` autocommand may not work. Noticed when resizing the GUI shell upon startup.

Python: Using `buffer.append(f.readlines())` didn't work. Allow appending a string with a trailing newline. The newline is ignored.

When using the `":saveas f2"` command for buffer `"f1"`, the Buffers menu would contain `"f2"` twice, one of them leading to `"f1"`. Also trigger the `BufFilePre` and `BufFilePost` events for the alternate buffer that gets the old name.

`strridx()` did not work well when the needle is empty. (Ciaran McCreesh)

GTK: Avoid a potential hang in `gui_mch_wait_for_chars()` when input arrives just before it is invoked

VMS: Occasionally CR characters were inserted in the file. Expansion of environment variables was not correct. (Zoltan Arpadffy)

UTF-8: When `'delcombine'` is set `"dw"` only deleted the last combining character from the first character of the word.

When using `":sball"` in an autocommand only the filetype in one buffer was detected. Reset `did_filetype` in `enter_buffer()`.

When using `":argdo"` and the window already was at the first argument index, but not actually editing it, the current buffer would be used instead.

When `":next dir/*"` includes many matches, adding the names to the argument list may take an awful lot of time and can't be interrupted. Allow interrupting this.

When editing a file that was already loaded in a buffer, modelines were not used. Now window-local options in the modeline are set. Buffer-local options and global options remain unmodified.

Win32: When `'encoding'` is set to `"utf-8"` in the `vimrc` file, files from the command line with non-ASCII characters are not used correctly. Recode the file names when `'encoding'` is set, using the Unicode command line.

Win32 console: When the default for `'encoding'` ends up to be `"latin1"`, the default value of `'isprint'` was wrong.

When an error message is given while waiting for a character (e.g., when an xterm reports the number of colors), the hit-enter prompt overwrote the last line. Don't reset `msg_didout` in `normal_cmd()` for `K_IGNORE`.

Mac GUI: Shift-Tab didn't work.

When defining tooltip text, don't translate terminal codes, since it's not going to be used like a command.

GTK 2: Check the tooltip text for valid utf-8 characters to avoid getting a GTK error. Invalid characters may appear when `'encoding'` is changed.

GTK 2: Add a safety check for invalid utf-8 sequences, they can crash pango.

Win32: When `'encoding'` is changed while starting up, use the Unicode command line to convert the file arguments to `'encoding'`. Both for the GUI and the console version.

Win32 GUI: latin9 text (iso-8859-15) was not displayed correctly, because

there is no codepage for latin9. Do our own conversion from latin9 to UCS2.

When two versions of GTK+ 2 are installed it was possible to use the header files from one and the library from the other. Use GTK\_LIBDIR to put the directory for the library early in the link flags.

With the GUI find/replace dialog a replace only worked if the pattern was literal text. Now it works for any pattern.

When 'equalalways' is set and 'eadirection' is "hor", ":quit" would still cause equalizing window heights in the vertical direction.

When ":emenu" is used in a startup script the command was put in the typeahead buffer, causing a prompt for the crypt key to be messed up.

Mac OS/X: The default for 'isprint' included characters 128-160, causes problems for Terminal.app.

When a syntax item with "containedin" is used, it may match in the start or end of a region with a matchgroup, while this doesn't happen for a "contains" argument.

When a transparent syntax items matches in another item where the highlighting has already stopped (because of a he= argument), the highlighting would come back.

When cscope is used to set the quickfix error list, it didn't get set if there was only one match. (Sergey Khorev)

When 'confirm' is set and using ":bdel" in a modified buffer, then selecting "cancel", would still give an error message.

The PopUp menu items that started Visual mode didn't work when not in Normal mode. Switching between selecting a word and a line was not possible.

Win32: The keypad decimal point always resulted in a '.', while on some keyboards it's a ','. Use MapVirtualKey(VK\_DECIMAL, 2).

Removed unused function DisplayCompStringOpaque() from gui\_w32.c

In Visual mode there is not always an indication whether the line break is selected or not. Highlight the character after the line when the line break is included, e.g., after "v\$o".

GTK: The <F10> key can't be mapped, it selects the menu. Disable that with a GTK setting and do select the menu when <F10> isn't mapped. (David Necas)

After "Y" '[' and ']' were not at start/end of the yanked text.

When a telnet connection is dropped Vim preserves files and exits. While doing that a SIGHUP may arrive and disturb us, thus ignore it. (Scott Anderson) Also postpone SIGHUP, SIGQUIT and SIGTERM until it's safe to handle. Added handle\_signal().

When completing a file name on the command line backslashes are required for white space. Was only done for a space, not for a Tab.

When configure could not find a terminal library, compiling continued for a long time before reporting the problem. Added a configure check for tgetent() being found in a library.

When the cursor is on the first char of the last line a ":g/pat/s///" command

may cause the cursor to be displayed below the text.

Win32: Editing a file with non-ASCII characters doesn't work when 'encoding' is "utf-8". use `_wfullpath()` instead of `_fullpath()`. (Yu-sung Moon)

When recovering the 'fileformat' and 'fileencoding' were taken from the original file instead of from the swapfile. When the file didn't exist, was empty or the option was changed (e.g., with `":e ++fenc=cp123 file"`) it could be wrong. Now store 'fileformat' and 'fileencoding' in the swapfile and use the values when recovering.

`":bufdo g/something/p"` overwrites each last printed text line with the file message for the next buffer. Temporarily clear 'shortmess' to avoid that.

Win32: Cannot edit a file starting with # with `--remote`. Do escape % and # when building the `":drop"` command.

A comment or | just after an expression-backtick argument was not recognized. E.g. in `:e `="foo"`comment`.

`"("` does not stop at an empty sentence (single dot and white space) while `")"` does. Also breaks `"das"` on that dot.

When doing `"yy"` with the cursor on a TAB the ruler could be wrong and `"k"` moved the cursor to another column.

When 'commentstring' is `'"%s'` and there is a double quote in the line a double quote before the fold marker isn't removed in the text displayed for a closed fold.

In Visual mode, when 'bin' and 'eol' set, g CTRL-G counted the last line break, resulting in `"selected 202 of 201 bytes"`.

Motif: fonts were not used for dialog components. (Marcin Dalecki)

Motif: After using a toolbar button the keyboard focus would be on the toolbar (Lesstif problem). (Marcin Dalecki)

When using `"y<C-V>`x"` where mark x is in the first column, the last line was not included.

Not all test scripts work properly on MS-Windows when checked out from CVS. Use a Vim command to fix all fileformats to dos before executing the tests.

When using `":new"` and the file fits in the window, lines could still be above the window. Now remove empty lines instead of keeping the relative position.

Cmdline completion didn't work after `":let var1 var<Tab>"`.

When using `":startinsert"` or `":startreplace"` when already in Insert mode (possible when using CTRL-R =), pressing Esc would directly restart Insert mode. (Peter Winters)

`"2daw"` didn't work at end of file if the last word is a single character.

Completion for `":next a'<Tab>"` put a backslash before single quote, but it was not removed when editing a file. Now halve backslashes in `save_patterns()`. Also fix expanding a file name with the shell that contains `"\"`.

When doing `"1,6d|put"` only "fewer lines" was reported. Now a following "more lines" overwrites the message.

Configure could not handle "-Dfoo=long\ long" in the TCL config output.

When searching backwards, using a pattern that matches a newline and uses \zs after that, didn't find a match. Could also get a hang or end up in the right column in the wrong line.

When \$LANG is "sl" for slovenian, the slovak menu was used, since "slovak" starts with "sl".

When 'paste' is set in the GUI the Paste toolbar button doesn't work. Clear 'paste' when starting the GUI.

A message about a wrong viminfo line included the trailing NL.

When 'paste' is set in the GUI the toolbar button doesn't work in Insert mode. Use ":exe" in menu.vim to avoid duplicating the commands, instead of using a mapping.

Treat "mlterm" as an xterm-like terminal. (Seiichi Sato)

":z.4" and ":z=4" didn't work Vi compatible.

When sourcing a file, editing it and sourcing it again, it could appear twice in ":scriptnames" and get a new <SID>, because the inode has changed.

When \$SHELL is set but empty the 'shell' option would be empty. Don't use an empty \$SHELL value.

A command "w! file" in .vimrc or \$EXINIT didn't work. Now it writes an empty file.

When a CTRL-F command at the end of the file failed, the cursor was still moved to the start of the line. Now it remains where it is.

When using ":s" or "&" to repeat the last substitute and "\$" was used to put the cursor in the last column, put the cursor in the last column again. This is Vi compatible.

Vim is not fully POSIX compliant but sticks with traditional Vi behavior. Added a few flags in 'coptions' to behave the POSIX way when wanted. The \$VIM\_POSIX environment variable is checked to set the default.

Appending to a register didn't insert a line break like Vi. Added the '>' flag to 'coptions' for this.

Using "I" in a line with only blanks appended to the line. This is not Vi compatible. Added the 'H' flag in 'coptions' for this.

When joining multiple lines the cursor would be at the last joint, but Vi leaves it at the position where "J" would put it. Added the 'q' flag in 'coptions' for this.

Autoindent didn't work for ":insert" and ":append".

Using ":append" in an empty buffer kept the dummy line. Now it's deleted to be Vi compatible.

When reading commands from a file and stdout goes to a terminal, would still request the xterm version. Vim can't read it, thus the output went to the shell and caused trouble there.

When redirecting to a register with an invalid name the redirection would

still be done (after an error message). Now reset "redir\_reg". (Yegappan Lakshmanan)

It was not possible to use a NL after a backslash in Ex mode. This is sometimes used to feed multiple lines to a shell command.

When 'cmdheight' is set to 2 in .vimrc and the GUI uses the number of lines from the terminal we actually get 3 lines for the cmdline in gvim.

When setting \$HOME allocated memory would leak.

Win32: bold characters may sometimes write in another character cell. Use unicodepdy[] as for UTF-8. (Taro Muraoka)

":w fname" didn't work for files with 'buftype' set to "nofile".

The method used to locate user commands for completion differed from when they are executed. Ambiguous command names were not completed properly.

Incremental search may cause a crash when there is a custom statusline that indirectly invokes ":normal".

Diff mode failed when \$DIFF\_OPTIONS was set in the environment. Unset it before invoking "diff".

Completion didn't work after ":argdo", ":windo" and ":bufdo". Also for ":set &l:opt" and ":set &g:opt". (Peter Winters)

When setting 'ttymouse' to "dec" in an xterm that supports the DEC mouse locator it doesn't work. Now switch off the mouse before selecting another mouse model.

When the CursorHold event is triggered and the commands peek for typed characters the typeahead buffer may be messed up, e.g., when a mouse-up event is received. Avoid invoking the autocommands from the function waiting for a character, let it put K\_CURSORHOLD in the input buffer.

Removed the "COUNT" flag from ":argadd", to avoid ":argadd 1\*" to be used like ":l:argadd \*". Same for ":argdelete" and ":argedit".

Avoid that \$LANG is used for the menus when LC\_MESSAGES is "en\_US".

Added backslashes before dashes in the vim.1 manual page to make them appear as real dashes. (Pierre Habouzit)

Where "gq" left the cursor depended on the value of 'formatprg'. Now "gq" always leaves the cursor at the last line of the formatted text.

When editing a compressed file, such as "changelog.Debian.gz" file, filetype detection may try to check the contents of the file while it's still compressed. Skip setting 'filetype' for compressed files until they have been decompressed. Required for patterns that end in a "\*".

Starting with an argument "+cmd" or "-S script" causes the cursor to be moved to the first line. That breaks a BufReadPost autocommand that uses g`". Don't move the cursor if it's somewhere past the first line.

"gg=G" while 'modifiable' is off was uninterruptible.

When 'encoding' is "sjis" inserting CTRL-V u d800 a few times causes a crash. Don't insert a DBCS character with a NUL second byte.



In Insert mode CTRL-O <Home> didn't move the cursor. Made "ins\_at\_eol" global and reset it in nv\_home().

Wildcard expansion failed: ":w /tmp/\$.`echo test`". Don't put quotes around spaces inside backticks.

After this sequence of commands: Y V p gv: the wrong line is selected. Now let "gv" select the text that was put, since the original text is deleted. This should be the most useful thing to do.

":sleep 100u" sleeps for 100 seconds, not 100 usec as one might expect. Give an error message when the argument isn't recognized.

In gui\_mch\_draw\_string() in gui\_w32.c "unibuflen" wasn't static, resulting in reallocating the buffer every time. (Alexei Alexandrov)

When using a Python "atexit" function it was not invoked when Vim exits. Now call Py\_Finalize() for that. (Ugo Di Girolamo)  
This breaks the thread stuff though, fixed by Ugo.

GTK GUI: using a .vimrc with "set cmdheight=2 lines=43" and ":split" right after startup, the window layout is messed up. (Michael Schaap) Added win\_new\_shellsize() call in gui\_init() to fix the topframe size.

Trick to get ...MOUSE\_NM not used when there are vertical splits. Now pass column -1 for the left most window and add MOUSE\_COLOFF for others. Limits mouse column to 10000.

searchpair() may hang when the end pattern has "\zs" at the end. Check that we find the same position again and advance one character.

When in diff mode and making a change that causes the "changed" highlighting to disappear or reappear, it was still highlighted in another window.

When a ":next" command fails because the user selects "Abort" at the ATTENTION prompt the argument index was advanced anyway.

When "~" is in 'iskeyword' the "gd" doesn't work, it's used for the previous substitute pattern. Put "\V" in the pattern to avoid that.

Use of sprintf() sometimes didn't check properly for buffer overflow. Also when using msg(). Included code for snprintf() to avoid having to do size checks where invoking them

":help \=<Tab>" didn't find "sub-replace-\=". Wild menu for help tags didn't show backslashes. ":he :s\=" didn't work.

When reading an errorfile "~/ " in a file name was not expanded.

GTK GUI: When adding a scrollbar (e.g. when using ":vsplit") in a script or removing it the window size may change. GTK sends us resize events when we change the window size ourselves, but they may come at an unexpected moment. Peek for a character to get any window resize events and fix 'columns' and 'lines' to undo this.

When using the GTK plug mechanism, resizing and focus was not working properly. (Neil Bird)

After deleting files from the argument list a session file generated with ":mksession" may contain invalid ":next" commands.

When 'shortmess' is empty and 'keymap' set to accents, in Insert mode CTRL-N

may cause the hit-enter prompt. Typing 'a then didn't result in the accented character. Put the character typed at the prompt back in the typeahead buffer so that mapping is done in the right mode.

setbufvar() and setwinvar() did not give error messages.

It was possible to set a variable with an illegal name, e.g. with setbufvar(). It was possible to define a function with illegal name, e.t. ":func F{-1}()"

CTRL-W F and "gf" didn't use the same method to get the file name.

When reporting a conversion error the line number of the last error could be given. Now report the first encountered error.

When using ":e ++enc=name file" and iconv() was used for conversion an error caused a fall-back to no conversion. Now replace a character with '?' and continue.

When opening a new buffer the local value of 'bomb' was not initialized from the global value.

Win32: When using the "Edit with Vim" entry the file name was limited to about 200 characters.

When using command line completion for ":e \*foo" and the file "+foo" exists the resulting command ":e +foo" doesn't work. Now insert a backslash: ":e \+foo".

When the translation of "-- More --" was not 10 characters long the following message would be in the wrong position.

At the more-prompt the last character in the last line wasn't drawn.

When deleting non-existing text while 'virtualedit' is set the '[' and ']' marks were not set.

Win32: Could not use "\*\*/" in 'path', it had to be "\*\*\".

The search pattern "\n" did not match at the end of the last line.

Searching for a pattern backwards, starting on the NUL at the end of the line and 'encoding' is "utf-8" would match the pattern just before it incorrectly. Affected searchpair('/\\*', '', '\\*/').

For the Find/Replace dialog it was possible that not finding the text resulted in an error message while redrawing, which cleared the syntax highlighting while it was being used, resulting in a crash. Now don't clear syntax highlighting, disable it with b\_syn\_error.

Win32: Combining UTF-8 characters were drawn on the previous character. Could be noticed with a Thai font.

Output of ":function" could leave some of the typed text behind. (Yegappan Lakshmanan)

When the command line history has only a few lines the command line window would be opened with these lines above the first window line.

When using a command line window for search strings ":qa" would result in searching for "qa" instead of quitting all windows.

GUI: When scrolling with the scrollbar and there is a line that doesn't fit

redrawing may fail. Make sure `w_skipcol` is valid before redrawing.

Limit the values of 'columns' and 'lines' to avoid an overflow in Rows \* Columns. Fixed bad effects when running out of memory (command line would be reversed, `":qa!"` resulted in `":!aq"`).

Motif: `"gvim -iconic"` opened the window anyway. (David Harrison)

There is a tiny chance that a symlink gets created between checking for an existing file and creating a file. Use the `O_NOFOLLOW` for `open()` if it's available.

In an empty line `"ix<CTRL-O>0"` moved the cursor to after the line instead of sticking to the first column.

When using `":wq"` and a `BufWriteCmd` autocmd uses `inputsecret()` the text was echoed anyway. Set terminal to raw mode in `getcmdline()`.

Unix: `":w a;b~c"` caused an error in expanding wildcards.

When appending to a file with `":w >>fname"` in a buffer without a name, causing the buffer to use "fname", the modified flag was reset.

When appending to the current file the "not edited" flag would be reset. `":w"` would overwrite the file accidentally.

Unix: When filtering text with an external command Vim would still read input, causing text typed for the command (e.g., a password) to be eaten and echoed. Don't read input when the terminal is in cooked mode.

The Cygwin version of `xxd` used CR/LF line separators. (Corinna Vinschen)

Unix: When filtering text through a shell command some resulting text may be dropped. Now after detecting that the child has exited try reading some more of its output.

When inside `input()`, using `"CTRL-R ="` and the expression throws an exception the command line was not abandoned but it wasn't used either. Now abandon typing the command line.

'`delcombine`' was also used in Visual and Select mode and for commands like `"cl"`. That was illogical and has been disabled.

When recording while a `CursorHold` autocommand was defined special keys would appear in the register. Now the `CursorHold` event is not triggered while recording.

Unix: the `src/configure` script used `${srcdir-.`}, not all shells understand that. Use `${srcdir:-.}` instead.

When editing file "a" which is a symlink to file "b" that doesn't exist, writing file "a" to create "b" and then `":split b"` resulted in two buffers on the same file with two different swapfile names. Now set the inode in the buffer when creating a new file.

When '`esckey`' is not set don't send the xterm code to request the version string, because it may cause trouble in Insert mode.

When evaluating an expression for `CTRL-R =` on the command line it was possible to call a function that opens a new window, resulting in errors for incremental search, and many other nasty things were possible. Now use the `|textlock|` to disallow changing the buffer or jumping to another window

to protect from unexpected behavior. Same for CTRL-\ e.

"d(" deleted the character under the cursor, while the documentation specified an exclusive motion. Vi also doesn't delete the character under the cursor.

Shift-Insert in Insert mode could put the cursor before the last character when it just fits in the window. In coladvance() don't stop at the window edge when filling with spaces and when in Insert mode. In mswin.vim avoid getting a beep from the "l" command.

Win32 GUI: When Alt-F4 is used to close the window and Cancel is selected in the dialog then Vim would insert <M-F4> in the text. Now it's ignored.

When ":silent! {cmd}" caused the swap file dialog, which isn't displayed, there would still be a hit-enter prompt.

Requesting the termresponse (|t\_RV|) early may cause problems with "-c" arguments that invoke an external command or even "-c quit". Postpone it until after executing "-c" arguments.

When typing in Insert mode so that a new line is started, using CTRL-G u to break undo and start a new change, then joining the lines with <BS> caused undo info to be missing. Now reset the insertion start point.

Syntax HL: When a region start match has a matchgroup and an offset that happens to be after the end of the line then it continued in the next line and stopped at the region end match, making the region continue after that. Now check for the column being past the end of the line in syn\_add\_end\_off().

When changing a file, setting 'swapfile' off and then on again, making another change and killing Vim, then some blocks may be missing from the swapfile. When 'swapfile' is switched back on mark all blocks in the swapfile as dirty. Added mf\_set\_dirty().

Expanding wildcards in a command like ":e aap;<!" didn't work. Put backslashes before characters that are special to the shell. (Adri Verhoef)

A CursorHold autocommand would cause a message to be cleared. Don't show the special key for the event for 'showcmd'.

When expanding a file name for a shell command, as in "!cmd foo<Tab>" or ":r !cmd foo<Tab>" also escape characters that are special for the shell: "!!;&()<>".

When the name of the buffer was set by a ":r fname" command |cpo-f| no autocommands were triggered to notify about the change in the buffer list.

In the quickfix buffer 'bufhidden' was set to "delete", which caused closing the quickfix window to leave an unlisted "No Name" buffer behind every time.

Win32: when using two screens of different size, setting 'lines' to a large value didn't fill the whole screen. (SungHyun Nam)

Win32 installer: The generated \_vimrc contained an absolute path to diff.exe. After upgrading it becomes invalid. Now use \$VIMRUNTIME instead.

The command line was cleared too often when 'showmode' was set and ":silent normal vy" was used. Don't clear the command line unless the mode was actually displayed. Added the "mode\_displayed" variable.

The "load session" toolbar item could not handle a space or other special characters in v:this\_session.

":set sta ts=8 sw=4 sts=2" deleted 4 spaces halfway a line instead of 2.

In a multi-byte file the foldmarker could be recognized in the trail byte.  
(Taro Muraoka)

Pasting with CTRL-V and menu didn't work properly when some commands are mapped. Use ":normal!" instead of ":normal". (Tony Apuzzo)

Crashed when expanding a file name argument in backticks.

In some situations the menu and scrollbar didn't work, when the value contains a CSI byte. (Yukihiro Nakadaira)

GTK GUI: When drawing the balloon focus changes and we might get a key release event that removed the balloon again. Ignore the key release event.

'titleold' was included in ":mkexrc" and ":mksession" files.

":set background&" didn't use the same logic as was used when starting up.

When "umask" is set such that nothing is writable then the viminfo file would be written without write permission. (Julian Bridle)

Motif: In diff mode dragging one scrollbar didn't update the scrollbar of the other diff'ed window.

When editing in an xterm with a different number of colors than expected the screen would be cleared and redrawn, causing the message about the edited file to be cleared. Now set "keep\_msg" to redraw the last message.

For a color terminal: When the Normal HL uses bold, possibly to make the color lighter, and another HL group specifies a color it might become light as well. Now reset bold if a HL group doesn't specify bold itself.

When using 256 color xterm the color 255 would show up as color 0. Use a short instead of a char to store the color number.

ml\_get errors when searching for "\n\zs" in an empty file.

When selecting a block and using "\$" to select until the end of every line and not highlighting the character under the cursor the first character of the block could be unhighlighted.

When counting words for the Visual block area and using "\$" to select until the end of every line only up to the length of the last line was counted.

"dip" in trailing empty lines left one empty line behind.

The script ID was only remembered globally for each option. When a buffer- or window-local option was set the same "last set" location was changed for all buffers and windows. Now remember the script ID for each local option separately.

GUI: The "Replace All" button didn't handle backslashes in the replacement in the same way as "Replace". Escape backslashes so that they are taken literally.

When using Select mode from Insert mode and typing a key, causing lines to be deleted and a message displayed, delayed the effect of inserting the key. Now overwrite the message without delay.

When 'whichwrap' includes "l" then "dl" and "yl" on a single letter line worked differently. Now recognize all operators when using "l" at the end of a line.

GTK GUI: when the font selector returned a font name with a comma in it then it would be handled like two font names. Now put a backslash before the comma.

MS-DOS, Win32: When 'encoding' defaults to "latin1" then the value for 'iskeyword' was still for CPxxx. And when 'nocompatible' was set 'isprint' would also be the wrong value.

When a command was defined not to take arguments and no '|' no warning message would be given for using a '|'. Also with ":loadkeymap".

Motif: When using a fontset and 'encoding' is "utf-8" and sizeof(wchar\_t) != sizeof(XChar2b) then display was wrong. (Yukihiro Nakadaira)

":all" always set the current window to the first window, even when it contains a buffer that is not in the argument list (can't be closed because it is modified). Now go to the window that has the first item of the argument list.

GUI: To avoid left-over pixels from bold text all characters after a character with special attributes were redrawn. Now only do this for characters that actually are bold. Speeds up displaying considerably.

When only highlighting changes and the text is scrolled at the same time everything is redrawn instead of using a scroll and updating the changed text. E.g., when using ":match" to highlight a paren that the cursor landed on. Added SOME\_VALID: Redraw the whole window but also try to scroll to minimize redrawing.

Win32: When using Korean IME making it active didn't work properly. (Moon, Yu-sung, 2005 March 21)

Ruby interface: when inserting/deleting lines display wasn't updated. (Ryan Paul)

--- fixes since Vim 7.0b ---

Getting the GCC version in configure didn't work with Solaris sed. First strip any "darwin." and then get the version number.

The "autoload" directory was missing from the self-installing executable for MS-Windows.

The MS-Windows install program would find "vimtutor.bat" in the install directory. After changing to "c:" also change to "\" to avoid looking in the install directory.

To make the 16 bit DOS version compile exclude not used highlight initializations and build a tiny instead of small version.

finddir() and findfile() accept a negative count and return a List then.

The Python indent file contained a few debugging statements, removed.

Expanding {} for a function name, resulting in a name starting with "s:" was not handled correctly.

Spelling: renamed COMPOUNDMAX to COMPOUNDWORDMAX. Added several items to be

able to handle the new Hungarian dictionary.

Mac: Default to building for the current platform only, that is much faster than building a universal binary. Also, using Perl/Python/etc. only works for the current platform.

The time on undo messages disappeared for someone. Using %T for strftime() apparently doesn't work everywhere. Use %H:%M:%S instead.

Typing BS at the "z=" prompt removed the prompt.

--- fixes and changes since Vim 7.0c ---

When jumping to another tab page the Vim window size was always set, even when nothing in the layout changed.

Win32 GUI tab pages line wasn't always enabled. Do a proper check for the compiler version.

Win32: When switching between tab pages the Vim window was moved when part of it was outside of the screen. Now only do that in the direction of a size change.

Win32: added menu to GUI tab pages line. (Yegappan Lakshmanan)

Mac: Added document icons. (Benji Fisher)

Insert mode completion: Using Enter to accept the current match causes confusion. Use CTRL-Y instead. Also, use CTRL-E to go back to the typed text.

GUI: When there are left and right scrollbars, ":tabedit" kept them instead of using the one that isn't needed.

Using "gP" to replace all the text could leave the cursor below the last line, causing ml\_get errors.

When 'cursorline' is set don't use the highlighting when Visual mode is active, otherwise it's difficult to see the selected area.

The matchparen plugin restricts the search to 100 lines, to avoid a long delay when there are closed folds.

Sometimes using CTRL-X s to list spelling suggestions used text from another line.

Win32: Set the default for 'isprint' back to the wrong default "@,~-255", because many people use Windows-1252 while 'encoding' is "latin1".

GTK: Added a workaround for gvim crashing when used over an untrusted ssh link, caused by GTK doing something nasty. (Ed Catmur)

Win32: The font used for the tab page labels is too big. Use the system menu font. (George Reilly)

Win32: Adjusting the window position and size to keep it on the screen didn't work properly when the taskbar is on the left or top of the screen.

The installman.sh and installml.sh scripts use \${10}, that didn't work with old shells. And use "test -f" instead of "test -e".

Win32: When 'encoding' was set in the vimrc then a directory argument for diff

mode didn't work.

GUI: at the inputlist() prompt the cursorshape was adjusted as if the windows were still at their old position.

The parenmatch plugin didn't remember the highlighting per window.

Using ":bd" for a buffer that's the current window in another tab page caused a crash.

For a new tab page the 'scroll' option wasn't set to a good default.

Using an end offset for a search "/pat/e" didn't work properly for multi-byte text. (Yukihiro Nakadaira)

":s/\n/,/" doubled the text when used on the last line.

When "search" is in 'foldopen' "[s" and "]s" now open folds.

When using a numbered function "dict" can be omitted, but "self" didn't work then. Always add FC\_DICT to the function flags when it's part of a dictionary.

When "--remote-tab" executes locally it left an empty tab page.

"gvim -u NONE", ":set cursorcolumn", "C" in the second line didn't update text. Do update further lines even though the "\$" is displayed.

VMS: Support GTK better, also enable +clientserver. (Zoltan Arpadffy)

When highlighting of statusline or tabline is changed there was no redraw to show the effect.

Mac: Added "CFBundleIdentifier" to infplist.xml.

Added tabpage-local variables t:var.

Win32: Added double-click in tab pages line creates new tab. (Yegappan Lakshmanan)

Motif: Added GUI tab pages line. (Yegappan Lakshmanan)

Fixed crash when 'lines' was set to 1000 in a modeline.

When init\_spellfile() finds a writable directory in 'runtimepath' but it doesn't contain a "spell" directory, create one.

Win32: executable() also finds "xxd" in the directory where Vim was started, but "!xxd" doesn't work. Append the Vim starting directory to \$PATH.

The tab page labels are shortened, directory names are reduced to a single letter by default. Added the pathshorten() function to allow a user to do the same.

":saveas" now resets 'readonly' if the file was successfully written.

Set \$MYVIMRC file to the first found .vimrc file.

Set \$MYGVIMRC file to the first found .gvimrc file.

Added menu item "Startup Settings" that edits the \$MYVIMRC file

Added matcharg().



Error message E745 appeared twice. Renamed one to E786.

Fixed crash when using "au BufRead \* Sexplore" and doing ":help". Was wiping out a buffer that's still in a window.

":hardcopy" resulted in an error message when 'encoding' is "utf-8" and 'printencoding' is empty. Now it assumes latin1. (Mike Williams)

The check for the toolbar feature for Motif, depending on certain included files, wasn't detailed enough, causing building to fail in gui\_xmew.c.

Using CTRL-E in Insert mode completion after CTRL-P inserted the first match instead of the original text.

When displaying a UTF-8 character with a zero lower byte Vim might think the previous character is double-wide.

The "nbsp" item of 'listchars' didn't work when 'encoding' was utf-8.

Motif: when Xm/xpm.h is missing gui\_xmew.c would not compile.  
HAVE\_XM\_UNHIGHLIGHTT\_H was missing a T.

Mac: Moved the .icns files into src/os\_mac\_rsrc, so that they can all be copied at once. Adjusted the Info.plist file for three icons.

When Visual mode is active while switching to another tabpage could get ml\_get errors.

When 'list' is set, 'nowrap' the \$ in the first column caused 'cursorcolumn' to move to the right.

When a line wraps, 'cursorcolumn' was never displayed past the end of the line.

'autochdir' was only available when compiled with NetBeans and GUI. Now it's a separate feature, also available in the "big" version.

Added CTRL-W gf: open file under cursor in new tab page.

When using the menu in the tab pages line, "New Tab" opens the new tab before where the click was. Beyond the labels the new tab appears at the end instead of after the current tab page.

Inside a mapping with an expression getchar() could not be used.

When vgetc is used recursively vgetc\_busy protects it from being used recursively. But after a ":normal" command the protection was reset.

":s/a/b/n" didn't work when 'modifiable' was off.

When \$VIMRUNTIME includes a multi-byte character then rgb.txt could not be found. (Yukihiro Nakadaira)

":mkspell" didn't work correctly for non-ASCII affix flags when conversion is needed on the spell file.

glob('/dir/\\$ABC/\*') didn't work.

When using several tab pages and changing 'cmdheight' the display could become messed up. Now store the value of 'cmdheight' separately for each tab page.

The user of the Enter key while the popup menu is visible was still confusing.

Now use Enter to select the match after using a cursor key.

Added "usetab" to 'switchbuf'.

--- fixes and changes since Vim 7.0d ---

Added CTRL-W T: move a window to a new tab page.

Using CTRL-X s in Insert mode to complete spelling suggestions and using BS deleted characters before the bad word.

A few small fixes for the VMS makefile. (Zoltan Arpadffy)

With a window of 91 lines 45 cols, ":vsp" scrolled the window. Copy w\_wrow when splitting a window and skip setting the height when it's already at the right value.

Using <silent> in a mapping with a shell command and the GUI caused redraw to use wrong attributes.

Win32: Using MSVC 4.1 for install.exe resulted in the start menu items to be created in the administrator directory instead of "All Users". Define the CSIDL\_ items if they are missing.

Motif: The GUI tabline did not use the space above the right scrollbar. Work around a bug in the Motif library. (Yegappan Lakshmanan)

The extra files for XML Omni completion are now also installed.  
|xml-omni-datafile|

GTK GUI: when 'm' is missing from 'guioptions' during startup and pressing <F10> GTK produced error messages. Now do create the menu but disable it just after the first gui\_mch\_update().

":mkspell" doesn't work well with the Hungarian dictionary from the Hunspell project. Back to the Myspell dictionary.

In help files hide the | used around tags.

Renamed pycomplete to pythoncomplete.

Added "tabpages" to 'sessionoptions'.

When 'guitablabel' is set the effect wasn't visible right away.

Fixed a few 'cindent' errors.

When completing menu names, e.g., after ":emenu", don't sort the entries but keep them in the original order.

Fixed a crash when editing a directory in diff mode. Don't trigger autocommands when executing the diff command.

Getting a keystroke could get stuck if 'encoding' is a multi-byte encoding and typing a special key.

When 'foldignore' is set the folds were not updated right away.

When a list is indexed with [a : b] and b was greater than the length an error message was given. Now silently truncate the result.

When using BS during Insert mode completion go back to the original text, so that CTRL-N selects the first matching entry.

Added the 'M' flag to 'cinoptions'.

Win32: Make the "gvim --help" window appear in the middle of the screen instead of at an arbitrary position. (Randall W. Morris)

Added gettabwinvar() and settabwinvar().

Command line completion: pressing <Tab> after ":e /usr/\*" expands the whole tree, because it becomes ":e /usr/\*\*". Don't add a star if there already is one.

Added grey10 to grey90 to all GUIs, so that they can all be used for initializing highlighting. Use grey40 for CursorColumn and CursorLine when 'background' is "dark".

When reading a file and using iconv for conversion, an incomplete byte sequence at the end caused problems. (Yukihiro Nakadaira)

--- fixes and changes since Vim 7.0e ---

Default color for MatchParen when 'background' is "dark" is now DarkCyan.

":syn off" had to be used twice in a file that sets 'syntax' in a modeline. (Michael Geddes)

When using ":vsp" or ":sp" the available space wasn't used equally between windows. (Servatius Brandt)

Expanding <WORD> on a trailing blank resulted in the first word in the line if 'encoding' is a multi-byte encoding.

Spell checking: spellbadword() didn't see a missing capital in the first word of a line. Popup menu now only suggest the capitalized word when appropriate.

When using whole line completion CTRL-L moves through the matches but it didn't work when at the original text.

When completion finds the longest match, don't go to the first match but stick at the original text, so that CTRL-N selects the first one.

Recognize "zsh-beta" like "zsh" for setting the 'shellpipe' default. (James Vega)

When using ":map <expr>" and the expression results in something with a special byte (NUL or CSI) then it didn't work properly. Now escape special bytes.

The default Visual highlighting for a color xterm with 8 colors was a magenta background, which made magenta text disappear. Now use reverse in this specific situation.

After completing the longest match "." didn't insert the same text. Repeating also didn't work correctly for multi-byte text.

When using Insert mode completion and BS the whole word that was completed would result in all possible matches. Now stop completion. Also fixes that for spell completion the previous word was deleted.

GTK: When 'encoding' is "latin1" and using non-ASCII characters in a file name the tab page label was wrong and an error message would be given.

The taglist() function could hang on a tags line with a non-ASCII character.

Win32: When 'encoding' differs from the system encoding tab page labels with non-ASCII characters looked wrong. (Yegappan Lakshmanan)

Motif: building failed when Xm/Notebook.h doesn't exist. Added a configure check, disable GUI tabline when it's missing.

Mac: When compiled without multi-byte feature the clipboard didn't work.

It was possible to switch to another tab page when the cmdline window is open.

Completion could hang when 'lines' is 6 and a preview window was opened.

Added CTRL-W gF: open file under cursor in new tab page and jump to the line number following the file name.

Added 'guitabtooltip'. Implemented for Win32 (Yegappan Lakshmanan).

Added "throw" to 'debug' option: throw an exception for error messages even when they would otherwise be ignored.

When 'keymap' is set and a line contains an invalid entry could get a "No mapping found" warning instead of a proper error message.

Motif: default to using XpmAttributes instead of XpmAttributes\_21.

A few more changes for 64 bit MS-Windows. (George Reilly)

Got ml\_get errors when doing "o" and selecting in other window where there are less lines shorter than the cursor position in the other window. ins\_mouse() was using position in wrong window.

Win32 GUI: Crash when giving a lot of messages during startup. Allocate twice as much memory for the dialog template.

Fixed a few leaks and wrong pointer use reported by coverity.

When showing menus the mode character was sometimes wrong.

Added feedkeys(). (Yakov Lerner)

Made matchlist() always return all submatches.

Moved triggering QuickFixCmdPost to before jumping to the first location.

Mac: Added the 'macatsui' option as a temporary work around for text drawing problems.

Line completion on "/\*" gave error messages when scanning an unloaded buffer.

--- fixes and changes since Vim 7.0f ---

Win32: The height of the tab page labels is now adjusted to the font height. (Yegappan Lakshmanan)

Win32: selecting the tab label was off by one. (Yegappan Lakshmanan)

Added tooltips for Motif and GTK tab page labels. (Yegappan Lakshmanan)

When 'encoding' is "utf-8" then ":help spell" would report an illegal byte and the file was not converted from latin1 to utf-8. Now retry with latin1 if reading the file as utf-8 results in illegal bytes.

Escape the argument of feedkeys() before putting it in the typeahead buffer. (Yukihiro Nakadaira)

Added the v:char variable for evaluating 'formatexpr'. (Yukihiro Nakadaira)

With 8 colors Search highlighting combined with Statement highlighted text made the text disappear.

VMS: avoid warnings for redefining MAX and MIN. (Zoltan Arpadffy)

When 'virtualedit' includes "onemore", stopping Visual selection would still move the cursor left.

Prevent that using CTRL-R = in Insert mode can start Visual mode.

Fixed a crash that occurred when in Insert mode with completion active and a mapping caused edit() to be called recursively.

When using CTRL-O in Insert mode just after the last character while 'virtualedit' is "all", then typing CR moved the last character to the next line. Call coladvance() before starting the new line.

When using |:shell| ignore clicks on the tab page labels. Also when using the command line window.

When 'eventignore' is "all" then adding more to ignoring some events, e.g., for ":vimgrep", would actually trigger more events.

Win32: When a running Vim uses server name GVIM1 then "gvim --remote fname" didn't find it. When looking for a server name that doesn't end in a digit and it is not found then use another server with that name and a number (just like on Unix).

When using "double" in 'spellsuggest' when the language doesn't support sound folding resulted in too many suggestions.

Win32: Dropping a shortcut on the Vim icon didn't edit the referred file like editing it in another way would. Use fname\_expand() in buf\_set\_name() instead of simply make the file name a full path.

Using feedkeys() could cause Vim to hang.

When closing another tab page from the tabline menu in Insert mode the tabline was not updated right away.

The syntax menu didn't work in compatible mode.

After using ":tag id" twice with the same "id", ":ts" and then ":pop" a ":ts" reported no matching tag. Clear the cached tag name.

In Insert mode the matchparen plugin highlighted the wrong paren when there is a string just next to a paren.

GTK: After opening a new tab page the text was sometimes not drawn correctly. Flush output and catch up with events when updating the tab page labels.

In the GUI, using CTRL-W q to close the last window of a tab page could cause a crash.

GTK: The tab pages line menu was not converted from 'encoding' to utf-8.

Typing a multi-byte character or a special key at the hit-enter prompt did not work.

When 'virtualedit' contains "onemore" CTRL-O in Insert mode still moved the cursor left when it was after the end of the line, even though it's allowed to be there.

Added test for using tab pages.

toupper() and tolower() were not used, because of checking for \_\_STDC\_ISO\_10646\_\_ instead of \_\_STDC\_ISO\_10646\_\_. (sertacyildiz)

For ":map <expr>" forbid changing the text, jumping to another buffer and using ":normal" to avoid nasty side effects.

--- fixes and changes since Vim 7.0g ---

Compilation error on HP-UX, use of "dlerr" must be inside a #ifdef.  
(Gary Johnson)

Report +reltime feature in ":version" output.

The tar and zip plugins detect failure to get the contents of the archive and edit the file as-is.

When the result of 'guitablabel' is empty fall back to the default label.

Fixed crash when using ":insert" in a while loop and missing "endwhile".

"gt" and other commands could move to another window when |textlock| active and when the command line window was open.

Spell checking a file with syntax highlighting and a bad word at the end of the line is ignored could make "js" hang.

Mac: inputdialog() didn't work when compiled with big features.

Interrupting ":vimgrep" while it is busy loading a file left a modified and hidden buffer behind. Use enter\_cleanup() and leave\_cleanup() around wipe\_buffer().

When making 'keymap' empty the b:keymap\_name variable wasn't deleted.

Using CTRL-N that searches a long time, pressing space to interrupt the searching and accept the first match, the popup menu was still displayed briefly.

When setting the Vim window height with -geometry the 'window' option could be at a value that makes CTRL-F behave differently.

When opening a quickfix window in two tabs they used different buffers, causing redrawing problems later. Now use the same buffer for all quickfix windows. (Yegappan Lakshmanan)

When 'mousefocus' is set moving the mouse to the text tab pages line would move focus to the first window. Also, the mouse pointer would jump to the active window.

In a session file, when an empty buffer is wiped out, do this silently.

When one window has the cursor on the last line and another window is resized to make that window smaller, the cursor line could go below the displayed lines. In `win_new_height()` subtract one from the available space. Also avoid that using `"~"` lines makes the window scroll down.

Mac: When sourcing the "macmap.vim" script and then finding a .vimrc file the 'cpo' option isn't set properly, because it was already set and restored. Added the `<special>` argument to `":map"`, so that 'cpo' doesn't need to be changed to be able to use `<>` notation. Also do this for `":menu"` for consistency.

When using `"/encoding=abc"` in a spell word list, only "bc" was used.

When 'encoding' and 'printencoding' were both "utf-8" then `":hardcopy"` didn't work. (Mike Williams)

Mac: When building with `"--disable-gui"` the install directory would still be `"/Applications"` and Vim.app would be installed. Now install in `/usr/local` as usual for a console application.

GUI: when doing completion and there is one match and still searching for another, the cursor was displayed at the end of the line instead of after the match. Now show the cursor after the match while still searching for matches.

GUI: The mouse shape changed on the statusline even when 'mouse' was empty and they can't be dragged.

GTK2: Selecting a button in the `confirm()` dialog with Tab or cursor keys and hitting Enter didn't select that button. Removed GTK 1 specific code. (Neil Bird)

When evaluating 'balloonexpr' takes a long time it could be called recursively, which could cause a crash.

`exists()` could not be used to detect whether `":2match"` is supported. Added a check for it specifically.

GTK1: Tab page labels didn't work. (Yegappan Lakshmanan)

Insert mode completion: When finding matches use 'ignorecase', but when adding matches to the list don't use it, so that all words with different case are added, "word", "Word" and "WORD".

When 'cursorline' and 'hlsearch' are set and the search pattern is `"x\n"` the rest of the line was highlighted as a match.

Cursor moved while evaluating 'balloonexpr' that invokes `":isearch"` and redirects the output. Don't move the cursor to the command line if `msg_silent` is set.

`exists()` ignored text after a function name and option name, which could result in false positives.

`exists()` ignored characters after the recognized word, which can be wrong when using a name with non-keyword characters. Specifically, these calls no longer allow characters after the name: `exists('*funcname')` `exists('*funcname(...)')` `exists('&option')` `exists(':cmd')` `exists('g:name')` `exists('g:name[n]')` `exists('g:name.n')`

Trigger the `TabEnter` autocommand only after entering the current window of the tab page, otherwise the commands are executed with an invalid current window.

Win32: When using two monitors and Vim is on the second monitor, changing the width of the Vim window could make it jump to the first monitor.

When scrolling back at the more prompt and the quitting a line of text would be left behind when 'cmdheight' is 2 or more.

Fixed a few things for Insert mode completion, especially when typing BS, CTRL-N or a printable character while still searching for matches.

=====

VERSION 7.1

\*version-7.1\* \*version7.1\*

This section is about improvements made between version 7.0 and 7.1.

This is a bug-fix release, there are no fancy new features.

Changed

\*changed-7.1\*

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Added setting 'mouse' in vimrc\_example.vim.

When building with MZscheme also look for include files in the "plt" subdirectory. That's where they are for FreeBSD.

The Ruby interface module is now called "Vim" instead of "VIM". But "VIM" is an alias, so it's backwards compatible. (Tim Pope)

Added

\*added-7.1\*

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New syntax files:

- /var/log/messages (Yakov Lerner)
- Autohotkey (Nikolai Weibull)
- AutoIt v3 (Jared Breland)
- Bazaar commit file "bZR". (Dmitry Vasiliev)
- Cdrdao TOC (Nikolai Weibull)
- Cmusrc (Nikolai Weibull)
- Conary recipe (rPath Inc)
- Framescript (Nikolai Weibull)
- FreeBasic (Mark Manning)
- Hamster (David Fishburn)
- IBasic (Mark Manning)
- Initng (Elan Ruusamäe)
- Ldapconf (Nikolai Weibull)
- Litestep (Nikolai Weibull)
- Privoxy actions file (Doug Kearns)
- Streaming Descriptors "sd" (Puria Nafisi Azizi)

New tutor files:

- Czech (Lubos Turek)
- Hungarian (Arpad Horvath)
- Turkish (Serkan kkk)
- utf-8 version of Greek tutor.
- utf-8 version of Russian tutor.
- utf-8 version of Slovak tutor.

New filetype plugins:

- Bst (Tim Pope)



Cobol (Tim Pope)  
Fvwm (Gautam Iyer)  
Hamster (David Fishburn)  
Django HTML template (Dave Hodder)

New indent files:

Bst (Tim Pope)  
Cobol (Tim Pope)  
Hamster (David Fishburn)  
Django HTML template (Dave Hodder)  
Javascript  
JSP (David Fishburn)

New keymap files:

Bulgarian (Boyko Bantchev)  
Mongolian (Natsagdorj Shagdar)  
Thaana (Ibrahim Fayaz)  
Vietnamese (Samuel Thibault)

Other new runtime files:

Ada support files. (Neil Bird, Martin Krischik)  
Slovenian menu translations (Mojca Miklavec)  
Mono C# compiler plugin (Jarek Sobiecki)

Fixed

\*fixed-7.1\*

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Could not build the Win32s version. Added a few structure definitions in  
src/gui\_w32.c

Patch 7.0.001

Problem: ":set spellsuggest+=10" does not work. (Suresh Govindachar)  
Solution: Add P\_COMMA to the 'spellsuggest' flags.  
Files: src/option.c

Patch 7.0.002

Problem: C omni completion has a problem with tags files with a path  
containing "#" or "%".  
Solution: Escape these characters. (Sebastian Baberowski)  
Files: runtime/autoload/ccomplete.vim

Patch 7.0.003

Problem: GUI: clicking in the lower part of a label in the tab pages line  
while 'mousefocus' is set may warp the mouse pointer. (Robert  
Webb)  
Solution: Check for a negative mouse position.  
Files: src/gui.c

Patch 7.0.004

Problem: Compiler warning for debug\_saved used before set. (Todd Blumer)  
Solution: Remove the "else" for calling save\_dbg\_stuff().  
Files: src/ex\_docmd.c

Patch 7.0.005 (extra)

Problem: Win32: The installer doesn't remove the "autoload" and "spell"  
directories. (David Fishburn)  
Solution: Add the directories to the list to be removed.  
Files: nsis/gvim.nsi

Patch 7.0.006

Problem: Mac: "make shadow" doesn't make a link for infplist.xml. (Axel Kielhorn)  
Solution: Make the link.  
Files: src/Makefile

Patch 7.0.007

Problem: AIX: compiling fails for message.c. (Ruediger Hornig)  
Solution: Move the #if outside of memchr().  
Files: src/message.c

Patch 7.0.008

Problem: Can't call a function that uses both <SID> and {expr}. (Thomas)  
Solution: Check both the expanded and unexpanded name for <SID>.  
Files: src/eval.c

Patch 7.0.009

Problem: ml\_get errors with both 'sidescroll' and 'spell' set.  
Solution: Use ml\_get\_buf() instead of ml\_get(), get the line from the right buffer, not the current one.  
Files: src/spell.c

Patch 7.0.010

Problem: The spellfile plugin required typing login name and password.  
Solution: Use "anonymous" and "vim7user" by default. No need to setup a .netrc file.  
Files: runtime/autoload/spellfile.vim

Patch 7.0.011

Problem: Can't compile without the folding and with the eval feature.  
Solution: Add an #ifdef. (Vallimar)  
Files: src/option.c

Patch 7.0.012

Problem: Using the matchparen plugin, moving the cursor in Insert mode to a shorter line that ends in a brace, changes the preferred column  
Solution: Use winsaveview()/winrestview() instead of getpos()/setpos().  
Files: runtime/plugin/matchparen.vim

Patch 7.0.013

Problem: Insert mode completion: using CTRL-L to add an extra character also deselects the current match, making it impossible to use CTRL-L a second time.  
Solution: Keep the current match. Also make CTRL-L work at the original text, using the first displayed match.  
Files: src/edit.c

Patch 7.0.014

Problem: Compiling gui\_xmew.c fails on Dec Alpha Tru64. (Rolfe)  
Solution: Disable some code for Motif 1.2 and older.  
Files: src/gui\_xmew.c

Patch 7.0.015

Problem: Athena: compilation problems with modern compiler.  
Solution: Avoid type casts for lvalue. (Alexey Froloff)  
Files: src/gui\_at\_fs.c

Patch 7.0.016

Problem: Printing doesn't work for "dec-mcs" encoding.  
Solution: Add "dec-mcs", "mac-roman" and "hp-roman8" to the list of recognized 8-bit encodings. (Mike Williams)  
Files: src/mbyte.c

## Patch 7.0.017 (after 7.0.014)

Problem: Linking gui\_xmew.c fails on Dec Alpha Tru64. (Rolfe)  
Solution: Adjust defines for Motif 1.2 and older.  
Files: src/gui\_xmew.c

## Patch 7.0.018

Problem: VMS: plugins are not loaded on startup.  
Solution: Remove "\*\*\*" from the path. (Zoltan Arpadffy)  
Files: src/main.c

## Patch 7.0.019

Problem: Repeating "VjA789" may cause a crash. (James Vega)  
Solution: Check the cursor column after moving it to another line.  
Files: src/ops.c

## Patch 7.0.020

Problem: Crash when using 'mousefocus'. (William Fulton)  
Solution: Make buffer for mouse coordinates 2 bytes longer. (Juergen Weigert)  
Files: src/gui.c

## Patch 7.0.021

Problem: Crash when using "\\[" and "\\]" in 'errorformat'. (Marc Weber)  
Solution: Check for valid submatches after matching the pattern.  
Files: src/quickfix.c

## Patch 7.0.022

Problem: Using buffer.append() in Ruby may append the line to the wrong buffer. (Alex Norman)  
Solution: Properly switch to the buffer to do the appending. Also for buffer.delete() and setting a buffer line.  
Files: src/if\_ruby.c

## Patch 7.0.023

Problem: Crash when doing spell completion in an empty line and pressing CTRL-E.  
Solution: Check for a zero pointer. (James Vega)  
Also handle a situation without a matching pattern better, report "No matches" instead of remaining in undefined CTRL-X mode. And get out of CTRL-X mode when typing a letter.  
Files: src/edit.c

## Patch 7.0.024

Problem: It is possible to set arbitrary "v:" variables.  
Solution: Disallow setting "v:" variables that are not predefined.  
Files: src/eval.c

## Patch 7.0.025

Problem: Crash when removing an element of a:000. (Nikolai Weibull)  
Solution: Mark the a:000 list with VAR\_FIXED.  
Files: src/eval.c

## Patch 7.0.026

Problem: Using libcall() may show an old error.  
Solution: Invoke dlerror() to clear a previous error. (Yukihiro Nakadaira)  
Files: src/os\_unix.c

## Patch 7.0.027 (extra)

Problem: Win32: When compiled with SNIFF gvim may hang on exit.  
Solution: Translate and dispatch the WM\_USER message. (Mathias Michaelis)  
Files: src/gui\_w48.c

## Patch 7.0.028 (extra)

Problem: OS/2: Vim doesn't compile with gcc 3.2.1.  
Solution: Add argument to after\_pathsep(), don't define vim\_handle\_signal(),  
define HAVE\_STDARG\_H. (David Sanders)  
Files: src/os\_unix.c, src/vim.h, src/os\_os2\_cfg.h

#### Patch 7.0.029

Problem: getchar() may not position the cursor after a space.  
Solution: Position the cursor explicitly.  
Files: src/eval.c

#### Patch 7.0.030

Problem: The ":compiler" command can't be used in a FileChangedRO event.  
(Hari Krishna Dara)  
Solution: Add the CMDWIN flag to the ":compiler" command.  
Files: src/ex\_cmds.h

#### Patch 7.0.031

Problem: When deleting a buffer the buffer-local mappings for Select mode  
remain.  
Solution: Add the Select mode bit to MAP\_ALL\_MODES. (Edwin Steiner)  
Files: src/vim.h

#### Patch 7.0.032 (extra, after 7.0.027)

Problem: Missing semicolon.  
Solution: Add the semicolon.  
Files: src/gui\_w48.c

#### Patch 7.0.033

Problem: When pasting text, with the menu or CTRL-V, autoindent is removed.  
Solution: Use "x<BS>" to avoid indent to be removed. (Benji Fisher)  
Files: runtime/autoload/paste.vim

#### Patch 7.0.034

Problem: After doing completion and typing more characters or using BS  
repeating with "." didn't work properly. (Martin Stubenschrott)  
Solution: Don't put BS and other characters in the redo buffer right away,  
do this when finishing completion.  
Files: src/edit.c

#### Patch 7.0.035

Problem: Insert mode completion works when typed but not when replayed from  
a register. (Hari Krishna Dara)  
Also: Mappings for Insert mode completion don't always work.  
Solution: When finding a non-completion key in the input don't interrupt  
completion when it wasn't typed.  
Do use mappings when checking for typeahead while still finding  
completions. Avoids that completion is interrupted too soon.  
Use "compl\_pending" in a different way.  
Files: src/edit.c

#### Patch 7.0.036

Problem: Can't compile with small features and syntax highlighting or the  
diff feature.  
Solution: Define LINE\_ATTR whenever syntax highlighting or the diff feature  
is enabled.  
Files: src/screen.c

#### Patch 7.0.037

Problem: Crash when resizing the GUI window vertically when there is a line  
that doesn't fit.  
Solution: Don't redraw while the screen data is invalid.  
Files: src/screen.c

## Patch 7.0.038

Problem: When calling complete() from an Insert mode expression mapping text could be inserted in an improper way.

Solution: Make undo\_allowed() global and use it in complete().

Files: src/undo.c, src/proto/undo.pro, src/eval.c

## Patch 7.0.039

Problem: Calling inputdialog() with a third argument in the console doesn't work.

Solution: Make a separate function for input() and inputdialog(). (Yegappan Lakshmanan)

Files: src/eval.c

## Patch 7.0.040

Problem: When 'cmdheight' is larger than 1 using inputlist() or selecting a spell suggestion with the mouse gets the wrong entry.

Solution: Start listing the first alternative on the last line of the screen.

Files: src/eval.c, src/spell.c

## Patch 7.0.041

Problem: cursor([1, 1]) doesn't work. (Peter Hodge)

Solution: Allow leaving out the third item of the list and use zero for the virtual column offset.

Files: src/eval.c

## Patch 7.0.042

Problem: When pasting a block of text in Insert mode Vim hangs or crashes. (Noam Halevy)

Solution: Avoid that the cursor is positioned past the NUL of a line.

Files: src/ops.c

## Patch 7.0.043

Problem: Using "%!" at the start of 'statusline' doesn't work.

Solution: Recognize the special item when the option is being set.

Files: src/option.c

## Patch 7.0.044

Problem: Perl: setting a buffer line in another buffer may result in changing the current buffer.

Solution: Properly change to the buffer to be changed.

Files: src/if\_perl.xs

## Patch 7.0.045 (extra)

Problem: Win32: Warnings when compiling OLE version with MSVC 2005.

Solution: Move including vim.h to before windows.h. (Ilya Bobir)

Files: src/if\_ole.cpp

## Patch 7.0.046

Problem: The matchparen plugin ignores parens in strings, but not in single quotes, often marked with "character".

Solution: Also ignore parens in syntax items matching "character".

Files: runtime/plugin/matchparen.vim

## Patch 7.0.047

Problem: When running configure the exit status is wrong.

Solution: Handle the exit status properly. (Matthew Woehlke)

Files: configure, src/configure

## Patch 7.0.048

Problem: Writing a compressed file fails when there are parens in the name. (Wang Jian)

Solution: Put quotes around the temp file name.  
Files: runtime/autoload/gzip.vim

Patch 7.0.049

Problem: Some TCL scripts are not recognized. (Steven Atkinson)  
Solution: Check for "exec wish" in the file.  
Files: runtime/scripts.vim

Patch 7.0.050

Problem: After using the netbeans interface close command a stale pointer may be used.  
Solution: Clear the pointer to the closed buffer. (Xavier de Gaye)  
Files: src/netbeans.c

Patch 7.0.051 (after 7.0.44)

Problem: The Perl interface doesn't compile or doesn't work properly.  
Solution: Remove the spaces before #ifdef and avoid an empty line above it.  
Files: src/if\_perl.xs

Patch 7.0.052

Problem: The user may not be aware that the Vim server allows others more functionality than desired.  
Solution: When running Vim as root don't become a Vim server without an explicit --servername argument.  
Files: src/main.c

Patch 7.0.053

Problem: Shortening a directory name may fail when there are multi-byte characters.  
Solution: Copy the correct bytes. (Titov Anatoly)  
Files: src/misc1.c

Patch 7.0.054

Problem: Mac: Using a menu name that only has a mnemonic or accelerator causes a crash. (Elliot Shank)  
Solution: Check for an empty menu name. Also delete empty submenus that were created before detecting the error.  
Files: src/menu.c

Patch 7.0.055

Problem: ":startinsert" in a CmdwinEnter autocommand doesn't take immediate effect. (Bradley White)  
Solution: Put a NOP key in the typeahead buffer. Also avoid that using CTRL-C to go back to the command line moves the cursor left.  
Files: src/edit.c, src/ex\_getln.c

Patch 7.0.056

Problem: "#!something" gives an error message.  
Solution: Ignore this line, so that it can be used in an executable Vim script.  
Files: src/ex\_docmd.c

Patch 7.0.057 (extra, after 7.0.45)

Problem: Win32: Compilation problem with Borland C 5.5.  
Solution: Include vim.h as before. (Mark S. Williams)  
Files: src/if\_ole.cpp

Patch 7.0.058

Problem: The gbk and gb18030 encodings are not recognized.  
Solution: Add aliases to cp936. (Edward L. Fox)  
Files: src/mbyte.c

## Patch 7.0.059

Problem: The Perl interface doesn't compile with ActiveState Perl 5.8.8.  
Solution: Remove the `__attribute__()` items. (Liu Yubao)  
Files: `src/if_perl.xs`

## Patch 7.0.060 (after 7.0.51)

Problem: Code for temporarily switching to another buffer is duplicated in quite a few places.  
Solution: Use `aucmd_prepbuff()` and `aucmd_restbuf()` also when `FEAT_AUTOCMD` is not defined.  
Files: `src/buffer.c`, `src/eval.c`, `src/fileio.c`, `src/if_ruby.c`,  
`src/if_perl.xs`, `src/quickfix.c`, `src/structs.h`

## Patch 7.0.061

Problem: Insert mode completion for Vim commands may crash if there is nothing to complete.  
Solution: Instead of freeing the pattern make it empty, so that a "not found" error is given. (Yukihiro Nakadaira)  
Files: `src/edit.c`

## Patch 7.0.062

Problem: Mac: Crash when using the popup menu for spell correction. The popup menu appears twice when letting go of the right mouse button early.  
Solution: Don't show the popup menu on the release of the right mouse button. Also check that a menu pointer is actually valid.  
Files: `src/proto/menu.pro`, `src/menu.c`, `src/normal.c`, `src/term.c`

## Patch 7.0.063

Problem: Tiny chance for a memory leak. (coverity)  
Solution: Free pointer when next memory allocation fails.  
Files: `src/eval.c`

## Patch 7.0.064

Problem: Using uninitialized variable. (Tony Mechelynck)  
Solution: When not used set "temp" to zero. Also avoid a warning for "files" in `ins_compl_dictionaries()`.  
Files: `src/edit.c`

## Patch 7.0.065 (extra)

Problem: Mac: left-right movement of the scrollwheel causes up-down scrolling.  
Solution: Ignore mouse wheel events that are not up-down. (Nicolas Weber)  
Files: `src/gui_mac.c`

## Patch 7.0.066

Problem: After the popup menu for Insert mode completion overlaps the tab pages line it is not completely removed.  
Solution: Redraw the tab pages line after removing the popup menu. (Ori Avtalion)  
Files: `src/popupmnu.c`

## Patch 7.0.067

Problem: Undo doesn't always work properly when using "scim" input method. Undo is split up when using preediting.  
Solution: Reset `xim_has_preediting` also when `preedit_start_col` is not `MAXCOL`. Don't split undo when `<Left>` is used while preediting. (Yukihiro Nakadaira)  
Files: `src/edit.c`, `src/mbyte.c`

## Patch 7.0.068

Problem: When 'ignorecase' is set and using Insert mode completion,

typing characters to change the list of matches, case is not ignored. (Hugo Ahlenius)  
Solution: Store the 'ignorecase' flag with the matches where needed.  
Files: src/edit.c, src/search.c, src/spell.c

#### Patch 7.0.069

Problem: Setting 'guitablabel' to %!expand(\%) causes Vim to free an invalid pointer. (Kim Schulz)  
Solution: Don't try freeing a constant string pointer.  
Files: src/buffer.c

#### Patch 7.0.070

Problem: Compiler warnings for shadowed variables and uninitialized variables.  
Solution: Rename variables such as "index", "msg" and "dup". Initialize variables.  
Files: src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/gui\_beval.c, src/gui\_gtk.c, src/gui\_gtk\_x11.c, src/hardcopy.c, src/if\_cscope.c, src/main.c, src/mbyte.c, src/memline.c, src/netbeans.c, src/normal.c, src/option.c, src/os\_unix.c, src/quickfix.c, src/regexp.c, src/screen.c, src/search.c, src/spell.c, src/ui.c, src/undo.c, src/window.c, src/version.c

#### Patch 7.0.071

Problem: Using an empty search pattern may cause a crash.  
Solution: Avoid using a NULL pointer.  
Files: src/search.c

#### Patch 7.0.072

Problem: When starting the GUI fails there is no way to adjust settings or do something else.  
Solution: Add the GUIFailed autocommand event.  
Files: src/fileio.c, src/gui.c, src/vim.h

#### Patch 7.0.073

Problem: Insert mode completion: Typing <CR> sometimes selects the original text instead of keeping what was typed. (Justin Constantino)  
Solution: Don't let <CR> select the original text if there is no popup menu.  
Files: src/edit.c

#### Patch 7.0.074 (extra)

Problem: Win32: tooltips were not converted from 'encoding' to Unicode.  
Solution: Set the tooltip to use Unicode and do the conversion. Also cleanup the code for the tab pages tooltips. (Yukihiro Nakadaira)  
Files: src/gui\_w32.c, src/gui\_w48.c

#### Patch 7.0.075

Problem: winsaveview() did not store the actual value of the desired cursor column. This could move the cursor in the matchparen plugin.  
Solution: Call update\_curswant() before using the value w\_curswant.  
Files: src/eval.c

#### Patch 7.0.076 (after 7.0.010)

Problem: Automatic downloading of spell files only works for ftp.  
Solution: Don't add login and password for non-ftp URLs. (Alexander Patrakov)  
Files: runtime/autoload/spellfile.vim

#### Patch 7.0.077

Problem: ":unlet v:this\_session" causes a crash. (Marius Roets)  
Solution: When trying to unlet a fixed variable give an error message.  
Files: src/eval.c



## Patch 7.0.078

Problem: There are two error messages E46.  
Solution: Change the number for the sandbox message to E794.  
Files: src/globals.h

## Patch 7.0.079

Problem: Russian tutor doesn't work when 'encoding' is "utf-8".  
Solution: Use tutor.ru.utf-8 as the master, and generate the other encodings from it. Select the right tutor depending on 'encoding'. (Alexey Froloff)  
Files: runtime/tutor/Makefile, runtime/tutor/tutor.vim,  
runtime/tutor/tutor.ru.utf-8

## Patch 7.0.080

Problem: Generating auto/pathdef.c fails for CFLAGS with a backslash.  
Solution: Double backslashes in the string. (Alexey Froloff)  
Files: src/Makefile

## Patch 7.0.081

Problem: Command line completion doesn't work for a shell command with an absolute path.  
Solution: Don't use \$PATH when there is an absolute path.  
Files: src/ex\_getln.c

## Patch 7.0.082

Problem: Calling a function that waits for input may cause List and Dictionary arguments to be freed by the garbage collector.  
Solution: Keep a list of all arguments to internal functions.  
Files: src/eval.c

## Patch 7.0.083

Problem: Clicking with the mouse on an item for inputlist() doesn't work when 'compatible' is set and/or when 'cmdheight' is more than one. (Christian J. Robinson)  
Solution: Also decrement "lines\_left" when 'more' isn't set. Set "cmdline\_row" to zero to get all mouse events.  
Files: src/message.c, src/misc1.c

## Patch 7.0.084

Problem: The garbage collector may do its work while some Lists or Dictionaries are used internally, e.g., by ":echo" that runs into the more-prompt or ":echo [garbagecollect()]".  
Solution: Only do garbage collection when waiting for a character at the toplevel. Let garbagecollect() set a flag that is handled at the toplevel before waiting for a character.  
Files: src/eval.c, src/getchar.c, src/globals.h, src/main.c

## Patch 7.0.085

Problem: When doing "make test" the viminfo file is modified.  
Solution: Use another viminfo file after setting 'compatible'.  
Files: src/testdir/test56.in

## Patch 7.0.086

Problem: getqflist() returns entries for pattern and text with the number zero. Passing these to setqflist() results in the string "0".  
Solution: Use an empty string instead of the number zero.  
Files: src/quickfix.c

## Patch 7.0.087

Problem: After ":file fname" and ":saveas fname" the 'autochdir' option does not take effect. (Yakov Lerner)

Solution: Commands for handling 'autochdir' are repeated many times. Add the DO\_AUTOCHDIR macro and do\_autochdir(). Use it for ":file fname" and ":saveas fname".  
Files: src/proto/buffer.pro, src/buffer.c, src/ex\_cmds.c, src/macros.h, src/netbeans.c, src/option.c, src/window.c

#### Patch 7.0.088

Problem: When compiled with Perl the generated prototypes have "extern" unnecessarily added.  
Solution: Remove the "-pipe" argument from PERL\_CFLAGS.  
Files: src/auto/configure, src/configure.in

#### Patch 7.0.089

Problem: "ga" does not work properly for a non-Unicode multi-byte encoding.  
Solution: Only check for composing chars for utf-8. (Taro Muraoka)  
Files: src/ex\_cmds.c

#### Patch 7.0.090

Problem: Cancelling the conform() dialog on the console with Esc requires typing it twice. (Benji Fisher)  
Solution: When the start of an escape sequence is found use 'timeoutlen' or 'ttimeoutlen'.  
Files: src/misc1.c

#### Patch 7.0.091

Problem: Using winrestview() while 'showcmd' is set causes the cursor to be displayed in the wrong position. (Yakov Lerner)  
Solution: Set the window topline properly.  
Files: src/eval.c

#### Patch 7.0.092 (after 7.0.082 and 7.0.084)

Problem: The list of internal function arguments is obsolete now that garbage collection is only done at the toplevel.  
Solution: Remove the list of all arguments to internal functions.  
Files: src/eval.c

#### Patch 7.0.093

Problem: The matchparen plugin can't handle a 'matchpairs' value where a colon is matched.  
Solution: Change the split() that is used to change 'matchpairs' into a List.  
Files: runtime/plugin/matchparen.vim

#### Patch 7.0.094

Problem: When a hidden buffer is made the current buffer and another file edited later, the file message will still be given. Using ":silent" also doesn't prevent the file message. (Marvin Renich)  
Solution: Reset the need\_fileinfo flag when reading a file. Don't set need\_fileinfo when msg\_silent is set.  
Files: src/buffer.c, src/fileio.c

#### Patch 7.0.095

Problem: The Greek tutor is not available in utf-8. "el" is used for the language, only "gr" for the country is recognized.  
Solution: Add the utf-8 Greek tutor. Use it for conversion to iso-8859-7 and cp737. (Lefteris Dimitroulakis)  
Files: runtime/tutor/Makefile, runtime/tutor/tutor.gr.utf-8, runtime/tutor/tutor.vim

#### Patch 7.0.096

Problem: taglist() returns the filename relative to the tags file, while the directory of the tags file is unknown. (Hari Krishna Dara)

Solution: Expand the file name. (Yegappan Lakshmanan)  
Files: src/tag.c

#### Patch 7.0.097

Problem: ":tabclose N" that closes another tab page does not remove the tab pages line. Same problem when using the mouse.

Solution: Adjust the tab pages line when needed in tabpage\_close\_other().  
Files: src/ex\_docmd.c

#### Patch 7.0.098

Problem: Redirecting command output in a cmdline completion function doesn't work. (Hari Krishna Dara)

Solution: Enable redirection when redirection is started.  
Files: src/ex\_docmd.c, src/ex\_getln.c

#### Patch 7.0.099

Problem: GUI: When the popup menu is visible using the scrollbar messes up the display.

Solution: Disallow scrolling the current window. Redraw the popup menu after scrolling another window.  
Files: src/gui.c

#### Patch 7.0.100

Problem: "zug" may report the wrong filename. (Lawrence Kesteloot)

Solution: Call home\_replace() to fill NameBuff[].  
Files: src/spell.c

#### Patch 7.0.101

Problem: When the "~/.vim/spell" directory does not exist "zg" may create a wrong directory. "zw" doesn't work.

Solution: Use the directory of the file name instead of NameBuff. For "zw" not only remove a good word but also add the word with "!".  
Files: src/spell.c

#### Patch 7.0.102

Problem: Redrawing cmdline is not correct when using SCIM.

Solution: Don't call im\_get\_status(). (Yukihiro Nakadaira)  
Files: src/ex\_getln.c

#### Patch 7.0.103 (after 7.0.101)

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)

Solution: Init variable.  
Files: src/spell.c

#### Patch 7.0.104

Problem: The CursorHoldI event only triggers once in Insert mode. It also triggers after CTRL-V and other two-key commands.

Solution: Set "did\_cursorhold" before getting a second key. Reset "did\_cursorhold" after handling a command.  
Files: src/edit.c, src/fileio.c

#### Patch 7.0.105

Problem: When using incremental search the statusline ruler isn't updated. (Christoph Koegl)

Solution: Update the statusline when it contains the ruler.  
Files: src/ex\_getln.c

#### Patch 7.0.106

Problem: The spell popup menu uses ":amenu", triggering mappings. Other PopuMenu autocmds are removed. (John Little)

Solution: Use ":anoremenu" and use an autocmd group.  
Files: runtime/menu.vim

## Patch 7.0.107

Problem: Incremental search doesn't redraw the text tabline. (Ilya Bobir)  
Also happens in other situations with one window in a tab page.  
Solution: Redraw the tabline after clearing the screen.  
Files: src/screen.c

## Patch 7.0.108 (extra)

Problem: Amiga: Compilation problem.  
Solution: Have mch\_mkdir() return a failure flag. (Willy Catteau)  
Files: src/os\_amiga.c, src/proto/os\_amiga.pro

## Patch 7.0.109

Problem: Lisp indenting is confused by escaped quotes in strings. (Dorai Sitaram)  
Solution: Check for backslash inside strings. (Sergey Khorev)  
Files: src/misc1.c

## Patch 7.0.110

Problem: Amiga: Compilation problems when not using libnix.  
Solution: Change a few #ifdefs. (Willy Catteau)  
Files: src/memfile.c

## Patch 7.0.111

Problem: The gzip plugin can't handle filenames with single quotes.  
Solution: Add and use the shellescape() function. (partly by Alexey Froloff)  
Files: runtime/autoload/gzip.vim, runtime/doc/eval.txt, src/eval.c, src/mbyte.c, src/misc2.c, src/proto/misc2.pro

## Patch 7.0.112

Problem: Python interface does not work with Python 2.5.  
Solution: Change PyMem\_DEL() to Py\_DECREF(). (Sumner Hayes)  
Files: src/if\_python.c

## Patch 7.0.113

Problem: Using CTRL-L in Insert completion when there is no current match may cause a crash. (Yukihiro Nakadaira)  
Solution: Check for compl\_leader to be NULL  
Files: src/edit.c

## Patch 7.0.114

Problem: When aborting an insert with CTRL-C an extra undo point is created in the GUI. (Yukihiro Nakadaira)  
Solution: Call gotchars() only when advancing.  
Files: src/getchar.c

## Patch 7.0.115

Problem: When 'ignorecase' is set, Insert mode completion only adds "foo" and not "Foo" when both are found.  
A found match isn't displayed right away when 'completeopt' does not have "menu" or "menuone".  
Solution: Do not ignore case when checking if a completion match already exists. call ins\_compl\_check\_keys() also when not using a popup menu. (Yukihiro Nakadaira)  
Files: src/edit.c

## Patch 7.0.116

Problem: 64 bit Windows version reports "32 bit" in the ":version" output. (M. Veerman)  
Solution: Change the text for Win64.  
Files: src/version.c

## Patch 7.0.117

Problem: Using "extend" on a syntax item inside a region with "keepend", an intermediate item may be truncated.  
When applying the "keepend" and there is an offset to the end pattern the highlighting of a contained item isn't adjusted.

Solution: Use the seen\_keepend flag to remember when to apply the "keepend" flag. Adjust the keepend highlighting properly. (Ilya Bobir)

Files: src/syntax.c

## Patch 7.0.118

Problem: printf() does not do zero padding for strings.

Solution: Do allow zero padding for strings.

Files: src/message.c

## Patch 7.0.119

Problem: When going back from Insert to Normal mode the CursorHold event doesn't trigger. (Yakov Lerner)

Solution: Reset "did\_cursorhold" when leaving Insert mode.

Files: src/edit.c

## Patch 7.0.120

Problem: Crash when using CTRL-R = at the command line and entering "getreg('=')". (James Vega)

Solution: Avoid recursiveness of evaluating the = register.

Files: src/ops.c

## Patch 7.0.121

Problem: GUI: Dragging the last status line doesn't work when there is a text tabline. (Markus Wolf)

Solution: Take the text tabline into account when deciding to start modeless selection.

Files: src/gui.c

## Patch 7.0.122

Problem: GUI: When clearing after a bold, double-wide character half a character may be drawn.

Solution: Check for double-wide character and redraw it. (Yukihiro Nakadaira)

Files: src/screen.c

## Patch 7.0.123

Problem: On SCO Openserver configure selects the wrong terminal library.

Solution: Put terminfo before the other libraries. (Roger Cornelius)

Also fix a small problem compiling on Mac without Darwin.

Files: src/configure.in, src/auto/configure

## Patch 7.0.124

Problem: getwinvar() obtains a dictionary with window-local variables, but it's always for the current window.

Solution: Get the variables of the specified window. (Geoff Reedy)

Files: src/eval.c

## Patch 7.0.125

Problem: When "autoselect" is in the 'clipboard' option then the '<' and '>' marks are set while Visual mode is still active.

Solution: Don't set the '<' and '>' marks when yanking the selected area for the clipboard.

Files: src/normal.c

## Patch 7.0.126

Problem: When 'formatexpr' uses setline() and later internal formatting is used undo information is not correct. (Jiri Cerny, Benji Fisher)

Solution: Set ins\_need\_undo after using 'formatexpr'.

Files: src/edit.c

Patch 7.0.127

Problem: Crash when swap files has invalid timestamp.

Solution: Check return value of ctime() for being NULL.

Files: src/memline.c

Patch 7.0.128

Problem: GUI: when closing gvim is cancelled because there is a changed buffer the screen isn't updated to show the changed buffer in the current window. (Krzysztof Kacprzak)

Solution: Redraw when closing gvim is cancelled.

Files: src/gui.c

Patch 7.0.129

Problem: GTK GUI: the GTK file dialog can't handle a relative path.

Solution: Make the initial directory a full path before passing it to GTK. (James Vega) Also postpone adding the default file name until after setting the directory.

Files: src/gui\_gtk.c

Patch 7.0.130 (extra)

Problem: Win32: Trying to edit or write devices may cause Vim to get stuck.

Solution: Add the 'opendevic' option, default off. Disallow reading/writing from/to devices when it's off. Also detect more devices by the full name starting with "\\.\\".

Files: runtime/doc/options.txt, src/fileio.c, src/option.c, src/option.h, src/os\_win32.c

Patch 7.0.131

Problem: Win32: "vim -r" does not list all the swap files.

Solution: Also check for swap files starting with a dot.

Files: src/memline.c

Patch 7.0.132 (after 7.0.130)

Problem: Win32: Crash when Vim reads from stdin.

Solution: Only use mch\_nodetype() when there is a file name.

Files: src/fileio.c

Patch 7.0.133

Problem: When searching included files messages are added to the history.

Solution: Set msg\_hist\_off for messages about scanning included files.

Set msg\_silent to avoid message about wrapping around.

Files: src/edit.c, src/globals.h, src/message.c, src/search.c

Patch 7.0.134

Problem: Crash when comparing a recursively looped List or Dictionary.

Solution: Limit recursiveness for comparing to 1000.

Files: src/eval.c

Patch 7.0.135

Problem: Crash when garbage collecting list or dict with loop.

Solution: Don't use DEL\_REFCOUNT but don't recurse into Lists and Dictionaries when freeing them in the garbage collector. Also add allocated Dictionaries to the list of Dictionaries to avoid leaking memory.

Files: src/eval.c, src/proto/eval.pro, src/tag.c

Patch 7.0.136

Problem: Using "0" while matching parens are highlighted may not remove the highlighting. (Ilya Bobir)

Solution: Also trigger CursorMoved when a line is inserted under the cursor.

Files: src/misc1.c

Patch 7.0.137

Problem: Configure check for big features is wrong.

Solution: Change "==" to "==". (Martti Kuparinen)

Files: src/auto/configure, src/configure.in

Patch 7.0.138 (extra)

Problem: Mac: modifiers don't work with function keys.

Solution: Use GetEventParameter() to obtain modifiers. (Nicolas Weber)

Files: src/gui\_mac.c

Patch 7.0.139

Problem: Using CTRL-PageUp or CTRL-PageDown in Insert mode to go to another tab page does not prepare for undo properly. (Stefano Zacchioli)

Solution: Call start\_arrow() before switching tab page.

Files: src/edit.c

Patch 7.0.140 (after 7.0.134)

Problem: Comparing recursively looped List or Dictionary doesn't work well.

Solution: Detect comparing a List or Dictionary with itself.

Files: src/eval.c

Patch 7.0.141

Problem: When pasting a while line on the command line an extra CR is added literally.

Solution: Don't add the trailing CR when pasting with the mouse.

Files: src/ex\_getln.c, src/proto/ops.pro, src/ops.c

Patch 7.0.142

Problem: Using the middle mouse button in Select mode to paste text results in an extra "y". (Kriton Kyrimis)

Solution: Let the middle mouse button replace the selected text with the contents of the clipboard.

Files: src/normal.c

Patch 7.0.143

Problem: Setting 'scroll' to its default value was not handled correctly.

Solution: Compare the right field to PV\_SCROLL.

Files: src/option.c

Patch 7.0.144

Problem: May compare two unrelated pointers when matching a pattern against a string. (Dominique Pelle)

Solution: Avoid calling reg\_getline() when REG\_MULTI is false.

Files: src/regexp.c

Patch 7.0.145 (after 7.0.142)

Problem: Compiler warning.

Solution: Add type cast.

Files: src/normal.c

Patch 7.0.146

Problem: When 'switchbuf' is set to "usetab" and the current tab has only a quickfix window, jumping to an error always opens a new window. Also, when the buffer is open in another tab page it's not found.

Solution: Check for the "split" value of 'switchbuf' properly. Search in other tab pages for the desired buffer. (Yegappan Lakshmanan)

Files: src/buffer.c, src/quickfix.c

Patch 7.0.147

Problem: When creating a session file and there are several tab pages and

some windows have a local directory a short file name may be used when it's not valid. (Marius Roets)  
A session with multiple tab pages may result in "No Name" buffers. (Bill McCarthy)  
Solution: Don't enter tab pages when going through the list, only use a pointer to the first window in each tab page.  
Use "tabedit" instead of "tabnew | edit" when possible.  
Files: src/ex\_docmd.c

#### Patch 7.0.148

Problem: When doing "call a.xyz()" and "xyz" does not exist in dictionary "a" there is no error message. (Yegappan Lakshmanan)  
Solution: Add the error message.  
Files: src/eval.c

#### Patch 7.0.149

Problem: When resizing a window that shows "~" lines the text sometimes jumps down.  
Solution: Remove code that uses "~" lines in some situations. Fix the computation of the screen line of the cursor. Also set w\_skipcol to handle very long lines.  
Files: src/misc1.c, src/window.c

#### Patch 7.0.150

Problem: When resizing the Vim window scrollbinding doesn't work. (Yakov Lerner)  
Solution: Do scrollbinding in set\_shellsize().  
Files: src/term.c

#### Patch 7.0.151

Problem: Buttons in file dialog are not according to Gnome guidelines.  
Solution: Swap Cancel and Open buttons. (Stefano Zacchiroli)  
Files: src/gui\_gtk.c

#### Patch 7.0.152

Problem: Crash when using lesstif 2.  
Solution: Fill in the extension field. (Ben Hutchings)  
Files: src/gui\_xmew.c

#### Patch 7.0.153

Problem: When using cscope and opening the temp file fails Vim crashes. (Kaya Bekiroglu)  
Solution: Check for NULL pointer returned from mch\_open().  
Files: src/if\_cscope.c

#### Patch 7.0.154

Problem: When 'foldnestmax' is negative Vim can hang. (James Vega)  
Solution: Avoid the fold level becoming negative.  
Files: src/fold.c, src/syntax.c

#### Patch 7.0.155

Problem: When getchar() returns a mouse button click there is no way to get the mouse coordinates.  
Solution: Add v:mouse\_win, v:mouse\_lnum and v:mouse\_col.  
Files: runtime/doc/eval.txt, src/eval.c, src/vim.h

#### Patch 7.0.156 (extra)

Problem: Vim doesn't compile for Amiga OS 4.  
Solution: Various changes for Amiga OS4. (Peter Bengtsson)  
Files: src/feature.h, src/mbyte.c, src/memfile.c, src/memline.c, src/os\_amiga.c, src/os\_amiga.h, src/pty.c



## Patch 7.0.157

Problem: When a function is used recursively the profiling information is invalid. (Mikolaj Machowski)  
Solution: Put the start time on the stack instead of in the function.  
Files: src/eval.c

## Patch 7.0.158

Problem: In a C file with ":set foldmethod=syntax", typing {<CR> on the last line results in the cursor being in a closed fold. (Gautam Iyer)  
Solution: Open fold after inserting a new line.  
Files: src/edit.c

## Patch 7.0.159

Problem: When there is an I/O error in the swap file the cause of the error cannot be seen.  
Solution: Use PERROR() instead of MSG() where possible.  
Files: src/memfile.c

## Patch 7.0.160

Problem: ":@a" echoes the command, Vi doesn't do that.  
Solution: Set the silent flag in the typeahead buffer to avoid echoing the command.  
Files: src/ex\_docmd.c, src/normal.c, src/ops.c, src/proto/ops.pro

## Patch 7.0.161

Problem: Win32: Tab pages line popup menu isn't using the right encoding. (Yongwei Wu)  
Solution: Convert the text when necessary. Also fixes the Find/Replace dialog title. (Yegappan Lakshmanan)  
Files: src/gui\_w48.c

## Patch 7.0.162

Problem: "vim -o a b" when file "a" triggers the ATTENTION dialog, selecting "Quit" exits Vim instead of editing "b" only. When file "b" triggers the ATTENTION dialog selecting "Quit" or "Abort" results in editing file "a" in that window.  
Solution: When selecting "Abort" exit Vim. When selecting "Quit" close the window. Also avoid hit-enter prompt when selecting Abort.  
Files: src/buffer.c, src/main.c

## Patch 7.0.163

Problem: Can't retrieve the position of a sign after it was set.  
Solution: Add the netbeans interface getAnno command. (Xavier de Gaye)  
Files: runtime/doc/netbeans.txt, src/netbeans.c

## Patch 7.0.164

Problem: ":redir @+" doesn't work.  
Solution: Accept "@+" just like "@\*". (Yegappan Lakshmanan)  
Files: src/ex\_docmd.c

## Patch 7.0.165

Problem: Using CTRL-L at the search prompt adds a "/" and other characters without escaping, causing the pattern not to match.  
Solution: Escape special characters with a backslash.  
Files: src/ex\_getln.c

## Patch 7.0.166

Problem: Crash in cscope code when connection could not be opened. (Kaya Bekiroglu)  
Solution: Check for the file descriptor to be NULL.  
Files: src/if\_cscope.c

## Patch 7.0.167

Problem: `":function"` redefining a dict function doesn't work properly.  
(Richard Emberson)

Solution: Allow a function name to be a number when it's a function reference.

Files: `src/eval.c`

## Patch 7.0.168

Problem: Using uninitialized memory and memory leak. (Dominique Pelle)

Solution: Use `alloc_clear()` instead of `alloc()` for `w_lines`. Free `b_ml.ml_stack` after recovery.

Files: `src/memline.c`, `src/window.c`

## Patch 7.0.169

Problem: With a Visual block selection, with the cursor in the left upper corner, pressing "I" doesn't remove the highlighting. (Guopeng Wen)

Solution: When checking if redrawing is needed also check if Visual selection is still active.

Files: `src/screen.c`

## Patch 7.0.170 (extra)

Problem: Win32: Using `"gvim --remote-tab foo"` when gvim is minimized while it previously was maximized, un-maximizing doesn't work properly. And the labels are not displayed properly when 'encoding' is utf-8.

Solution: When minimized check for `SW_SHOWMINIMIZED`. When updating the tab pages line use `TCM_SETITEMW` instead of `TCM_INSERTITEMW`. (Liu Yubao)

Files: `src/gui_w48.c`

## Patch 7.0.171 (extra)

Problem: VMS: A file name with multiple paths is written in the wrong file.

Solution: Get the actually used file name. (Zoltan Arpadffy)  
Also add info to the `:version` command about compilation.

Files: `src/Make_vms.mms`, `src/buffer.c`, `src/os_unix.c`, `src/version.c`

## Patch 7.0.172

Problem: Crash when recovering and quitting at the "press-enter" prompt.

Solution: Check for `"msg_list"` to be NULL. (Liu Yubao)

Files: `src/ex_eval.c`

## Patch 7.0.173

Problem: `":call f().TT()"` doesn't work. (Richard Emberson)

Solution: When a function returns a Dictionary or another composite continue evaluating what follows.

Files: `src/eval.c`

## Patch 7.0.174

Problem: `":mksession"` doesn't restore window layout correctly in tab pages other than the current one. (Zhibin He)

Solution: Use the correct topframe for producing the window layout commands.

Files: `src/ex_docmd.c`

## Patch 7.0.175

Problem: The result of `tr()` is missing the terminating NUL. (Ingo Karkat)

Solution: Add the NUL.

Files: `src/eval.c`

## Patch 7.0.176

Problem: `":emenu"` isn't executed directly, causing the encryption key

prompt to fail. (Life Jazzer)  
Solution: Fix wrong #ifdef.  
Files: src/menu.c

#### Patch 7.0.177

Problem: When the press-enter prompt gets a character from a non-remappable mapping, it's put back in the typeahead buffer as remappable, which may cause an endless loop.  
Solution: Restore the non-remappable flag and the silent flag when putting a char back in the typeahead buffer.  
Files: src/getchar.c, src/message.c, src/normal.c

#### Patch 7.0.178

Problem: When 'enc' is "utf-8" and 'ignorecase' is set the result of ":echo ("\xe4" == "\xe4")" varies.  
Solution: In mb\_strnicmp() avoid looking past NUL bytes.  
Files: src/mbyte.c

#### Patch 7.0.179

Problem: Using ":recover" or "vim -r" without a swapfile crashes Vim.  
Solution: Check for "buf" to be unequal NULL. (Yukihiro Nakadaira)  
Files: src/memline.c

#### Patch 7.0.180 (extra, after 7.0.171)

Problem: VMS: build failed. Problem with swapfiles.  
Solution: Add "compiled\_arch". Always expand path and pass it to buf\_modname(). (Zoltan Arpadffy)  
Files: src/globals.h, src/memline.c, src/os\_unix.c, runtime/menu.vim

#### Patch 7.0.181

Problem: When reloading a file that starts with an empty line, the reloaded buffer has an extra empty line at the end. (Motty Lentzitzky)  
Solution: Delete all lines, don't use bufempty().  
Files: src/fileio.c

#### Patch 7.0.182

Problem: When using a mix of undo and "g-" it may no longer be possible to go to every point in the undo tree. (Andy Wokula)  
Solution: Correctly update pointers in the undo tree.  
Files: src/undo.c

#### Patch 7.0.183

Problem: Crash in ":let" when redirecting to a variable that's being displayed. (Thomas Link)  
Solution: When redirecting to a variable only do the assignment when stopping redirection to avoid that setting the variable causes a freed string to be accessed.  
Files: src/eval.c

#### Patch 7.0.184

Problem: When the cscope program is called "mlcscope" the Cscope interface doesn't work.  
Solution: Accept "\S\*cscope:" instead of "cscope:". (Frodak D. Baksik)  
Files: src/if\_cscope.c

#### Patch 7.0.185

Problem: Multi-byte characters in a message are displayed with attributes from what comes before it.  
Solution: Don't use the attributes for a multi-byte character. Do use attributes for special characters. (Yukihiro Nakadaira)  
Files: src/message.c

## Patch 7.0.186

Problem: Get an `ml_get` error when 'encoding' is "utf-8" and searching for `"/\_s*/e"` in an empty buffer. (Andrew Maykov)  
Solution: Don't try getting the line just below the last line.  
Files: `src/search.c`

## Patch 7.0.187

Problem: Can't source a remote script properly.  
Solution: Add the `SourceCmd` event. (Charles Campbell)  
Files: `runtime/doc/autocmd.txt`, `src/ex_cmds2.c`, `src/fileio.c`, `src/vim.h`

## Patch 7.0.188 (after 7.0.186)

Problem: Warning for wrong pointer type.  
Solution: Add a type cast.  
Files: `src/search.c`

## Patch 7.0.189

Problem: Translated message about finding matches is truncated. (Yukihiro Nakadaira)  
Solution: Enlarge the buffer. Also use `vim_snprintf()`.  
Files: `src/edit.c`

## Patch 7.0.190

Problem: "syntax spell default" results in an error message.  
Solution: Change 4 to 7 for `STRNICMP()`. (Raul Nunez de Arenas Coronado)  
Files: `src/syntax.c`

## Patch 7.0.191

Problem: The items used by `getqflist()` and `setqflist()` don't match.  
Solution: Support the "bufnum" item for `setqflist()`. (Yegappan Lakshmanan)  
Files: `runtime/doc/eval.txt`, `src/quickfix.c`

## Patch 7.0.192

Problem: When 'swapfile' is switched off in an empty file it is possible that not all blocks are loaded into memory, causing `ml_get` errors later.  
Solution: Rename "dont\_release" to "mf\_dont\_release" and also use it to avoid using the cached line and locked block.  
Files: `src/globals.h`, `src/memfile.c`, `src/memline.c`

## Patch 7.0.193

Problem: Using `--remote` or `--remote-tab` with an argument that matches 'wildignore' causes a crash.  
Solution: Check the argument count before using `ARGLIST[0]`.  
Files: `src/ex_cmds.c`

## Patch 7.0.194

Problem: Once an `ml_get` error is given redrawing part of the screen may cause it again, resulting in an endless loop.  
Solution: Don't give the error message for a recursive call.  
Files: `src/memline.c`

## Patch 7.0.195

Problem: When a buffer is modified and 'autowriteall' is set, `":quit"` results in an endless loop when there is a conversion error while writing. (Nikolai Weibull)  
Solution: Make `autowrite()` return FAIL if the buffer is still changed after writing it.  
Files: `/* put the cursor on the last char, for 'tw' formatting */`  
`src/ex_cmds2.c`

## Patch 7.0.196

Problem: When using ":vert ball" the computation of the mouse pointer position may be off by one column. (Stefan Karlsson)  
Solution: Recompute the frame width when moving the vertical separator from one window to another.  
Files: src/window.c

Patch 7.0.197 (extra)  
Problem: Win32: Compiling with EXITFREE doesn't work.  
Solution: Adjust a few #ifdefs. (Alexei Alexandrof)  
Files: src/misc2.c, src/os\_mswin.c

Patch 7.0.198 (extra)  
Problem: Win32: Compiler warnings. No need to generate gvim.exe.mnf.  
Solution: Add type casts. Use "\*" for processorArchitecture. (George Reilly)  
Files: src/Make\_mvc.mak, src/eval.c, src/gvim.exe.mnf, src/misc2.c

Patch 7.0.199  
Problem: When using multi-byte characters the combination of completion and formatting may result in a wrong cursor position.  
Solution: Don't decrement the cursor column, use dec\_cursor(). (Yukihiro Nakadaira) Also check for the column to be zero.  
Files: src/edit.c

Patch 7.0.200  
Problem: Memory leaks when out of memory.  
Solution: Free the memory.  
Files: src/edit.c, src/diff.c

Patch 7.0.201  
Problem: Message for ":diffput" about buffer not being in diff mode may be wrong.  
Solution: Check for buffer in diff mode but not modifiable.  
Files: src/diff.c

Patch 7.0.202  
Problem: Problems on Tandem systems while compiling and at runtime.  
Solution: Recognize root uid is 65535. Check select() return value for it not being supported. Avoid wrong function prototypes. Mention use of -lfloss. (Matthew Woehlke)  
Files: src/Makefile, src/ex\_cmds.c, src/fileio.c, src/main.c, src/osdef1.h.in, src/osdef2.h.in, src/os\_unix.c, src/pty.c, src/vim.h

Patch 7.0.203  
Problem: 0x80 characters in a register are not handled correctly for the "@" command.  
Solution: Escape CSI and 0x80 characters. (Yukihiro Nakadaira)  
Files: src/ops.c

Patch 7.0.204  
Problem: Cscope: Parsing matches for listing isn't done properly.  
Solution: Check for line number being found. (Yu Zhao)  
Files: src/if\_cscope.c

Patch 7.0.205 (after 7.0.203)  
Problem: Can't compile.  
Solution: Always include the vim\_strsave\_escape\_csi function.  
Files: src/getchar.c

Patch 7.0.206 (after 7.0.058)  
Problem: Some characters of the "gb18030" encoding are not handled properly.

Solution: Do not use "cp936" as an alias for "gb18030" encoding. Instead initialize 'encoding' to "cp936".  
Files: src/mbyte.c, src/option.c

#### Patch 7.0.207

Problem: After patch 2.0.203 CSI and K\_SPECIAL characters are escaped when recorded and then again when the register is executed.  
Solution: Remove escaping before putting the recorded characters in a register. (Yukihiro Nakadaira)  
Files: src/getchar.c, src/ops.c, src/proto/getchar.pro

#### Patch 7.0.208 (after 7.0.171 and 7.0.180)

Problem: VMS: changes to path handling cause more trouble than they solve.  
Solution: Revert changes.  
Files: src/buffer.c, src/memline.c, src/os\_unix.c

#### Patch 7.0.209

Problem: When replacing a line through Python the cursor may end up beyond the end of the line.  
Solution: Check the cursor column after replacing the line.  
Files: src/if\_python.c

#### Patch 7.0.210

Problem: ":cbuffer" and ":lbuffer" always fail when the buffer is modified. (Gary Johnson)  
Solution: Support adding a !. (Yegappan Lakshmanan)  
Files: runtime/doc/quickfix.txt, src/ex\_cmds.h

#### Patch 7.0.211

Problem: With ":set cindent noai bs=0" using CTRL-U in Insert mode will delete auto-indent. After ":set ai" it doesn't.  
Solution: Also check 'cindent' being set. (Ryan Lortie)  
Files: src/edit.c

#### Patch 7.0.212

Problem: The GUI can't be terminated with SIGTERM. (Mark Logan)  
Solution: Use the signal protection in the GUI as in the console, allow signals when waiting for 100 msec or longer.  
Files: src/ui.c

#### Patch 7.0.213

Problem: When 'spellfile' has two regions that use the same sound folding using "z=" will cause memory to be freed twice. (Mark Woodward)  
Solution: Clear the hashtable properly so that the items are only freed once.  
Files: src/spell.c

#### Patch 7.0.214

Problem: When using <f-args> in a user command it's not possible to have an argument end in '\ '.  
Solution: Change the handling of backslashes. (Yakov Lerner)  
Files: runtime/doc/map.txt, src/ex\_docmd.c

#### Patch 7.0.215 (extra)

Problem: Mac: Scrollbar size isn't set. Context menu has disabled useless Help entry. Call to MoreMasterPointers() is ignored.  
Solution: Call SetControlViewSize() in gui\_mch\_set\_scrollbar\_thumb(). Use kCMHelpItemRemoveHelp for ContextualMenuSelect(). Remove call to MoreMasterPointers(). (Nicolas Weber)  
Files: src/gui\_mac.c

#### Patch 7.0.216

Problem: ":tab wincmd ]" does not open a tab page. (Tony Mechelynck)

Solution: Copy the cmdmod.tab value to postponed\_split\_tab and use it.  
Files: src/globals.h, src/ex\_docmd.c, src/if\_cscope.c, src/window.c

#### Patch 7.0.217

Problem: This hangs when pressing "n": ":%s/\n/, \r/gc". (Ori Avtalion)  
Solution: Set "skip\_match" to advance to the next line.  
Files: src/ex\_cmds.c

#### Patch 7.0.218

Problem: "%B" in 'statusline' always shows zero in Insert mode. (DervishD)  
Solution: Remove the exception for Insert mode, check the column for being valid instead.  
Files: src/buffer.c

#### Patch 7.0.219

Problem: When using the 'editexisting.vim' script and a file is being edited in another tab page the window is split. The "+123" argument is not used.  
Solution: Make the tab page with the file the current tab page. Set v:swapcommand when starting up to the first "+123" or "-c" command line argument.  
Files: runtime/macros/editexisting.vim, src/main.c

#### Patch 7.0.220

Problem: Crash when using winnr('#') in a new tab page. (Andy Wokula)  
Solution: Check for not finding the window.  
Files: src/eval.c

#### Patch 7.0.221

Problem: finddir() uses 'path' by default, where "." means relative to the current file. But it works relative to the current directory. (Tye Zdrojewski)  
Solution: Add the current buffer name to find\_file\_in\_path\_option() for the relative file name.  
Files: runtime/doc/eval.txt, src/eval.c

#### Patch 7.0.222

Problem: Perl indenting using 'cindent' works almost right.  
Solution: Recognize '#' to start a comment. (Alex Manoussakis) Added '#' flag in 'cinoptions'.  
Files: runtime/doc/indent.txt, src/misc1.c

#### Patch 7.0.223

Problem: Unprintable characters in completion text mess up the popup menu. (Gombault Damien)  
Solution: Use strtrans() to make the text printable.  
Files: src/charset.c, src/popupmenu.c

#### Patch 7.0.224

Problem: When expanding "##" spaces are escaped twice. (Pavol Juhas)  
Solution: Don't escape the spaces that separate arguments.  
Files: src/eval.c, src/ex\_docmd.c, src/proto/ex\_docmd.pro

#### Patch 7.0.225

Problem: When using setline() in an InsertEnter autocommand and doing "A" the cursor ends up on the last byte in the line. (Yukihiro Nakadaira)  
Solution: Only adjust the column when using setline() for the cursor line. Move it back to the head byte if necessary.  
Files: src/eval.c, src/misc2.c

#### Patch 7.0.226

Problem: Display flickering when updating signs through the netbeans interface. (Xavier de Gaye)  
Solution: Remove the redraw\_later(CLEAR) call.  
Files: src/netbeans.c

Patch 7.0.227

Problem: Crash when closing a window in the GUI. (Charles Campbell)  
Solution: Don't call out\_flush() from win\_free().  
Files: src/window.c

Patch 7.0.228

Problem: Cygwin: problem with symlink to DOS style path.  
Solution: Invoke cygwin\_conv\_to\_posix\_path(). (Luca Masini)  
Files: src/os\_unix.c

Patch 7.0.229

Problem: When 'pastetoggle' starts with Esc then pressing Esc in Insert mode will not time out. (Jeffery Small)  
Solution: Use KL\_PART\_KEY instead of KL\_PART\_MAP, so that 'ttimeout' applies to the 'pastetoggle' key.  
Files: src/getchar.c

Patch 7.0.230

Problem: After using ":lcd" a script doesn't know how to restore the current directory.  
Solution: Add the haslocaldir() function. (Bob Hiestand)  
Files: runtime/doc/usr\_41.txt, runtime/doc/eval.txt, src/eval.c

Patch 7.0.231

Problem: When recovering from a swap file the page size is likely to be different from the minimum. The block used for the first page then has a buffer of the wrong size, causing a crash when it's reused later. (Zephaniah Hull)  
Solution: Reallocate the buffer when the page size changes. Also check that the page size is at least the minimum value.  
Files: src/memline.c

Patch 7.0.232 (extra)

Problem: Mac: doesn't support GUI tab page labels.  
Solution: Add GUI tab page labels. (Nicolas Weber)  
Files: src/feature.h, src/gui.c, src/gui.h, src/gui\_mac.c, src/proto/gui\_mac.pro

Patch 7.0.233 (extra)

Problem: Mac: code formatted badly.  
Solution: Fix code formatting  
Files: src/gui\_mac.c

Patch 7.0.234

Problem: It's possible to use feedkeys() from a modeline. That is a security issue, can be used for a trojan horse.  
Solution: Disallow using feedkeys() in the sandbox.  
Files: src/eval.c

Patch 7.0.235

Problem: It is possible to use writefile() in the sandbox.  
Solution: Add a few more checks for the sandbox.  
Files: src/eval.c

Patch 7.0.236

Problem: Linux 2.4 uses sysinfo() with a mem\_unit field, which is not backwards compatible.



Solution: Add an autoconf check for sysinfo.mem\_unit. Let mch\_total\_mem() return Kbyte to avoid overflow.  
Files: src/auto/configure, src/configure.in, src/config.h.in, src/option.c, src/os\_unix.c

#### Patch 7.0.237

Problem: For root it is recommended to not use 'modeline', but in not-compatible mode the default is on.  
Solution: Let 'modeline' default to off for root.  
Files: runtime/doc/options.txt, src/option.c

#### Patch 7.0.238

Problem: Crash when ":match" pattern runs into 'maxmempattern'. (Yakov Lerner)  
Solution: Don't free the regexp program of match\_hl.  
Files: src/screen.c

#### Patch 7.0.239

Problem: When using local directories and tab pages ":mksession" uses a short file name when it shouldn't. Window-local options from a modeline may be applied to the wrong window. (Teemu Likonen)  
Solution: Add the did\_lcd flag, use the full path when it's set. Don't use window-local options from the modeline when using the current window for another buffer in ":doautoall".  
Files: src/fileio.c, src/ex\_docmd.c

#### Patch 7.0.240

Problem: Crash when splitting a window in the GUI. (opposite of 7.0.227)  
Solution: Don't call out\_flush() from win\_alloc(). Also avoid this for win\_delete(). Also block autocommands while the window structure is invalid.  
Files: src/window.c

#### Patch 7.0.241

Problem: ":windo throw 'foo'" loops forever. (Andy Wokula)  
Solution: Detect that win\_goto() doesn't work.  
Files: src/ex\_cmds2.c

#### Patch 7.0.242 (extra)

Problem: Win32: Using "-register" in a Vim that does not support OLE causes a crash.  
Solution: Don't use EMSG() but mch\_errmsg(). Check p\_go for being NULL. (partly by Michael Wookey)  
Files: src/gui\_w32.c

#### Patch 7.0.243 (extra)

Problem: Win32: When GvimExt is built with MSVC 2005 or later, the "Edit with vim" context menu doesn't appear in the Windows Explorer.  
Solution: Embed the linker manifest file into the resources of GvimExt.dll. (Mathias Michaelis)  
Files: src/GvimExt/Makefile

#### Fixes after Vim 7.1a BETA:

The extra archive had CVS directories included below "farsi" and "runtime/icons". CVS was missing the farsi icon files.

Fix compiling with Gnome 2.18, undefine bind\_textdomain\_codeset. (Daniel Drake)

Mac: "make install" didn't copy rgb.txt.

When editing a compressed file while there are folds caused "ml\_get" errors and some lines could be missing. When decompressing failed option values were not restored.

#### Patch 7.1a.001

Problem: Crash when downloading a spell file. (Szabolcs Horvat)  
 Solution: Avoid that did\_set\_spelllang() is used recursively when a new window is opened for the download.  
 Also avoid wiping out the wrong buffer.  
 Files: runtime/autoload/spellfile.vim, src/buffer.c, src/ex\_cmds.c, src/spell.c

#### Patch 7.1a.002 (extra)

Problem: Compilation error with MingW.  
 Solution: Check for LPT00LTIPTTEXT to be defined.  
 Files: src/gui\_w32.c

#### Fixes after Vim 7.1b BETA:

Made the Mzscheme interface build both with old and new versions of Mzscheme, using an #ifdef. (Sergey Khorev)  
 Mzscheme interface didn't link, missing function. Changed order of libraries in the configure script.

Ruby interface didn't compile on Mac. Changed #ifdef. (Kevin Ballard)

#### Patch 7.1b.001 (extra)

Problem: Random text in a source file. No idea how it got there.  
 Solution: Delete the text.  
 Files: src/gui\_w32.c

#### Patch 7.1b.002

Problem: When 'maxmem' is large there can be an overflow in computations. (Thomas Wiegner)  
 Solution: Use the same mechanism as in mch\_total\_mem(): first reduce the multiplier as much as possible.  
 Files: src/memfile.c

=====

VERSION 7.2

\*version-7.2\* \*version7.2\*

This section is about improvements made between version 7.1 and 7.2.

This is mostly a bug-fix release. The main new feature is floating point support. |Float|

Changed

\*changed-7.2\*

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Changed the command line buffer name from "command-line" to "[Command Line]".

Removed optional ! for ":caddexpr", ":cgetexpr", ":cgetfile", ":laddexpr", ":lgetexpr" and ":lgetfile". They are not needed. (Yegappan Lakshmanan)

An offset for syntax matches worked on bytes instead of characters. That is inconsistent and can easily be done wrong. Use character offsets now. (Yukihiro Nakadaira)

The FileChangedShellPost event was also given when a file didn't change.  
(John Little)

When the current line is long (doesn't fit) the popup menu can't be seen.  
Display it below the screen line instead of below the text line.  
(Francois Ingelrest)

Switched to autoconf version 2.62.

Moved including fcntl.h to vim.h and removed it from all .c files.

Introduce macro STRMOVE(d, s), like STRCPY() for overlapping strings.  
Use it instead of mch\_memmove(p, p + x, STRLEN(p + x) + 1).

Removed the bulgarian.vim keymap file, two more standard ones replace it.  
(Boyko Bantchev)

Increased the maximum number of tag matches for command line completion from  
200 to 300.

Renamed help file sql.txt to ft\_sql.txt and ada.txt to ft\_ada.txt.

Added \*added-7.2\*  
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#### New syntax files:

- CUDA (Timothy B. Terriberry)
- Cdrdao config (Nikolai Weibull)
- Coco/R (Ashish Shukla)
- Denyhosts config (Nikolai Weibull)
- Dtrace script (Nicolas Weber)
- Git output, commit, config, rebase, send-email (Tim Pope)
- HASTE and HastePreProc (M. Tranchero)
- Haml (Tim Pope)
- Host conf (Nikolai Weibull)
- Linden script (Timo Frenay)
- MS messages (Kevin Locke)
- PDF (Tim Pope)
- ProMeLa (Maurizio Tranchero)
- Reva Foth (Ron Aaron)
- Sass (Tim Pope)
- Symbian meta-makefile, MMP (Ron Aaron)
- VOS CM macro (Andrew McGill)
- XBL (Doug Kearns)

#### New tutor files:

- Made UTF-8 versions of all the tutor files.
- Greek renamed from ".gr" to ".el" (Greek vs Greece).
- Esperanto (Dominique Pelle)
- Croatian (Paul B. Mahol)

#### New filetype plugins:

- Cdrdao config (Nikolai Weibull)
- Debian control files (Debian Vim maintainers)
- Denyhosts (Nikolai Weibull)
- Dos .ini file (Nikolai Weibull)
- Dtrace script (Nicolas Weber)
- FnameScript (Nikolai Weibull)
- Git, Git config, Git commit, Git rebase, Git send-email (Tim Pope)
- Haml (Tim Pope)
- Host conf (Nikolai Weibull)

Host access (Nikolai Weibull)  
Logtalk (Paulo Moura)  
MS messages (Kevin Locke)  
NSIS script (Nikolai Weibull)  
PDF (Tim Pope)  
Reva Forth (Ron Aaron)  
Sass (Tim Pope)

New indent files:

DTD (Nikolai Weibull)  
Dtrace script (Nicolas Weber)  
Erlang (Csaba Hoch)  
FrameScript (Nikolai Weibull)  
Git config (Tim Pope)  
Haml (Tim Pope)  
Logtalk (Paulo Moura)  
Sass (Tim Pope)  
Tiny Fugue (Christian J. Robinson)

New compiler plugins:

RSpec (Tim Pope)

New keymap files:

Croatian (Paul B. Mahol)  
Russian Dvorak (Serhiy Boiko)  
Ukrainian Dvorak (Serhiy Boiko)  
Removed plain Bulgarian, "bds" and phonetic are sufficient.

Other new runtime files:

Esperanto menu and message translations. (Dominique Pelle)  
Finnish menu and message translations. (Flammie Pirinen)  
Brazilian Portuguese message translations. (Eduardo Dobay)

Added floating point support. |Float|

Added argument to mode() to return a bit more detail about the current mode.  
(Ben Schmidt)

Added support for BSD console mouse: |sysmouse|. (Paul B. Mahol)

Added the "newtab" value for the 'switchbuf' option. (partly by Yegappan  
Lakshmanan)

Improved error messages for the netbeans interface. (Philippe Fremy)

Added support for using xterm mouse codes for screen. (Micah Cowan)

Added support for cross compiling:

Adjusted configure.in and added INSTALLcross.txt. (Marc Haisenko) Fixed  
mistakes in configure.in after that.

Don't use /usr/local/include and /usr/local/lib in configure. (Philip  
Prindeville)

For cross compiling the Cygwin version on Unix, change VIM.TLB to vim.tlb in  
src/vim.rc. (Tsuneo Nakagawa)

Added v:searchforward variable: What direction we're searching in. (Yakov  
Lerner)

Fixed

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\*fixed-7.2\*

## Patch 7.1.001

Problem: Still can't build with Gnome libraries.  
Solution: Fix typo in bind\_textdomain\_codeset. (Mike Kelly)  
Files: src/gui\_gtk.c, src/gui\_gtk\_x11.c

## Patch 7.1.002

Problem: Oracle Pro\*C/C++ files are not detected.  
Solution: Add the missing star. (Micah J. Cowan)  
Files: runtime/filetype.vim

## Patch 7.1.003 (extra)

Problem: The "Tear off this menu" message appears in the message history when using a menu. (Yongwei Wu)  
Solution: Disable message history when displaying the menu tip.  
Files: src/gui\_w32.c

## Patch 7.1.004

Problem: Crash when doing ":next directory". (Raphael Finkel)  
Solution: Do not use "buf", it may be invalid after autocommands.  
Files: src/ex\_cmds.c

## Patch 7.1.005

Problem: "cit" used on <foo></foo> deletes <foo>. Should not delete anything and start insertion, like "ci'" does on '". (Michal Bozon)  
Solution: Handle an empty object specifically. Made it work consistent for various text objects.  
Files: src/search.c

## Patch 7.1.006

Problem: Resetting 'modified' in a StdinReadPost autocommand doesn't work.  
Solution: Set 'modified' before the autocommands instead of after it.  
Files: src/buffer.c

## Patch 7.1.007 (extra)

Problem: Mac: Context menu doesn't work on Intel Macs.  
Scrollbars are not dimmed when Vim is not the active application.  
Solution: Remove the test whether context menus are supported. They are always there in OS/X. Handle the dimming. (Nicolas Weber)  
Files: src/gui\_mac.c, src/gui.h

## Patch 7.1.008

Problem: getfsize() returns a negative number for very big files.  
Solution: Check for overflow and return -2.  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.1.009

Problem: In diff mode, displaying the difference between a tab and spaces is not highlighted correctly.  
Solution: Only change highlighting at the end of displaying a tab.  
Files: src/screen.c

## Patch 7.1.010

Problem: The Gnome session file doesn't restore tab pages.  
Solution: Add SSOP\_TABPAGES to the session flags. (Matias D'Ambrosio)  
Files: src/gui\_gtk\_x11.c

## Patch 7.1.011

Problem: Possible buffer overflow when \$VIMRUNTIME is very long. (Victor Stinner)  
Solution: Use vim\_snprintf().  
Files: src/main.c

## Patch 7.1.012

Problem: `":let &shiftwidth = 'asdf'"` doesn't produce an error message.  
Solution: Check for a string argument. (Chris Lubinski)  
Files: `src/option.c`

## Patch 7.1.013

Problem: `":syn include"` only loads the first file, while it is documented as doing the equivalent of `":runtime!"`.  
Solution: Change the argument to `source_runtime()`. (James Vega)  
Files: `src/syntax.c`

## Patch 7.1.014

Problem: Crash when doing C indenting. (Chris Monson)  
Solution: Obtain the current line again after invoking `cin_islabel()`.  
Files: `src/edit.c`

## Patch 7.1.015

Problem: MzScheme interface: `current-library-collection-paths` produces no list. Interface doesn't build on a Mac.  
Solution: Use a list instead of a pair. (Bernhard Fisseni) Use `"-framework"` argument for `MZSCHEME_LIBS` in `configure`.  
Files: `src/configure.in`, `src/if_mzsch.c`, `src/auto/configure`

## Patch 7.1.016 (after patch 7.1.012)

Problem: Error message about setting `'diff'` to a string.  
Solution: Don't pass an empty string to `set_option_value()` when setting `'diff'`.  
Files: `src/quickfix.c`, `src/popupmnu.c`

## Patch 7.1.017

Problem: `":confirm w"` does give a prompt when `'readonly'` is set, but not when the file permissions are read-only. (Michael Schaap)  
Solution: Provide a dialog in both situations. (Chris Lubinski)  
Files: `src/ex_cmds.c`, `src/fileio.c`, `src/proto/fileio.pro`

## Patch 7.1.018

Problem: When `'virtualedit'` is set a "p" of a block just past the end of the line inserts before the cursor. (Engelke)  
Solution: Check for the cursor being just after the line (Chris Lubinski)  
Files: `src/ops.c`

## Patch 7.1.019

Problem: `":py"` asks for an argument, `":py asd"` then gives the error that `":py"` isn't implemented. Should already happen for `":py"`.  
Solution: Compare with `ex_script_ni`. (Chris Lubinski)  
Files: `src/ex_docmd.c`

## Patch 7.1.020

Problem: Reading from uninitialized memory when using a dialog. (Dominique Pelle)  
Solution: In `msg_show_console_dialog()` append a NUL after every appended character.  
Files: `src/message.c`

## Patch 7.1.021 (after 7.1.015)

Problem: MzScheme interface doesn't compile on Win32.  
Solution: Fix the problem that 7.1.015 fixed in a better way. (Sergey Khorev)  
Files: `src/if_mzsch.c`

## Patch 7.1.022

Problem: When setting `'keymap'` twice the `b:keymap_name` variable isn't set.

(Milan Berta)  
Solution: Don't unlet b:keymap\_name for ":loadkeymap". (Martin Toft)  
Files: src/digraph.c

Patch 7.1.023

Problem: "dw" in a line with one character deletes the line. Vi and nvi don't do this. (Kjell Arne Rekaa)  
Solution: Check for one-character words especially.  
Files: src/search.c

Patch 7.1.024

Problem: Using a pointer that has become invalid. (Chris Monson)  
Solution: Obtain the line pointer again after we looked at another line.  
Files: src/search.c

Patch 7.1.025

Problem: search() and searchpos() don't use match under cursor at start of line when using 'bc' flags. (Viktor Kojouharov)  
Solution: Don't go to the previous line when the 'c' flag is present. Also fix that "j" doesn't move the cursor to the right column.  
Files: src/eval.c, src/search.c

Patch 7.1.026

Problem: "[p" doesn't work in Visual mode. (David Brown)  
Solution: Use checkclearop() instead of checkclearopq().  
Files: src/normal.c

Patch 7.1.027

Problem: On Sun systems opening /dev/fd/N doesn't work, and they are used by process substitutions.  
Solution: Allow opening specific character special files for Sun systems. (Gary Johnson)  
Files: src/fileio.c, src/os\_unix.h

Patch 7.1.028

Problem: Can't use last search pattern for ":sort". (Brian McKee)  
Solution: When the pattern is empty use the last search pattern. (Martin Toft)  
Files: runtime/doc/change.txt, src/ex\_cmds.c

Patch 7.1.029 (after 7.1.019)

Problem: Can't compile when all interfaces are used. (Taylor Venable)  
Solution: Only check for ex\_script\_ni when it's defined.  
Files: src/ex\_docmd.c

Patch 7.1.030

Problem: The "vimtutor" shell script checks for "vim6" but not for "vim7". (Christian Robinson)  
Solution: Check for more versions, but prefer using "vim".  
Files: src/vimtutor

Patch 7.1.031

Problem: virtcol([123, '\$']) doesn't work. (Michael Schaap)  
Solution: When '\$' is used for the column number get the last column.  
Files: runtime/doc/eval.txt, src/eval.c

Patch 7.1.032

Problem: Potential crash when editing a command line. (Chris Monson)  
Solution: Check the position to avoid access before the start of an array.  
Files: src/ex\_getln.c

Patch 7.1.033

Problem: A buffer is marked modified when it was first deleted and then added again using a ":next" command. (John Mullin)  
Solution: When checking if a buffer is modified use the BF\_NEVERLOADED flag.  
Files: src/option.c

#### Patch 7.1.034

Problem: Win64: A few compiler warnings. Problems with optimizer.  
Solution: Use int instead of size\_t. Disable the optimizer in one function. (George V. Reilly)  
Files: src/eval.c, src/spell.c

#### Patch 7.1.035

Problem: After ":s/./&/#" all listed lines have a line number. (Yakov Lerner)  
Solution: Reset the line number flag when not using the "&" flag.  
Files: src/ex\_cmds.c

#### Patch 7.1.036

Problem: Completing ":echohl" argument should include "None". (Ori Avtalion) ":match" should have "none" too.  
Solution: Add flags to use expand\_highlight(). Also fix that when disabling FEAT\_CMDL\_COMPL compilation fails. (Chris Lubinski)  
Files: src/eval.c, src/ex\_docmd.c, src/ex\_getln.c, src/proto/syntax.pro, src/syntax.c

#### Patch 7.1.037

Problem: strcpy() used for overlapping strings. (Chris Monson)  
Solution: Use mch\_memmove() instead.  
Files: src/option.c

#### Patch 7.1.038

Problem: When 'expandtab' is set then a Tab copied for 'copyindent' is expanded to spaces, even when 'preserveindent' is set. (Alexei Alexandrov)  
Solution: Remove the check for 'expandtab'. Also fix that ">>" doesn't obey 'preserveindent'. (Chris Lubinski)  
Files: src/misc1.c

#### Patch 7.1.039

Problem: A tag in a help file that starts with "help-tags" and contains a percent sign may make Vim crash. (Ulf Harnhammar)  
Solution: Use puts() instead of fprintf().  
Files: src/ex\_cmds.c

#### Patch 7.1.040

Problem: ":match" only supports three matches.  
Solution: Add functions clearmatches(), getmatches(), matchadd(), matchdelete() and setmatches(). Changed the data structures for this. A small bug in syntax.c is fixed, so newly created highlight groups can have their name resolved correctly from their ID. (Martin Toft)  
Files: runtime/doc/eval.txt, runtime/doc/pattern.txt, runtime/doc/usr\_41.txt, src/eval.c, src/ex\_docmd.c, src/proto/window.pro, src/screen.c, src/structs.h, src/syntax.c, src/testdir/Makefile, src/testdir/test63.in, src/testdir/test63.ok, src/window.c

#### Patch 7.1.041 (extra, after 7.1.040)

Problem: Some changes for patch 7.1.040 are in extra files.  
Solution: Update the extra files.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms



Patch 7.1.042 (after 7.1.040)

Problem: Internal error when using matchadd(). (David Larson)

Solution: Check the third argument to be present before using the fourth argument. (Martin Toft)

Files: src/eval.c

Patch 7.1.043

Problem: In Ex mode using CTRL-D twice may cause a crash. Cursor isn't positioned properly after CTRL-D.

Solution: Set prev\_char properly. Position the cursor correctly. (Antony Scriven)

Files: src/ex\_getln.c

Patch 7.1.044

Problem: In Insert mode 0 CTRL-T deletes all indent, it should add indent. (Gautam Iyer)

Solution: Check for CTRL-D typed.

Files: src/edit.c

Patch 7.1.045

Problem: Unnecessary screen redrawing. (Jjgod Jiang)

Solution: Reset "must\_redraw" after clearing the screen.

Files: src/screen.c

Patch 7.1.046

Problem: ":s" command removes combining characters. (Ron Aaron)

Solution: Copy composing characters individually. (Chris Lubinski)

Files: src/regexp.c

Patch 7.1.047

Problem: vim\_regcomp() called with invalid argument. (Xiaozhou Liu)

Solution: Change TRUE to RE\_MAGIC + RE\_STRING.

Files: src/ex\_eval.c

Patch 7.1.048

Problem: The matchparen plugin doesn't update the match when scrolling with the mouse wheel. (Ilya Bobir)

Solution: Set the match highlighting for text that can be scrolled into the viewable area without moving the cursor. (Chris Lubinski)

Files: runtime/plugin/matchparen.vim

Patch 7.1.049

Problem: Cannot compile GTK2 version with Hangul input feature.

Solution: Don't define FEAT\_XFONTSET when using GTK2.

Files: src/feature.h

Patch 7.1.050

Problem: Possible crash when using C++ indenting. (Chris Monson)

Solution: Keep the line pointer to the line to compare with. Avoid going past the end of line.

Files: src/miscl.c

Patch 7.1.051

Problem: Accessing uninitialized memory when finding spell suggestions.

Solution: Don't try swapping characters at the end of a word.

Files: src/spell.c

Patch 7.1.052

Problem: When creating a new match not all fields are initialized, which may lead to unpredictable results.

Solution: Initialise rmm\_ic and rmm\_maxcol.

Files: src/window.c

Patch 7.1.053

Problem: Accessing uninitialized memory when giving a message.

Solution: Check going the length before checking for a NUL byte.

Files: src/message.c

Patch 7.1.054

Problem: Accessing uninitialized memory when displaying the fold column.

Solution: Add a NUL to the extra array. (Dominique Pelle). Also do this in a couple of other situations.

Files: src/screen.c

Patch 7.1.055

Problem: Using strcpy() with arguments that overlap.

Solution: Use mch\_memmove() instead.

Files: src/buffer.c, src/charset.c, src/eval.c, src/ex\_getln.c,  
src/misc1.c, src/regexp.c, src/termlib.c

Patch 7.1.056

Problem: More prompt does not behave correctly after scrolling back.  
(Randall W. Morris)

Solution: Avoid lines\_left becomes negative. (Chris Lubinski) Don't check  
mp\_last when deciding to show the more prompt. (Martin Toft)

Files: src/message.c

Patch 7.1.057

Problem: Problem with CursorHoldI when using "r" in Visual mode (Max  
Dyckhoff)

Solution: Ignore CursorHold(I) when getting a second character for a Normal  
mode command. Also abort the "r" command in Visual when a special  
key is typed.

Files: src/normal.c

Patch 7.1.058

Problem: When 'rightleft' is set the completion menu is positioned wrong.  
(Baha-Eddine MOKADEM)

Solution: Fix the completion menu. (Martin Toft)

Files: src/popupmnu.c, src/proto/search.pro, src/search.c

Patch 7.1.059

Problem: When in Ex mode and doing "g/^/vi" and then pressing CTRL-C Vim  
hangs and beeps. (Antony Scriven)

Solution: Clear "got\_int" in the main loop to avoid the hang. When typing  
CTRL-C twice in a row abort the ":g" command. This is Vi  
compatible.

Files: src/main.c

Patch 7.1.060

Problem: Splitting quickfix window messes up window layout. (Marius  
Gedminas)

Solution: Compute the window size in a smarter way. (Martin Toft)

Files: src/window.c

Patch 7.1.061

Problem: Win32: When 'encoding' is "latin1" 'ignorecase' doesn't work for  
characters with umlaut. (Joachim Hofmann)

Solution: Do not use islower()/isupper()/tolower()/toupper() but our own  
functions. (Chris Lubinski)

Files: src/mbyte.c, src/regexp.c, src/vim.h

Patch 7.1.062 (after 7.1.038)

Problem: Indents of C comments can be wrong. (John Mullin)  
Solution: Adjust ind\_len. (Chris Lubinski)  
Files: src/misc1.c

Patch 7.1.063 (after 7.1.040)

Problem: Warning for uninitialized variable.  
Solution: Initialise it to NULL.  
Files: src/ex\_docmd.c

Patch 7.1.064

Problem: On Interix some files appear not to exist.  
Solution: Remove the top bit from st\_mode. (Ligesh)  
Files: src/os\_unix.c

Patch 7.1.065 (extra)

Problem: Win32: Compilation problem for newer version of w32api.  
Solution: Only define \_\_IID\_DEFINED\_\_ when needed. (Chris Sutcliffe)  
Files: src/Make\_ming.mak, src/iid\_ole.c

Patch 7.1.066

Problem: When 'bomb' is set or reset the file should be considered modified. (Tony Mechelynck)  
Solution: Handle like 'endofline'. (Martin Toft)  
Files: src/buffer.c, src/fileio.c, src/option.c, src/structs.h

Patch 7.1.067

Problem: 'thesaurus' doesn't work when 'infercase' is set. (Mohsin)  
Solution: Don't copy the characters being completed but check the case and apply it to the suggested word. Also fix that the first word in the thesaurus line is not used. (Martin Toft)  
Files: src/edit.c

Patch 7.1.068

Problem: When 'equalalways' is set and splitting a window, it's possible that another small window gets bigger.  
Solution: Only equalize window sizes when after a split the windows are smaller than another window. (Martin Toft)  
Files: runtime/doc/options.txt, runtime/doc/windows.txt, src/window.c

Patch 7.1.069

Problem: GTK GUI: When using confirm() without a default button there still is a default choice.  
Solution: Ignore Enter and Space when there is no default button. (Chris Lubinski)  
Files: src/gui\_gtk.c

Patch 7.1.070 (extra)

Problem: Win32 GUI: When using confirm() without a default button there still is a default choice.  
Solution: Set focus on something else than a button. (Chris Lubinski)  
Files: src/gui\_w32.c

Patch 7.1.071 (after 7.1.040)

Problem: Regexp patterns are not tested.  
Solution: Add a basic test, to be expanded later.  
Also add (commented-out) support for valgrind.  
Files: src/testdir/Makefile, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.1.072 (extra, after 7.1.041 and 7.1.071)

Problem: Some changes for patch 7.1.071 are in extra files.  
Solution: Update the extra files. Also fix a few warnings from the DOS test makefile.

Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

Patch 7.1.073 (after 7.1.062)

Problem: Wrong cursor position and crash when 'preserveindent' is set.  
(Charles Campbell)

Solution: Handle the situation that we start without indent. (Chris  
Lubinski)

Files: src/misc1.c

Patch 7.1.074

Problem: Crash when calling string() on a recursively nested List.

Solution: Check result value for being NULL. (Yukihiro Nakadaira)

Files: src/eval.c

Patch 7.1.075

Problem: ":let v:statusmsg" reads memory already freed.

Solution: Don't set v:statusmsg when listing it.

Files: src/eval.c

Patch 7.1.076

Problem: Another strcpy() with overlapping arguments.

Solution: Use mch\_memmove(). (Dominique Pelle) And another one.

Files: src/ex\_docmd.c, src/normal.c

Patch 7.1.077

Problem: Using "can\_spell" without initializing it. (Dominique Pelle)

Solution: Set a default for get\_syntax\_attr().

Files: src/syntax.c

Patch 7.1.078

Problem: Dropping a file name on gvim that contains a CSI byte doesn't work  
when editing the command line.

Solution: Escape the CSI byte when inserting in the input buffer. (Yukihiro  
Nakadaira)

Files: src/gui.c, src/ui.c

Patch 7.1.079

Problem: When the locale is "C" and 'encoding' is "latin1" then the "@"  
character in 'isfname', 'isprint', etc. doesn't pick up accented  
characters.

Solution: Instead of isalpha() use MB\_ISLOWER() and MB\_ISUPPER().

Files: src/charset.c, src/macros.h

Patch 7.1.080 (extra)

Problem: Compiler warnings for using "const char \*" for "char \*".

Solution: Add type casts. (Chris Sutcliffe)

Files: src/GvimExt/gvimext.cpp

Patch 7.1.081

Problem: Command line completion for a shell command: "cat </tmp/file<Tab>"  
doesn't work.

Solution: Start the file name at any character that can't be in a file name.  
(Martin Toft)

Files: src/ex\_docmd.c

Patch 7.1.082

Problem: After a ":split" the matchparen highlighting isn't there.

Solution: Install a WinEnter autocommand. Also fixes that after  
":NoMatchParen" only the current window is updated. (Martin Toft)

Files: runtime/doc/pi\_paren.txt, runtime/plugin/matchparen.vim

## Patch 7.1.083 (after 7.1.081)

Problem: Command line completion doesn't work with wildcards.  
Solution: Add vim\_isfilec\_or\_wc() and use it. (Martin Toft)  
Files: src/charset.c, src/proto/charset.pro, src/ex\_docmd.c

## Patch 7.1.084

Problem: Using the "-nb" argument twice causes netbeans not to get fileOpened events.  
Solution: Change "&" to "&&". (Xavier de Gaye)  
Files: src/ex\_cmds.c

## Patch 7.1.085

Problem: ":e fold.c" then ":sp fold.c" results in folds of original window to disappear. (Akita Noek)  
Solution: Invoke foldUpdateAll() for all windows of the changed buffer. (Martin Toft)  
Files: src/ex\_cmds.c

## Patch 7.1.086

Problem: Crash when using specific Python syntax highlighting. (Quirk)  
Solution: Check for a negative index, coming from a keyword match at the start of a line from a saved state.  
Files: src/syntax.c

## Patch 7.1.087

Problem: Reading past ":cscope find" command. Writing past end of a buffer.  
Solution: Check length of the argument before using the pattern. Use vim\_strncpy(). (Dominique Pelle)  
Files: if\_cscope.c

## Patch 7.1.088 (extra)

Problem: The coordinates used by ":winpos" differ from what getwinposx() and getwinposy() return.  
Solution: Use MoveWindowStructure() instead of MoveWindow(). (Michael Henry)  
Files: src/gui\_mac.c

## Patch 7.1.089

Problem: ":let loaded\_getscriptPlugin" doesn't clear to eol, result is "#lin".  
Solution: Clear to the end of the screen after displaying the first variable value.  
Files: src/eval.c

## Patch 7.1.090

Problem: Compiler warning on Mac OS X 10.5.  
Solution: Don't redeclare sigaltstack(). (Hisashi T Fujinaka)  
Files: src/os\_unix.c

## Patch 7.1.091 (extra)

Problem: Win32: Can't embed Vim inside another application.  
Solution: Add the --windowid argument. (Nageshwar)  
Files: runtime/doc/gui\_w32.txt, runtime/doc/starting.txt, runtime/doc/vi\_diff.txt, src/globals.h, src/gui\_w32.c, src/main.c

## Patch 7.1.092 (extra, after 7.1.088)

Problem: Wrong arguments for MoveWindowStructure().  
Solution: Remove "TRUE". (Michael Henry)  
Files: src/gui\_mac.c

## Patch 7.1.093

Problem: Reading past end of a screen line when determining cell width. (Dominique Pelle)

Solution: Add an argument to `mb_off2cells()` for the maximum offset.  
Files: `src/globals.h`, `src/gui.c`, `src/mbyte.c`, `src/proto/mbyte.pro`,  
`src/screen.c`

#### Patch 7.1.094

Problem: When checking if syntax highlighting is present, looking in the current buffer instead of the specified one.

Solution: Use "buf" instead of "curbuf".

Files: `src/syntax.c`

#### Patch 7.1.095

Problem: The `FocusLost` and `FocusGained` autocommands are triggered asynchronously in the GUI. This may cause arbitrary problems.

Solution: Put the focus event in the input buffer and handle it when ready for it.

Files: `src/eval.c`, `src/getchar.c`, `src/gui.c`, `src/gui_gtk_x11.c`,  
`src/keymap.h`

#### Patch 7.1.096

Problem: Reading past end of a string when resizing Vim. (Dominique Pelle)

Solution: Check the string pointer before getting the char it points to.

Files: `src/message.c`

#### Patch 7.1.097

Problem: `":setlocal stl=%!l+1"` does not work.

Solution: Adjust check for pointer. (Politz)

Files: `src/option.c`

#### Patch 7.1.098

Problem: `":call s:var()"` doesn't work if "s:var" is a Funcref. (Andy Wokula)

Solution: Before converting "s:" into a script ID, check if it is a Funcref.

Files: `src/eval.c`

#### Patch 7.1.099

Problem: When the 'keymap' and 'paste' options have a non-default value, `":mkexrc"` and `":mksession"` do not correctly set the options.

Solution: Set the options with side effects before other options.

Files: `src/option.c`

#### Patch 7.1.100

Problem: Win32: Executing `cscope` doesn't always work properly.

Solution: Use another way to invoke `cscope`. (Mike Williams)

Files: `src/if_cscope.c`, `src/if_cscope.h`, `src/main.c`,  
`src/proto/if_cscope.pro`

#### Patch 7.1.101

Problem: Ruby: The `Buffer.line=` method does not work.

Solution: Add the "self" argument to `set_current_line()`. (Jonathan Hankins)

Files: `src/if_ruby.c`

#### Patch 7.1.102

Problem: Perl interface doesn't compile with new version of Perl.

Solution: Add two variables to the dynamic library loading. (Suresh Govindachar)

Files: `src/if_perl.xs`

#### Patch 7.1.103

Problem: Using "dw" with the cursor past the end of the last line (using CTRL-\ CTRL-O from Insert mode) deletes a character. (Tim Chase)

Solution: Don't move the cursor back when the movement failed.

Files: `src/normal.c`

## Patch 7.1.104 (after 7.1.095)

Problem: When 'lazyredraw' is set a focus event causes redraw to be postponed until a key is pressed.

Solution: Instead of not returning from vgetc() when a focus event is encountered return K\_IGNORE. Add plain\_vgetc() for when the caller doesn't want to get K\_IGNORE.

Files: src/digraph.c, src/edit.c, src/ex\_cmds.c, src/ex\_getln.c, src/getchar.c, src/normal.c, src/proto/getchar.pro, src/window.c

## Patch 7.1.105

Problem: Internal error when using "0 ? {'a': 1} : {}". (A.Politz)

Solution: When parsing a dictionary value without using the value, don't try obtaining the key name.

Files: src/eval.c

## Patch 7.1.106

Problem: ":messages" doesn't quit listing on ":".

Solution: Break the loop when "got\_int" is set.

Files: src/message.c

## Patch 7.1.107

Problem: When doing a block selection and using "s" to change the text, while triggering auto-indenting, causes the wrong text to be repeated in other lines. (Adri Verhoef)

Solution: Compute the change of indent and compensate for that.

Files: src/ops.c

## Patch 7.1.108 (after 7.1.100)

Problem: Win32: Compilation problems in Cscope code. (Jeff Lanzarotta)

Solution: Use (long) instead of (intptr\_t) when it's not defined.

Files: src/if\_cscope.c

## Patch 7.1.109

Problem: GTK: when there are many tab pages, clicking on the arrow left of the labels moves to the next tab page on the right. (Simeon Bird)

Solution: Check the X coordinate of the click and pass -1 as value for the left arrow.

Files: src/gui\_gtk\_x11.c, src/term.c

## Patch 7.1.110 (after 7.1.102)

Problem: Win32: Still compilation problems with Perl.

Solution: Change the #ifdefs. (Suresh Govindachar)

Files: src/if\_perl.xs

## Patch 7.1.111

Problem: When using ":vimgrep" with the "j" flag folds from another buffer may be displayed. (A.Politz)

Solution: When not jumping to another buffer update the folds.

Files: src/quickfix.c

## Patch 7.1.112

Problem: Using input() with a wrong argument may crash Vim. (A.Politz)

Solution: Init the input() return value to NULL.

Files: src/eval.c

## Patch 7.1.113

Problem: Using map() to go over an empty list causes memory to be freed twice. (A.Politz)

Solution: Don't clear the typeval in restore\_vimvar().

Files: src/eval.c

## Patch 7.1.114

Problem: Memory leak in getmatches().  
Solution: Don't increment the refcount twice.  
Files: src/eval.c

Patch 7.1.115 (after 7.1.105)

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)  
Solution: Init variable to NULL.  
Files: src/eval.c

Patch 7.1.116

Problem: Cannot display Unicode characters above 0x10000.  
Solution: Remove the replacement with a question mark when UNICODE16 is not defined. (partly by Nicolas Weber)  
Files: src/screen.c

Patch 7.1.117

Problem: Can't check whether Vim was compiled with Gnome. (Tony Mechelynck)  
Solution: Add gui\_gnome to the has() list.  
Files: src/eval.c

Patch 7.1.118 (after 7.1.107)

Problem: Compiler warning for Visual C compiler.  
Solution: Add typecast. (Mike Williams)  
Files: src/ops.c

Patch 7.1.119

Problem: Crash when 'cmdheight' set to very large value. (A.Politz)  
Solution: Limit 'cmdheight' to 'lines' minus one. Store right value of 'cmdheight' when running out of room.  
Files: src/option.c, src/window.c

Patch 7.1.120

Problem: Can't properly check memory leaks while running tests.  
Solution: Add an argument to garbagecollect(). Delete functions and variables in the test scripts.  
Files: runtime/doc/eval.txt src/eval.c, src/globals.h, src/main.c,  
src/testdir/Makefile, src/testdir/test14.in,  
src/testdir/test26.in, src/testdir/test34.in,  
src/testdir/test45.in, src/testdir/test47.in,  
src/testdir/test49.in, src/testdir/test55.in,  
src/testdir/test56.in, src/testdir/test58.in,  
src/testdir/test59.in, src/testdir/test60.in,  
src/testdir/test60.vim, src/testdir/test62.in,  
src/testdir/test63.in, src/testdir/test64.in,

Patch 7.1.121

Problem: Using ":cd %:h" when editing a file in the current directory results in an error message for using an empty string.  
Solution: When "%:h" results in an empty string use ".".  
Files: src/eval.c

Patch 7.1.122

Problem: Mac: building Vim.app fails. Using wrong architecture.  
Solution: Use line continuation for the gui\_bundle dependency. Detect the system architecture with "uname -a".  
Files: src/main.aap

Patch 7.1.123

Problem: Win32: ":edit foo ~ foo" expands "~".  
Solution: Change the call to expand\_env().  
Files: src/ex\_docmd.c, src/misc1.c, src/proto/misc1.pro, src/option.c



## Patch 7.1.124 (extra)

Problem: Mac: When dropping a file on Vim.app that is already in the buffer list (from .viminfo) results in editing an empty, unnamed buffer. (Axel Kielhorn) Also: warning for unused variable.

Solution: Move to the buffer of the first argument. Delete unused variable.

Files: src/gui\_mac.c

## Patch 7.1.125

Problem: The TermResponse autocommand event is not always triggered. (Aron Griffis)

Solution: When unblocking autocommands check if v:termresponse changed and trigger the event then.

Files: src/buffer.c, src/diff.c, src/ex\_getln.c, src/fileio.c, src/globals.h, src/misc2.c, src/proto/fileio.pro, src/window.c

## Patch 7.1.126 (extra)

Problem: ":vimgrep \*/\*" fails when a BufRead autocommand changes directory. (Bernhard Kuhn)

Solution: Change back to the original directory after loading a file. Also: use shorten\_fname1() to avoid duplicating code.

Files: src/buffer.c, src/ex\_docmd.c, src/fileio.c, src/gui\_gtk.c, src/gui\_w48.c, src/proto/ex\_docmd.pro, src/proto/fileio.pro, src/quickfix.c

## Patch 7.1.127

Problem: Memory leak when doing cmdline completion. (Dominique Pelle)

Solution: Free "orig" argument of ExpandOne() when it's not used.

Files: src/ex\_getln.c

## Patch 7.1.128 (extra)

Problem: Build problems with new version of Cygwin.

Solution: Remove -D\_\_IID\_DEFINED\_\_, like with MingW. (Guopeng Wen)

Files: src/Make\_cyg.mak

## Patch 7.1.129 (extra)

Problem: Win32: Can't get the user name when it is longer than 15 characters.

Solution: Use UNLEN instead of MAX\_COMPUTERNAME\_LENGTH. (Alexei Alexandrov)

Files: src/os\_win32.c

## Patch 7.1.130

Problem: Crash with specific order of undo and redo. (A.Politz)

Solution: Clear and adjust pointers properly. Add u\_check() for debugging.

Files: src/undo.c, src/structs.h

## Patch 7.1.131

Problem: ":mksession" always adds ":setlocal autoread". (Christian J. Robinson)

Solution: Skip boolean global/local option using global value.

Files: src/option.c

## Patch 7.1.132

Problem: getpos(">") may return a negative column number for a Linewise selection. (A.Politz)

Solution: Don't add one to MAXCOL.

Files: src/eval.c

## Patch 7.1.133 (after 7.1.126)

Problem: shorten\_fname1() linked when it's not needed.

Solution: Add #ifdef.

Files: src/fileio.c

## Patch 7.1.134 (extra)

Problem: Win32: Can't build with VC8  
Solution: Detect the MSVC version instead of using NMAKE\_VER.  
(Mike Williams)  
Files: src/Make\_mvc.mak

## Patch 7.1.135

Problem: Win32: When editing a file c:\tmp\foo and c:\tmp\foo we have two buffers for the same file. (Suresh Govindachar)  
Solution: Invoke FullName\_save() when a path contains "/" or "\".  
Files: src/buffer.c

## Patch 7.1.136

Problem: Memory leak when using Ruby syntax highlighting. (Dominique Pelle)  
Solution: Free the contained-in list.  
Files: src/syntax.c

## Patch 7.1.137

Problem: Build failure when using EXITFREE. (Dominique Pelle)  
Solution: Add an #ifdef around using clip\_exclude\_prog.  
Files: src/misc2.c

## Patch 7.1.138

Problem: The Perl Msg() function doesn't stop when "q" is typed at the more prompt. (Hari Krishna Dara)  
Solution: Check got\_int.  
Files: src/if\_perl.xs

## Patch 7.1.139

Problem: When using marker folding and ending Insert mode with CTRL-C the current fold is truncated. (Fred Kater)  
Solution: Ignore got\_int while updating folds.  
Files: src/fold.c

## Patch 7.1.140

Problem: v:count is set only after typing a non-digit, that makes it difficult to make a nice mapping.  
Solution: Set v:count while still typing the count.  
Files: src/normal.c

## Patch 7.1.141

Problem: GTK: -geom argument doesn't support a negative offset.  
Solution: Compute position from the right/lower corner.  
Files: src/gui\_gtk\_x11.c

## Patch 7.1.142

Problem: ":redir @A>" doesn't work.  
Solution: Ignore the extra ">" also when appending. (James Vega)  
Files: src/ex\_docmd.c

## Patch 7.1.143

Problem: Uninitialized memory read when diffing three files. (Dominique Pelle)  
Solution: Remove "+ !notset" so that we don't use fields that were not computed.  
Files: src/diff.c

## Patch 7.1.144

Problem: After ":diffup" cursor can be in the wrong position.  
Solution: Force recomputing the cursor position.  
Files: src/diff.c

## Patch 7.1.145

Problem: Insert mode completion: When using the popup menu, after completing a word and typing a non-word character Vim is still completing the same word, following CTRL-N doesn't work. Insert mode Completion: When using CTRL-X 0 and there is only "struct." before the cursor, typing one char to reduce the matches, then BS completion stops.

Solution: When typing a character that is not part of the item being completed, stop complete mode. For whole line completion also accept a space. For file name completion stop at a path separator. For omni completion stay in completion mode even if completing with empty string.

Files: src/edit.c

## Patch 7.1.146 (extra)

Problem: VMS: Files with a very rare record organization (VFC) cannot be properly written by Vim. On older VAX systems mms runs into a syntax error.

Solution: Check for this special situation. Do not wrap a comment, make it one long line. (Zoltan Arpadffy)

Files: src/fileio.c, src/Make\_vms.mms

## Patch 7.1.147 (after 7.1.127)

Problem: Freeing memory already freed when completing user name. (Meino Cramer)

Solution: Use a flag to remember if "orig" needs to be freed.

Files: src/ex\_getln.c

## Patch 7.1.148

Problem: Some types are not found by configure.

Solution: Test for the sys/types.h header file. (Sean Boudreau)

Files: src/configure.in, src/auto/configure

## Patch 7.1.149

Problem: GTK GUI: When the completion popup menu is used scrolling another window by the scrollbar is OK, but using the scroll wheel it behaves line <Enter>.

Solution: Ignore K\_MOUSEDOWN and K\_MOUSEUP. Fix redrawing the popup menu.

Files: src/edit.c, src/gui.c

## Patch 7.1.150

Problem: When 'clipboard' has "unnamed" using "p" in Visual mode doesn't work correctly. (Jianrong Yu)

Solution: When 'clipboard' has "unnamed" also obtain the selection when getting the default register.

Files: src/ops.c

## Patch 7.1.151

Problem: Using whole line completion with 'ignorecase' and 'infercase' set and the line is empty get an lalloc(0) error.

Solution: Don't try changing case for an empty match. (Matthew Wozniski)

Files: src/edit.c

## Patch 7.1.152

Problem: Display problem when 'hls' and 'cursorcolumn' are set and searching for "\$". (John Mullin) Also when scrolling horizontally when 'wrap' is off.

Solution: Keep track of the column where highlighting was set. Check the column offset when skipping characters.

Files: src/screen.c

## Patch 7.1.153

Problem: Compiler warnings on SGI. Undefined XpmAllocColor (Charles Campbell)  
Solution: Add type casts. Init st\_dev and st\_ino separately. Don't use type casts for vim\_snprintf() when HAVE\_STDARG\_H is defined. Define XpmAllocColor when needed.  
Files: src/eval.c, src/ex\_cmds.c, src/fileio.c, src/misc2.c, src/gui\_xmew.c

## Patch 7.1.154

Problem: Compiler warning for signed/unsigned compare.  
Solution: Add type cast.  
Files: src/screen.c

## Patch 7.1.155

Problem: Crash when 'undolevels' is 0 and repeating "udd". (James Vega)  
Solution: When there is only one branch use u\_freeheader() to delete it.  
Files: src/undo.c

## Patch 7.1.156

Problem: Overlapping arguments for strcpy() when expanding command line variables.  
Solution: Use mch\_memmove() instead of STRCPY(). Also fix a few typos. (Dominique Pelle)  
Files: src/ex\_docmd.c

## Patch 7.1.157

Problem: In Ex mode, ":" gives an error at end-of-file. (Michael Hordijk)  
Solution: Only give an error for an empty line, not for a comment.  
Files: src/ex\_docmd.c

## Patch 7.1.158 (extra)

Problem: Win32 console: When 'encoding' is "utf-8" and typing Alt-y the result is wrong. Win32 GUI: Alt-y results in "u" when 'encoding' is "cp1250" (Lukas Cerman)  
Solution: For utf-8 don't set the 7th bit in a byte, convert to the correct byte sequence. For cp1250, when conversion to 'encoding' results in the 7th bit not set, set the 7th bit after conversion.  
Files: src/os\_win32.c, src/gui\_w48.c

## Patch 7.1.159

Problem: strcpy() has overlapping arguments.  
Solution: Use mch\_memmove() instead. (Dominique Pelle)  
Files: src/ex\_cmds.c

## Patch 7.1.160

Problem: When a focus autocommand is defined, getting or losing focus causes the hit-enter prompt to be redrawn. (Bjorn Winckler)  
Solution: Overwrite the last line.  
Files: src/message.c

## Patch 7.1.161

Problem: Compilation errors with tiny features and EXITFREE.  
Solution: Add #ifdefs. (Dominique Pelle)  
Files: src/edit.c, src/misc2.c

## Patch 7.1.162

Problem: Crash when using a modifier before "while" or "for". (A.Politz)  
Solution: Skip modifiers when checking for a loop command.  
Files: src/proto/ex\_docmd.pro, src/ex\_docmd.c, src/ex\_eval.c

## Patch 7.1.163

Problem: Warning for the unknown option 'bufsecret'.  
Solution: Remove the lines .vim that use this option. (Andy Wokula)  
Files: runtime/menu.vim

Patch 7.1.164

Problem: Reading past end of regexp pattern. (Dominique Pelle)  
Solution: Use utf\_ptr2len().  
Files: src/regexp.c

Patch 7.1.165

Problem: Crash related to getting X window ID. (Dominique Pelle)  
Solution: Don't trust the window ID that we got in the past, check it every time.  
Files: src/os\_unix.c

Patch 7.1.166

Problem: Memory leak for using "gp" in Visual mode.  
Solution: Free memory in put\_register(). (Dominique Pelle)  
Files: src/ops.c

Patch 7.1.167

Problem: Xxd crashes when using "xxd -b -c 110". (Debian bug 452789)  
Solution: Allocate more memory. Fix check for maximum number of columns.  
Files: src/xxd/xxd.c

Patch 7.1.168 (extra)

Problem: Win32 GUI: Since patch 7.1.095, when the Vim window does not have focus, clicking in it doesn't position the cursor. (Juergen Kraemer)  
Solution: Don't reset s\_button\_pending just after receiving focus.  
Files: src/gui\_w48.c

Patch 7.1.169

Problem: Using uninitialized variable when system() fails. (Dominique Pelle)  
Solution: Let system() return an empty string when it fails.  
Files: src/eval.c

Patch 7.1.170

Problem: Valgrind warning for overlapping arguments for strcpy().  
Solution: Use mch\_memmove() instead. (Dominique Pelle)  
Files: src/getchar.c

Patch 7.1.171

Problem: Reading one byte before allocated memory.  
Solution: Check index not to become negative. (Dominique Pelle)  
Files: src/ex\_getln.c

Patch 7.1.172

Problem: When 'buftype' is "acwrite" Vim still checks if the file or directory exists before overwriting.  
Solution: Don't check for overwriting when the buffer name is not a file name.  
Files: src/ex\_cmds.c

Patch 7.1.173

Problem: Accessing freed memory. (Dominique Pelle)  
Solution: Don't call reg\_getline() to check if a line is the first in the file.  
Files: src/regexp.c

Patch 7.1.174

Problem: Writing NUL past end of a buffer.  
Solution: Copy one byte less when using strncat(). (Dominique Pelle)  
Files: src/ex\_cmds.c, src/ex\_docmd.c,

#### Patch 7.1.175

Problem: <BS> doesn't work with some combination of 'sts', 'linebreak' and 'backspace'. (Francois Ingelrest)  
Solution: When adding white space results in not moving back delete one character.  
Files: src/edit.c

#### Patch 7.1.176

Problem: Building with Aap fails when the "compiledby" argument contains '<' or '>' characters. (Alex Yeh)  
Solution: Change how quoting is done in the Aap recipe.  
Files: src/main.aap

#### Patch 7.1.177

Problem: Freeing memory twice when in debug mode while reading a script.  
Solution: Ignore script input while in debug mode.  
Files: src/ex\_cmds2.c, src/getchar.c, src/globals.h

#### Patch 7.1.178

Problem: "%" doesn't work on "/\* comment \*/" comment /\*".  
Solution: Don't handle the "/" in "\*/" as a C++ comment. (Markus Heidelberg)  
Files: src/search.c

#### Patch 7.1.179

Problem: Need to check for TCL 8.5.  
Solution: Adjust configure script. (Alexey Froloff)  
Files: src/configure.in, src/auto/configure

#### Patch 7.1.180

Problem: Regexp patterns not tested sufficiently.  
Solution: Add more checks to the regexp test.  
Files: src/testdir/test64.in, src/testdir/test64.ok

#### Patch 7.1.181

Problem: Accessing uninitialized memory in Farsi mode. (Dominique Pelle)  
Solution: Only invoke lrF\_sub() when there is something to do.  
Files: src/ex\_cmds.c

#### Patch 7.1.182

Problem: When using tab pages and an argument list the session file may contain wrong "next" commands. (Alexander Bluem)  
Solution: Use "argu" commands and only when needed.  
Files: src/ex\_docmd.c

#### Patch 7.1.183

Problem: "Internal error" for ":echo matchstr('a', 'a%[\&]')". (Mitaneu Paul)  
Solution: Inside "%[]" detect \&, \| and \) as an error.  
Files: src/regexp.c

#### Patch 7.1.184

Problem: Crash when deleting backwards over a line break in Insert mode.  
Solution: Don't advance the cursor when it's already on the NUL after a line. (Matthew Wozniski)  
Files: src/normal.c

#### Patch 7.1.185

Problem: Using "gR" with a multi-byte encoding and typing a CR pushes characters onto the replace stack incorrectly, resulting in BS putting back the wrong characters. (Paul B. Mahol)  
Solution: Push multi-byte characters onto the replace stack in reverse byte order. Add `replace_push_mb()`.  
Files: `src/edit.c`, `src/misc1.c`, `src/proto/edit.pro`

#### Patch 7.1.186

Problem: `"expand('<afile>')"` returns a bogus value after changing directory. (Dave Fishburn)  
Solution: Copy `"autocmd_fname"` to allocated memory and expand to full filename. Shorten the path when expanding `<afile>`.  
Files: `src/ex_docmd.c`, `src/fileio.c`

#### Patch 7.1.187

Problem: Win32 GUI: Custom completion using `system()` no longer works after patch 7.1.104. (Erik Falor)  
Solution: Loop when `safe_vgetc()` returns `K_IGNORE`.  
Files: `src/ex_getln.c`

#### Patch 7.1.188

Problem: When 'showmode' is off the message for changing a readonly file is given in the second column instead of the first. (Payl B. Mahol)  
Solution: Put the W10 message in the first column.  
Files: `src/edit.c`

#### Patch 7.1.189 (after 7.1.104)

Problem: Patch 7.1.104 was incomplete.  
Solution: Also call `plain_vgetc()` in `ask_yesno()`.  
Files: `src/misc1.c`

#### Patch 7.1.190

Problem: Cursor after end-of-line: `"iA sentence.<Esc>)"`  
Solution: Move cursor back and make motion inclusive.  
Files: `src/normal.c`

#### Patch 7.1.191

Problem: Win32 GUI: after patch 7.1.168 there is still a problem when clicking in a scrollbar. (Juergen Jottkaerr)  
Solution: Don't check the input buffer when dragging the scrollbar.  
Files: `src/gui.c`

#### Patch 7.1.192

Problem: With Visual block selection, "s" and typing something, CTRL-C doesn't stop Vim from repeating the replacement in other lines, like happens for "I".  
Solution: Check for "got\_int" to be set.  
Files: `src/ops.c`

#### Patch 7.1.193

Problem: Some Vim 5.x digraphs are missing in Vim 7, even though the character pairs are not used. (Philippe de Muyter)  
Solution: Add those Vim 5.x digraphs that don't conflict with others.  
Files: `src/digraph.c`

#### Patch 7.1.194

Problem: `":echo glob('~/{})"` results in `/home/user//`.  
Solution: Don't add a slash if there already is one.  
Files: `src/os_unix.c`

#### Patch 7.1.195

Problem: '0 mark doesn't work for `"~/foo ~ foo"`.

Solution: Don't expand the whole file name, only "~/".  
Files: src/mark.c

Patch 7.1.196 (extra)

Problem: Win32 GUI: "\n" in a tooltip doesn't cause a line break. (Erik Falor)

Solution: Use the TTM\_SETMAXTIPWIDTH message.  
Files: src/gui\_w32.c

Patch 7.1.197

Problem: Mac: "make install" doesn't work when prefix defined.

Solution: Pass different arguments to "make installruntime". (Jjgod Jiang)  
Files: src/Makefile

Patch 7.1.198

Problem: Hang when using ":s/\n//gn". (Burak Gorkemli)

Solution: Set "skip\_match".  
Files: src/ex\_cmds.c

Patch 7.1.199

Problem: Can't do command line completion for a specific file name extension.

Solution: When the pattern ends in "\$" don't add a star for completion and remove the "\$" before matching with file names.

Files: runtime/doc/cmdline.txt, src/ex\_getln.c

Patch 7.1.200 (after 7.1.177 and 7.1.182)

Problem: Compiler warnings for uninitialized variables.

Solution: Init variables.  
Files: src/ex\_cmds2.c, src/ex\_docmd.c

Patch 7.1.201

Problem: When reading stdin 'fenc' and 'ff' are not set.

Solution: Set the options after reading stdin. (Ben Schmidt)  
Files: src/fileio.c

Patch 7.1.202

Problem: Incomplete utf-8 byte sequence is not checked for validity.

Solution: Check the bytes that are present for being valid. (Ben Schmidt)  
Files: src/mbyte.c

Patch 7.1.203

Problem: When 'virtualedit' is "onemore" then "99|" works but ":normal 99|" doesn't. (Andy Wokula)

Solution: Check for "onemore" flag in check\_cursor\_col().  
Files: src/misc2.c

Patch 7.1.204 (extra)

Problem: Win32: Using the example at 'balloonexpr' the balloon disappears after four seconds and then comes back again. Also moves the mouse pointer a little bit. (Yongwei Wu)

Solution: Set the autopop time to 30 seconds (the max value). (Sergey Khorev) Move the mouse two pixels forward and one back to end up in the same position (really!).

Files: src/gui\_w32.c

Patch 7.1.205

Problem: Can't get the operator in an ":omap".

Solution: Add the "v:operator" variable. (Ben Schmidt)  
Files: runtime/doc/eval.txt, src/eval.c, src/normal.c, src/vim.h

Patch 7.1.206



Problem: Compiler warnings when using MODIFIED\_BY.  
Solution: Add type casts. (Ben Schmidt)  
Files: src/version.c

#### Patch 7.1.207

Problem: Netbeans: "remove" cannot delete one line.  
Solution: Remove partial lines and whole lines properly. Avoid a memory leak. (Xavier de Gaye)  
Files: src/netbeans.c

#### Patch 7.1.208

Problem: On Alpha get an unaligned access error.  
Solution: Store the dictitem pointer before using it. (Matthew Luckie)  
Files: src/eval.c

#### Patch 7.1.209

Problem: GTK: When using the netrw plugin and doing ":gui" Vim hangs.  
Solution: Stop getting a selection after three seconds. This is a hack.  
Files: src/gui\_gtk\_x11.c

#### Patch 7.1.210

Problem: Listing mapping for 0xdb fails when 'encoding' is utf-8. (Tony Mechelynck)  
Solution: Recognize K\_SPECIAL KS\_EXTRA KE\_CSI as a CSI byte.  
Files: src/mbyte.c

#### Patch 7.1.211

Problem: The matchparen plugin may take an unexpected amount of time, so that it looks like Vim hangs.  
Solution: Add a timeout to searchpair(), searchpairpos(), search() and searchpos(). Use half a second timeout in the plugin.  
Files: runtime/doc/eval.txt, runtime/plugin/matchparen.vim, src/edit.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/normal.c, src/proto/eval.pro, src/proto/ex\_cmds2.pro, src/proto/search.pro, src/search.c

#### Patch 7.1.212

Problem: Accessing a byte before a line.  
Solution: Check that the column is 1 or more. (Dominique Pelle)  
Files: src/edit.c

#### Patch 7.1.213

Problem: A ":tabedit" command that results in the "swap file exists" dialog and selecting "abort" doesn't close the new tab. (Al Budden)  
Solution: Pass "old\_curwin" to do\_exedit().  
Files: src/ex\_docmd.c

#### Patch 7.1.214

Problem: ":ls/g\n\zs1//" deletes characters from the first line. (A Politz)  
Solution: Start replacing in the line where the match starts.  
Files: src/ex\_cmds.c

#### Patch 7.1.215

Problem: It is difficult to figure out what syntax items are nested at a certain position.  
Solution: Add the synstack() function.  
Files: runtime/doc/eval.txt, src/eval.c, src/proto/syntax.pro, src/syntax.c

#### Patch 7.1.216

Problem: Variants of --remote-tab are not mentioned for "vim --help".  
Solution: Display optional -wait and -silent.

Files: src/main.c

Patch 7.1.217

Problem: The "help-tags" tag may be missing from runtime/doc/tags when it was generated during "make install".

Solution: Add the "++t" argument to ":helptags" to force adding the tag.

Files: runtime/doc/Makefile, runtime/doc/various.txt, src/ex\_cmds.c, src/ex\_cmds.h

Patch 7.1.218

Problem: A syntax region without a "keepend", containing a region with "extend" could be truncated at the end of the containing region.

Solution: Do not call syn\_update\_ends() when there are no keepend items.

Files: src/syntax.c

Patch 7.1.219 (after 7.1.215)

Problem: synstack() returns situation after the current character, can't see the state for a one-character region.

Solution: Don't update ending states in the requested column.

Files: runtime/doc/eval.txt, src/eval.c, src/hardcopy.c, src/proto/syntax.pro, src/screen.c, src/spell.c, src/syntax.c

Patch 7.1.220

Problem: When a ")" or word movement command moves the cursor back from the end of the line it may end up on the trail byte of a multi-byte character. It's also moved back when it isn't needed.

Solution: Add the adjust\_cursor() function.

Files: src/normal.c

Patch 7.1.221

Problem: When inserting a "(", triggering the matchparen plugin, the following highlighting may be messed up.

Solution: Before triggering the CursorMovedI autocommands update the display to update the stored syntax stacks for the change.

Files: src/edit.c

Patch 7.1.222 (after 7.1.217)

Problem: Wildcards in argument of ":helptags" are not expanded. (Marcel Svitalsky)

Solution: Expand wildcards in the directory name.

Files: src/ex\_cmds.c

Patch 7.1.223

Problem: glob() doesn't work properly when 'shell' is "sh" or "bash" and the expanded name contains spaces, '~', single quotes and other special characters. (Adri Verhoef, Charles Campbell)

Solution: For Posix shells define a vimglob() function to list the matches instead of using "echo" directly.

Files: src/os\_unix.c

Patch 7.1.224

Problem: When using "vim -F -o file1 file2" only one window is right-to-left. Same for "-H". (Ben Schmidt)

Solution: use set\_option\_value() to set 'rightleft'.

Files: src/main.c

Patch 7.1.225

Problem: Using uninitialized value when XGetWMNormalHints() fails.

Solution: Check the return value. (Dominique Pelle)

Files: src/os\_unix.c

Patch 7.1.226

Problem: Command line completion doesn't work when a file name contains a '&' character.

Solution: Accept all characters in a file name, except ones that end a command or white space.

Files: src/ex\_docmd.c

#### Patch 7.1.227

Problem: Hang in syntax HL when moving over a ")". (Dominique Pelle)

Solution: Avoid storing a syntax state in the wrong position in the list of remembered states.

Files: src/syntax.c

#### Patch 7.1.228

Problem: When 'foldmethod' is "indent" and a fold is created with ">>" it can't be closed with "zc". (Daniel Shahaf)

Solution: Reset the "small" flag of a fold when adding a line to it.

Files: src/fold.c

#### Patch 7.1.229

Problem: A fold is closed when it shouldn't when 'foldmethod' is "indent" and backspacing a non-white character so that the indent increases.

Solution: Keep the fold open after backspacing a character.

Files: src/edit.c

#### Patch 7.1.230

Problem: Memory leak when executing SourceCmd autocommands.

Solution: Free the memory. (Dominique Pelle)

Files: src/ex\_cmds2.c

#### Patch 7.1.231

Problem: When shifting lines the change is acted upon multiple times.

Solution: Don't have shift\_line() call changed\_bytes.

Files: src/edit.c, src/ops.c, src/proto/edit.pro, src/proto/ops.pro

#### Patch 7.1.232 (after 7.1.207 and 7.1.211)

Problem: Compiler warnings with MSVC.

Solution: Add type casts. (Mike Williams)

Files: src/ex\_cmds2.c, src/netbeans.c

#### Patch 7.1.233

Problem: Crash when doing Insert mode completion for a user defined command. (Yegappan Lakshmanan)

Solution: Don't use the non-existing command line.

Files: src/ex\_getln.c

#### Patch 7.1.234

Problem: When diff'ing three files the third one isn't displayed correctly. (Gary Johnson)

Solution: Compute the size of diff blocks correctly when merging blocks. Compute filler lines correctly when scrolling.

Files: src/diff.c

#### Patch 7.1.235

Problem: Pattern matching is slow when using a lot of simple patterns.

Solution: Avoid allocating memory by not freeing it when it's not so much. (Alexei Alexandrov)

Files: src/regexp.c

#### Patch 7.1.236

Problem: When using 'incsearch' and 'hlsearch' a complicated pattern may make Vim hang until CTRL-C is pressed.

Solution: Add the 'redrawtime' option.

Files: runtime/doc/options.txt, src/ex\_cmds.c, src/ex\_docmd.c,  
src/ex\_getln.c, src/gui.c, src/misc1.c, src/normal.c,  
src/option.c, src/quickfix.c, src/regexp.c, src/proto/regexp.pro,  
src/proto/search.pro, src/search.c, src/screen.c,  
src/option.h, src/spell.c, src/structs.h, src/syntax.c, src/tag.c,  
src/vim.h

Patch 7.1.237

Problem: Compiler warning on an Alpha processor in Motif code.  
Solution: Change a typecast. (Adri Verhoef)  
Files: src/gui\_motif.c

Patch 7.1.238

Problem: Using the 'c' flag with searchpair() may cause it to fail. Using  
the 'r' flag doesn't work when 'wrapscan' is set. (A.Politz)  
Solution: Only use the 'c' flag for the first search, not for repeating.  
When using 'r' imply 'W'. (Antony Scriven)  
Files: src/eval.c

Patch 7.1.239 (after 7.1.233)

Problem: Compiler warning for sprintf() argument.  
Solution: Add a typecast. (Nico Weber)  
Files: src/ex\_getln.c

Patch 7.1.240

Problem: When "gUe" turns a German sharp s into SS the operation stops  
before the end of the word. Latin2 has the same sharp s but it's  
not changed to SS there.  
Solution: Make sure all the characters are operated upon. Detect the sharp  
s in latin2. Also fixes that changing case of a multi-byte  
character that changes the byte count doesn't always work.  
Files: src/ops.c

Patch 7.1.241

Problem: Focus change events not always ignored. (Erik Falor)  
Solution: Ignore K\_IGNORE in Insert mode in a few more places.  
Files: src/edit.c

Patch 7.1.242 (after 7.1.005)

Problem: "cib" doesn't work properly on "(x)". (Tim Pope)  
Solution: Use ltoreq() instead of lt(). Also fix "ciT" on "<a>x</a>".  
Files: src/search.c

Patch 7.1.243 (after 7.1.240)

Problem: "U" doesn't work on all text in Visual mode. (Adri Verhoef)  
Solution: Loop over all the lines to be changed. Add tests for this.  
Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

Patch 7.1.244

Problem: GUI may have part of the command line cut off.  
Solution: Don't round the number of lines up, always round down.  
(Tony Houghton, Scott Dillard)  
Files: src/gui.c

Patch 7.1.245

Problem: Pressing CTRL-\ three times causes Vim to quit. (Ranganath Rao).  
Also for f CTRL-\ CTRL-\  
Solution: When going to cooked mode in mch\_delay() set a flag to ignore  
SIGQUIT.  
Files: src/os\_unix.c

Patch 7.1.246

Problem: Configure hangs when the man pager is something strange. (lorien)  
Solution: Set MANPAGER and PAGER to "cat". (Micah Cowan)  
Files: src/auto/configure, src/configure.in

#### Patch 7.1.247

Problem: When using Netbeans backspacing in Insert mode skips a character now and then. (Ankit Jain)  
Solution: Avoid calling netbeans\_removed(), it frees the line pointer. (partly by Dominique Pelle).  
Files: src/misc1.c

#### Patch 7.1.248

Problem: Can't set the '"' mark. Can't know if setpos() was successful.  
Solution: Allow setting the '"' mark with setpos(). Have setpos() return a value indicating success/failure.  
Files: runtime/doc/eval.txt, src/eval.c, src/mark.c

#### Patch 7.1.249

Problem: After "U" the cursor can be past end of line. (Adri Verhoef)  
Solution: Adjust the cursor position in u\_undoline().  
Files: src/undo.c

#### Patch 7.1.250

Problem: ":setglobal fenc=anything" gives an error message in a buffer where 'modifiable' is off. (Ben Schmidt)  
Solution: Don't give an error if 'modifiable' doesn't matter.  
Files: src/option.c

#### Patch 7.1.251

Problem: Using freed memory when spell checking enabled.  
Solution: Obtain the current line again after calling spell\_move\_to(). (Dominique Pelle)  
Files: src/screen.c

#### Patch 7.1.252 (after 7.1.243)

Problem: Test 39 fails when the environment has a utf-8 locale. (Dominique Pelle)  
Solution: Force 'encoding' to be latin1.  
Files: src/testdir/test39.in

#### Patch 7.1.253

Problem: ":sort" doesn't work in a one line file. (Patrick Texier)  
Solution: Don't sort if there is only one line. (Dominique Pelle)  
Files: src/ex\_cmds.c

#### Patch 7.1.254

Problem: Tests 49 and 55 fail when the locale is French.  
Solution: Using C messages for test 49. Filter the error message in test 55 such that it works when the number is halfway the message.  
Files: src/testdir/test49.in, src/testdir/test55.in

#### Patch 7.1.255

Problem: Vim doesn't support utf-32. (Yongwei Wu)  
Solution: Add aliases for utf-32, it's the same as ucs-4.  
Files: src/mbyte.c

#### Patch 7.1.256

Problem: findfile() also returns directories.  
Solution: Cleanup the code for finding files and directories in a list of directories. Remove the ugly global ff\_search\_ctx.  
Files: src/eval.c, src/misc2.c, src/vim.h, src/tag.c

## Patch 7.1.257

Problem: Configure can't always find the Tcl header files.

Solution: Also look in /usr/local/include/tcl\$tclver and  
/usr/include/tcl\$tclver (James Vega)

Files: src/auto/configure, src/configure.in

## Patch 7.1.258

Problem: Crash when doing "d/\n/e" and 'virtualedit' is "all". (Andy Wokula)

Solution: Avoid that the column becomes negative. Also fixes other problems  
with the end of a pattern match is in column zero. (A.Politz)

Files: src/search.c

## Patch 7.1.259

Problem: Cursor is in the wrong position when 'rightleft' is set,  
'encoding' is "utf-8" and on an illegal byte. (Dominique Pelle)

Solution: Only put the cursor in the first column when actually on a  
double-wide character. (Yukihiro Nakadaira)

Files: src/screen.c

## Patch 7.1.260

Problem: Cursor positioning problem after ^@ wrapping halfway when  
'encoding' is utf-8.

Solution: Only count a position for printable characters. (partly by  
Yukihiro Nakadaira)

Files: src/charset.c

## Patch 7.1.261

Problem: When a 2 byte BOM is detected Vim uses UCS-2, which doesn't work  
for UTF-16 text. (Tony Mechelynck)

Solution: Default to UTF-16.

Files: src/fileio.c, src/testdir/test42.ok

## Patch 7.1.262

Problem: Can't get the process ID of Vim.

Solution: Implement getpid().

Files: src/eval.c, runtime/doc/eval.txt

## Patch 7.1.263

Problem: The filetype can consist of two dot separated names. This works  
for syntax and ftplugin, but not for indent. (Brett Stahlman)

Solution: Use split() and loop over each dot separated name.

Files: runtime/indent.vim

## Patch 7.1.264

Problem: Crash when indenting lines. (Dominique Pelle)

Solution: Set the cursor column when changing the cursor line.

Files: src/ops.c, src/misc1.c

## Patch 7.1.265

Problem: When 'isfname' contains a space, cmdline completion can hang.  
(James Vega)

Solution: Reset the "len" variable.

Files: src/ex\_docmd.c

## Patch 7.1.266

Problem: When the version string returned by the terminal contains  
unexpected characters, it is used as typed input. (James Vega)

Solution: Assume the escape sequence ends in a letter.

Files: src/term.c

## Patch 7.1.267

Problem: When changing folds cursor may be positioned in the wrong place.

Solution: Call `changed_window_setting_win()` instead of  
`changed_window_setting()`.  
Files: `src/fold.c`

#### Patch 7.1.268

Problem: Always shows "+" at end of screen line with: `":set  
listchars=eol:$,extends:+ nowrap list cursorline"` (Gary Johnson)  
Solution: Check for `lcs_eol_one` instead of `lcs_eol`.  
Files: `src/screen.c`

#### Patch 7.1.269

Problem: The `matchparen` plugin has an arbitrary limit for the number of  
lines to look for a match.  
Solution: Rely on the `searchpair()` timeout.  
Files: `runtime/plugin/matchparen.vim`

#### Patch 7.1.270

Problem: `":?foo?"` matches in current line since patch 7.1.025. (A.Politz)  
Solution: Remove the `SEARCH_START` flag.  
Files: `src/ex_docmd.c`, `src/search.c`

#### Patch 7.1.271

Problem: In a Vim build without autocommands, checking a file that was  
changed externally causes the current buffer to be changed  
unexpectedly. (Karsten Hopp)  
Solution: Store `"curbuf"` instead of `"buf"`.  
Files: `src/fileio.c`

#### Patch 7.1.272

Problem: The special buffer name [Location List] is not used for a buffer  
displayed in another tab page.  
Solution: Use `FOR_ALL_TAB_WINDOWS` instead of `FOR_ALL_WINDOWS`. (Hiroaki  
Nishihara)  
Files: `src/buffer.c`

#### Patch 7.1.273

Problem: When profiling on Linux Vim exits early. (Liu Yubao)  
Solution: When profiling don't exit on `SIGPROF`.  
Files: `src/Makefile`, `src/os_unix.c`

#### Patch 7.1.274 (after 7.1.272)

Problem: Compiler warning for optimized build.  
Solution: Init `win` to `NULL`.  
Files: `src/buffer.c`

#### Patch 7.1.275 (extra)

Problem: Mac: `ATSUI` and `'antialias'` don't work properly together.  
Solution: Fix this and the input method. (Jjgod Jiang)  
Files: `src/vim.h`, `src/gui_mac.c`

#### Patch 7.1.276

Problem: `"gw"` uses `'formatexpr'`, even though the docs say it doesn't.  
Solution: Don't use `'formatexpr'` for `"gw"`.  
Files: `src/vim.h`, `src/edit.c`, `src/ops.c`, `src/proto/ops.pro`

#### Patch 7.1.277

Problem: Default for `'paragraphs'` misses some items (Colin Watson)  
Solution: Add `TP`, `HP`, `Pp`, `Lp` and `It` to `'paragraphs'`. (James Vega)  
Files: `runtime/doc/options.txt`, `src/option.c`

#### Patch 7.1.278 (extra, after 7.1.275)

Problem: Build failure when `USE_CARBONKEYHANDLER` is not defined.

Solution: Remove #ifdef.  
Files: src/gui\_mac.c

Patch 7.1.279

Problem: When using cscope temporary files are left behind.  
Solution: Send the quit command to cscope and give it two seconds to exit nicely before killing it. (partly by Dominique Pelle)  
Files: src/if\_cscope.c

Patch 7.1.280 (after 7.1.275)

Problem: Mac: build problems when not using multibyte feature. (Nicholas Stallard)  
Solution: Don't define USE\_IM\_CONTROL when not using multibyte.  
Files: src/vim.h

Patch 7.1.281 (after 7.1.279)

Problem: sa.sa\_mask is not initialized. Cscope may not exit.  
Solution: Use sigemptyset(). Use SIGKILL instead of SIGTERM. (Dominique Pelle)  
Files: src/if\_cscope.c

Patch 7.1.282 (extra)

Problem: Win64: Edit with Vim context menu isn't installed correctly. Compiler warnings and a few other things.  
Solution: Add [ and ] to entry of class name. Use UINT\_PTR instead of UINT. And fixes for other things. (George V. Reilly)  
Files: src/GvimExt/Makefile, src/dosinst.c, src/if\_ole.cpp, src/if\_ole.h, src/if\_ole.idl, src/INSTALLpc.txt, src/Make\_mvc.mak, src/os\_win32.c,

Patch 7.1.283

Problem: Non-extra part for 7.1.282.  
Solution: Various changes.  
Files: src/ex\_docmd.c, src/globals.h, src/if\_cscope.c, src/main.c, src/mark.c, src/netbeans.c, src/popupmnu.c, src/vim.h, src/window.c

Patch 7.1.284

Problem: Compiler warnings for functions without prototype.  
Solution: Add the function prototypes. (Patrick Texier)  
Files: src/eval.c, src/quickfix.c

Patch 7.1.285 (extra)

Problem: Mac: dialog hotkeys don't work.  
Solution: Add hotkey support. (Dan Sandler)  
Files: src/gui\_mac.c

Patch 7.1.286 (after 7.1.103)

Problem: "w" at the end of the buffer moves the cursor past the end of the line. (Markus Heidelberg)  
Solution: Move the cursor back from the NUL when it was moved forward.  
Files: src/normal.c

Patch 7.1.287

Problem: Crash when reversing a list after using it. (Andy Wokula)  
Solution: Update the pointer to the last used element. (Dominique Pelle)  
Files: src/eval.c

Patch 7.1.288 (after 7.1.281)

Problem: Cscope still leaves behind temp files when using gvim.  
Solution: When getting the ECHILD error loop for a while until cscope exits. (Dominique Pelle)



Files: if\_cscope.c

Patch 7.1.289

Problem: When EXITFREE is defined and 'acd' is set freed memory is used.  
(Dominique Pelle)

Solution: Reset p\_acd before freeing all buffers.

Files: src/misc2.c

Patch 7.1.290

Problem: Reading bytes that were not written when spell checking and a line  
has a very large indent.

Solution: Don't copy the start of the next line when it only contains  
spaces. (Dominique Pelle)

Files: src/spell.c

Patch 7.1.291 (after 7.1.288)

Problem: Compiler warning.

Solution: Change 50 to 50L.

Files: src/if\_cscope.c

Patch 7.1.292

Problem: When using a pattern with "@<=" the submatches can be wrong.  
(Brett Stahlman)

Solution: Save the submatches when attempting a look-behind match.

Files: src/regexp.c

Patch 7.1.293

Problem: Spell checking considers super- and subscript characters as word  
characters.

Solution: Recognize the Unicode super and subscript characters.

Files: src/spell.c

Patch 7.1.294

Problem: Leaking memory when executing a shell command.

Solution: Free memory when not able to save for undo. (Dominique Pelle)

Files: src/ex\_cmds.c

Patch 7.1.295

Problem: Vimtutor only works with vim, not gvim.

Solution: Add the -g flag to vimtutor. (Dominique Pelle) Add gvimtutor.

Files: src/Makefile, src/gvimtutor, src/vimtutor, runtime/doc/vimtutor.1

Patch 7.1.296

Problem: SELinux is not supported.

Solution: Detect the selinux library and use mch\_copy\_sec(). (James Vega)

Files: src/auto/configure, src/config.h.in, src/configure.in,  
src/fileio.c, src/memfile.c, src/os\_unix.c, src/proto/os\_unix.pro

Patch 7.1.297

Problem: When using the search/replace dialog the parenmatch highlighting  
can be wrong. (Tim Duncan)

Solution: In the GUI redraw function invoke the CursorMoved autocmd.

Files: src/gui.c

Patch 7.1.298 (after 7.1.295)

Problem: src/gvimtutor is not distributed.

Solution: Add it to the list of distributed files.

Files: Filelist

Patch 7.1.299

Problem: Filetype detection doesn't work properly for file names ending in  
a part that is ignored and contain a space or other special

characters.  
Solution: Escape the special characters using the new `fnameescape` function.  
Files: `runtime/doc/eval.txt`, `runtime/filetype.vim`, `src/eval.c`,  
`src/ex_getln.c`, `src/proto/ex_getln.pro`, `src/vim.h`

#### Patch 7.1.300

Problem: Value of `asmsyntax` argument isn't checked for valid characters.  
Solution: Only accepts letters and digits.  
Files: `runtime/filetype.vim`

#### Patch 7.1.301

Problem: When the "File/Save" menu is used in Insert mode, a tab page label is not updated to remove the "+".  
Solution: Call `draw_tabline()` from `showruler()`. (Bjorn Winckler)  
Files: `src/screen.c`

#### Patch 7.1.302 (after 7.1.299)

Problem: Compilation error on MS-Windows.  
Solution: Don't use `xp_shell` when it's not defined.  
Files: `src/ex_getln.c`

#### Patch 7.1.303 (after 7.1.302)

Problem: Compilation error on MS-Windows, again.  
Solution: Declare `p`.  
Files: `src/ex_getln.c`

#### Patch 7.1.304

Problem: `Shortpath_for_invalid_fname()` does not work correctly and is unnecessary complex.  
Solution: Clean up `shortpath_for_invalid_fname()`. (mostly by Yegappan Lakshmanan)  
Files: `src/eval.c`

#### Patch 7.1.305

Problem: Editing a compressed file with special characters in the name doesn't work properly.  
Solution: Escape special characters.  
Files: `runtime/autoload/gzip.vim`

#### Patch 7.1.306

Problem: Some Unicode characters are handled like word characters while they are symbols.  
Solution: Adjust the table for Unicode classification.  
Files: `src/mbyte.c`

#### Patch 7.1.307

Problem: Many warnings when compiling with Python 2.5.  
Solution: Use `ssize_t` instead of `int` for some types. (James Vega)  
Files: `src/if_python.c`

#### Patch 7.1.308

Problem: When in readonly mode `":options"` produces an error.  
Solution: Reset 'readonly'. (Gary Johnson)  
Files: `runtime/optwin.vim`

#### Patch 7.1.309

Problem: Installing and testing with a shadow directory doesn't work. (James Vega)  
Solution: Add "po" to the list of directories to link. Also link the Vim scripts in `testdir`. And a few more small fixes.  
Files: `src/Makefile`

## Patch 7.1.310

Problem: Incomplete utf-8 byte sequence at end of the file is not detected.  
Accessing memory that wasn't written.  
Solution: Check the last bytes in the buffer for being a valid utf-8  
character. (mostly by Ben Schmidt)  
Also fix that the reported line number of the error was wrong.  
Files: src/fileio.c

## Patch 7.1.311

Problem: Compiler warning for missing sentinel in X code.  
Solution: Change 0 to NULL. (Markus Heidelberg)  
Files: src/mbyte.c

## Patch 7.1.312

Problem: The .po files have mistakes in error numbers.  
Solution: Search for these mistakes in the check script. (Dominique Pelle)  
Files: src/po/check.vim

## Patch 7.1.313

Problem: When the netbeans interface setModified call is used the status  
lines and window title are not updated.  
Solution: Redraw the status lines and title. (Philippe Fremy)  
Files: src/netbeans.c

## Patch 7.1.314

Problem: The value of 'pastetoggle' is written to the session file without  
any escaping. (Randall Hansen)  
Solution: Use put\_escstr(). (Ben Schmidt)  
Files: src/option.c

## Patch 7.1.315

Problem: Crash with specific search pattern using look-behind match.  
(Andreas Politz)  
Solution: Also save the value of "need\_clear\_subexpr".  
Files: src/regexp.c

## Patch 7.1.316

Problem: When 'cscopetag' is set ":tag" gives an error message instead of  
going to the next tag in the tag stack.  
Solution: Don't call do\_cstag() when there is no argument. (Mark Goldman)  
Files: src/ex\_docmd.c

## Patch 7.1.317

Problem: Compiler warnings in Motif calls.  
Solution: Change zero to NULL. (Dominique Pelle)  
Files: src/gui\_motif.c

## Patch 7.1.318

Problem: Memory leak when closing xsmp connection. Crash on exit when  
using Lesstif.  
Solution: Don't close the X display to work around a Lesstif bug. Free  
clientid. Also fix a leak for Motif and Athena. (Dominique Pelle)  
Files: src/gui\_x11.c, src/os\_unix.c

## Patch 7.1.319

Problem: When a register has an illegal utf-8 sequence, pasting it on the  
command line causes an illegal memory access.  
Solution: Use mb\_cptr2char\_adv(). (Dominique Pelle)  
Files: src/ex\_getln.c

## Patch 7.1.320 (extra)

Problem: Win64: Warnings while compiling Python interface.

Solution: Use PyInt in more places. Also update version message for the console. (George Reilly)  
Files: src/if\_python.c, src/version.c

Patch 7.1.321 (extra)

Problem: Win32 / Win64: Install file is outdated.  
Solution: Update the text for recent compiler. (George Reilly)  
Files: src/INSTALLpc.txt

Patch 7.1.322

Problem: Can't get start of Visual area in an <expr> mapping.  
Solution: Add the 'v' argument to getpos().  
Files: runtime/doc/eval.txt, src/eval.c

Patch 7.1.323

Problem: Test 19 fails with some termcaps. (Dominique Pelle)  
Solution: Set the t\_kb and t\_kD termcap values.  
Files: src/testdir/test19.in, src/testdir/test38.in

Patch 7.1.324

Problem: File name path length on Unix is limited to 1024.  
Solution: Use PATH\_MAX when it's more than 1000.  
Files: src/os\_unix.h

Patch 7.1.325

Problem: When editing a command line that's longer than available space in the window, the characters at the end are in reverse order.  
Solution: Increment the insert position even when the command line doesn't fit. (Ingo Karkat)  
Files: src/ex\_getln.c

Patch 7.1.326

Problem: ":s!from!to!" works, but ":smagic!from!to!" doesn't. It sees the "!" as a flag to the command. Same for ":snomagic". (Johan Spetz)  
Solution: When checking for a forced command also ignore ":smagic" and ":snomagic". (Ian Kelling)  
Files: src/ex\_docmd.c

Patch 7.1.327

Problem: The GUI tutor is installed when there is no GUI version.  
Solution: Only install gvimtutor when building a GUI version.  
Files: src/Makefile

Patch 7.1.328

Problem: Crash when using Cygwin and non-posix path name in tags file.  
Solution: Use separate buffer for posix path. (Ben Schmidt)  
Files: src/os\_unix.c

Patch 7.1.329

Problem: When the popup menu is removed a column of cells, the right halve of double-wide characters, may not be redrawn.  
Solution: Check if the right halve of a character needs to be redrawn. (Yukihiro Nakadaira)  
Files: src/screen.c

Patch 7.1.330

Problem: Reading uninitialized memory when using Del in replace mode.  
Solution: Use utfc\_ptr2len\_len() instead of mb\_ptr2len(). (Dominique Pelle)  
Files: src/misc1.c

Warning for missing sentinel in gui\_xmldlg.c. (Dominique Pelle)

A search offset from the end of a match didn't work properly for multi-byte characters. (Yukihiro Nakadaira)

When displaying the value of 'key' don't show "\*\*\*\*\*" when the value is empty. (Ben Schmidt)

Internal error when compiled with EXITFREE and using the nerd\_tree plugin. Set last\_msg\_hist to NULL when history becomes empty. Call free\_all\_functions() after garbage collection. (Dominique Pelle)

GTK with XIM: <S-Space> does not work. (Yukihiro Nakadaira)

Some shells do not support "echo -n", which breaks glob(). Use "echo" instead of "echo -n \$1; echo". (Gary Johnson)

"echo 22,44" printed "22" on top of the command, the error messages caused the rest not to be cleared. Added the need\_clr\_eos flag.

Netbeans events are handled while updating the screen, causing a crash. Change the moment when events are handled. Rename nb\_parse\_messages() to netbeans\_parse\_messages(). (Xavier de Gaye)

Test 11 was broken after patch 7.1.186 on Win32 console. (Daniel Shahaf)  
Use shellescape() on the file name.

IM was turned off in im\_preedit\_end\_cb() for no good reason. (Takuhiro Nishioka)

A corrupted spell file could cause Vim to use lots of memory. Better detection for running into the end of the file. (idea from James Vega)

Mac: Included a patch to make it build with GTK. Moved language init to mac\_lang\_init() function. (Ben Schmidt)

Problem with 'wildmenu' after ":lcd", up/down arrows don't work. (Erik Falor)

Fix configure.in to avoid "implicitly declared" warnings when running configure.

Fixed a memory leak when redefining a keymap. (Dominique Pelle)

Setting 'pastetoggle' to "jj" didn't work.

'ic' and 'smartcase' don't work properly when using \%V in a search pattern. (Kana Natsuno)

#### Patch 7.2a.001

Problem: On some systems X11/Xlib.h exists (from X11-dev package) but X11/Intrinsic.h does not (in Xt-dev package). This breaks the build. Also, on Solaris 9 sys/ptem.h isn't found.

Solution: Have configure only accept X11 when X11/Intrinsic.h exists. Check for sys/ptem.h while including sys/stream.h. (Vladimir Marek)

Files: src/auto/configure, src/configure.in

#### Patch 7.2a.002

Problem: getbufvar(N, "") gets the dictionary of the current buffer instead of buffer N.

Solution: Set curbuf before calling find\_var\_in\_ht(). (Kana Natsuno)

Files: src/eval.c

## Patch 7.2a.003

Problem: Leaking memory when using ":file name" and using access control lists.  
Solution: Invoke mch\_free\_acl() in vim\_rename(). (Dominique Pelle)  
Files: src/fileio.c

## Patch 7.2a.004

Problem: Some systems can't get spell files by ftp.  
Solution: Use http when it looks like it's possible. (James Vega)  
Files: runtime/autoload/spellfile.vim

## Patch 7.2a.005

Problem: A few error messages use confusing names. Misspelling.  
Solution: Change "dissallows" to "disallows". (Dominique Pelle) Change "number" to "Number".  
Files: src/eval.c, src/fileio.c

## Patch 7.2a.006

Problem: Reading past NUL in a string.  
Solution: Check for invalid utf-8 byte sequence. (Dominique Pelle)  
Files: src/charset.c

## Patch 7.2a.007

Problem: ":let v = 1.2.3" was OK in Vim 7.1, now it gives an error.  
Solution: Don't look for a floating point number after the "." operator.  
Files: src/eval.c

## Patch 7.2a.008

Problem: printf("%g", 1) doesn't work.  
Solution: Convert Number to Float when needed.  
Files: src/message.c

## Patch 7.2a.009

Problem: cygwin\_conv\_to\_posix\_path() does not specify buffer size.  
Solution: Use new Cygwin function: cygwin\_conv\_path(). (Corinna Vinschen)  
Files: src/main.c, src/os\_unix.c

## Patch 7.2a.010

Problem: When a file name has an illegal byte sequence Vim may read uninitialised memory.  
Solution: Don't use UTF\_COMPOSINGLIKE() on an illegal byte. In msg\_outtrans\_len\_attr() use char2cells() instead of ptr2cells(). In utf\_ptr2char() don't check second byte when first byte is illegal. (Dominique Pelle)  
Files: src/mbyte.c, src/message.c

## Patch 7.2a.011

Problem: The Edit/Startup Settings menu doesn't work.  
Solution: Expand environment variables. (Ben Schmidt)  
Files: runtime/menu.vim

## Patch 7.2a.012

Problem: Compiler warnings for casting int to pointer.  
Solution: Add cast to long in between. (Martin Toft)  
Files: src/gui\_gtk\_x11.c

## Patch 7.2a.013

Problem: shellescape() does not escape "%" and "#" characters.  
Solution: Add find\_cmdline\_var() and use it when the second argument to shellescape() is non-zero.  
Files: runtime/doc/eval.txt, src/eval.c, src/ex\_docmd.c, src/proto/ex\_docmd.pro, src/proto/misc2.pro, src/misc2.c

## Patch 7.2a.014

Problem: Problem with % in message.  
Solution: Put % in single quotes.  
Files: src/eval.c

## Patch 7.2a.015 (after 7.2a.010)

Problem: Misaligned messages.  
Solution: Compute length of unprintable chars correctly.  
Files: src/message.c

## Patch 7.2a.016

Problem: Using CTRL-W v in the quickfix window results in two quickfix windows, which is not allowed. ":tab split" should be allowed to open a new quickfix window in another tab.  
Solution: For CTRL-W v instead of splitting the window open a new one. When using ":tab" do allow splitting the quickfix window (was already included in patch 7.2a.013).  
Files: src/window.c

## Patch 7.2a.017

Problem: ":doautoall" executes autocommands for all buffers instead of just for loaded buffers.  
Solution: Change "curbuf" to "buf".  
Files: src/fileio.c

## Patch 7.2a.018

Problem: Compiler warnings when compiling with Gnome. (Tony Mechelynck)  
Solution: Add type casts.  
Files: src/gui\_gtk\_x11.c

## Patch 7.2a.019

Problem: ":let &g:tw = 44" sets the local option value. (Cyril Slobin)  
Solution: Use get\_varp\_scope() instead of get\_varp(). (Ian Kelling)  
Files: src/option.c

There is no way to avoid adding /usr/local/{include|lib} to the build commands. Add the --with-local-dir argument to configure. (Michael Haubenwallner)

When using CTRL-D after ":help", the number of matches could be thousands. Restrict to TAG\_MANY to avoid this taking too long. (Ian Kelling)

The popup menu could be placed at a weird location. Caused by w\_wcol computed by curs\_columns(). (Dominique Pelle)

Overlapping STRCPY() arguments when using %r item in 'errorformat'. Use STRMOVE() instead. (Ralf Wildenhues)

Mac: On Leopard gvim, when using the mouse wheel nothing would happen until another event occurs, such as moving the mouse. Then the recorded scrolling would take place all at once. (Eckehard Berns)

Solution for cursor color not reflecting IM status for GTK 2. Add preedit\_is\_active flag. (SungHyun Nam)

filereadable() can hang on a FIFO on Linux. Use open() instead of fopen(), with O\_NONBLOCK. (suggested by Lars Kotthoff)

Included patch to support Perl 5.10. (Yasuhiro Matsumoto)

When files are dropped on gvim while the screen is being updated, ignore the

drop command to avoid freeing memory that is being used.

In a terminal, when drawing the popup menu over double-wide characters, half characters may not be cleared properly. (Yukihiro Nakadaira)

The `#ifdef` for including "vimio.h" was inconsistent. In a few files it depended on `MSWIN`, which isn't defined until later.

#### Patch 7.2b.001

Problem: Compilation problem: `mb_fix_col()` missing with multi-byte feature but without GUI or clipboard.

Solution: Remove `#ifdef`.

Files: `src/mbyte.c`

#### Patch 7.2b.002

Problem: Compiler warnings for signed/unsigned mismatch.

Solution: Add type casts.

Files: `src/screen.c`

#### Patch 7.2b.003

Problem: Still a compilation problem, `check_col()` and `check_row()` missing.

Solution: Add `FEAT_MBYTE` to the `#if`.

Files: `src/ui.c`

#### Patch 7.2b.004

Problem: Trying to free memory for a static string when using `":helpgrep"`. (George Reilly)

Solution: Set `'cpo'` to `empty_option` instead of an empty string. Also for `searchpair()` and `substitute()`.

Files: `src/quickfix.c`, `src/eval.c`

#### Patch 7.2b.005

Problem: The special character `!"` isn't handled properly in `shellescape()`. (Jan Minar)

Solution: Escape `!"` when using a "csh" like shell and with `shellescape(s, 1)`. Twice for both. Also escape `<NL>`.

Files: `src/misc2.c`

#### Patch 7.2b.006

Problem: Reading past end of string when reading info from tags line.

Solution: Break the loop when encountering a `NUL`. (Dominique Pelle)

Files: `src/tag.c`

#### Patch 7.2b.007

Problem: Part of a message cannot be translated.

Solution: Put `_()` around the message.

Files: `src/search.c`

#### Patch 7.2b.008

Problem: A few filetypes are not detected or not detected properly.

Solution: Add filetype detection patterns. (Nikolai Weibull)

Files: `runtime/filetype.vim`

#### Patch 7.2b.009

Problem: Reading past end of screen line. (Epicurus)

Solution: Avoid going past the value of `Columns`.

Files: `src/screen.c`

#### Patch 7.2b.010

Problem: `":mksession"` doesn't work for `":map , foo"`, `":sunmap ,"`. (Ethan Mallove)

Solution: Check for `"nxo"`, `"nso"` and other strange mapping combinations.



Files: src/getchar.c

Patch 7.2b.011

Problem: Configure for TCL ends up with include file in compiler command.  
(Richard Hogg)

Solution: Delete items from \$TCL\_DEFS that do not start with a dash.

Files: src/auto/configure, src/configure.in

Patch 7.2b.012

Problem: Build failure with +multi\_byte but without +diff.

Solution: Add #ifdef. (Patrick Texier)

Files: src/main.c

Patch 7.2b.013

Problem: Build fails with tiny features and Perl. (Dominique Pelle)

Solution: Define missing functions. Also when compiling Python.

Files: src/if\_perl.xs, src/if\_python.c

Patch 7.2b.014

Problem: Configure uses an unsafe temp file to store commands.

Solution: Create the temp file in local directory.

Files: src/auto/configure, src/configure.in

Patch 7.2b.015

Problem: Build fails on Mac when using Aap.

Solution: Fix typo in configure script.

Files: src/auto/configure, src/configure.in

Patch 7.2b.016

Problem: Build fails with normal features but without +autocmd.

Solution: Fix #ifdefs. (Ian Kelling)

Files: src/eval.c, src/ex\_cmds.c, src/quickfix.c, src/option.c,  
src/ex\_docmd.c

Patch 7.2b.017

Problem: "vim -O foo foo" results in only one window. (Zdenek Sekera)

Solution: Handle result of ATTENTION prompt properly. (Ian Kelling)

Files: src/main.c

Patch 7.2b.018

Problem: When doing command line completion on a file name for a csh-like  
shell argument a '!' character isn't escaped properly.

Solution: Add another backslash.

Files: src/ex\_getln.c, src/misc2.c, src/proto/misc2.pro, src/screen.c

Patch 7.2b.019 (extra)

Problem: Win32: Various compiler warnings.

Solution: Use \_\_w64 attribute. Comment-out unused parameters. Adjust a few  
#ifdefs. (George Reilly)

Files: src/gui\_w48.c, src/GvimExt/gvimext.cpp, src/Make\_mvc.mak,  
src/os\_mswin.c, src/os\_win32.c, src/vim.h

Patch 7.2b.020

Problem: ":sort n" doesn't handle negative numbers. (James Vega)

Solution: Include '-' in the number.

Files: src/charset.c, src/ex\_cmds.c

Patch 7.2b.021

Problem: Reloading doesn't read the BOM correctly. (Steve Gardner)

Solution: Accept utf-8 BOM when specified file encoding is utf-8.

Files: src/fileio.c

## Patch 7.2b.022

Problem: When using ":normal" while updating the status line the count of an operator is lost. (Dominique Pelle)  
Solution: Save and restore "opcount".  
Files: src/ex\_docmd.c, src/globals.h, src/normal.c

## Patch 7.2b.023

Problem: Crash when using the result of synstack(0,0). (Matt Wozniski)  
Solution: Check for v\_list to be NULL in a few more places.  
Files: src/eval.c

## Patch 7.2b.024

Problem: Using ":gui" while the netrw plugin is active causes a delay in updating the display.  
Solution: Don't check for terminal codes when starting the GUI.  
Files: src/term.c

## Patch 7.2b.025

Problem: When the CursorHold event triggers a pending count is lost. (Juergen Kraemer)  
Solution: Save the counts and restore them.  
Files: src/normal.c, src/structs.h

## Patch 7.2b.026

Problem: The GTK 2 file chooser causes the ~/.recently-used.xbel file to be written over and over again. This may cause a significant slowdown. (Guido Berhoerster)  
Solution: Don't use the GTK 2 file chooser.  
Files: src/gui\_gtk.c

## Patch 7.2b.027

Problem: Memory leak for Python, Perl, etc. script command with end marker.  
Solution: Free the memory of the end marker. (Andy Kittner)  
Files: src/ex\_getln.c

## Patch 7.2b.028

Problem: Reading uninitialized memory when doing ":gui -f". (Dominique Pelle)  
Solution: Don't position the cursor when the screen size is invalid.  
Files: src/gui.c

## Patch 7.2b.029

Problem: ":help a" doesn't jump to "a" tag in docs. (Tony Mechelynck)  
Solution: Get all tags and throw away more than TAG\_MANY after sorting. When there is no argument find matches for "help" to avoid a long delay.  
Files: src/ex\_cmds.c, src/ex\_getln.c

## Patch 7.2b.030

Problem: When changing the value of t\_Co from 8 to 16 the Visual highlighting keeps both reverse and a background color.  
Solution: Remove the attribute when setting the default highlight color. (Markus Heidelberg)  
Files: src/syntax.c

Error when cancelling completion menu and auto-formatting. (fixed by Ian Kelling)

## Patch 7.2c.001

Problem: ":let x=[''] | let x += x" causes hang. (Matt Wozniski)  
Solution: Only insert elements up to the original length of the List.  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.2c.002

Problem: `fnameescape()` doesn't handle a leading '+' or '>'. (Jan Minar)  
 Solution: Escape a leading '+' and '>'. And a single '-'.  
 Files: `runtime/doc/eval.txt`, `src/ex_getln.c`

## Patch 7.2c.003

Problem: Searching for `"foo\[bar]\+"` gives a "Corrupted regexp program" error. (Joachim Hofmann)  
 Solution: Mark the `\[%[]` item as not being simple.  
 Files: `src/regexp.c`

On Vista access to system directories is virtualized. (Michael Mutschler)  
 Adjusted the manifest file to avoid this. (George Reilly)

Memory leak when using CTRL-C to cancel listing the jump list. (Dominique Pelle)

Mac: Could not build with Perl interface.

## =====

\*version-7.3\* \*version7.3\*

VERSION 7.3

This section is about improvements made between version 7.2 and 7.3.

This release has hundreds of bug fixes and there are a few new features. The most notable new features are:

## Persistent undo

\*new-persistent-undo\*

-----

Store undo information in a file. Can undo to before when the file was read, also for unloaded buffers. See `|undo-persistence|` (partly by Jordan Lewis)

Added the `":earlier lf"` and `":later lf"` commands.  
 Added file save counter to undo information.  
 Added the `|undotree()|` and `|undofile()|` functions.

Also added the 'undoreload' option. This makes it possible to save the current text when reloading the buffer, so that the reload can be undone.

## More encryption

\*new-more-encryption\*

-----

Support for Blowfish encryption. Added the 'cryptmethod' option.  
 Mostly by Mohsin Ahmed.

Also encrypt the text in the swap file and the undo file.

## Conceal text

\*new-conceal\*

-----

Added the `|+conceal|` feature. (Vince Negri)  
 This allows hiding stretches of text, based on syntax highlighting.  
 It also allows replacing a stretch of text by a character `|:syn-cchar|`.  
 The 'conceallevel' option specifies what happens with text matching a syntax item that has the conceal attribute.  
 The 'concealcursor' option specifies what happens in the cursor line.

The help files conceal characters used to mark tags and examples.

Added the |synconcealed()| function and use it for :T0html. (Benjamin Fritz)

Added the 'cursorbind' option, keeps the cursor in two windows with the same text in sync.

Lua interface \*new-lua\*  
-----

Added the |Lua| interface. (Luis Carvalho)

Python3 interface \*new-python3\*  
-----

Added the Python3 interface. It exists next to Python 2.x, both can be used at the same time. See |python3| (Roland Puntaier)

Changed \*changed-7.3\*  
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The MS-Windows installer no longer requires the user to type anything in the console windows. The installer now also works on 64 bit systems, including the "Edit with Vim" context menu.

The gvim executable is 32 bits, the installed gvimext.dll is either a 32 or 64 bit version. (mostly by George Reilly)

Made the DOS installer work with more compilers.

The MS-Windows big gvim is now built with Python 2.7 and 3.1.2, Perl 5.12 and Ruby 1.9.1. You need the matching .dll files to use them.

The extra and language files are no longer distributed separately.

The source files for all systems are included in one distribution.

After using ":recover" or recovering a file in another way, ":x" and "ZZ" didn't save what you see. This could result in work being lost. Now the text after recovery is compared to the original file contents. When they differ the buffer is marked as modified.

When Vim is exiting because of a deadly signal, when v:dying is 2 or more, VimLeavePre, VimLeave, BufWinLeave and BufUnload autocommands are not executed.

Removed support for GTK 1. It was no longer maintained and required a lot of #ifdefs in the source code. GTK 2 should be available for every system. (James Vega)

It is no longer allowed to set the 'encoding' option from a modeline. It would corrupt the text. (Patrick Texier)

Renamed runtime/spell/fixdup to runtime/spell/fixdup.vim.

Removed obsolete Mac code.

Updated spell files for Ubuntu locale names.

Switched from autoconf 2.63 to 2.65.

Removed Mupad indent and ftplugin files, they are not useful.

The maximum number of messages remembered in the history is now 200 (was 100).

Added

\*added-7.3\*

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Added the 'relativenumber' option. (Markus Heidelberg)

Added the 'colorcolumn' option: highlight one or more columns in a window.  
E.g. to highlight the column after 'textwidth'. (partly by Gregor Uhlenheuer)

Added support for NetBeans in a terminal. Added |:nbstart| and |:nbclose|. (Xavier de Gaye)

More floating point functions: |acos()|, |asin()|, |atan2()|, |cosh()|, |exp()|, |fmod()|, |log()|, |sinh()|, |tan()|, |tanh()|. (Bill McCarthy)

Added the |gettabvar()| and |settabvar()| functions. (Yegappan Lakshmanan)

Added the |strchars()|, |strwidth()| and |strdisplaywidth()| functions.

Support GDK\_SUPER\_MASK for GTK on Mac. (Stephan Schulz)

Made CTRL and ALT modifier work for mouse wheel. (Benjamin Haskell)

Added support for horizontal scroll wheel. (Bjorn Winckler)

When the buffer is in diff mode, have :TOhtml create HTML to show the diff side-by-side. (Christian Brabandt)

Various improvements to ":TOhtml" and the 2html.vim script. (Benjamin Fritz)

Add the 'L' item to 'cinoptions'. (Manuel Konig)

Improve Javascript indenting. Add "J" flag to 'cinoptions'. (Hari Kumar G)

Mac: Support disabling antialias. (LC Mi)

Mac: Add clipboard support in the Mac console. (Bjorn Winckler)

Make it possible to drag a tab page label to another position. (Paul B. Mahol)

Better implementation of creating the Color Scheme menu. (Juergen Kraemer)

In Visual mode with 'showcmd' display the number of bytes and characters.

Allow synIDattr() getting GUI attributes when built without GUI. (Matt Wozniski)

Support completion for ":find". Added test 73. (Nazri Ramliy)

Command line completion for :ownsyntax and :setfiletype. (Dominique Pelle)

Command line completion for :lmap and :lunmap.

Support syntax and filetype completion for user commands. (Christian Brabandt)

Avoid use of the GTK main\_loop() so that the GtkFileChooser can be used. (James Vega)

When 'formatexpr' evaluates to non-zero fall back to internal formatting, also for "gq". (James Vega)

Support :browse for commands that use an error file argument. (Lech Lorens)

Support wide file names in gvimext. (Szabolcs Horvat)

Improve test for joining lines. (Milan Vancura)

Make joining a range of lines much faster. (Milan Vancura)

Add patch to improve support of z/OS (OS/390). (Ralf Schandl)

Added the helphelp.txt file. Moved text from various.txt to it.

Added "q" item for 'statusline'. Added |w:quickfix\_title|. (Lech Lorens)

Various improvements for VMS. (Zoltan Arpadffy)

New syntax files: ~

Haskell Cabal build file (Vincent Berthoux)

ChaiScript (Jason Turner)

Cucumber (Tim Pope)

Datascript (Dominique Pelle)

Fantom (Kamil Toman)

Liquid (Tim Pope)

Markdown (Tim Pope)

wavefront's obj file (Vincent Berthoux)

Perl 6 (Andy Lester)

SDC - Synopsys Design Constraints (Maurizio Tranchero)

SVG - Scalable Vector Graphics (Vincent Berthoux)

task data (John Florian)

task 42 edit (John Florian)

New filetype plugins: ~

Cucumber (Tim Pope)

Liquid (Tim Pope)

Logcheck (Debian)

Markdown (Tim Pope)

Perl 6 (Andy Lester)

Quickfix window (Lech Lorens)

Tcl (Robert L Hicks)

New indent plugins: ~

CUDA (Bram Moolenaar)

ChaiScript (Jason Turner)

Cucumber (Tim Pope)

LifeLines (Patrick Texier)

Liquid (Tim Pope)

Mail (Bram Moolenaar)

Perl 6 (Andy Lester)

Other new runtime files: ~

Breton spell file (Dominique Pelle)

Dvorak keymap (Ashish Shukla)

Korean translations. (SungHyun Nam)

Python 3 completion (Aaron Griffin)

Serbian menu translations (Aleksandar Jelenak)

Tetum spell files

Tutor Bairish (Sepp Hell)

Tutor in Esperanto. (Dominique Pellé)

Tutor in Portuguese.

Norwegian Tutor now also available as tutor.nb

Removed the Mupad runtime files, they were not maintained.

Fixed

\*fixed-7.3\*

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Patch 7.2.001

Problem: Mac: pseudo-ttys don't work properly on Leopard, resulting in the shell not to have a prompt, CTRL-C not working, etc.  
Solution: Don't use SVR4 compatible ptys, even though they are detected. (Ben Schmidt)  
Files: src/pty.c

Patch 7.2.002

Problem: Leaking memory when displaying menus.  
Solution: Free allocated memory. (Dominique Pelle)  
Files: src/menu.c

Patch 7.2.003

Problem: Typo in translated message. Message not translated.  
Solution: Correct spelling. Add \_(). (Dominique Pelle)  
Files: src/spell.c, src/version.c

Patch 7.2.004

Problem: Cscope help message is not translated.  
Solution: Put it in \_(). (Dominique Pelle)  
Files: src/if\_cscope.c, src/if\_cscope.h

Patch 7.2.005

Problem: A few problems when profiling. Using flag pointer instead of flag value. Allocating zero bytes. Not freeing used memory.  
Solution: Remove wrong '&' characters. Skip dumping when there is nothing to dump. Free used memory. (Dominique Pelle)  
Files: src/eval.c

Patch 7.2.006

Problem: HTML files are not recognized by contents.  
Solution: Add a rule to the scripts file. (Nico Weber)  
Files: runtime/scripts.vim

Patch 7.2.007 (extra)

Problem: Minor issues for VMS.  
Solution: Minor fixes for VMS. Add float support. (Zoltan Arpadffy)  
Files: runtime/doc/os\_vms.txt, src/os\_vms\_conf.h, src/Make\_vms.mms, src/testdir/Make\_vms.mms, src/testdir/test30.in, src/testdir/test54.in

Patch 7.2.008

Problem: With a BufHidden autocommand that invokes ":bunload" the window count for a buffer can be wrong. (Bob Hiestand)  
Solution: Don't call enter\_buffer() when already in that buffer.  
Files: src/buffer.c

Patch 7.2.009

Problem: Can't compile with Perl 5.10 on MS-Windows. (Cesar Romani)  
Solution: Add the Perl\_sv\_free2 function for dynamic loading. (Dan Sharp)  
Files: src/if\_perl.xs

Patch 7.2.010

Problem: When using "K" in Visual mode not all characters are properly escaped. (Ben Schmidt)  
Solution: Use a function with the functionality of shellescape(). (Jan

Minar)  
Files: src/mbyte.c, src/misc2.c, src/normal.c

#### Patch 7.2.011

Problem: Get an error when inserting a float value from the expression register.

Solution: Convert the Float to a String automatically in the same place where a List would be converted to a String.

Files: src/eval.c

#### Patch 7.2.012

Problem: Compiler warnings when building with startup timing.

Solution: Add type casts.

Files: src/ex\_cmds2.c

#### Patch 7.2.013

Problem: While waiting for the X selection Vim consumes a lot of CPU time and hangs until a response is received.

Solution: Sleep a bit when the selection event hasn't been received yet. Time out after a couple of seconds to avoid a hang when the selection owner isn't responding.

Files: src/ui.c

#### Patch 7.2.014

Problem: synstack() doesn't work in an empty line.

Solution: Accept column zero as a valid position.

Files: src/eval.c

#### Patch 7.2.015

Problem: "make all test install" doesn't stop when the test fails. (Daniel Shahaf)

Solution: When test.log contains failures exit with non-zero status.

Files: src/testdir/Makefile

#### Patch 7.2.016

Problem: The pattern being completed may be in freed memory when the command line is being reallocated. (Dominique Pelle)

Solution: Keep a pointer to the expand\_T in the command line structure. Don't use <S-Tab> as CTRL-P when there are no results. Clear the completion when using a command line from the history.

Files: src/ex\_getln.c

#### Patch 7.2.017

Problem: strlen() used on text that may not end in a NUL. (Dominique Pelle)  
Pasting a very big selection doesn't work.

Solution: Use the length passed to the XtSelectionCallbackProc() function. After getting the SelectionNotify event continue dispatching events until the callback is actually called. Also dispatch the PropertyNotify event.

Files: src/ui.c

#### Patch 7.2.018

Problem: Memory leak when substitute is aborted.

Solution: Free the buffer allocated for the new text. (Dominique Pelle)

Files: src/ex\_cmds.c

#### Patch 7.2.019

Problem: Completion of ":noautocmd" doesn't work and exists(":noautocmd") returns zero. (Ben Fritz)

Solution: Add "noautocmd" to the list of modifiers and commands.

Files: src/ex\_cmds.h, src/ex\_docmd.c



## Patch 7.2.020

Problem: Starting the GUI when the executable starts with 'k', but the KDE version no longer exists.  
Solution: Don't have "kvim" start the GUI.  
Files: src/main.c

## Patch 7.2.021

Problem: When executing autocommands getting the full file name may be slow. (David Kotchan)  
Solution: Postpone calling FullName\_save() until autocmd\_fname is used.  
Files: src/ex\_docmd.c, src/fileio.c, src/globals.h

## Patch 7.2.022 (extra)

Problem: Testing is not possible when compiling with MingW.  
Solution: Add a MingW specific test Makefile. (Bill McCarthy)  
Files: Filelist, src/testdir/Make\_ming.mak

## Patch 7.2.023

Problem: 'cursorcolumn' is in the wrong place in a closed fold when the display is shifted left. (Gary Johnson)  
Solution: Subtract w\_skipcol or w\_leftcol when needed.  
Files: src/screen.c

## Patch 7.2.024

Problem: It's possible to set 'history' to a negative value and that causes an out-of-memory error.  
Solution: Check that 'history' has a positive value. (Doug Kearns)  
Files: src/option.c

## Patch 7.2.025

Problem: When a CursorHold event invokes system() it is retrigged over and over again.  
Solution: Don't reset did\_cursorhold when getting K\_IGNORE.  
Files: src/normal.c

## Patch 7.2.026 (after 7.2.010)

Problem: "K" doesn't use the length of the identifier but uses the rest of the line.  
Solution: Copy the desired number of characters first.  
Files: src/normal.c

## Patch 7.2.027

Problem: Can use cscope commands in the sandbox.  
Solution: Disallow them, they might not be safe.  
Files: src/ex\_cmds.h

## Patch 7.2.028

Problem: Confusing error message for missing ().  
Solution: Change "braces" to "parentheses". (Gary Johnson)  
Files: src/eval.c

## Patch 7.2.029

Problem: No completion for ":doautoall".  
Solution: Complete ":doautoall" like ":doautocmd". (Doug Kearns)  
Files: src/ex\_docmd.c

## Patch 7.2.030 (after 7.2.027)

Problem: Can't compile.  
Solution: Remove prematurely added ex\_oldfiles.  
Files: src/ex\_cmds.h

## Patch 7.2.031

Problem: Information in the viminfo file about previously edited files is not available to the user. There is no way to get a complete list of files edited in previous Vim sessions.

Solution: Add v:oldfiles and fill it with the list of old file names when first reading the viminfo file. Add the ":oldfiles" command, ":browse oldfiles" and the "#<123" special file name. Increase the default value for 'viminfo' from '20' to '100'.

Files: runtime/doc/cmdline.txt, runtime/doc/eval.txt, runtime/doc/starting.txt, runtime/doc/usr\_21.txt, src/eval.c, src/ex\_cmds.c, src/ex\_cmds.h, src/ex\_docmd.c, src/feature.h, src/fileio.c, src/main.c, src/mark.c, src/misc1.c, src/proto/eval.pro, src/proto/ex\_cmds.pro, src/proto/mark.pro, src/option.c, src/structs.h, src/vim.h

Patch 7.2.032 (after 7.2.031)

Problem: Can't build with EXITFREE defined. (Dominique Pelle)

Solution: Change vv\_string to vv\_str.

Files: src/eval.c

Patch 7.2.033

Problem: When detecting a little endian BOM "ucs-2le" is used, but the text might be "utf-16le".

Solution: Default to "utf-16le", it also works for "ucs-2le". (Jia Yanwei)

Files: src/fileio.c, src/testdir/test42.ok

Patch 7.2.034

Problem: Memory leak in spell info when deleting buffer.

Solution: Free the memory. (Dominique Pelle)

Files: src/buffer.c

Patch 7.2.035

Problem: Mismatches between alloc/malloc, free/vim\_free, realloc/vim\_realloc.

Solution: Use the right function. (Dominique Pelle)

Files: src/gui\_x11.c, src/mbyte.c, src/misc2.c, src/os\_unix.c

Patch 7.2.036 (extra)

Problem: Mismatches between alloc/malloc, free/vim\_free, realloc/vim\_realloc.

Solution: Use the right function. (Dominique Pelle)

Files: src/gui\_riscos.c, src/gui\_w48.c, src/mbyte.c, src/os\_vms.c, src/os\_w32exe.c, src/os\_win16.c

Patch 7.2.037

Problem: Double free with GTK 1 and compiled with EXITFREE.

Solution: Don't close display. (Dominique Pelle)

Files: src/os\_unix.c

Patch 7.2.038

Problem: Overlapping arguments to memcpy().

Solution: Use mch\_memmove(). (Dominique Pelle)

Files: src/if\_xcmdsrv.c

Patch 7.2.039

Problem: Accessing freed memory on exit when EXITFREE is defined.

Solution: Call hash\_init() on the v: hash table.

Files: src/eval.c

Patch 7.2.040

Problem: When using ":e ++ff=dos fname" and the file contains a NL without a CR before it and 'ffs' contains "unix" then the fileformat becomes unix.

Solution: Ignore 'ffs' when using the ++ff argument. (Ben Schmidt)  
Also remove unreachable code.  
Files: src/fileio.c

#### Patch 7.2.041

Problem: In diff mode, when using two tabs, each with two diffed buffers, editing a buffer of the other tab messes up the diff. (Matt Mzyzik)  
Solution: Only copy options from a window where the buffer was edited that doesn't have 'diff' set or is for the current tab page. Also fix that window options for a buffer are stored with the wrong window.  
Files: src/buffer.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/if\_sniff.c, src/main.c, src/netbeans.c, src/normal.c, src/popupmnu.c, src/proto/buffer.pro, src/proto/ex\_cmds.pro src/quickfix.c, src/window.c

#### Patch 7.2.042

Problem: When using winrestview() in a BufWinEnter autocommand the window is scrolled anyway. (Matt Mzyzik)  
Solution: Don't recompute topline when above 'scrolloff' from the bottom. Don't always put the cursor halfway when entering a buffer. Add "w\_topleft\_was\_set".  
Files: src/buffer.c, src/move.c, src/structs.h

#### Patch 7.2.043

Problem: VMS: Too many characters are escaped in filename and shell commands.  
Solution: Escape fewer characters. (Zoltan Arpadffy)  
Files: src/vim.h

#### Patch 7.2.044

Problem: Crash because of STRCPY() being over protective of the destination size. (Dominique Pelle)  
Solution: Add -D\_FORTIFY\_SOURCE=1 to CFLAGS. Use an intermediate variable for the pointer to avoid a warning.  
Files: src/auto/configure, src/configure.in, src/eval.c

#### Patch 7.2.045

Problem: The Python interface has an empty entry in sys.path.  
Solution: Filter out the empty entry. (idea from James Vega)  
Files: src/if\_python.c

#### Patch 7.2.046

Problem: Wrong check for filling buffer with encoding. (Danek Duvall)  
Solution: Remove pointers. (Dominique Pelle)  
Files: src/mbyte.c

#### Patch 7.2.047

Problem: Starting Vim with the -nb argument while it's not supported causes the other side to hang.  
Solution: When -nb is used while it's not supported exit Vim. (Xavier de Gaye)  
Files: src/main.c, src/vim.h

#### Patch 7.2.048

Problem: v:prevcount is changed too often. Counts are not multiplied when setting v:count.  
Solution: Set v:prevcount properly. Multiply counts. (idea by Ben Schmidt)  
Files: src/eval.c, src/normal.c, src/proto/eval.pro

#### Patch 7.2.049 (extra)

Problem: Win32: the clipboard doesn't support UTF-16.  
Solution: Change UCS-2 support to UTF-16 support. (Jia Yanwei)  
Files: src/gui\_w32.c, src/gui\_w48.c, src/mbyte.c, src/misc1.c,  
src/os\_mswin.c, src/os\_win32.c, src/proto/os\_mswin.pro

#### Patch 7.2.050

Problem: Warnings for not checking return value of fwrite(). (Chip Campbell)  
Solution: Use the return value.  
Files: src/spell.c

#### Patch 7.2.051

Problem: Can't avoid 'wildignore' and 'suffixes' for glob() and globpath().  
Solution: Add an extra argument to these functions. (Ingo Karkat)  
Files: src/eval.c, src/ex\_getln.c, src/proto/ex\_getln.pro,  
runtime/doc/eval.txt, runtime/doc/options.txt

#### Patch 7.2.052

Problem: synIDattr() doesn't support "sp" for special color.  
Solution: Recognize "sp" and "sp#". (Matt Wozniski)  
Files: runtime/doc/eval.txt, src/eval.c

#### Patch 7.2.053

Problem: Crash when using WorkShop command ":ws foo". (Dominique Pelle)  
Solution: Avoid using a NULL pointer.  
Files: src/workshop.c

#### Patch 7.2.054

Problem: Compilation warnings for format in getchar.c.  
Solution: Use fputs() instead of fprintf(). (Dominique Pelle)  
Files: src/getchar.c

#### Patch 7.2.055

Problem: Various compiler warnings with strict checking.  
Solution: Avoid the warnings by using return values and renaming.  
Files: src/diff.c, src/eval.c, src/ex\_cmds.c, src/ex\_docmd.c,  
src/fileio.c, src/fold.c, src/globals.h, src/gui.c,  
src/gui\_at\_sb.c, src/gui\_gtk\_x11.c, src/gui\_xmdlg.c,  
src/gui\_xmew.c, src/main.c, src/mbyte.c, src/message.c,  
src/netbeans.c, src/option.c, src/os\_unix.c, src/spell.c,  
src/ui.c, src/window.c

#### Patch 7.2.056 (after 7.2.050)

Problem: Tests 58 and 59 fail.  
Solution: Don't invoke fwrite() with a zero length. (Dominique Pelle)  
Files: src/spell.c

#### Patch 7.2.057 (after 7.2.056)

Problem: Combination of int and size\_t may not work.  
Solution: Use size\_t for variable.  
Files: src/spell.c

#### Patch 7.2.058

Problem: Can't add a patch name to the ":version" output.  
Solution: Add the extra\_patches array.  
Files: src/version.c

#### Patch 7.2.059

Problem: Diff display is not always updated.  
Solution: Update the display more often.  
Files: src/diff.c

#### Patch 7.2.060

Problem: When a spell files has many compound rules it may take a very long time making the list of suggestions. Displaying also can be slow when there are misspelled words.  
Can't parse some Hunspell .aff files.

Solution: Check if a compounding can possibly work before trying a combination, if the compound rules don't contain wildcards.  
Implement using CHECKCOMPOUNDPATTERN.  
Ignore COMPOUNDRULES. Ignore a comment after most items.  
Accept ONLYINCOMPOUND as an alias for NEEDCOMPOUND.  
Accept FORBIDDENWORD as an alias for BAD.

Files: runtime/doc/spell.txt, src/spell.c

## Patch 7.2.061

Problem: Can't create a funcref for an autoload function without loading the script first. (Marc Weber)

Solution: Accept autoload functions that don't exist yet in function().

Files: src/eval.c

## Patch 7.2.062

Problem: "[Scratch]" is not translated.

Solution: Mark the string for translation. (Dominique Pelle)

Files: src/buffer.c

## Patch 7.2.063

Problem: Warning for NULL argument of Perl\_sys\_init3().

Solution: Use Perl\_sys\_init() instead. (partly by Dominique Pelle)

Files: src/if\_perl.xs

## Patch 7.2.064

Problem: Screen update bug when repeating "~" on a Visual block and the last line doesn't change.

Solution: Keep track of changes for all lines. (Moritz Orbach)

Files: src/ops.c

## Patch 7.2.065

Problem: GTK GUI: the cursor disappears when doing ":vsp" and the Vim window is maximized. (Dominique Pelle, Denis Smolyar)

Solution: Don't change "Columns" back to an old value at a wrong moment.  
Do change "Rows" when it should not be a problem.

Files: src/gui.c

## Patch 7.2.066

Problem: It's not easy to see whether 'encoding' is a multi-byte encoding.

Solution: Add has('multi\_byte\_encoding').

Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.2.067

Problem: Session file can't load extra file when the path contains special characters.

Solution: Escape the file name. (Lech Lorens)

Files: src/ex\_docmd.c

## Patch 7.2.068

Problem: Emacs tags file lines can be too long, resulting in an error message. (James Vega)

Solution: Ignore lines with errors if they are too long.

Files: src/tag.c

## Patch 7.2.069 (after 7.2.060)

Problem: Compiler warning for storing size\_t in int.

Solution: Add type cast.

Files: src/spell.c

## Patch 7.2.070

Problem: Crash when a function returns a:000. (Matt Wozniski)

Solution: Don't put the function struct on the stack, allocate it. Free it only when nothing in it is used.

Files: src/eval.c

## Patch 7.2.071 (extra)

Problem: Win32: Handling netbeans events while Vim is busy updating the screen may cause a crash.

Solution: Like with GTK, only handle netbeans messages in the main loop. (Xavier de Gaye)

Files: src/gui\_w48.c, src/netbeans.c

## Patch 7.2.072 (extra)

Problem: Compiler warning in Sniff code.

Solution: Use return value of pipe(). (Dominique Pelle)

Files: src/if\_sniff.c

## Patch 7.2.073

Problem: ":set <xHome>" has the same output as ":set <Home>". (Matt Wozniski)

Solution: Don't translate "x" keys to its alternative for ":set".

Files: src/gui\_mac.c, src/misc2.c, src/option.c, src/proto/misc2.pro

## Patch 7.2.074 (extra, after 7.2.073)

Problem: ":set <xHome>" has the same output as ":set <Home>". (Matt Wozniski)

Solution: Don't translate "x" keys to its alternative for ":set".

Files: src/gui\_mac.c

## Patch 7.2.075 (after 7.2.058)

Problem: Explanation about making a diff for extra\_patches is unclear.

Solution: Adjust comment.

Files: src/version.c

## Patch 7.2.076

Problem: rename(from, to) deletes the file if "from" and "to" are not equal but still refer to the same file. E.g., on a FAT32 filesystem under Unix.

Solution: Go through another file name.

Files: src/fileio.c

## Patch 7.2.077 (after 7.2.076)

Problem: rename(from, to) doesn't work if "from" and "to" differ only in case on a system that ignores case in file names.

Solution: Go through another file name.

Files: src/fileio.c

## Patch 7.2.078

Problem: When deleting a fold that is specified with markers the cursor position may be wrong. Folds may not be displayed properly after a delete. Wrong fold may be deleted.

Solution: Fix the problems. (mostly by Lech Lorens)

Files: src/fold.c

## Patch 7.2.079

Problem: "killed" netbeans events are not handled correctly.

Solution: A "killed" netbeans event is sent when the buffer is deleted or wiped out (in this case, the netbeans annotations in this buffer have been removed). A user can still remove a sign with the command ":sign unplace" and this does not trigger a "killed"

event. (Xavier de Gaye)  
Files: runtime/doc/netbeans.txt, src/buffer.c, src/globals.h,  
src/netbeans.c, src/proto/netbeans.pro

## Patch 7.2.080

Problem: When typing a composing character just after starting completion  
may access memory before its allocation point. (Dominique Pelle)  
Solution: Don't delete before the completion start column. Add extra checks  
for the offset not being negative.  
Files: src/edit.c

## Patch 7.2.081

Problem: Compiler warning for floating point overflow on VAX.  
Solution: For VAX use a smaller number. (Zoltan Arpadffy)  
Files: src/message.c

## Patch 7.2.082

Problem: When 'ff' is "mac" then "ga" on a ^J shows 0x0d instead of 0x0a.  
(Andy Wokula)  
Solution: Use NL for this situation. (Lech Lorens)  
Files: src/ex\_cmds.c

## Patch 7.2.083

Problem: ":tag" does not return to the right tag entry from the tag stack.  
Solution: Don't change the current match when there is no argument.  
(Erik Falor)  
Files: src/tag.c

## Patch 7.2.084

Problem: Recursive structures are not handled properly in Python  
vim.eval().  
Solution: Keep track of references in a better way. (Yukihiro Nakadaira)  
Files: src/if\_python.c

## Patch 7.2.085

Problem: ":set <M-b>=<Esc>b" does not work when 'encoding' is utf-8.  
Solution: Put the <M-b> character in the input buffer as valid utf-8.  
(partly by Matt Wozniski)  
Files: src/term.c

## Patch 7.2.086

Problem: Using ":diffget 1" in buffer 1 corrupts the text.  
Solution: Don't do anything when source and destination of ":diffget" or  
":diffput" is the same buffer. (Dominique Pelle)  
Files: src/diff.c

## Patch 7.2.087

Problem: Adding URL to 'path' doesn't work to edit a file.  
Solution: Skip simplify\_filename() for URLs. (Matt Wozniski)  
Files: src/misc2.c

## Patch 7.2.088 (extra)

Problem: OpenClipboard() may fail when another application is using the  
clipboard.  
Solution: Retry OpenClipboard() a few times. (Jianrong Yu)  
Files: src/os\_mswin.c

## Patch 7.2.089 (extra)

Problem: Win32: crash when using Ultramon buttons.  
Solution: Don't use a WM\_OLE message of zero size. (Ray Megal)  
Files: src/if\_ole.cpp, src/gui\_w48.c

## Patch 7.2.090

Problem: User command containing 0x80 in multi-byte character does not work properly. (Yasuhiro Matsumoto)  
Solution: Undo replacement of K\_SPECIAL and CSI characters when executing the command.  
Files: src/ex\_docmd.c

## Patch 7.2.091

Problem: ":cs help" output is not aligned for some languages.  
Solution: Compute character size instead of byte size. (Dominique Pelle)  
Files: src/if\_kscope.c

## Patch 7.2.092

Problem: Some error messages are not translated.  
Solution: Add \_() around the messages. (Dominique Pelle)  
Files: src/eval.c

## Patch 7.2.093 (extra)

Problem: Win32: inputdialog() and find/replace dialogs can't handle multi-byte text.  
Solution: Use the wide version of dialog functions when available. (Yanwei Jia)  
Files: src/gui\_w32.c, src/gui\_w48.c

## Patch 7.2.094

Problem: Compiler warning for signed/unsigned compare.  
Solution: Add type cast. Also fix a few typos.  
Files: src/edit.c

## Patch 7.2.095

Problem: With Visual selection, "r" and then CTRL-C Visual mode is stopped but the highlighting is not removed.  
Solution: Call reset\_Visual().  
Files: src/normal.c

## Patch 7.2.096

Problem: After ":number" the "Press Enter" message may be on the wrong screen, if switching screens for shell commands.  
Solution: Reset info\_message. (James Vega)  
Files: src/ex\_cmds.c

## Patch 7.2.097

Problem: "!xterm&" doesn't work when 'shell' is "bash".  
Solution: Ignore SIGHUP after calling setsid(). (Simon Schubert)  
Files: src/os\_unix.c

## Patch 7.2.098

Problem: Warning for signed/unsigned pointer.  
Solution: Add type cast.  
Files: src/eval.c

## Patch 7.2.099

Problem: Changing GUI options causes an unnecessary redraw when the GUI isn't active.  
Solution: Avoid the redraw. (Lech Lorens)  
Files: src/option.c

## Patch 7.2.100

Problem: When using ":source" on a FIFO or something else that can't rewind the first three bytes are skipped.  
Solution: Instead of rewinding read the first line and detect a BOM in that. (mostly by James Vega)



Files: src/ex\_cmds2.c

Patch 7.2.101 (extra)

Problem: MSVC version not recognized.

Solution: Add the version number to the list. (Zhong Zhang)

Files: src/Make\_mvc.mak

Patch 7.2.102 (after 7.2.100)

Problem: When 'encoding' is "utf-8" a BOM at the start of a Vim script is not removed. (Tony Mechelynck)

Solution: When no conversion is taking place make a copy of the line without the BOM.

Files: src/ex\_cmds2.c

Patch 7.2.103

Problem: When 'bomb' is changed the window title is updated to show/hide a "+", but the tab page label isn't. (Patrick Texier)

Solution: Set "redraw\_tabline" in most places where "need\_maketitle" is set. (partly by Lech Lorens)

Files: src/option.c

Patch 7.2.104

Problem: When using ":saveas bar.c" the tab label isn't updated right away.

Solution: Set redraw\_tabline. (Francois Ingelrest)

Files: src/ex\_cmds.c

Patch 7.2.105

Problem: Modeline setting for 'foldmethod' overrules diff options. (Ingo Karkat)

Solution: Don't set 'foldmethod' and 'wrap' from a modeline when 'diff' is on.

Files: src/option.c

Patch 7.2.106

Problem: Endless loop when using "]s" in HTML when there are no misspellings. (Ingo Karkat)

Solution: Break the search loop. Also fix pointer alignment for systems with pointers larger than int.

Files: src/spell.c

Patch 7.2.107

Problem: When using a GUI dialog and ":echo" commands the messages are deleted after the dialog. (Vincent Birebent)

Solution: Don't call msg\_end\_prompt() since there was no prompt.

Files: src/message.c

Patch 7.2.108 (after 7.2.105)

Problem: Can't build without the diff feature.

Solution: Add #ifdef.

Files: src/option.c

Patch 7.2.109

Problem: 'langmap' does not work for multi-byte characters.

Solution: Add a list of mapped multi-byte characters. (based on work by Konstantin Korikov, Agathoklis Hatzimanikas)

Files: runtime/doc/options.txt, src/edit.c, src/getchar.c, src/macros.h, src/normal.c, src/option.c, src/proto/option.pro, src/window.c

Patch 7.2.110

Problem: Compiler warning for unused variable.

Solution: Init the variable.

Files: src/ex\_docmd.c

## Patch 7.2.111

Problem: When using Visual block mode with 'cursorcolumn' it's unclear what is selected.

Solution: Don't use 'cursorcolumn' highlighting inside the Visual selection. (idea by Dominique Pelle)

Files: src/screen.c

## Patch 7.2.112

Problem: Cursor invisible in Visual mode when 'number' is set and cursor in first column. (Matti Niememaa, Renato Alves)

Solution: Check that vcol\_prev is smaller than vcol.

Files: src/screen.c

## Patch 7.2.113

Problem: Crash for substitute() call using submatch(1) while there is no such submatch. (Yukihiro Nakadaira)

Solution: Also check the start of the submatch is set, it can be NULL when an attempted match didn't work out.

Files: src/regexp.c

## Patch 7.2.114

Problem: Using wrong printf format.

Solution: Use "%ld" instead of "%d". (Dominique Pelle)

Files: src/netbeans.c

## Patch 7.2.115

Problem: Some debugging code is never used.

Solution: Remove nbtrace() and nbprt(). (Dominique Pelle)

Files: src/nbdebug.c, src/nbdebug.h

## Patch 7.2.116

Problem: Not all memory is freed when EXITFREE is defined.

Solution: Free allocated memory on exit. (Dominique Pelle)

Files: src/ex\_docmd.c, src/gui\_gtk\_x11.c, src/misc2.c, src/search.c, src/tag.c

## Patch 7.2.117

Problem: Location list incorrectly labelled "Quickfix List".

Solution: Break out of both loops for finding window for location list buffer. (Lech Lorens)

Files: src/buffer.c, src/quickfix.c, src/screen.c

## Patch 7.2.118

Problem: <PageUp> at the more prompt only does half a page.

Solution: Make <PageUp> go up a whole page. Also make 'f' go a page forward, but not quit the more prompt. (Markus Heidelberg)

Files: src/message.c

## Patch 7.2.119

Problem: Status line is redrawn too often.

Solution: Check ScreenLinesUC[] properly. (Yukihiro Nakadaira)

Files: src/screen.c

## Patch 7.2.120

Problem: When opening the quickfix window or splitting the window and setting the location list, the location list is copied and then deleted, which is inefficient.

Solution: Don't copy the location list when not needed. (Lech Lorens)

Files: src/quickfix.c, src/vim.h, src/window.c

## Patch 7.2.121

Problem: In gvim "!grep a \*.c" spews out a lot of text that can't be stopped with CTRL-C.  
Solution: When looping to read and show text, do check for typed characters every two seconds.  
Files: src/os\_unix.c

## Patch 7.2.122

Problem: Invalid memory access when the VimResized autocommand changes 'columns' and/or 'lines'.  
Solution: After VimResized check for changed values. (Dominique Pelle)  
Files: src/screen.c

## Patch 7.2.123

Problem: Typing 'q' at more prompt for ":map" output still displays another line, causing another more prompt. (Markus Heidelberg)  
Solution: Quit listing maps when 'q' typed.  
Files: src/getchar.c

## Patch 7.2.124

Problem: Typing 'q' at more prompt for ":tselect" output still displays more lines, causing another more prompt. (Markus Heidelberg)  
Solution: Quit listing tags when 'q' typed.  
Files: src/tag.c

## Patch 7.2.125

Problem: Leaking memory when reading XPM bitmap for a sign.  
Solution: Don't allocate the memory twice. (Dominique Pelle)  
Files: src/gui\_x11.c

## Patch 7.2.126

Problem: When EXITFREE is defined signs are not freed.  
Solution: Free all signs on exit. Also free keymaps. (Dominique Pelle)  
Files: src/misc2.c, src/ex\_cmds.c, src/proto/ex\_cmds.pro

## Patch 7.2.127

Problem: When listing mappings and a wrapping line causes the more prompt, after typing 'q' there can be another more prompt. (Markus Heidelberg)  
Solution: Set "lines\_left" to allow more lines to be displayed.  
Files: src/message.c

## Patch 7.2.128 (after 7.2.055)

Problem: Using ":lcd" makes session files not work.  
Solution: Compare return value of mch\_chdir() properly. (Andreas Bernauer)  
Files: src/ex\_docmd.c

## Patch 7.2.129

Problem: When opening a command window from input() it uses the search history.  
Solution: Use get\_cmdline\_type(). (James Vega)  
Files: src/ex\_getln.c

## Patch 7.2.130

Problem: Vim may hang until CTRL-C is typed when using CTRL-Z.  
Solution: Avoid using pause(). Also use "volatile" for variables used in signal functions. (Dominique Pelle)  
Files: src/auto/configure, src/configure.in, src/config.h.in, src/globals.h, src/os\_unix.c

## Patch 7.2.131

Problem: When 'keymap' is cleared may still use the cursor highlighting for when it's enabled.

Solution: Reset 'iminsert' and 'imsearch'. (partly by Dominique Pelle)  
Also avoid ":setlocal" for these options have a global effect.  
Files: src/option.c

#### Patch 7.2.132

Problem: When changing directory during a SwapExists autocmd freed memory may be accessed. (Dominique Pelle)  
Solution: Add the allbuf\_lock flag.  
Files: src/ex\_getln.c, src/globals.h, src/fileio.c, src/proto/ex\_getln.pro

#### Patch 7.2.133

Problem: ":diffoff!" changes settings in windows not in diff mode.  
Solution: Only change settings in other windows when 'diff' is set, always do it for the current window. (Lech Lorens)  
Files: src/diff.c

#### Patch 7.2.134

Problem: Warning for discarding "const" from pointer.  
Solution: Don't pass const pointer to mch\_memmove().  
Files: src/fileio.c

#### Patch 7.2.135

Problem: Memory leak when redefining user command with complete argument.  
Solution: Free the old complete argument. (Dominique Pelle)  
Files: src/ex\_docmd.c

#### Patch 7.2.136 (after 7.2.132)

Problem: ":cd" is still possible in a SwapExists autocmd.  
Solution: Check the allbuf\_lock flag in ex\_cd().  
Files: src/ex\_docmd.c

#### Patch 7.2.137

Problem: When 'virtualedit' is set, a left shift of a blockwise selection that starts and ends inside a tab shifts too much. (Helmut Stiegler)  
Solution: Redo the block left shift code. (Lech Lorens)  
Files: src/ops.c, src/testdir/Makefile, src/testdir/test66.in, src/testdir/test66.ok

#### Patch 7.2.138 (extra part of 7.2.137)

Problem: See 7.2.137.  
Solution: See 7.2.137.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

#### Patch 7.2.139

Problem: Crash when 'virtualedit' is "all". (James Vega)  
Solution: Avoid overflow when column is MAXCOL. (Dominique Pelle)  
Files: src/misc2.c

#### Patch 7.2.140

Problem: Diff highlighting isn't displayed before the Visual area if it starts at the cursor position. (Markus Heidelberg)  
Solution: Also check fromcol\_prev.  
Files: src/screen.c

#### Patch 7.2.141

Problem: When redrawing a character for bold spill this causes the next character to be redrawn as well.  
Solution: Only redraw one extra character. (Yukihiro Nakadaira)

Files: src/screen.c

Patch 7.2.142

Problem: Motif and Athena balloons don't use tooltip colors.

Solution: Set the colors. (Matt Wozniski)

Files: src/gui\_beval.c

Patch 7.2.143

Problem: No command line completion for ":cscope" command.

Solution: Add the completion for ":cscope". (Dominique Pelle)

Files: src/ex\_docmd.c, src/ex\_getln.c, src/if\_cscope.c,  
src/proto/if\_cscope.pro, src/vim.h

Patch 7.2.144

Problem: When 't\_Co' is set to the value it already had the color scheme is reloaded anyway.

Solution: Only load the colorscheme when the t\_Co value changes. (Dominique Pelle)

Files: src/option.c

Patch 7.2.145

Problem: White space in ":cscope find" is not ignored.

Solution: Ignore the white space, but not when the leading white space is useful for the argument.

Files: runtime/doc/if\_scop.txt, src/if\_cscope.c

Patch 7.2.146

Problem: v:warningmsg isn't used for all warnings.

Solution: Set v:warningmsg for relevant warnings. (Ingo Karkat)

Files: src/fileio.c, src/misc1.c, src/option.c

Patch 7.2.147

Problem: When compiled as small version and 'number' is on the cursor is displayed in the wrong position after a tab. (James Vega)

Solution: Don't increment vcol when still displaying the line number.

Files: src/screen.c

Patch 7.2.148

Problem: When searching for "\$" while 'hlsearch' is set, highlighting the character after the line does not work in the cursor column. Also highlighting for Visual mode after the line end when this isn't needed. (Markus Heidelberg)

Solution: Only compare the cursor column in the cursor line. Only highlight for Visual selection after the last character when it's needed to see where the Visual selection ends.

Files: src/screen.c

Patch 7.2.149

Problem: Using return value of function that doesn't return a value results in reading uninitialized memory.

Solution: Set the default to return zero. Make cursor() return -1 on failure. Let complete() return an empty string in case of an error. (partly by Dominique Pelle)

Files: runtime/doc/eval.txt, src/eval.c

Patch 7.2.150 (extra)

Problem: Can't use tab pages from VisVim.

Solution: Add tab page support to VisVim. (Adam Slater)

Files: src/VisVim/Commands.cpp, src/VisVim/Resource.h,  
src/VisVim/VisVim.rc

Patch 7.2.151

Problem: ":hist a" doesn't work like ":hist all" as the docs suggest.  
Solution: Make ":hist a" and ":hist al" work. (Dominique Pelle)  
Files: src/ex\_getln.c

#### Patch 7.2.152

Problem: When using "silent echo x" inside ":redir" a next echo may start halfway the line. (Tony Mechelynck, Dennis Benzinger)  
Solution: Reset msg\_col after redirecting silently.  
Files: src/ex\_docmd.c, src/message.c, src/proto/message.pro

#### Patch 7.2.153

Problem: Memory leak for ":recover empty\_dir/".  
Solution: Free files[] when it becomes empty. (Dominique Pelle)  
Files: src/memline.c

#### Patch 7.2.154 (after 7.2.132)

Problem: ":cd" is still possible in a SwapExists autocmd.  
Solution: Set allbuf\_lock in do\_swapexists().  
Files: src/memline.c

#### Patch 7.2.155

Problem: Memory leak in ":function /pat".  
Solution: Free the memory. (Dominique Pelle)  
Files: src/eval.c

#### Patch 7.2.156 (after 7.2.143)

Problem: No completion for :scscope and :lcscope commands.  
Solution: Implement the completion. (Dominique Pelle)  
Files: src/if\_cscope.c, src/ex\_docmd.c, src/proto/if\_cscope.pro

#### Patch 7.2.157

Problem: Illegal memory access when searching in path.  
Solution: Avoid looking at a byte after end of a string. (Dominique Pelle)  
Files: src/search.c

#### Patch 7.2.158

Problem: Warnings from VisualC compiler.  
Solution: Add type casts. (George Reilly)  
Files: src/ops.c

#### Patch 7.2.159

Problem: When \$x\_includes ends up being "NONE" configure fails.  
Solution: Check for \$x\_includes not to be "NONE" (Rainer)  
Files: src/auto/configure, src/configure.in

#### Patch 7.2.160

Problem: Search pattern not freed on exit when 'rightleft' set.  
Solution: Free mr\_pattern\_allocated.  
Files: src/search.c

#### Patch 7.2.161

Problem: Folds messed up in other tab page. (Vlad Irnov)  
Solution: Instead of going over all windows in current tab page go over all windows in all tab pages. Also free memory for location lists in other tab pages when exiting. (Lech Lorens)  
Files: src/fileio.c, src/mark.c, src/misc1.c, src/misc2.c

#### Patch 7.2.162

Problem: The quickfix window may get wrong filetype.  
Solution: Do not detect the filetype for the quickfix window. (Lech Lorens)  
Files: src/quickfix.c

## Patch 7.2.163

Problem: The command line window may get folding.  
Solution: Default to no/manual folding. (Lech Lorens)  
Files: src/ex\_getln.c

## Patch 7.2.164

Problem: When 'showbreak' is set the size of the Visual block may be reported wrong. (Eduardo Daudt Flach)  
Solution: Temporarily make 'sbr' empty.  
Files: src/normal.c, src/ops.c

## Patch 7.2.165

Problem: The argument for the FuncUndefined autocmd event is expanded like a file name.  
Solution: Don't try expanding it. (Wang Xu)  
Files: src/fileio.c

## Patch 7.2.166

Problem: No completion for ":sign" command.  
Solution: Add ":sign" completion. (Dominique Pelle)  
Files: src/ex\_cmds.c, src/ex\_docmd.c, src/ex\_getln.c, src/vim.h, src/proto/ex\_cmds.pro

## Patch 7.2.167

Problem: Splint doesn't work well for checking the code.  
Solution: Add splint arguments in the Makefile. Exclude some code from splint that it can't handle. Tune splint arguments to give reasonable errors. Add a filter for removing false warnings from splint output. Many small changes to avoid warnings. More to follow...  
Files: Filelist, src/Makefile, src/buffer.c, src/charset.c, src/cleanlint.vim, src/digraph.c, src/edit.c, src/ex\_cmds.c, src/globals.h, src/ops.c, src/os\_unix.c, src/os\_unix.h, src/proto/buffer.pro, src/proto/edit.pro, src/screen.c, src/structs.h

## Patch 7.2.168

Problem: When no ctags program can be found, "make tags" attempts to execute the first C file.  
Solution: Default to "ctags" when no ctags program can be found.  
Files: src/configure.in, src/auto/configure

## Patch 7.2.169

Problem: Splint complains about a lot of things.  
Solution: Add type casts, #ifdefs and other changes to avoid warnings. Change colnr\_T from unsigned to int. Avoids mistakes with subtracting columns.  
Files: src/cleanlint.vim, src/diff.c, src/edit.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/proto/ex\_cmds.pro, src/proto/spell.pro, src/quickfix.c, src/spell.c, src/structs.h, src/term.h, src/vim.h

## Patch 7.2.170

Problem: Using b\_dev while it was not set. (Dominique Pelle)  
Solution: Add the b\_dev\_valid flag.  
Files: src/buffer.c, src/fileio.c, src/structs.h

## Patch 7.2.171 (after 7.2.169)

Problem: Compiler warnings. (Tony Mechelynck)  
Solution: Add function prototype. (Patrick Texier) Init variable.  
Files: src/ex\_cmds.c

## Patch 7.2.172 (extra)

Problem: Compiler warning.  
Solution: Adjust function prototype. (Patrick Texier)  
Files: src/os\_mswin.c

## Patch 7.2.173

Problem: Without lint there is no check for unused function arguments.  
Solution: Use gcc -Wunused-parameter instead of lint. For a few files add attributes to arguments that are known not to be used.  
Files: src/auto/configure, src/buffer.c, src/charset.c, src/diff.c, src/configure.in, src/config.h.in, src/edit.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/version.c, src/vim.h

## Patch 7.2.174

Problem: Too many warnings from gcc -Wextra.  
Solution: Change initializer. Add UNUSED. Add type casts.  
Files: src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, getchar.c, globals.h, main.c, memline.c, message.c, src/misc1.c, src/move.c, src/normal.c, src/option.c, src/os\_unix.c, src/os\_unix.h, src/regexp.c, src/search.c, src/tag.c

## Patch 7.2.175

Problem: Compiler warning in OpenBSD.  
Solution: Add type cast for NULL. (Dasn)  
Files: src/if\_ctype.c

## Patch 7.2.176

Problem: Exceptions for splint are not useful.  
Solution: Remove the S\_SPLINT\_S ifdefs.  
Files: src/edit.c, src/ex\_cmds.c, src/ex\_docmd.c, src/os\_unix.c, src/os\_unix.h, src/os\_unixx.h, src/structs.h, src/term.h

## Patch 7.2.177

Problem: Compiler warnings when using -Wextra  
Solution: Add UNUSED and type casts.  
Files: src/eval.c, src/ex\_docmd.c, src/ex\_eval.c, src/ex\_getln.c, src/fileio.c, src/hardcopy.c, src/if\_ctype.c, src/if\_xcmdsrv.c, src/farsi.c, src/mark.c, src/menu.c

## Patch 7.2.178

Problem: Using negative value for device number might not work.  
Solution: Use a separate flag for whether ffv\_dev was set.  
Files: src/misc2.c

## Patch 7.2.179

Problem: Using negative value for device number might not work.  
Solution: Use a separate flag for whether sn\_dev was set.  
Files: src/ex\_cmds2.c

## Patch 7.2.180

Problem: Some more compiler warnings when using gcc -Wextra.  
Solution: Add UNUSED and type casts.  
Files: src/buffer.c, src/ex\_cmds.c, src/macros.h, src/main.c, src/menu.c, src/message.c, src/misc1.c, src/mbyte.c, src/normal.c, src/option.c, src/os\_unix.c, src/quickfix.c, src/screen.c, src/search.c, src/spell.c, src/syntax.c, src/tag.c, src/term.c, src/ui.c

## Patch 7.2.181

Problem: Some more compiler warnings when using gcc -Wextra.  
Solution: Add UNUSED and type casts.



Files: src/if\_mzsch.c, src/gui.c, src/gui\_gtk.c, src/gui\_gtk\_x11.c,  
src/gui\_gtk\_f.c, src/gui\_beval.c, src/netbeans.c

Patch 7.2.182 (after 7.2.181)

Problem: Compilation problems after previous patch for Motif. Gvim with  
GTK crashes on startup.

Solution: Add comma. Init form structure to zeroes.

Files: src/netbeans.c, src/gui\_gtk\_f.c

Patch 7.2.183

Problem: Configure problem for sys/sysctl.h on OpenBSD. (Dasn)

Solution: Add separate check for this header file. Also switch to newer  
version of autoconf.

Files: src/auto/configure, src/configure.in

Patch 7.2.184

Problem: Some more compiler warnings when using gcc -Wextra.

Solution: Add UNUSED and type casts. Autoconf check for wchar\_t.

Files: src/auto/configure, src/config.h.in, src/configure.in,  
src/gui\_athena.c, src/gui\_x11.c, src/gui.c, src/gui\_beval.c,  
src/gui\_at\_sb.c, src/gui\_at\_fs.c, src/gui\_motif.c,  
src/gui\_xmdl.c, src/gui\_xmew.c, src/if\_python.c, src/window.c,  
src/workshop.c

Patch 7.2.185

Problem: Some more compiler warnings when using gcc -Wextra.

Solution: Add UNUSED and type casts.

Files: src/Makefile, src/if\_tlc.c, src/if\_ruby.c

Patch 7.2.186

Problem: Some more compiler warnings when using gcc -Wextra.

Solution: Now with the intended if\_tcl.c changes.

Files: src/if\_tcl.c

Patch 7.2.187 (after 7.2.186)

Problem: Doesn't build with older versions of TCL. (Yongwei Wu)

Solution: Add #ifdefs. (Dominique Pelle)

Files: src/if\_tcl.c

Patch 7.2.188

Problem: Crash with specific use of function calls. (Meikel Brandmeyer)

Solution: Make sure the items referenced by a function call are not freed  
twice. (based on patch from Nico Weber)

Files: src/eval.c

Patch 7.2.189

Problem: Possible hang for deleting auto-indent. (Dominique Pelle)

Solution: Make sure the position is not beyond the end of the line.

Files: src/edit.c

Patch 7.2.190

Problem: The register executed by @@ isn't restored.

Solution: Mark the executable register in the viminfo file.

Files: src/ops.c

Patch 7.2.191

Problem: Mzscheme interface doesn't work on Ubuntu.

Solution: Change autoconf rules. Define missing macro. Some changes to  
avoid gcc warnings. Remove per-buffer namespace. (Sergey Khorev)

Files: runtime/doc/if\_mzsch.txt, src/Makefile, src/Make\_ming.mak,  
src/Make\_mvc.mak, src/auto/configure, src/configure.in,  
src/config.mk.in, src/eval.c, src/if\_mzsch.c, src/if\_mzsch.h,

src/main.c, src/proto/if\_mzsch.pro

Patch 7.2.192 (after 7.2.188)

Problem: Still a crash in the garbage collector for a very rare situation.

Solution: Make sure current\_copyID is always incremented correctly. (Kent Sibilev)

Files: src/eval.c

Patch 7.2.193

Problem: Warning for uninitialized values.

Solution: Initialize all the struct items.

Files: src/eval.c

Patch 7.2.194 (extra)

Problem: MSVC: rem commands are echoed.

Solution: Add commands to switch off echo. (Wang Xu)

Files: src/msvc2008.bat

Patch 7.2.195

Problem: Leaking memory for the command Vim was started with.

Solution: Remember the pointer and free it.

Files: src/gui\_gtk\_x11.c

Patch 7.2.196 (after 7.2.167)

Problem: Turns out splint doesn't work well enough to be usable.

Solution: Remove splint support.

Files: Filelist, src/cleanlint.vim

Patch 7.2.197

Problem: Warning for uninitialized values.

Solution: Initialize all the struct items of typebuf.

Files: src/globals.h

Patch 7.2.198

Problem: Size of buffer used for tgetent() may be too small.

Solution: Use the largest known size everywhere.

Files: src/vim.h

Patch 7.2.199

Problem: Strange character in comment.

Solution: Change to "message". (Yongwei Wu)

Files: src/term.c

Patch 7.2.200

Problem: Reading past end of string when navigating the menu bar or resizing the window.

Solution: Add and use mb\_ptr2len\_len(). (partly by Dominique Pelle)  
Also add mb\_ptr2cells\_len() to prevent more trouble.

Files: src/gui\_gtk\_x11.c, src/os\_unix.c, src/globals.h, src/mbyte.c,  
src/proto/mbyte.pro

Patch 7.2.201

Problem: Cannot copy/paste HTML to/from Firefox via the clipboard.

Solution: Implement this for GTK. Add the "html" value to 'clipboard'.

Files: runtime/doc/options.txt, src/globals.h, src/gui\_gtk\_x11.c,  
src/mbyte.c, src/proto/mbyte.pro, src/option.c

Patch 7.2.202

Problem: BufWipeout autocommand that edits another buffer causes problems.

Solution: Check for the situation, give an error and quit the operation.

Files: src/fileio.c

## Patch 7.2.203

Problem: When reloading a buffer or doing anything else with a buffer that is not displayed in a visible window, autocommands may be applied to the current window, folds messed up, etc.

Solution: Instead of using the current window for the hidden buffer use a special window, splitting the current one temporarily.

Files: src/fileio.c, src/globals.h, src/gui.c, src/if\_perl.xs, src/progo/gui.pro, src/proto/window.pro, src/screen.c, src/structs.h, src/window.c

## Patch 7.2.204 (extra)

Problem: Win32: Can't build with Visual Studio 2010 beta 1.

Solution: Fix the makefile. (George Reilly)

Files: src/Make\_mvc.mak

## Patch 7.2.205 (extra)

Problem: Win32: No support for High DPI awareness.

Solution: Fix the manifest file. (George Reilly)

Files: src/Make\_mvc.mak, src/gvim.exe.mnf

## Patch 7.2.206

Problem: Win32: Can't build netbeans interface with Visual Studio 2010.

Solution: Undefine ECONNREFUSED. (George Reilly)

Files: src/netbeans.c

## Patch 7.2.207

Problem: Using freed memory with ":redrawstatus" when it works recursively.

Solution: Prevent recursively updating the status line. (partly by Dominique Pelle)

Files: src/screen.c

## Patch 7.2.208

Problem: "set novice" gives an error message, it should be ignored.

Solution: Don't see "no" in "novice" as unsetting an option. (Patrick Texier)

Files: src/option.c

## Patch 7.2.209

Problem: For xxd setmode() is undefined on Cygwin.

Solution: Include io.h. (Dominique Pelle)

Files: src/xxd/xxd.c

## Patch 7.2.210

Problem: When a file that is being edited has its timestamp updated outside of Vim and ":checktime" is used still get a warning when writing the file. (Matt Mueller)

Solution: Store the timestamp in b\_mtime\_read when the timestamp is the only thing that changed.

Files: src/fileio.c

## Patch 7.2.211

Problem: Memory leak when expanding a series of file names.

Solution: Use ga\_clear\_strings() instead of ga\_clear().

Files: src/misc1.c

## Patch 7.2.212 (extra)

Problem: Warnings for redefining SIG macros.

Solution: Don't define them if already defined. (Bjorn Winckler)

Files: src/os\_mac.h

## Patch 7.2.213

Problem: Warning for using vsprintf().

Solution: Use `vim_vsnprintf()`.  
Files: `src/netbeans.c`

#### Patch 7.2.214

Problem: Crash with complete function for user command. (Andy Wokula)  
Solution: Avoid using a NULL pointer (Dominique Pelle)  
Files: `src/ex_getln.c`

#### Patch 7.2.215

Problem: `ml_get` error when using `":vimgrep"`.  
Solution: Load the memfile for the hidden buffer before putting it in a window. Correct the order of splitting the window and filling the window and buffer with data.  
Files: `src/fileio.c`, `src/proto/window.pro`, `src/quickfix.c`, `src/window.c`

#### Patch 7.2.216

Problem: Two error messages have the same number E812.  
Solution: Give one message a different number.  
Files: `runtime/doc/autocmd.txt`, `runtime/doc/if_mzsch.txt`, `src/if_mzsch.c`

#### Patch 7.2.217

Problem: Running tests with valgrind doesn't work as advertised.  
Solution: Fix the line in the Makefile.  
Files: `src/testdir/Makefile`

#### Patch 7.2.218

Problem: Cannot build GTK with `hangul_input` feature. (Dominique Pelle)  
Solution: Adjust `#ifdef`. (SungHyun Nam)  
Files: `src/gui.c`

#### Patch 7.2.219 (extra)

Problem: Photon GUI is outdated.  
Solution: Updates for QNX 6.4.0. (Sean Boudreau)  
Files: `src/gui_photon.c`

#### Patch 7.2.220 (after 7.2.215)

Problem: a `BufEnter` autocommand that changes directory causes problems. (Ajit Thakkar)  
Solution: Disable autocommands when opening a hidden buffer in a window.  
Files: `src/fileio.c`

#### Patch 7.2.221

Problem: `X cut_buffer0` text is used as-is, it may be in the wrong encoding.  
Solution: Convert between 'enc' and latin1. (James Vega)  
Files: `src/gui_gtk_x11.c`, `src/message.c`, `src/ops.c`, `src/proto/ui.pro`, `src/ui.c`

#### Patch 7.2.222

Problem: `":mksession"` doesn't work properly with 'acd' set.  
Solution: Make it work. (Yakov Lerner)  
Files: `src/ex_docmd.c`

#### Patch 7.2.223

Problem: When a script is run with `":silent"` it is not able to give warning messages.  
Solution: Add the `":unsilent"` command.  
Files: `runtime/doc/varsious.txt`, `src/ex_cmds.h`, `src/ex_docmd.c`

#### Patch 7.2.224

Problem: Crash when using 'completefunc'. (Ingo Karkat)  
Solution: Disallow entering `edit()` recursively when doing completion.  
Files: `src/edit.c`

## Patch 7.2.225

Problem: When using ":normal" a saved character may be executed.  
Solution: Also store old\_char when saving typeahead.  
Files: src/getchar.c, src/structs.h

## Patch 7.2.226

Problem: ml\_get error after deleting the last line. (Xavier de Gaye)  
Solution: When adjusting marks a callback may be invoked. Adjust the cursor position before invoking deleted\_lines\_mark().  
Files: src/ex\_cmds.c, src/ex\_docmd.c, src/if\_mzsch.c, src/if\_python.c, src/if\_perl.xs, src/misc1.c

## Patch 7.2.227

Problem: When using ":cd" in a script there is no way to track this.  
Solution: Display the directory when 'verbose' is 5 or higher.  
Files: src/ex\_docmd.c

## Patch 7.2.228

Problem: Cscope is limited to 8 connections.  
Solution: Allocated the connection array to handle any number of connections. (Dominique Pelle)  
Files: runtime/doc/if\_cscop.txt, src/if\_cscope.h, src/if\_cscope.c

## Patch 7.2.229

Problem: Warning for shadowed variable.  
Solution: Rename "wait" to "wait\_time".  
Files: src/os\_unix.c

## Patch 7.2.230

Problem: A few old lint-style ARGUSED comments.  
Solution: Change to the new UNUSED style.  
Files: src/getchar.c

## Patch 7.2.231

Problem: Warning for unreachable code.  
Solution: Add #ifdef.  
Files: src/if\_perl.xs

## Patch 7.2.232

Problem: Cannot debug problems with being in a wrong directory.  
Solution: When 'verbose' is 5 or higher report directory changes.  
Files: src/os\_unix.c, src/os\_unix.h, src/proto/os\_unix.pro

## Patch 7.2.233 (extra part of 7.2.232)

Problem: Cannot debug problems with being in a wrong directory.  
Solution: When 'verbose' is 5 or higher report directory changes.  
Files: src/os\_msdos.c, src/os\_mswin.c, src/os\_riscos.c, src/os\_mac.h

## Patch 7.2.234

Problem: It is not possible to ignore file names without a suffix.  
Solution: Use an empty entry in 'suffixes' for file names without a dot.  
Files: runtime/doc/cmdline.txt, src/misc1.c

## Patch 7.2.235

Problem: Using CTRL-O z= in Insert mode has a delay before redrawing.  
Solution: Reset msg\_didout and msg\_scroll.  
Files: src/misc1.c, src/spell.c

## Patch 7.2.236

Problem: Mac: Compiling with Ruby doesn't always work.  
Solution: In configure filter out the --arch argument (Bjorn Winckler)

Files: src/configure.in, src/auto/configure

Patch 7.2.237

Problem: Crash on exit when window icon not set.  
Solution: Copy terminal name when using it for the icon name.  
Files: src/os\_unix.c

Patch 7.2.238

Problem: Leaking memory when setting term to "builtin\_dumb".  
Solution: Free memory when resetting term option t\_Co.  
Files: src/option.c, src/proto/option.pro, src/term.c

Patch 7.2.239

Problem: Using :diffpatch twice or when patching fails causes memory corruption and/or a crash. (Bryan Venteicher)  
Solution: Detect missing output file. Avoid using non-existing buffer.  
Files: src/diff.c

Patch 7.2.240

Problem: Crash when using find/replace dialog repeatedly. (Michiel Hartsuiker)  
Solution: Avoid doing the operation while busy or recursively. Also refuse replace when text is locked.  
Files: src/gui.c

Patch 7.2.241

Problem: When using a combination of ":bufdo" and "doautoall" we may end up in the wrong directory. (Ajit Thakkar)  
Crash when triggering an autocommand in ":vimgrep". (Yukihiro Nakadaira)  
Solution: Clear w\_localdir and globaldir when using the aucmd\_win.  
Use a separate flag to decide aucmd\_win needs to be restored.  
Files: src/fileio.c, src/globals.h, src/structs.h

Patch 7.2.242

Problem: Setting 'lazyredraw' causes the cursor column to be recomputed. (Tom Link)  
Solution: Only recompute the cursor column for a boolean option if changes the cursor position.  
Files: src/option.c

Patch 7.2.243

Problem: Memory leak when using :vimgrep and resizing. (Dominique Pelle)  
Solution: Free memory for aucmd\_win when resizing and don't allocate it twice.  
Files: src/screen.c

Patch 7.2.244

Problem: When 'enc' is utf-8 and 'fenc' is latin1, writing a non-latin1 character gives a conversion error without any hint what is wrong.  
Solution: When known add the line number to the error message.  
Files: src/fileio.c

Patch 7.2.245

Problem: When 'enc' is "utf-16" and 'fenc' is "utf-8" writing a file does conversion while none should be done. (Yukihiro Nakadaira) When 'fenc' is empty the file is written as utf-8 instead of utf-16.  
Solution: Do proper comparison of encodings, taking into account that all Unicode values for 'enc' use utf-8 internally.  
Files: src/fileio.c

Patch 7.2.246

Problem: Cscope home page link is wrong.  
Solution: Update the URL. (Sergey Khorev)  
Files: runtime/doc/if\_cscop.txt

Patch 7.2.247

Problem: Mzscheme interface minor problem.  
Solution: Better error message when build fails. (Sergey Khorev)  
Files: src/if\_mzsch.c

Patch 7.2.248 (extra)

Problem: Mzscheme interface building minor problems.  
Solution: Update Win32 makefiles. (Sergey Khorev)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak

Patch 7.2.249

Problem: The script to check .po files can't handle '%' in plural forms.  
Solution: Remove "Plural-Forms:" from the checked string.  
Files: src/po/check.vim

Patch 7.2.250 (extra)

Problem: Possible buffer overflow.  
Solution: Compute the remaining space. (Dominique Pelle)  
Files: src/GvimExt/gvimext.cpp

Patch 7.2.251 (after 7.2.044)

Problem: Compiler adds invalid memory bounds check.  
Solution: Remove \_FORTIFY\_SOURCE=2 from CFLAGS. (Dominique Pelle)  
Files: src/auto/configure, src/configure.in

Patch 7.2.252

Problem: When using a multi-byte 'enc' the 'iskeyword' option cannot contain characters above 128.  
Solution: Use mb\_ptr2char\_adv().  
Files: src/charset.c

Patch 7.2.253

Problem: Netbeans interface: getLength always uses current buffer.  
Solution: Use ml\_get\_buf() instead of ml\_get(). (Xavier de Gaye)  
Files: src/netbeans.c

Patch 7.2.254

Problem: Compiler warning for assigning size\_t to int.  
Solution: Use size\_t for the variable. (George Reilly)  
Files: src/fileio.c

Patch 7.2.255 (after 7.2.242)

Problem: Setting 'rightleft', 'linebreak' and 'wrap' may cause cursor to be in wrong place.  
Solution: Recompute the cursor column for these options.  
Files: src/option.c

Patch 7.2.256

Problem: When 'guifont' was not set GTK font dialog doesn't have a default. (Andreas Metzler)  
Solution: Set default to DEFAULT\_FONT. (James Vega)  
Files: src/gui\_gtk\_x11.c

Patch 7.2.257

Problem: With GTK 2.17 lots of assertion error messages.  
Solution: Remove check for static gravity. (Sebastian Droege)  
Files: src/gui\_gtk\_f.c

## Patch 7.2.258

Problem: v:beval\_col and b:beval\_text are wrong in UTF-8 text. (Tony Mechelynck)  
Solution: Use byte number instead of character number for the column.  
Files: src/ui.c

## Patch 7.2.259

Problem: exists() doesn't work properly for an empty aucmd group.  
Solution: Change how au\_exists() handles a missing pattern. Also add a test for this. (Bob Hiestand)  
Files: src/fileio.c, src/testdir/Makefile, src/testdir/test67.in, src/testdir/test67.ok

## Patch 7.2.260 (extra part of 7.2.259)

Problem: exists() doesn't work properly for empty aucmd group.  
Solution: Change how au\_exists() handles a missing pattern. Also add a test for this. (Bob Hiestand)  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.2.261

Problem: When deleting lines with a specific folding configuration E38 may appear. (Shahaf)  
Solution: When adjusting nested folds for deleted lines take into account that they don't start at the top of the enclosing fold.  
Files: src/fold.c

## Patch 7.2.262

Problem: When using custom completion for a user command the pattern string goes beyond the cursor position. (Hari Krishna Dara)  
Solution: Truncate the string at the cursor position.  
Files: src/ex\_getln.c, src/structs.h

## Patch 7.2.263

Problem: GTK2: when using the -geom argument with an offset from the right edge and the size is smaller than the default, the Vim window is not positioned properly.  
Solution: Use another function to set the size. (Vitaly Minko)  
Files: src/gui\_gtk\_x11.c

## Patch 7.2.264

Problem: GTK2: When the Vim window is maximized setting 'columns' or 'lines' doesn't work.  
Solution: Unmaximize the window before setting the size. (Vitaly Minko)  
Files: src/gui.c, src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro

## Patch 7.2.265

Problem: When using ":silent broken" inside try/catch silency may persist. (dr-dr xp)  
Solution: Set msg\_silent when there is an error and it's bigger than the saved value.  
Files: src/ex\_docmd.c

## Patch 7.2.266

Problem: When an expression abbreviation is triggered, the typed character is unknown.  
Solution: Make the typed character available in v:char.  
Files: runtime/doc/map.txt, src/eval.c, src/getchar.c, src/ops.c, src/proto/eval.pro

## Patch 7.2.267



Problem: Crash for narrow window and double-width character.  
Solution: Check for zero width. (Taro Muraoka)  
Files: src/charset.c

Patch 7.2.268

Problem: Crash when using Python to set cursor beyond end of line.  
(winterTTr)  
Solution: Check the column to be valid.  
Files: src/if\_python.c

Patch 7.2.269

Problem: Many people struggle to find out why Vim startup is slow.  
Solution: Add the --startuptime command line flag.  
Files: runtime/doc/starting.txt, src/globals.h, src/feature.h,  
src/main.c, src/macros.h

Patch 7.2.270

Problem: Using ":@" when the c register contains a CR causes the rest to  
be executed later. (Dexter Douglas)  
Solution: Don't check for typeahead to start with ':', keep executing  
commands until all added typeahead has been used.  
Files: src/ex\_docmd.c

Patch 7.2.271

Problem: Using freed memory in Motif GUI version when making a choice.  
Solution: Free memory only after using it. (Dominique Pelle)  
Files: src/gui\_xmdlg.c

Patch 7.2.272

Problem: "\_svz" is not recognized as a swap file. (David M. Besonen)  
Solution: Accept .s[uvw][a-z] as a swap file name extension.  
Files: src/memline.c

Patch 7.2.273

Problem: Crash with redir to unknown array. (Christian Brabandt)  
Solution: Don't assign the redir result when there was an error.  
Files: src/eval.c

Patch 7.2.274

Problem: Syntax folding doesn't work properly when adding a comment.  
Solution: Fix it and add a test. (Lech Lorens)  
Files: src/fold.c, src/testdir/test45.in, src/testdir/test45.ok

Patch 7.2.275

Problem: Warning for unused argument and comparing signed and unsigned.  
Solution: Add type cast.  
Files: src/memline.c

Patch 7.2.276

Problem: Crash when setting 'isprint' to a small bullet. (Raul Coronado)  
Solution: Check for the character to be < 256. Also make it possible to  
specify a range of multi-byte characters. (Lech Lorens)  
Files: src/charset.c

Patch 7.2.277

Problem: CTRL-Y in a diff'ed window may move the cursor outside of the  
window. (Lech Lorens)  
Solution: Limit the number of filler lines to the height of the window.  
Don't reset filler lines to zero for an empty buffer.  
Files: src/move.c

Patch 7.2.278

Problem: Using magic number in the folding code.  
Solution: Use the defined MAX\_LEVEL.  
Files: src/fold.c

Patch 7.2.279

Problem: Invalid memory read with visual mode "r". (Dominique Pelle)  
Solution: Make sure the cursor position is valid. Don't check the cursor position but the position being used. And make sure we get the right line.  
Files: src/misc2.c, src/ops.c

Patch 7.2.280

Problem: A redraw in a custom statusline with %! may cause a crash. (Yukihiro Nakadaira)  
Solution: Make a copy of 'statusline'. Also fix typo in function name redraw\_custom\_statusline. (partly by Dominique Pelle)  
Files: src/screen.c

Patch 7.2.281

Problem: 'cursorcolumn' highlighting is wrong in diff mode.  
Solution: Adjust the column computation. (Lech Lorens)  
Files: src/screen.c

Patch 7.2.282

Problem: A fold can't be closed.  
Solution: Initialize fd\_small to MAYBE. (Lech Lorens)  
Files: src/fold.c

Patch 7.2.283

Problem: Changing font while the window is maximized doesn't keep the window maximized.  
Solution: Recompute number of lines and columns after changing font. (James Vega)  
Files: src/gui\_gtk\_x11.c

Patch 7.2.284

Problem: When editing the same buffer in two windows, one with folding, display may be wrong after changes.  
Solution: Call set\_topline() to take care of side effects. (Lech Lorens)  
Files: src/miscl.c

Patch 7.2.285 (after 7.2.169)

Problem: CTRL-U in Insert mode also deletes indent. (Andrey Voropaev)  
Solution: Fix mistake made in patch 7.2.169.  
Files: src/edit.c

Patch 7.2.286 (after 7.2.269)

Problem: The "--startuptime=<file>" argument is not consistent with other arguments.  
Solution: Use "--startuptime <file>". Added the +startuptime feature.  
Files: runtime/doc/eval.txt, runtime/doc/starting.txt, runtime/doc/various.txt, src/eval.c, src/main.c, src/version.c

Patch 7.2.287

Problem: Warning from gcc 3.4 about uninitialized variable.  
Solution: Move assignment outside of #ifdef.  
Files: src/if\_perl.xs

Patch 7.2.288

Problem: Python 2.6 pyconfig.h redefines macros.  
Solution: Undefine the macros before including pyconfig.h.  
Files: src/if\_python.c

## Patch 7.2.289

Problem: Checking wrong struct member.  
Solution: Change tb\_buf to tb\_noremap. (Dominique Pelle)  
Files: src/getchar.c

## Patch 7.2.290

Problem: Not freeing memory from ":lmap", ":xmap" and ":menutranslate".  
Solution: Free the memory when exiting. (Dominique Pelle)  
Files: src/misc2.c

## Patch 7.2.291

Problem: Reading uninitialised memory in arabic mode.  
Solution: Use utfc\_ptr2char\_len() rather than utfc\_ptr2char(). (Dominique Pelle)  
Files: src/screen.c

## Patch 7.2.292

Problem: Block right-shift doesn't work properly with multi-byte encoding and 'list' set.  
Solution: Add the missing "else". (Lech Lorens)  
Files: src/ops.c

## Patch 7.2.293

Problem: When setting 'comments' option it may be used in a wrong way.  
Solution: Don't increment after skipping over digits. (Yukihiro Nakadaira)  
Files: src/miscl.c

## Patch 7.2.294

Problem: When using TEMPDIRS dir name could get too long.  
Solution: Overwrite tail instead of appending each time. Use mkdtemp() when available. (James Vega)  
Files: src/auto/configure, src/config.h.in, src/configure.in, src/fileio.c

## Patch 7.2.295

Problem: When using map() on a List the index is not known.  
Solution: Set v:key to the index. (Hari Krishna Dara)  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.2.296

Problem: Help message about startuptime is wrong. (Dominique Pelle)  
Solution: Remove the equal sign.  
Files: src/main.c

## Patch 7.2.297

Problem: Reading freed memory when writing ":reg" output to a register. (Dominique Pelle)  
Solution: Skip the register being written to.  
Files: src/ops.c

## Patch 7.2.298

Problem: ":vimgrep" crashes when there is an autocommand that sets a window-local variable.  
Solution: Initialize the w: hashtab for re-use. (Yukihiro Nakadaira)  
Files: src/fileio.c

## Patch 7.2.299

Problem: Crash when comment middle is longer than start.  
Solution: Fix size computation. (Lech Lorens)  
Files: src/miscl.c

## Patch 7.2.300

Problem: Vim doesn't close file descriptors when forking and executing another command, e.g., ":shell".  
Solution: Use FD\_CLOEXEC when available. (James Vega)  
Files: auto/configure, src/config.h.in, src/configure.in, src/ex\_cmdds2.c, src/fileio.c, src/memfile.c, src/memline.c

#### Patch 7.2.301

Problem: Formatting is wrong when 'tw' is set to a small value.  
Solution: Fix it and add tests. Also fix behavior of "l" in 'fo'. (Yukihiro Nakadaira)  
Files: src/edit.c, src/testdir/Makefile, src/testdir/test68.in, src/testdir/test68.ok, src/testdir/test69.in, src/testdir/test69.ok

#### Patch 7.2.302 (extra part of 7.2.301)

Problem: Formatting wrong with small 'tw' value.  
Solution: Add build rules for tests.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

#### Patch 7.2.303 (after 7.2.294)

Problem: Can't build on MS-Windows.  
Solution: Add #ifdef around vim\_settempdir(). (James Vega)  
Files: src/fileio.c

#### Patch 7.2.304

Problem: Compiler warning for bad pointer cast.  
Solution: Use another variable for int pointer.  
Files: src/ops.c

#### Patch 7.2.305

Problem: Recursively redrawing causes a memory leak. (Dominique Pelle)  
Solution: Disallow recursive screen updating.  
Files: src/screen.c

#### Patch 7.2.306

Problem: shellescape("10%", 1) only escapes first %. (Christian Brabandt)  
Solution: Don't copy the character after the escaped one.  
Files: src/misc2.c

#### Patch 7.2.307

Problem: Crash with a very long syntax match statement. (Guy Gur Ari)  
Solution: When the offset does not fit in the two bytes available give an error instead of continuing with invalid pointers.  
Files: src/regexp.c

#### Patch 7.2.308

Problem: When using a regexp in the "\=" expression of a substitute command, submatch() returns empty strings for further lines. (Clockwork Jam)  
Solution: Save and restore the line number and line count when calling reg\_getline().  
Files: src/regexp.c

#### Patch 7.2.309 (after 7.2.308)

Problem: Warning for missing function prototype. (Patrick Texier)  
Solution: Add the prototype.  
Files: src/regexp.c

#### Patch 7.2.310

Problem: When a filetype plugin in ~/.vim/ftdetect uses ":setfiletype" and

the file starts with a "# comment" it gets "conf" filetype.  
Solution: Check for "conf" filetype after using ftdetect plugins.  
Files: runtime/filetype.vim

#### Patch 7.2.311

Problem: Can't compile with FreeMiNT.  
Solution: Change #ifdef for limits.h. (Alan Hourihane)  
Files: src/fileio.c

#### Patch 7.2.312

Problem: iconv() returns an invalid character sequence when conversion fails. It should return an empty string. (Yongwei Wu)  
Solution: Be more strict about invalid characters in the input.  
Files: src/mbyte.c

#### Patch 7.2.313

Problem: Command line completion doesn't work after "%:h" and similar.  
Solution: Expand these items before doing the completion.  
Files: src/ex\_getln.c, src/misc1.c, src/proto/misc1.pro

#### Patch 7.2.314

Problem: Missing function in small build.  
Solution: Always include concat\_str.  
Files: src/misc1.c

#### Patch 7.2.315

Problem: Python libs can't be found on 64 bit system.  
Solution: Add lib64 to the list of directories. (Michael Henry)  
Files: src/auto/configure, src/configure.in

#### Patch 7.2.316

Problem: May get multiple \_FORTIFY\_SOURCE arguments. (Tony Mechelynck)  
Solution: First remove all these arguments and then add the one we want. (Dominique Pelle)  
Files: src/auto/configure, src/configure.in

#### Patch 7.2.317

Problem: Memory leak when adding a highlight group with unprintable characters, resulting in E669.  
Solution: Free the memory. And fix a few typos. (Dominique Pelle)  
Files: src/syntax.c

#### Patch 7.2.318

Problem: Wrong locale value breaks floating point numbers for gvim.  
Solution: Set the locale again after doing GUI inits. (Dominique Pelle)  
Files: src/main.c

#### Patch 7.2.319

Problem: Motif: accessing freed memory when cancelling font dialog.  
Solution: Destroy the widget only after accessing it. (Dominique Pelle)  
Files: src/gui\_xmdlg.c

#### Patch 7.2.320

Problem: Unused function in Mzscheme interface.  
Solution: Remove the function and what depends on it. (Dominique Pelle)  
Files: src/if\_mzsch.c, src/proto/if\_mzsch.pro

#### Patch 7.2.321

Problem: histadd() and searching with "\*" fails to add entry to history when it is empty.  
Solution: Initialize the history. (Lech Lorens)  
Files: src/eval.c, src/normal.c

## Patch 7.2.322

Problem: Wrong indenting in virtual replace mode with CTRL-Y below a short line.

Solution: Check for character to be NUL. (suggested by Lech Lorens)

Files: src/edit.c

## Patch 7.2.323 (extra)

Problem: Balloon evaluation crashes on Win64.

Solution: Change pointer types. (Sergey Khorev)

Files: src/gui\_w32.c

## Patch 7.2.324

Problem: A negative column argument in setpos() may cause a crash.

Solution: Check for invalid column number. (James Vega)

Files: src/eval.c, src/misc2.c

## Patch 7.2.325

Problem: A stray "w" in the startup vimrc file causes the edited file to be replaced with an empty file. (Stone Kang).

Solution: Do not write a buffer when it has never been loaded.

Files: src/fileio.c

## Patch 7.2.326

Problem: Win32: \$HOME doesn't work when %HOMEPATH% is not defined.

Solution: Use "\" for %HOMEPATH% when it is not defined.

Files: src/misc1.c

## Patch 7.2.327

Problem: Unused functions in Workshop.

Solution: Add "#if 0" and minor cleanup. (Dominique Pelle)

Files: src/workshop.c, src/integration.c, src/integration.h

## Patch 7.2.328

Problem: has("win64") does not return 1 on 64 bit MS-Windows version.

Solution: Also check for \_WIN64 besides WIN64.

Files: src/eval.c

## Patch 7.2.329

Problem: "g\_" doesn't position cursor correctly when in Visual mode and 'selection' is "exclusive". (Ben Fritz)

Solution: Call adjust\_for\_sel().

Files: src/normal.c

## Patch 7.2.330

Problem: Tables for Unicode case operators are outdated.

Solution: Add a Vim script for generating the tables. Include tables for Unicode 5.2.

Files: runtime/tools/README.txt, runtime/tools/unicode.vim, src/mbyte.c

## Patch 7.2.331

Problem: Can't interrupt "echo list" for a very long list.

Solution: Call line\_breakcheck() in list\_join().

Files: src/eval.c

## Patch 7.2.332

Problem: Crash when spell correcting triggers an autocommand that reloads the buffer.

Solution: Make a copy of the line to be modified. (Dominique Pelle)

Files: src/spell.c

## Patch 7.2.333

Problem: Warnings from static code analysis.  
Solution: Small changes to various lines. (Dominique Pelle)  
Files: src/buffer.c, src/edit.c, src/ex\_getln.c, src/fileio.c,  
src/if\_cscope.c, src/netbeans.c, src/ops.c, src/quickfix.c,  
src/syntax.c, src/ui.c

#### Patch 7.2.334

Problem: Postponing keys in Netbeans interface does not work properly.  
Solution: Store the key string instead of the number. Avoid an infinite  
loop. (Mostly by Xavier de Gaye)  
Files: src/netbeans.c, src/proto/netbeans.pro

#### Patch 7.2.335

Problem: The CTRL-] command escapes too many characters.  
Solution: Use a different list of characters to be escaped. (Sergey Khorev)  
Files: src/normal.c

#### Patch 7.2.336

Problem: MzScheme interface can't evaluate an expression.  
Solution: Add mzeval(). (Sergey Khorev)  
Files: runtime/doc/eval.txt, runtime/doc/if\_mzsch.txt,  
runtime/doc/usr\_41.txt, src/eval.c, src/if\_mzsch.c,  
src/proto/eval.pro, src/proto/if\_mzsch.pro,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Makefile, src/testdir/main.aap, src/testdir/test1.in,  
src/testdir/test70.in, src/testdir/test70.ok

#### Patch 7.2.337

Problem: The :compiler command doesn't function properly when invoked in a  
function.  
Solution: Add "g:" before "current\_compiler". (Yukihiro Nakadaira)  
Files: src/ex\_cmds2.c

#### Patch 7.2.338 (after 7.2.300)

Problem: Part of FD\_CLOEXEC change is missing.  
Solution: Include source file skipped because of typo.  
Files: src/ex\_cmds2.c

#### Patch 7.2.339 (after 7.2.269)

Problem: Part of --startuptime patch is missing.  
Solution: Add check for time\_fd.  
Files: src/ex\_cmds2.c

#### Patch 7.2.340

Problem: Gcc warning for condition that can never be true. (James Vega)  
Solution: Use start\_lvl instead flp->lvl.  
Files: src/fold.c

#### Patch 7.2.341

Problem: Popup menu wraps to next line when double-wide character doesn't  
fit. (Jiang Ma)  
Solution: Display a ">" instead. (Dominique Pelle)  
Files: src/screen.c

#### Patch 7.2.342

Problem: Popup menu displayed wrong in 'rightleft' mode when there are  
multi-byte characters.  
Solution: Adjust the column computations. (Dominique Pelle)  
Files: src/popupmenu.c

#### Patch 7.2.343 (after 7.2.338)

Problem: Can't compile on Win32.

Solution: Insert the missing '|'.  
Files: src/ex\_cmds2.c

Patch 7.2.344 (after 7.2.343)

Problem: Can't compile on some systems  
Solution: Move the #ifdef outside of the mch\_open macro. (Patrick Texier)  
Files: src/ex\_cmds2.c

Patch 7.2.345

Problem: Tab line is not updated when the value of 'bt' is changed.  
Solution: Call redraw\_titles(). (Lech Lorens)  
Files: src/option.c

Patch 7.2.346

Problem: Repeating a command with @: causes a mapping to be applied twice.  
Solution: Do not remap characters inserted in the typeahead buffer. (Kana Natsuno)  
Files: src/ops.c

Patch 7.2.347

Problem: Crash when executing <expr> mapping redefines that same mapping.  
Solution: Save the values used before evaluating the expression.  
Files: src/getchar.c

Patch 7.2.348 (after 7.2.330)

Problem: Unicode double-width characters are not up-to date.  
Solution: Produce the double-width table like the others.  
Files: runtime/tools/unicode.vim, src/mbyte.c

Patch 7.2.349

Problem: CTRL-W gf doesn't put the new tab in the same place as "tab split" and "gf". (Tony Mechelynck)  
Solution: Store the tab number in cmdmod.tab.  
Files: src/window.c

Patch 7.2.350

Problem: Win32: When changing font the window may jump from the secondary to the primary screen. (Michael Wookey)  
Solution: When the screen position was negative don't correct it to zero.  
Files: src/gui.c

Patch 7.2.351 (after 7.2.347)

Problem: Can't build with some compilers.  
Solution: Move the #ifdef outside of a macro. Cleanup the code.  
Files: src/getchar.c

Patch 7.2.352 (extra)

Problem: Win64: Vim doesn't work when cross-compiled with MingW libraries.  
Solution: Always return TRUE for the WM\_NCCREATE message. (Andy Kittner)  
Files: src/gui\_w48.c

Patch 7.2.353

Problem: No command line completion for ":profile".  
Solution: Complete the subcommand and file name.  
Files: src/ex\_docmd.c, src/ex\_cmds2.c, src/ex\_getln.c, src/proto/ex\_cmds2.pro, src/vim.h

Patch 7.2.354

Problem: Japanese single-width double-byte characters not handled correctly.  
Solution: Put 0x8e in ScreenLines[] and the second byte in ScreenLines2[].  
(partly by Kikuchan)  
Files: src/screen.c



## Patch 7.2.355

Problem: Computing the cursor column in `validate_cursor_col()` is wrong when line numbers are used and 'n' is not in 'coptions', causing the popup menu to be positioned wrong.

Solution: Correctly use the offset. (partly by Dominique Pelle)

Files: `src/move.c`

## Patch 7.2.356

Problem: When 'foldmethod' is changed not all folds are closed as expected.

Solution: In `foldUpdate()` correct the start position and reset `fd_flags` when `w_foldinvalid` is set. (Lech Lorens)

Files: `src/fold.c`

## Patch 7.2.357

Problem: When changing 'fileformat' from/to "mac" and there is a CR in the text the display is wrong.

Solution: Redraw the text when 'fileformat' is changed. (Ben Schmidt)

Files: `src/option.c`

## Patch 7.2.358

Problem: Compiler warnings on VMS. (Zoltan Arpadffy)

Solution: Pass array itself instead its address. Return a value.

Files: `src/gui_gtk_x11.c`, `src/os_unix.c`

## Patch 7.2.359

Problem: Crash when using the Netbeans join command.

Solution: Make sure the `ml_flush_line()` function is not used recursively. (Xavier de Gaye)

Files: `src/memline.c`

## Patch 7.2.360

Problem: Ruby on MS-Windows: can't use sockets.

Solution: Call `NtInitialize()` during initialization. (Ariya Mizutani)

Files: `src/if_ruby.c`

## Patch 7.2.361

Problem: Ruby 1.9 is not supported.

Solution: Add Ruby 1.9 support. (Masaki Suketa)

Files: `src/Makefile`, `src/auto/configure`, `src/configure.in`, `src/if_ruby.c`

## Patch 7.2.362 (extra, after 7.2.352)

Problem: Win64: Vim doesn't work when cross-compiled with MingW libraries.

Solution: Instead of handling `WM_NCCREATE`, create wide text area window class if the parent window is side. (Sergey Khorev)

Files: `src/gui_w32.c`, `src/gui_w48.c`

## Patch 7.2.363

Problem: Can't dynamically load Perl 5.10.

Solution: Add the function `Perl_croak_xs_usage`. (Sergey Khorev)

Files: `src/if_perl.xs`

## Patch 7.2.364 (extra)

Problem: Can't build `gvimext.dll` on Win 7 x64 using MinGW (John Marriott)

Solution: Check if `_MSC_VER` is defined. (Andy Kittner)

Files: `src/GvimExt/gvimext.h`

## Patch 7.2.365 (extra)

Problem: MS-Windows with MingW: "File->Save As" does not work. (John Marriott)

Solution: Correctly fill in structure size. (Andy Kittner)

Files: `src/gui_w48.c`

## Patch 7.2.366

Problem: CTRL-B doesn't go back to the first line of the buffer.  
Solution: Avoid an overflow when adding MAXCOL.  
Files: src/move.c

## Patch 7.2.367

Problem: "xxd -r -p" doesn't work as documented.  
Solution: Skip white space. (James Vega)  
Files: src/xxd/xxd.c

## Patch 7.2.368 (after 7.2.361)

Problem: Ruby interface: Appending line doesn't work. (Michael Henry)  
Solution: Reverse check for NULL line. (James Vega)  
Files: src/if\_ruby.c

## Patch 7.2.369

Problem: Error message is not easy to understand.  
Solution: Add quotes. (SungHyun Nam)  
Files: src/ex\_cmds2.c

## Patch 7.2.370 (after 7.2.356)

Problem: A redraw may cause folds to be closed.  
Solution: Revert part of the previous patch. Add a test. (Lech Lorens)  
Files: src/diff.c, src/fold.c, src/option.c, src/testdir/test45.in,  
src/testdir/test45.ok

## Patch 7.2.371

Problem: Build problems on Tandem NonStop.  
Solution: A few changes to #ifdefs (Joachim Schmitz)  
Files: src/auto/configure, src/configure.in, src/config.h.in, src/vim.h,  
src/if\_cscope.c, src/osdef1.h.in, src/tag.c

## Patch 7.2.372 (extra)

Problem: Cross-compiling GvimExt and xxd doesn't work.  
Solution: Change the build files. (Markus Heidelberg)  
Files: src/INSTALLpc.txt, src/GvimExt/Make\_ming.mak, src/Make\_cyg.mak,  
src/Make\_ming.mak, src/xxd/Make\_cyg.mak

## Patch 7.2.373

Problem: Gcc 4.5 adds more error messages. (Chris Indy)  
Solution: Update default 'errorformat'.  
Files: src/option.h

## Patch 7.2.374

Problem: Ruby eval() doesn't understand Vim types.  
Solution: Add the vim\_to\_ruby() function. (George Gensure)  
Files: src/eval.c, src/if\_ruby.c

## Patch 7.2.375

Problem: ml\_get errors when using ":bprevious" in a BufEnter autocmd.  
(Dominique Pelle)  
Solution: Clear w\_valid when entering another buffer.  
Files: src/buffer.c

## Patch 7.2.376

Problem: ml\_get error when using SiSU syntax. (Nathan Thomas)  
Solution: If the match ends below the last line move it to the end of the  
last line.  
Files: src/syntax.c

## Patch 7.2.377 (extra, after 7.2.372)

Problem: Misplaced assignment. Duplicate build line for gvimext.dll.  
Solution: Move setting CROSS\_COMPILE to before ifneq. Remove the wrong  
build line. (Markus Heidelberg)  
Files: src/Make\_ming.mak

Patch 7.2.378

Problem: C function declaration indented too much. (Rui)  
Solution: Don't see a line containing { or } as a type. (Matt Wozniski)  
Files: src/misc1.c

Patch 7.2.379

Problem: 'eventignore' is set to an invalid value inside ":doau". (Antony  
Scriven)  
Solution: Don't include the leading comma when the option was empty.  
Files: src/fileio.c

Patch 7.2.380 (after 7.2.363)

Problem: Perl interface builds with 5.10.1 but not with 5.10.0.  
Solution: Change the #ifdefs. (Sergey Khorev)  
Files: src/if\_perl.xs

Patch 7.2.381

Problem: No completion for :behave.  
Solution: Add :behave completion. Minor related fixes. (Dominique Pelle)  
Files: src/ex\_docmd.c, src/ex\_getln.c, src/proto/ex\_docmd.pro, src/vim.h

Patch 7.2.382

Problem: Accessing freed memory when closing the cmdline window when  
'bufhide' is set to "wipe".  
Solution: Check if the buffer still exists before invoking close\_buffer()  
(Dominique Pelle)  
Files: src/ex\_getln.c

Patch 7.2.383

Problem: Vim doesn't build cleanly with MSVC 2010.  
Solution: Change a few types. (George Reilly)  
Files: src/ex\_cmds2.c, src/if\_python.c, src/syntax.c

Patch 7.2.384 (extra)

Problem: Vim doesn't build properly with MSVC 2010.  
Solution: Add the nmake version to the build file. (George Reilly)  
Files: src/Make\_mvc.mak, src/testdir/Make\_dos.mak

Patch 7.2.385

Problem: When in the command line window dragging status line only works  
for last-but-one window. (Jean Johner)  
Solution: Remove the code that disallows this.  
Files: src/ui.c

Patch 7.2.386

Problem: Focus hack for KDE 3.1 causes problems for other window managers.  
Solution: Remove the hack. (forwarded by Joel Bradshaw)  
Files: src/gui\_gtk.c

Patch 7.2.387

Problem: Ruby with MingW still doesn't build all versions.  
Solution: More #ifdefs for the Ruby code. (Sergey Khorev)  
Files: src/if\_ruby.c

Patch 7.2.388 (extra part of 7.2.387)

Problem: Ruby with MingW still doesn't build all versions.  
Solution: Different approach to build file. (Sergey Khorev)

Files: src/Make\_ming.mak

Patch 7.2.389

Problem: synIDattr() cannot return the font.  
Solution: Support the "font" argument. (Christian Brabandt)  
Files: runtime/doc/eval.txt, src/eval.c, src/syntax.c

Patch 7.2.390

Problem: In some situations the popup menu can be displayed wrong.  
Solution: Remove the popup menu if the cursor moved. (Lech Lorens)  
Files: src/edit.c

Patch 7.2.391

Problem: Internal alloc(0) error when doing "CTRL-V \$ c". (Martti Kuparinen)  
Solution: Fix computations in getvcol(). (partly by Lech Lorens)  
Files: src/charset.c, src/memline.c

Patch 7.2.392

Problem: Netbeans hangs reading from a socket at the maximum block size.  
Solution: Use select() or poll(). (Xavier de Gaye)  
Files: src/vim.h, src/os\_unixx.h, src/if\_xcmdsrv.c, src/netbeans.c

Patch 7.2.393

Problem: Mac: Can't build with different Xcode developer tools directory.  
Solution: make "Developer" directory name configurable. (Rainer Muller)  
Files: src/configure.in, src/auto/configure

Patch 7.2.394

Problem: .lzma and .xz files are not supported.  
Solution: Recognize .lzma and .xz files so that they can be edited.  
Files: runtime/plugin/gzip.vim

Patch 7.2.395

Problem: In help CTRL=] on g?g? escapes the ?, causing it to fail. (Tony Mechelynck)  
Solution: Don't escape ? for a help command. (Sergey Khorev)  
Files: src/normal.c

Patch 7.2.396

Problem: Get E38 errors. (Dasn)  
Solution: Set cursor to line 1 instead of 0. (Dominique Pelle)  
Files: src/popupmnu.c

Patch 7.2.397

Problem: Redundant check for w\_lines\_valid.  
Solution: Remove the if. (Lech Lorens)  
Files: src/fold.c

Patch 7.2.398

Problem: When moving windows the cursor ends up in the wrong line.  
Solution: Set the window width and height properly. (Lech Lorens)  
Files: src/window.c

Patch 7.2.399 (extra, after 7.2.388)

Problem: Cannot compile on MingW.  
Solution: Move ifneq to separate line. (Vlad Sandrini, Dominique Pelle)  
Files: src/Make\_ming.mak

Patch 7.2.400 (after 7.2.387)

Problem: Dynamic Ruby is not initialised properly for version 1.9.1.  
Ruby cannot create strings from NULL.  
Solution: Cleanup #ifdefs. Handle NULL like an empty string. Add

Files:       ruby\_init\_stack. (Sergey Khorev)  
             src/if\_ruby.c

Patch 7.2.401

Problem:     ":e dir<Tab>" with 'wildmode' set to "list" doesn't highlight  
              directory names with a space. (Alexandre Provencio)  
Solution:     Remove the backslash before checking if the name is a directory.  
              (Dominique Pelle)  
Files:       src/ex\_getln.c

Patch 7.2.402

Problem:     This gives a #705 error: let X = function('haslocaldir')  
              let X = function('getcwd')  
Solution:     Don't give E705 when the name is found in the hashtable. (Sergey  
              Khorev)  
Files:       src/eval.c

Patch 7.2.403 (after 7.2.400)

Problem:     Compiler warning for pointer type. (Tony Mechelynck)  
Solution:     Move type cast to the right place.  
Files:       src/if\_ruby.c

Patch 7.2.404

Problem:     Pointers for composing characters are not properly initialized.  
Solution:     Compute the size of the pointer, not what it points to. (Yukihiro  
              Nakadaira)  
Files:       src/screen.c

Patch 7.2.405

Problem:     When built with small features the matching text is not  
              highlighted for ":s/pat/repl/c".  
Solution:     Remove the #ifdef for IncSearch. (James Vega)  
Files:       src/syntax.c

Patch 7.2.406

Problem:     Patch 7.2.119 introduces uninit mem read. (Dominique Pelle)  
Solution:     Only used ScreenLinesC when ScreenLinesUC is not zero. (Yukihiro  
              Nakadaira) Also clear ScreenLinesC when allocating.  
Files:       src/screen.c

Patch 7.2.407

Problem:     When using an expression in ":s" backslashes in the result are  
              dropped. (Sergey Goldgaber, Christian Brabandt)  
Solution:     Double backslashes.  
Files:       src/regexp.c

Patch 7.2.408

Problem:     With ":g/the/s/foo/bar/" the '[' and ']' marks can be set to a line  
              that was not changed.  
Solution:     Only set '[' and ']' marks when a substitution was done.  
Files:       src/ex\_cmds.c

Patch 7.2.409

Problem:     Summary of number of substitutes is incorrect for ":folddo". (Jean  
              Johner)  
Solution:     Reset sub\_nsubs and sub\_nlines in global\_exe().  
Files:       src/ex\_cmds.c

Patch 7.2.410

Problem:     Highlighting directories for completion doesn't work properly.  
Solution:     Don't halve backslashes when not needed, expanded "~/".  
              (Dominique Pelle)

Files: src/ex\_getln.c

Patch 7.2.411

Problem: When parsing 'cino' a comma isn't skipped properly.

Solution: Skip the comma. (Lech Lorens)

Files: src/misc1.c

Patch 7.2.412

Problem: [ or ] followed by mouse click doesn't work.

Solution: Reverse check for key being a mouse event. (Dominique Pelle)

Files: src/normal.c

Patch 7.2.413

Problem: Large file support is incorrect.

Solution: Add AC\_SYS\_LARGEFILE to configure. (James Vega)

Files: src/configure.in, src/config.h.in, src/auto/configure

Patch 7.2.414

Problem: CTRK-K <space> <space> does not produce 0xa0 as expected. (Tony Mechelynck)

Solution: Remove the Unicode range 0xe000 - 0xffff from digraphs, these are not valid characters.

Files: src/digraph.c

Patch 7.2.415

Problem: Win32: Can't open a remote file when starting Vim.

Solution: Don't invoke cygwin\_conv\_path() for URLs. (Tomoya Adachi)

Files: src/main.c

Patch 7.2.416

Problem: Logtalk.dict is not installed.

Solution: Add it to the install target. (Markus Heidelberg)

Files: src/Makefile

Patch 7.2.417

Problem: When 'shell' has an argument with a slash then 'shellpipe' is not set properly. (Britton Kerin)

Solution: Assume there are no spaces in the path, arguments follow.

Files: src/option.c

Patch 7.2.418

Problem: Vim tries to set the background or foreground color in a terminal to -1. (Graywh) Happens with ":hi Normal ctermbg=NONE".

Solution: When resetting the foreground or background color don't set the color, let the clear screen code do that.

Files: src/syntax.c

Patch 7.2.419

Problem: Memory leak in Motif when clicking on "Search Vim Help".

Solution: Free string returned by XmTextGetString(). (Dominique Pelle)

Files: src/gui\_motif.c

Patch 7.2.420

Problem: ":argedit" does not accept "++enc=utf8" as documented. (Dominique Pelle)

Solution: Add the ARGOPT flag to ":argedit".

Files: src/ex\_cmds.h

Patch 7.2.421

Problem: Folds are sometimes not updated properly and there is no way to force an update.

Solution: Make "zx" and "zX" recompute folds (suggested by Christian

Files: Brabandt)  
src/normal.c

Patch 7.2.422

Problem: May get E763 when using spell dictionaries.  
Solution: Avoid utf-8 case folded character to be truncated to 8 bits and  
differ from latin1. (Dominique Pelle)  
Files: src/spell.c

Patch 7.2.423

Problem: Crash when assigning s: to variable. (Yukihiro Nakadaira)  
Solution: Make ga\_scripts contain pointer to scriptvar\_T instead of  
scriptvar\_T itself. (Dominique Pelle)  
Files: src/eval.c

Patch 7.2.424

Problem: ":colorscheme" without an argument doesn't do anything.  
Solution: Make it echo the current color scheme name. (partly by Christian  
Brabandt)  
Files: runtime/doc/syntax.txt, src/ex\_cmds.h, src/ex\_docmd.c

Patch 7.2.425

Problem: Some compilers complain about fourth EX() argument.  
Solution: Add cast to long\_u.  
Files: src/ex\_cmds.h

Patch 7.2.426

Problem: Commas in 'langmap' are not always handled correctly.  
Solution: Require commas to be backslash escaped. (James Vega)  
Files: src/option.c

Patch 7.2.427

Problem: The swapfile is created using the destination of a symlink, but  
recovery doesn't follow symlinks.  
Solution: When recovering, resolve symlinks. (James Vega)  
Files: src/memline.c

Patch 7.2.428

Problem: Using setqflist([]) to clear the error list doesn't work properly.  
Solution: Set qf\_nonevalid to TRUE when appropriate. (Christian Brabandt)  
Files: src/quickfix.c

Patch 7.2.429

Problem: A file that exists but access is denied may result in a "new file"  
message. E.g. when its directory is unreadable.  
Solution: Specifically check for ENOENT to decide a file doesn't exist.  
(partly by James Vega)  
Files: src/fileio.c

Patch 7.2.430

Problem: The ++bad argument is handled wrong, resulting in an invalid  
memory access.  
Solution: Use the bad\_char field only for the replacement character, add  
bad\_char\_idx to store the position. (Dominique Pelle)  
Files: src/eval.c, src/ex\_cmds.h, src/ex\_docmd.c

Patch 7.2.431

Problem: ":amenu" moves the cursor when in Insert mode.  
Solution: Use CTRL-\ CTRL-O instead of CTRL-O. (Christian Brabandt)  
Files: src/menu.c

Patch 7.2.432

Problem: When menus are translated they can only be found by the translated name. That makes ":emenu" difficult to use.  
Solution: Store the untranslated name and use it for completion and :emenu. (Liang Peng (Bezetek James), Edward L. Fox)  
Files: src/menu.c, src/structs.h

#### Patch 7.2.433

Problem: Can't use cscope with QuickFixCmdPre and QuickFixCmdPost.  
Solution: Add cscope support for these autocmd events. (Bryan Venteicher)  
Files: runtime/doc/autocmd.txt, src/if\_cscope.c

#### Patch 7.2.434 (after 7.2.432)

Problem: Compilation fails without the multi-lang feature.  
Solution: Add #ifdefs. (John Marriott)  
Files: src/menu.c

#### Patch 7.2.435 (after 7.2.430)

Problem: Crash when using bad\_char\_idx uninitialized. (Patrick Texier)  
Solution: Don't use bad\_char\_idx, reproduce the ++bad argument from bad\_char.  
Files: src/eval.c, src/ex\_cmds.h, src/ex\_docmd.c

#### Patch 7.2.436

Problem: Reproducible crash in syntax HL. (George Reilly, Dominique Pelle)  
Solution: Make sst\_stacksize an int instead of short. (Dominique Pelle)  
Files: src/structs.h

#### Patch 7.2.437 (after 7.2.407)

Problem: When "\\n" appears in the expression result the \n doesn't result in a line break. (Andy Wokula)  
Solution: Also replace a \n after a backslash into \r.  
Files: src/regexp.c

#### Patch 7.2.438 (after 7.2.427)

Problem: "vim -r" crashes.  
Solution: Don't use NULL pointer argument.  
Files: src/memline.c

#### Patch 7.2.439

Problem: Invalid memory access when doing thesaurus completion and 'infercase' is set.  
Solution: Use the minimal length of completed word and replacement. (Dominique Pelle)  
Files: src/edit.c

#### Patch 7.2.440

Problem: Calling a function through a funcref, where the function deletes the funcref, leads to an invalid memory access.  
Solution: Make a copy of the function name. (Lech Lorens)  
Files: src/eval.c, src/testdir/test34.in, src/testdir/test34.ok

#### Patch 7.2.441

Problem: When using ":earlier" undo information may be wrong.  
Solution: When changing alternate branches also adjust b\_u\_oldhead.  
Files: src/undo.c

#### Patch 7.2.442 (after 7.2.201)

Problem: Copy/paste with OpenOffice doesn't work.  
Solution: Do not offer the HTML target when it is not supported. (James Vega)  
Files: src/gui\_gtk\_x11.c, src/option.c, src/proto/gui\_gtk\_x11.pro

#### Patch 7.2.443



Problem: Using taglist() on a tag file with duplicate fields generates an internal error. (Peter Odding)  
Solution: Check for duplicate field names.  
Files: src/eval.c, src/proto/eval.pro, src/tag.c

Patch 7.2.444 (after 7.2.442)

Problem: Can't build with GTK 1, gtk\_selection\_clear\_targets() is not available. (Patrick Texier)  
Solution: Don't change the targets for GTK 1, set them once.  
Files: src/gui\_gtk\_x11.c, src/option.c

Patch 7.2.445

Problem: Crash when using undo/redo and a FileChangedRO autocmd event that reloads the buffer. (Dominique Pelle)  
Solution: Do not allow autocommands while performing an undo or redo.  
Files: src/misc1.c, src/undo.c

Patch 7.2.446

Problem: Crash in GUI when closing the last window in a tabpage. (ryo7000)  
Solution: Remove the tabpage from the list before freeing the window.  
Files: src/window.c

When writing a file, switching tab pages and selecting a word the file write message would be displayed again. This happened in Insert mode and with 'cmdheight' set to 2.

When using ":lang" to set a locale that uses a comma for decimal separator and using GTK floating point numbers stop working. Use gtk\_disable\_setlocale(). (James Vega)

"g8" didn't produce the right value on a NUL. (Dominique Pelle)

Use BASEMODLIBS instead of MODLIBS for Python configuration to pick up the right compiler flags. (Michael Bienia)

Window title was not updated after dropping a file on Vim. (Hari G)

synstack() did not return anything when just past the end of the line. Useful when using the cursor position in Insert mode.

When entering a digraph or special character after a line that fits the window the '?' or '^' on the next line is not redrawn. (Ian Kelling)

Composing characters in |:s| substitute text were dropped.

|exists()| was causing an autoload script to be loaded.

Filter out -pthread for cproto.

Make CTRL-L in command line mode respect 'ignorecase' and 'smartcase'. (Martin Toft)

Spell menu moved the cursor, causing Copy not to work. Spell replacement didn't work in 'compatible' mode.

Various small fixes from Dominique Pelle.

Fix that :mksession may generate "2argu" even though there is no such argument. (Peter Odding)

Fixes for time in clipboard request. Also fix ownership. (David Fries)

Fixed completion of file names with '%' and '\*'.

Fixed MSVC makefile use of /Wp64 flag.

Correct use of long instead of off\_t for file size. (James Vega)

Add a few #ifdefs to exclude functions that are not used. (Dominique Pelle)

Remove old and unused method to allocate memory for undo.

Fix definition of UINT\_PTR for 64 bit systems.

Some versions of Ruby redefine rb\_str\_new2 to rb\_str\_new\_cstr.

Window title not updated after file dropped.

Fixed crash for ":find" completion, might also happen in other path expansion usage.

When 'searchhl' causes a hang make CTRL-C disable 'searchhl'.

When resetting both 'title' and 'icon' the title would be set after a shell command.

Reset 'title' and 'icon' in test47 to avoid the xterm title getting messed up.

Fix for compiler warning about function prototype in pty.c.

Added 'window' to the options window.

Fixed: errors for allocating zero bytes when profiling an empty function.

Remove -arch flag from build flags for Perl. (Bjorn Wickler)

Fix 'autochdir' not showing up in :options window. (Dominique Pelle)

Fix: test 69 didn't work on MS-Windows. Test 72 beeped too often.

Avoid illegal memory access in spell suggestion. (Dominique Pelle)

Fix: crash in spell checking with a 0x300 character.

Avoid that running tests changes viminfo.

Fix: changing case of a character removed combining characters.

Fixed: CTRL-R in Insert mode doesn't insert composing characters.

Added the WOW64 flag to OLE registration, for 64 bit Windows systems.

Various fixes for coverity warnings.

Fix compile warnings, esp. for 64-bit systems. (Mike Williams)

Fix: :redir to a dictionary that is changed before ":redir END" causes a memory access error.

Fix: terminal title not properly restored when there are multi-byte characters. (partly by James Vega)

Set 'wrapscan' when checking the .po files. (Mike Williams)

Win32: Put quotes around the gvim.exe path for the "Open with" menu entry.

On MS-Windows sometimes files with number 4913 or higher are left behind.

'suffixesadd' was used for finding tags file.

Removed unused code.

Improved positioning of combining characters in GTK.

Made test 11 pass when there is no gzip program. (John Beckett)

Changed readfile() to ignore byte order marks, unless in binary mode.

On MS-Windows completion of shell commands didn't work.

An unprintable multi-byte character at the start of the screen line caused the following text to be drawn at the wrong position.

Got ml\_get errors when using undo with 'virtualedit'.

Call gui\_mch\_update() before triggering GuiEnter autocmd. (Ron Aaron)

Unix "make install" installed a few Amiga .info files.

Disallow setting 'ambiwidth' to "double" when 'listchars' or 'fillchars' contains a character that would become double width.

Set 'wrapscan' when checking the .po files. (Mike Williams)

Fixed: using expression in command line may cause a crash.

Avoid warnings from the clang compiler. (Dominique Pelle)

Fix: Include wchar.h in charset.c for towupper().

Fixed: Using ":read file" in an empty buffer when 'compatible' is set caused an error. Was caused by patch 7.2.132.

Make the references to features in the help more consistent. (Sylvain Hitier)

=====

VERSION 7.4

\*version-7.4\* \*version7.4\* \*vim-7.4\*

This section is about improvements made between version 7.3 and 7.4.

This release has hundreds of bug fixes and there are a few new features. The most notable new features are:

- New regexp engine |new-regexp-engine|
- A more pythonic Python interface |better-python-interface|

New regexp engine

\*new-regexp-engine\*

-----

What is now called the "old" regexp engine uses a backtracking algorithm. It tries to match the pattern with the text in one way, and when that fails it goes back and tries another way. This works fine for simple patterns, but complex patterns can be very slow on longer text.

The new engine uses a state machine. It tries all possible alternatives at the current character and stores the possible states of the pattern. This is a bit slower for simple patterns, but much faster for complex patterns and

long text.

Most notably, syntax highlighting for Javascript and XML files with long lines is now working fine. Previously Vim could get stuck.

More information here: [|two-engines|](#)

Better Python interface

*\*better-python-interface\**

-----

Added [|python-bindeval|](#) function. Unlike [|python-eval|](#) this one returns [|python-Dictionary|](#), [|python-List|](#) and [|python-Function|](#) objects for dictionaries lists and functions respectively in place of their Python built-in equivalents (or None if we are talking about function references).

For simple types this function returns Python built-in types and not only Python ``str()`` like [|python-eval|](#) does. On Python 3 it will return ``bytes()`` objects in place of ``str()`` ones avoiding possibility of `UnicodeDecodeError`.

Interface of new objects mimics standard Python ``dict()`` and ``list()`` interfaces to some extent. Extent will be improved in the future.

Added special [|python-vars|](#) objects also available for [|python-buffer|](#) and [|python-window|](#). They ease access to Vim script variables from Python.

Now you no longer need to alter ``sys.path`` to import your module: special hooks are responsible for importing from [{rtp}/python2](#), [{rtp}/python3](#) and [{rtp}/pythonx](#) directories (for Python 2, Python 3 and both respectively). See [|python-special-path|](#).

Added possibility to work with [|tabpage|](#)s through [|python-tabpage|](#) object.

Added automatic conversion of Vim errors and exceptions to Python exceptions.

Changed the behavior of the [|python-buffers|](#) object: it now uses buffer numbers as keys in place of the index of the buffer in the internal buffer list. This should not break anything as the only way to get this index was iterating over [|python-buffers|](#).

Added `|:pydo|` and `|:py3do|` commands.

Added the `|pyeval()|` and `|py3eval()|` functions.

Now in all places which previously accepted ``str()`` objects, ``str()`` and ``unicode()`` (Python 2) or ``bytes()`` and ``str()`` (Python 3) are accepted.

[|python-window|](#) has gained ``col`` and ``row`` attributes that are currently the only way to get internal window positions.

Added or fixed support for ``dir()`` in Vim Python objects.

Changed

*\*changed-7.4\**

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Old Python versions ( $\leq 2.2$ ) are no longer supported. Building with them did not work anyway.

Options:

Added ability to automatically save the selection into the system clipboard when using non-GUI version of Vim (`autoselectplus` in `'clipboard'`). Also added ability to use the system clipboard as

default register (previously only primary selection could be used).  
(Ivan Krasilnikov, Christian Brabandt, Bram Moolenaar)

Added a special 'shiftwidth' value that makes 'sw' follow 'tabstop'.  
As indenting via 'indentexpr' became tricky |shiftwidth()| function  
was added. Also added equivalent special value to 'softtabstop'  
option. (Christian Brabandt, so8res)

Show absolute number in number column when 'relativenumber' option is  
on. Now there are four combinations with 'number' and  
'relativenumber'. (Christian Brabandt)

#### Commands:

|:diffoff| now saves the local values of some settings and restores  
them in place of blindly resetting them to the defaults. (Christian  
Brabandt)

#### Other:

Lua interface now also uses userdata binded to Vim structures. (Taro  
Muraoka, Luis Carvalho)

glob() and autocommand patterns used to work with the undocumented  
"\{n,m\}" item from a regexp. "\{" is now used for a literal "{", as  
this is normal in shell file patterns. Now used "\\{n,m\}" to get  
"\{n,m\}" in the regexp pattern.

#### Added

\*added-7.4\*

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Various syntax, indent and other plugins were added.

Added support for |Lists| and |Dictionaries| in |viminfo|. (Christian  
Brabandt)

#### Functions:

Bitwise functions: |and()|, |or()|, |invert()|, |xor()|.

Added |luaeval()| function. (Taro Muraoka, Luis Carvalho)

Added |sha256()| function. (Tyru, Hirohito Higashi)

Added |wildmenu mode()| function. (Christian Brabandt)

Debugging functions: |screenattr()|, |screenchar()|, |screencol()|,  
|screenrow()|. (Simon Ruderich, Bram Moolenaar)

Added ability to use |Dictionary-function|s for |sort()|ing, via  
optional third argument. (Nikolay Pavlov)

Added special |expand()| argument that expands to the current line  
number.

Made it possible to force |char2nr()| to always give unicode codepoints  
regardless of current encoding. (Yasuhiro Matsumoto)

Made it possible for functions generating file list generate |List|  
and not NL-separated string. (e.g. |glob()|, |expand()|) (Christian  
Brabandt)

Functions that obtain variables from the specific window, tabpage or  
buffer scope dictionary can now return specified default value in  
place of empty string in case variable is not found. (|gettabvar()|,

|getwinvar()|, |getbufvar()|) (Shougo Matsushita, Hirohito Higashi)

#### Autocommands:

Added |InsertCharPre| event launched before inserting character.  
(Jakson A. Aquino)

Added |CompleteDone| event launched after finishing completion in  
insert mode. (idea by Florian Klein)

Added |QuitPre| event launched when commands that can either close Vim  
or only some window(s) are launched.

Added |TextChanged| and |TextChangedI| events launched when text is  
changed.

#### Commands:

|:syntime| command useful for debugging.

Made it possible to remove all signs from the current buffer using  
|:sign-unplace|. (Christian Brabandt)

Added |:language| autocompletion. (Dominique Pelle)

Added more |:command-complete| completion types: |:behave| suboptions,  
color schemes, compilers, |:cscope| suboptions, files from 'path',  
|:history| suboptions, locale names, |:syntime| suboptions, user  
names. (Dominique Pelle)

Added |:map-nowait| creating mapping which when having lhs that is the  
prefix of another mapping's lhs will not allow Vim to wait for user to  
type more characters to resolve ambiguity, forcing Vim to take the  
shorter alternative: one with <nowait>.

#### Options:

Made it possible to ignore case when completing: 'wildignorecase'.

Added ability to delete comment leader when using |J| by `j` flag in  
'formatoptions' (|fo-table|). (Lech Lorens)

Added ability to control indentation inside namespaces: |cino-N|. (Konstantin Lepa)

Added ability to control alignment inside `if` condition separately  
from alignment inside function arguments: |cino-k|. (Lech Lorens)

#### Other:

Improved support for cmd.exe. (Ben Fritz, Bram Moolenaar)

Added |v:windowid| variable containing current window number in GUI  
Vim. (Christian J. Robinson, Lech Lorens)

Added rxvt-unicode and SGR mouse support. (Yiding Jia, Hayaki Saito)

All changes in 7.4

\*fixed-7.4\*

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#### Patch 7.3.001

Problem: When editing "src/main.c" and 'path' set to "./proto",  
":find e<C-D" shows ./proto/eval.pro instead of eval.pro.  
Solution: Check for path separator when comparing names. (Nazri Ramliy)  
Files: src/misc1.c

## Patch 7.3.002

Problem: `":find"` completion doesn't work when halfway an environment variable. (Dominique Pelle)  
Solution: Only use in-path completion when expanding file names. (Nazri Ramliy)  
Files: `src/ex_docmd.c`

## Patch 7.3.003

Problem: Crash with specific `BufWritePost` autocmd. (Peter Odding)  
Solution: Don't free the quickfix title twice. (Lech Lorens)  
Files: `src/quickfix.c`

## Patch 7.3.004

Problem: Crash when using very long regexp. (Peter Odding)  
Solution: Reset `reg_toolong`. (Carlo Teubner)  
Files: `src/regexp.c`

## Patch 7.3.005

Problem: Crash when using `undotree()`. (Christian Brabandt)  
Solution: Increase the list reference count. Add a test for `undotree()` (Lech Lorens)  
Files: `src/eval.c`, `src/testdir/Makefile`, `src/testdir/test61.in`

## Patch 7.3.006

Problem: Can't build some multi-byte code with C89.  
Solution: Move code to after declarations. (Joachim Schmitz)  
Files: `src/mbyte.c`, `src/spell.c`

## Patch 7.3.007

Problem: Python code defines global `"buffer"`. Re-implements a grow-array.  
Solution: Use a grow-array instead of coding the same functionality. Handle out-of-memory situation properly.  
Files: `src/if_py_both.h`

## Patch 7.3.008

Problem: `'cursorbind'` is kept in places where `'scrollbind'` is reset.  
Solution: Reset `'cursorbind'`.  
Files: `src/buffer.c`, `src/diff.c`, `src/ex_cmds.c`, `src/ex_cmds2.c`,  
`src/ex_docmd.c`, `src/ex_getln.c`, `src/if_cscope.c`, `src/macros.h`,  
`src/quickfix.c`, `src/search.c`, `src/tag.c`, `src/window.c`

## Patch 7.3.009

Problem: Win32: Crash on Windows when using a bad argument for `strftime()`. (Christian Brabandt)  
Solution: Use the `bad_param_handler()`. (Mike Williams)  
Files: `src/os_win32.c`

## Patch 7.3.010

Problem: Mac GUI: Missing break statements.  
Solution: Add the break statements. (Dominique Pelle)  
Files: `src/gui_mac.c`

## Patch 7.3.011

Problem: X11 clipboard doesn't work in Athena/Motif GUI. First selection after a shell command doesn't work.  
Solution: When using the GUI use `XtLastTimestampProcessed()` instead of changing a property. (partly by Toni Ronkko)  
When executing a shell command disown the selection.  
Files: `src/ui.c`, `src/os_unix.c`

## Patch 7.3.012

Problem: Problems building with MingW.  
Solution: Adjust the MingW makefiles. (Jon Maken)  
Files: src/Make\_ming.mak, src/GvimExt/Make\_ming.mak

Patch 7.3.013

Problem: Dynamic loading with Ruby doesn't work for 1.9.2.  
Solution: Handle rb\_str2cstr differently. Also support dynamic loading on Unix. (Jon Maken)  
Files: src/if\_ruby.c

Patch 7.3.014

Problem: Ending a line in a backslash inside an ":append" or ":insert" command in Ex mode doesn't work properly. (Ray Frush)  
Solution: Halve the number of backslashes, only insert a NUL after an odd number of backslashes.  
Files: src/ex\_getln.c

Patch 7.3.015

Problem: Test is using error message that no longer exists.  
Solution: Change E106 to E121. (Dominique Pelle)  
Files: src/testdir/test49.vim

Patch 7.3.016

Problem: Netbeans doesn't work under Athena.  
Solution: Support Athena, just like Motif. (Xavier de Gaye)  
Files: runtime/doc/netbeans.txt, src/gui.c, src/main.c, src/netbeans.c

Patch 7.3.017

Problem: smatch reports errors.  
Solution: Fix the reported errors. (Dominique Pelle)  
Files: src/spell.c, src/syntax.c

Patch 7.3.018 (after 7.3.012)

Problem: Missing argument to windres in MingW makefiles.  
Solution: Add the argument that was wrapped in the patch. (Jon Maken)  
Files: src/Make\_ming.mak, src/GvimExt/Make\_ming.mak

Patch 7.3.019

Problem: ":nbstart" can fail silently.  
Solution: Give an error when netbeans is not supported by the GUI. (Xavier de Gaye)  
Files: src/netbeans.c

Patch 7.3.020

Problem: Cursor position wrong when joining multiple lines and 'formatoptions' contains "a". (Moshe Kamensky)  
Solution: Adjust cursor position for skipped indent. (Carlo Teubner)  
Files: src/ops.c, src/testdir/test68.in, src/testdir/test68.ok

Patch 7.3.021

Problem: Conflict for defining Boolean in Mac header files.  
Solution: Define NO\_X11\_INCLUDES. (Rainer Muller)  
Files: src/os\_macosx.m, src/vim.h

Patch 7.3.022

Problem: When opening a new window the 'spellcapcheck' option is cleared.  
Solution: Copy the correct option value. (Christian Brabandt)  
Files: src/option.c

Patch 7.3.023

Problem: External program may hang when it tries to write to the tty.  
Solution: Don't close the slave tty until after the child exits. (Nikola



Knezevic)  
Files: src/os\_unix.c

Patch 7.3.024

Problem: Named signs do not use a negative number as intended.  
Solution: Fix the numbering of named signs. (Xavier de Gaye)  
Files: src/ex\_cmds.c

Patch 7.3.025

Problem: ":mksession" does not square brackets escape file name properly.  
Solution: Improve escaping of file names. (partly by Peter Odding)  
Files: src/ex\_docmd.c

Patch 7.3.026

Problem: CTRL-] in a help file doesn't always work. (Tony Mechelynck)  
Solution: Don't escape special characters. (Carlo Teubner)  
Files: src/normal.c

Patch 7.3.027

Problem: Opening a file on a network share is very slow.  
Solution: When fixing file name case append "\*" to directory, server and network share names. (David Anderson, John Beckett)  
Files: src/os\_win32.c

Patch 7.3.028 (after 7.3.024)

Problem: Signs don't show up. (Charles Campbell)  
Solution: Don't use negative numbers. Also assign a number to signs that have a name of all digits to avoid using a sign number twice.  
Files: src/ex\_cmds.c

Patch 7.3.029

Problem: ":sort n" sorts lines without a number as number zero. (Beeyawned)  
Solution: Make lines without a number sort before lines with a number. Also fix sorting negative numbers.  
Files: src/ex\_cmds.c, src/testdir/test57.in, src/testdir/test57.ok

Patch 7.3.030

Problem: Cannot store Dict and List in viminfo file.  
Solution: Add support for this. (Christian Brabandt)  
Files: runtime/doc/options.txt, src/eval.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/main.aap, src/testdir/test74.in, src/testdir/test74.ok

Patch 7.3.031

Problem: Can't pass the X window ID to another application.  
Solution: Add v:windowid. (Christian J. Robinson, Lech Lorens)  
Files: runtime/doc/eval.txt, src/eval.c, src/gui.c, src/vim.h, src/os\_unix.c

Patch 7.3.032

Problem: maparg() doesn't return the flags, such as <buffer>, <script>, <silent>. These are needed to save and restore a mapping.  
Solution: Improve maparg(). (also by Christian Brabandt)  
Files: runtime/doc/eval.txt, src/eval.c, src/getchar.c, src/gui\_w48.c, src/message.c, src/proto/getchar.pro, src/proto/message.pro, src/structs.h src/testdir/test75.in, src/testdir/test75.ok

Patch 7.3.033 (after 7.3.032)

Problem: Can't build without FEAT\_LOCALMAP.  
Solution: Add an #ifdef. (John Marriott)

Files: src/getchar.c

Patch 7.3.034

Problem: Win32: may be loading .dll from the wrong directory.

Solution: Go to the Vim executable directory when opening a library.

Files: src/gui\_w32.c, src/if\_lua.c, src/if\_mzsch.c, src/if\_perl.xs,  
src/if\_python.c, src/if\_python3.c, src/if\_ruby.c, src/mbyte.c,  
src/os\_mswin.c, src/os\_win32.c, src/proto/os\_win32.pro

Patch 7.3.035 (after 7.3.034)

Problem: Stray semicolon after if statement. (Hari G)

Solution: Remove the semicolon.

Files: src/os\_win32.c

Patch 7.3.036

Problem: Win32 GUI: When building without menus, the font for dialogs and  
tab page headers also changes.

Solution: Define USE\_SYSMENU\_FONT always. (Harig G.)

Files: src/gui\_w32.c

Patch 7.3.037

Problem: Compiler warnings for loss of data. (Mike Williams)

Solution: Add type casts.

Files: src/if\_py\_both.h, src/getchar.c, src/os\_win32.c

Patch 7.3.038

Problem: v:windowid isn't set on MS-Windows.

Solution: Set it to the window handle. (Chris Sutcliffe)

Files: runtime/doc/eval.txt, src/gui\_w32.c

Patch 7.3.039

Problem: Crash when using skk.vim plugin.

Solution: Get length of expression evaluation result only after checking for  
NULL. (Noriaki Yagi, Dominique Pelle)

Files: src/ex\_getln.c

Patch 7.3.040

Problem: Comparing strings while ignoring case goes beyond end of the  
string when there are illegal bytes. (Dominique Pelle)

Solution: Explicitly check for illegal bytes.

Files: src/mbyte.c

Patch 7.3.041

Problem: Compiler warning for accessing mediumVersion. (Tony Mechelynck)

Solution: Use the pointer instead of the array itself. (Dominique Pelle)

Files: src/version.c

Patch 7.3.042

Problem: No spell highlighting when re-using an empty buffer.

Solution: Clear the spell checking info only when clearing the options for a  
buffer. (James Vega)

Files: src/buffer.c

Patch 7.3.043

Problem: Can't load Ruby dynamically on Unix.

Solution: Adjust the configure script. (James Vega)

Files: src/Makefile, src/config.h.in, src/configure.in,  
src/auto/configure, src/if\_ruby.c

Patch 7.3.044

Problem: The preview window opened by the popup menu is larger than  
specified with 'previewheight'. (Benjamin Haskell)

Solution: Use 'previewheight' if it's set and smaller.  
Files: src/popupmnu.c

Patch 7.3.045

Problem: Compiler warning for uninitialized variable.  
Solution: Initialize the variable always.  
Files: src/getchar.c

Patch 7.3.046 (after 7.3.043)

Problem: Can't build Ruby on MS-Windows.  
Solution: Add #ifdef, don't use WIN3264 before including vim.h.  
Files: src/if\_ruby.c

Patch 7.3.047 (after 7.3.032)

Problem: Missing makefile updates for test 75.  
Solution: Update the makefiles.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Makefile, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

Patch 7.3.048

Problem: ":earlier lf" doesn't work after loading undo file.  
Solution: Set b\_u\_save\_nr\_cur when loading an undo file. (Christian  
Brabandt)  
Fix only showing time in ":undolist"  
Files: src/undo.c

Patch 7.3.049

Problem: PLT has rebranded their Scheme to Racket.  
Solution: Add support for Racket 5.x. (Sergey Khorev)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak,  
src/auto/configure, src/configure.in, src/if\_mzsch.c

Patch 7.3.050

Problem: The link script is clumsy.  
Solution: Use the --as-needed linker option if available. (Kirill A.  
Shutemov)  
Files: src/Makefile, src/auto/configure, src/config.mk.in,  
src/configure.in, src/link.sh

Patch 7.3.051

Problem: Crash when \$PATH is empty.  
Solution: Check for vim\_getenv() returning NULL. (Yasuhiro Matsumoto)  
Files: src/ex\_getln.c, src/os\_win32.c

Patch 7.3.052

Problem: When 'completefunc' opens a new window all kinds of errors follow.  
(Xavier Deguillard)  
Solution: When 'completefunc' goes to another window or buffer and when it  
deletes text abort completion. Add a test for 'completefunc'.  
Files: src/edit.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test76.in, src/testdir/test76.ok

Patch 7.3.053

Problem: complete() function doesn't reset complete direction. Can't use  
an empty string in the list of matches.  
Solution: Set compl\_direction to FORWARD. Add "empty" key to allow empty  
words. (Kikuchan)  
Files: src/edit.c

## Patch 7.3.054

Problem: Can define a user command for :Print, but it doesn't work. (Aaron Thoma)  
Solution: Let user command :Print overrule the builtin command (Christian Brabandt) Disallow :X and :Next as a user defined command.  
Files: src/ex\_docmd.c

## Patch 7.3.055

Problem: Recursively nested lists and dictionaries cause a near-endless loop when comparing them with a copy. (ZyX)  
Solution: Limit recursiveness in a way that non-recursive structures can still be nested very deep.  
Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.3.056

Problem: "getline" argument in do\_cmdline() shadows global.  
Solution: Rename the argument.  
Files: src/ex\_docmd.c

## Patch 7.3.057

Problem: Segfault with command line abbreviation. (Randy Morris)  
Solution: Don't retrigger the abbreviation when abandoning the command line. Continue editing the command line after the error.  
Files: src/ex\_getln.c

## Patch 7.3.058

Problem: Error "code converter not found" when loading Ruby script.  
Solution: Load Gem module. (Yasuhiro Matsumoto)  
Files: src/if\_ruby.c

## Patch 7.3.059

Problem: Netbeans: Problem with recursively handling messages for Athena and Motif.  
Solution: Call netbeans\_parse\_messages() in the main loop, like it's done for GTK. (Xavier de Gaye)  
Files: src/gui\_x11.c, src/netbeans.c

## Patch 7.3.060

Problem: Netbeans: crash when socket is disconnected unexpectedly.  
Solution: Don't cleanup when a read fails, put a message in the queue and disconnect later. (Xavier de Gaye)  
Files: src/netbeans.c

## Patch 7.3.061

Problem: Remote ":drop" does not respect 'autochdir'. (Peter Odding)  
Solution: Don't restore the directory when 'autochdir' is set. (Benjamin Fritz)  
Files: src/main.c

## Patch 7.3.062

Problem: Python doesn't work properly when installed in another directory than expected.  
Solution: Figure out home directory in configure and use Py\_SetPythonHome() at runtime. (Roland Puntaier)  
Files: src/configure.in, src/auto/configure, src/if\_python.c, src/if\_python3.c

## Patch 7.3.063

Problem: Win32: Running a filter command makes Vim lose focus.  
Solution: Use SW\_SHOWMINNOACTIVE instead of SW\_SHOWMINIMIZED. (Hong Xu)  
Files: src/os\_win32.c

## Patch 7.3.064

Problem: Win32: ":dis +" shows nothing, but "+p does insert text.  
Solution: Display the \* register, since that's what will be inserted.  
(Christian Brabandt)  
Files: src/globals.h, src/ops.c

## Patch 7.3.065

Problem: Can't get current line number in a source file.  
Solution: Add the <slnum> item, similar to <sfile>.  
Files: src/ex\_docmd.c

## Patch 7.3.066

Problem: Crash when changing to another window while in a :vimgrep command.  
(Christian Brabandt)  
Solution: When wiping out the dummy before, remove it from aucmd\_win.  
Files: src/quickfix.c

## Patch 7.3.067 (after 7.3.058)

Problem: Ruby: Init\_prelude is not always available.  
Solution: Remove use of Init\_prelude. (Yasuhiro Matsumoto)  
Files: src/if\_ruby.c

## Patch 7.3.068

Problem: Using freed memory when doing ":saveas" and an autocommand sets  
'autochdir'. (Kevin Klement)  
Solution: Get the value of fname again after executing autocommands.  
Files: src/ex\_cmds.c

## Patch 7.3.069

Problem: GTK: pressing Enter in inputdialog() doesn't work like clicking OK  
as documented.  
Solution: call gtk\_entry\_set\_activates\_default(). (Britton Kerin)  
Files: src/gui\_gtk.c

## Patch 7.3.070

Problem: Can set environment variables in the sandbox, could be abused.  
Solution: Disallow it.  
Files: src/eval.c

## Patch 7.3.071

Problem: Editing a file in a window that's in diff mode resets 'diff'  
but not cursor binding.  
Solution: Reset cursor binding in two more places.  
Files: src/quickfix.c, src/option.c

## Patch 7.3.072

Problem: Can't complete file names while ignoring case.  
Solution: Add 'wildignorecase'.  
Files: src/ex\_docmd.c, src/ex\_getln.c, src/misc1.c, src/option.c,  
src/option.h, src/vim.h, src/runtime/options.txt

## Patch 7.3.073

Problem: Double free memory when netbeans command follows DETACH.  
Solution: Only free the node when owned. (Xavier de Gaye)  
Files: src/netbeans.c

## Patch 7.3.074

Problem: Can't use the "+" register like "\*" for yank and put.  
Solution: Add "unnamedplus" to the 'clipboard' option. (Ivan Krasilnikov)  
Files: runtime/doc/options.txt, src/eval.c, src/globals.h, src/ops.c,  
src/option.c

Patch 7.3.075 (after 7.3.072)

Problem: Missing part of 'wildignorecase'  
Solution: Also adjust expand()  
Files: src/eval.c

Patch 7.3.076

Problem: Clang warnings for dead code.  
Solution: Remove it. (Carlo Teubner)  
Files: src/gui\_gtk.c, src/if\_ruby.c, src/misc2.c, src/netbeans.c,  
src/spell.c

Patch 7.3.077

Problem: When updating crypt of swapfile fails there is no error message.  
(Carlo Teubner)  
Solution: Add the error message.  
Files: src/memline.c

Patch 7.3.078

Problem: Warning for unused variable.  
Solution: Adjust #ifdefs.  
Files: src/ops.c

Patch 7.3.079

Problem: Duplicate lines in makefile.  
Solution: Remove the lines. (Hong Xu)  
Files: src/Make\_mvc.mak

Patch 7.3.080

Problem: Spell doesn't work on VMS.  
Solution: Use different file names. (Zoltan Bartos, Zoltan Arpadffy)  
Files: src/spell.c

Patch 7.3.081

Problem: Non-printable characters in 'statusline' cause trouble. (ZyX)  
Solution: Use transstr(). (partly by Caio Ariede)  
Files: src/screen.c

Patch 7.3.082

Problem: Leaking file descriptor when hostname doesn't exist.  
Solution: Remove old debugging lines.  
Files: src/netbeans.c

Patch 7.3.083

Problem: When a read() or write() is interrupted by a signal it fails.  
Solution: Add read\_eintr() and write\_eintr().  
Files: src/fileio.c, src/proto/fileio.pro, src/memfile.c, src/memline.c,  
src/os\_unix.c, src/undo.c, src/vim.h

Patch 7.3.084

Problem: When splitting the window, the new one scrolls with the cursor at  
the top.  
Solution: Compute w\_fraction before setting the new height.  
Files: src/window.c

Patch 7.3.085 (after 7.3.083)

Problem: Inconsistency with preproc symbols. void \* computation.  
Solution: Include vimio.h from vim.h. Add type cast.  
Files: src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/fileio.c,  
src/if\_cscope.c, src/if\_sniff.c, src/main.c, src/memfile.c,  
src/memline.c, src/netbeans.c, src/os\_msdos.c, src/os\_mswin.c,  
src/os\_win16.c, src/os\_win32.c, src/spell.c, src/tag.c,  
src/undo.c, src/vim.h

## Patch 7.3.086

Problem: When using a mapping with an expression and there was no count, v:count has the value of the previous command. (ZyX)  
Solution: Also set v:count and v:count1 before getting the character that could be a command or a count.  
Files: src/normal.c

## Patch 7.3.087

Problem: EINTR is not always defined.  
Solution: Include errno.h in vim.h.  
Files: src/if\_cscope.c, src/if\_tcl.c, src/integration.c, src/getline.c, src/os\_mswin.c, src/os\_win16.c, src/os\_win32.c, src/vim.h, src/workshop.c

## Patch 7.3.088

Problem: Ruby can't load Gems sometimes, may cause a crash.  
Solution: Undefine off\_t. Use ruby\_process\_options(). (Yasuhiro Matsumoto)  
Files: src/if\_ruby.c

## Patch 7.3.089

Problem: Compiler warning on 64 bit MS-Windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/netbeans.c

## Patch 7.3.090

Problem: Wrong help text for Cscope.  
Solution: Adjust the help text for "t". (Dominique Pelle)  
Files: src/if\_cscope.c

## Patch 7.3.091

Problem: "vim -w foo" writes special key codes for removed escape sequences. (Josh Triplett)  
Solution: Don't write K\_IGNORE codes.  
Files: src/getchar.c, src/misc1.c, src/term.c, src/vim.h

## Patch 7.3.092

Problem: Resizing the window when exiting.  
Solution: Don't resize when exiting.  
Files: src/term.c

## Patch 7.3.093

Problem: New DLL dependencies in MingW with gcc 4.5.0.  
Solution: Add STATIC\_STDCPLUS, LDFLAGS and split up WINDRES. (Guopeng Wen)  
Files: src/GvimExt/Make\_ming.mak, src/Make\_ming.mak

## Patch 7.3.094

Problem: Using abs() requires type cast to int.  
Solution: Use labs() so that the value remains long. (Hong Xu)  
Files: src/screen.c

## Patch 7.3.095

Problem: Win32: In Chinese tear-off menu doesn't work. (Weasley)  
Solution: Use menu\_name\_equal(). (Alex Jakushev)  
Files: src/menu.c

## Patch 7.3.096

Problem: "gvim -nb" is not interruptible. Leaking file descriptor on netbeans connection error.  
Solution: Check for CTRL-C typed. Free file descriptor. (Xavier de Gaye)  
Files: src/netbeans.c

## Patch 7.3.097

Problem: Using ":call" inside "if 0" does not see that a function returns a Dict and gives error for "." as string concatenation.  
Solution: Use eval0() to skip over the expression. (Yasuhiro Matsumoto)  
Files: src/eval.c

## Patch 7.3.098

Problem: Function that ignores error still causes called\_emsg to be set. E.g. when expand() fails the status line is disabled.  
Solution: Move check for emsg\_not\_now() up. (James Vega)  
Files: src/message.c

## Patch 7.3.099

Problem: Crash when splitting a window with zero height. (Yukihiro Nakadaira)  
Solution: Don't set the fraction in a window with zero height.  
Files: src/window.c

## Patch 7.3.100

Problem: When using :normal v:count isn't set.  
Solution: Call normal\_cmd() with toplevel set to TRUE.  
Files: src/ex\_docmd.c

## Patch 7.3.101

Problem: ino\_t defined with wrong size.  
Solution: Move including auto/config.h before other includes. (Marius Geminas)  
Files: src/if\_ruby.c, src/if\_lua.c

## Patch 7.3.102

Problem: When using ":make", typing the next command and then getting the "reload" prompt the next command is (partly) eaten by the reload prompt.  
Solution: Accept ':' as a special character at the reload prompt to accept the default choice and execute the command.  
Files: src/eval.c, src/fileio.c, src/gui.c, src/gui\_xmdlg.c, src/memline.c, src/message.c, src/proto/message.pro, src/gui\_athena.c, src/gui\_gtk.c, src/gui\_mac.c, src/gui\_motif.c, src/gui\_photon.c, src/gui\_wl6.c, src/gui\_w32.c, src/os\_mswin.c, src/proto/gui\_athena.pro, src/proto/gui\_gtk.pro, src/proto/gui\_mac.pro, src/proto/gui\_motif.pro, src/proto/gui\_photon.pro, src/proto/gui\_wl6.pro, src/proto/gui\_w32.pro

## Patch 7.3.103

Problem: Changing 'fileformat' and then using ":w" in an empty file sets the 'modified' option.  
Solution: In unchanged() don't ignore 'ff' for an empty file.  
Files: src/misc1.c, src/option.c, src/proto/option.pro, src/undo.c

## Patch 7.3.104

Problem: Conceal: using Tab for cchar causes problems. (ZyX)  
Solution: Do not accept a control character for cchar.  
Files: src/syntax.c

## Patch 7.3.105

Problem: Can't get the value of "b:changedtick" with getbufvar().  
Solution: Make it work. (Christian Brabandt)  
Files: src/eval.c

## Patch 7.3.106

Problem: When 'cursorbind' is set another window may scroll unexpectedly



when 'scrollbind' is also set. (Xavier Wang)  
Solution: Don't call update\_topline() if 'scrollbind' is set.  
Files: src/move.c

#### Patch 7.3.107

Problem: Year number for :undolist can be confused with month or day.  
Solution: Change "%y" to "%Y".  
Files: src/undo.c

#### Patch 7.3.108

Problem: Useless check for NULL when calling vim\_free().  
Solution: Remove the check. (Dominique Pelle)  
Files: src/eval.c, src/ex\_cmds.c, src/os\_win32.c

#### Patch 7.3.109

Problem: Processing new Esperanto spell file fails and crashes Vim.  
(Dominique Pelle)  
Solution: When running out of memory give an error. Handle '?' in  
COMPOUNDRULE properly.  
Files: src/spell.c

#### Patch 7.3.110

Problem: The "nbsp" item in 'listchars' isn't used for ":list".  
Solution: Make it work. (Christian Brabandt)  
Files: src/message.c

#### Patch 7.3.111 (after 7.3.100)

Problem: Executing a :normal command in 'statusline' evaluation causes the  
cursor to move. (Dominique Pelle)  
Solution: When updating the cursor for 'cursorbind' allow the cursor beyond  
the end of the line. When evaluating 'statusline' temporarily  
reset 'cursorbind'.  
Files: src/move.c, src/screen.c

#### Patch 7.3.112

Problem: Setting 'statusline' to "%!'asdf%" reads uninitialized memory.  
Solution: Check for NUL after %.  
Files: src/buffer.c

#### Patch 7.3.113

Problem: Windows: Fall back directory for creating temp file is wrong.  
Solution: Use "." instead of empty string. (Hong Xu)  
Files: src/fileio.c

#### Patch 7.3.114

Problem: Potential problem in initialization when giving an error message  
early.  
Solution: Initialize 'verbosefile' empty. (Ben Schmidt)  
Files: src/option.h

#### Patch 7.3.115

Problem: Vim can crash when tmpnam() returns NULL.  
Solution: Check for NULL. (Hong Xu)  
Files: src/fileio.c

#### Patch 7.3.116

Problem: 'cursorline' is displayed too short when there are concealed  
characters and 'list' is set. (Dennis Preiser)  
Solution: Check for 'cursorline' when 'list' is set. (Christian Brabandt)  
Files: src/screen.c

#### Patch 7.3.117

Problem: On some systems --as-needed does not work, because the "tinfo" library is included indirectly from "ncurses". (Charles Campbell)  
Solution: In configure prefer using "tinfo" instead of "ncurses".  
Files: src/configure.in, src/auto/configure

#### Patch 7.3.118

Problem: Ruby uses SIGVTALARM which makes Vim exit. (Alec Tica)  
Solution: Ignore SIGVTALARM. (Dominique Pelle)  
Files: src/os\_unix.c

#### Patch 7.3.119

Problem: Build problem on Mac. (Nicholas Stallard)  
Solution: Use "extern" instead of "EXTERN" for p\_vfile.  
Files: src/option.h

#### Patch 7.3.120

Problem: The message for an existing swap file is too long to fit in a 25 line terminal.  
Solution: Make the message shorter. (Chad Miller)  
Files: src/memline.c

#### Patch 7.3.121

Problem: Complicated 'statusline' causes a crash. (Christian Brabandt)  
Solution: Check that the number of items is not too big.  
Files: src/buffer.c

#### Patch 7.3.122

Problem: Having auto/config.mk in the repository causes problems.  
Solution: Remove auto/config.mk from the distribution. In the toplevel Makefile copy it from the "dist" file.  
Files: Makefile, src/Makefile, src/auto/config.mk

#### Patch 7.3.123

Problem: ml\_get error when executing register being recorded into, deleting lines and 'conceallevel' is set. (ZyX)  
Solution: Don't redraw a line for concealing when it doesn't exist.  
Files: src/main.c

#### Patch 7.3.124

Problem: When writing a file in binary mode it may be missing the final EOL if a file previously read was missing the EOL. (Kevin Goodsell)  
Solution: Move the write\_no\_eol\_lnum into the buffer struct.  
Files: src/structs.h, src/fileio.c, src/globals.h, src/os\_unix.c

#### Patch 7.3.125

Problem: MSVC: Problem with quotes in link argument.  
Solution: Escape backslashes and quotes. (Weasley)  
Files: src/Make\_mvc.mak

#### Patch 7.3.126

Problem: Compiler warning for signed pointer.  
Solution: Use unsigned int argument for sscanf().  
Files: src/blowfish.c

#### Patch 7.3.127

Problem: Compiler complains about comma.  
Solution: Remove comma after last enum element.  
Files: src/ex\_cmds2.c

#### Patch 7.3.128

Problem: Another compiler warning for signed pointer.  
Solution: Use unsigned int argument for sscanf().

Files: src/mark.c

Patch 7.3.129

Problem: Using integer like a boolean.

Solution: Nicer check for integer being non-zero.

Files: src/tag.c

Patch 7.3.130

Problem: Variable misplaced in #ifdef.

Solution: Move clipboard\_event\_time outside of #ifdef.

Files: src/gui\_gtk\_x11.c

Patch 7.3.131

Problem: Including errno.h too often.

Solution: Don't include errno.h in Unix header file.

Files: src/os\_unix.h

Patch 7.3.132

Problem: C++ style comments.

Solution: Change to C comments.

Files: src/if\_python3.c

Patch 7.3.133

Problem: When using encryption it's not clear what method was used.

Solution: In the file message show "blowfish" when using blowfish.

Files: src/fileio.c

Patch 7.3.134

Problem: Drag-n-drop doesn't work in KDE Dolphin.

Solution: Add GDK\_ACTION\_MOVE flag. (Florian Degner)

Files: src/gui\_gtk\_x11.c

Patch 7.3.135

Problem: When there is no previous substitute pattern, the previous search pattern is used. The other way around doesn't work.

Solution: When there is no previous search pattern, use the previous substitute pattern if possible. (Christian Brabandt)

Files: src/search.c

Patch 7.3.136

Problem: Duplicate include of assert.h.

Solution: Remove it.

Files: src/if\_cscope.c

Patch 7.3.137 (after 7.3.091)

Problem: When 'lazyredraw' is set the screen may not be updated. (Ivan Krasilnikov)

Solution: Call update\_screen() before waiting for input.

Files: src/misc1.c, src/getchar.c

Patch 7.3.138

Problem: ":com" changes the multi-byte text of :echo. (Dimitar Dimitrov)

Solution: Search for K\_SPECIAL as a byte, not a character. (Ben Schmidt)

Files: src/ex\_docmd.c

Patch 7.3.139 (after 7.3.137)

Problem: When 'lazyredraw' is set ":ver" output can't be read.

Solution: Don't redraw the screen when at a prompt or command line.

Files: src/getchar.c, src/message.c, src/misc1.c

Patch 7.3.140

Problem: Crash when drawing the "\$" at end-of-line for list mode just after

the window border and 'cursorline' is set.  
Solution: Don't check for 'cursorline'. (Quentin Carbonneaux)  
Files: src/screen.c

#### Patch 7.3.141

Problem: When a key code is not set get a confusing error message.  
Solution: Change the error message to say the key code is not set.  
Files: src/option.c, runtime/doc/options.txt

#### Patch 7.3.142

Problem: Python stdout doesn't have a flush() method, causing an import to fail.  
Solution: Add a dummy flush() method. (Tobias Columbus)  
Files: src/if\_py\_both.h

#### Patch 7.3.143

Problem: Memfile is not tested sufficiently. Looking up blocks in a memfile is slow when there are many blocks.  
Solution: Add high level test and unittest. Adjust the number of hash buckets to the number of blocks. (Ivan Krasilnikov)  
Files: Filelist, src/Makefile, src/main.c, src/memfile.c, src/memfile\_test.c src/structs.h src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mak, src/testdir/Makefile, src/testdir/test77.in, src/testdir/test77.ok

#### Patch 7.3.144

Problem: Crash with ":python help(dir)". (Kearn Holliday)  
Solution: Fix the way the type is set on objects. (Tobias Columbus)  
Files: src/if\_python.c

#### Patch 7.3.145 (after 7.3.144)

Problem: Can't build with Python dynamically loading.  
Solution: Add dll\_PyType\_Ready.  
Files: src/if\_python.c

#### Patch 7.3.146

Problem: It's possible to assign to a read-only member of a dict.  
It's possible to create a global variable "0". (ZyX)  
It's possible to add a v: variable with ":let v:name = 1".  
Solution: Add check for dict item being read-only.  
Check the name of g: variables.  
Disallow adding v: variables.  
Files: src/eval.c

#### Patch 7.3.147 (after 7.3.143)

Problem: Can't build on HP-UX.  
Solution: Remove an unnecessary backslash. (John Marriott)  
Files: src/Makefile

#### Patch 7.3.148

Problem: A syntax file with a huge number of items or clusters causes weird behavior, a hang or a crash. (Yukihiro Nakadaira)  
Solution: Check running out of IDs. (partly by Ben Schmidt)  
Files: src/syntax.c

#### Patch 7.3.149

Problem: The cursor disappears after the processing of the 'setDot' netbeans command when vim runs in a terminal.  
Solution: Show the cursor after a screen update. (Xavier de Gaye)  
Files: src/netbeans.c

## Patch 7.3.150

Problem: `readline()` does not return the last line when the NL is missing.  
(Hong Xu)  
Solution: When at the end of the file Also check for a previous line.  
Files: `src/eval.c`

## Patch 7.3.151 (after 7.3.074)

Problem: When "unnamedplus" is in 'clipboard' the selection is sometimes  
also copied to the star register.  
Solution: Avoid copy to the star register when undesired. (James Vega)  
Files: `src/ops.c`

## Patch 7.3.152

Problem: `Xxd` does not check for errors from library functions.  
Solution: Add error checks. (Florian Zumbiehl)  
Files: `src/xxd/xxd.c`

## Patch 7.3.153 (after 7.3.152)

Problem: Compiler warning for ambiguous else, missing prototype.  
Solution: Add braces. (Dominique Pelle) Add prototype for `die()`.  
Files: `src/xxd/xxd.c`

## Patch 7.3.154 (after 7.3.148)

Problem: Can't compile with tiny features. (Tony Mechelynck)  
Solution: Move `#define` outside of `#ifdef`.  
Files: `src/syntax.c`

## Patch 7.3.155

Problem: Crash when using `map()`, `filter()` and `remove()` on `v:`. (ZyX)  
Also for `extend()`. (Yukihiro Nakadaira)  
Solution: Mark `v:` as locked. Also correct locking error messages.  
Files: `src/eval.c`

## Patch 7.3.156

Problem: Tty names possibly left unterminated.  
Solution: Use `vim_strncpy()` instead of `strncpy()`.  
Files: `src/pty.c`

## Patch 7.3.157

Problem: Superfluous assignment.  
Solution: Remove assignment.  
Files: `src/misc1.c`

## Patch 7.3.158

Problem: Might use uninitialized memory in C indenting.  
Solution: Init arrays to empty.  
Files: `src/misc1.c`

## Patch 7.3.159

Problem: Using uninitialized pointer when out of memory.  
Solution: Check for NULL return value.  
Files: `src/mbyte.c`

## Patch 7.3.160

Problem: Unsafe string copying.  
Solution: Use `vim_strncpy()` instead of `strcpy()`. Use `vim_strcat()` instead  
of `strcat()`.  
Files: `src/buffer.c`, `src/ex_docmd.c`, `src/hardcopy.c`, `src/menu.c`,  
`src/misc1.c`, `src/misc2.c`, `src/proto/misc2.pro`, `src/netbeans.c`,  
`src/os_unix.c`, `src/spell.c`, `src/syntax.c`, `src/tag.c`

## Patch 7.3.161

Problem: Items on the stack may be too big.  
Solution: Make items static or allocate them.  
Files: src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c,  
src/fileio.c, src/hardcopy.c, src/quickfix.c, src/main.c,  
src/netbeans.c, src/spell.c, src/tag.c, src/vim.h, src/xxd/xxd.c

## Patch 7.3.162

Problem: No error message when assigning to a list with an index out of range. (Yukihiro Nakadaira)  
Solution: Add the error message.  
Files: src/eval.c

## Patch 7.3.163

Problem: For the default of 'shellpipe' "mksh" and "pdksh" are not recognized.  
Solution: Recognize these shell names.  
Files: src/option.c

## Patch 7.3.164

Problem: C-indenting: a preprocessor statement confuses detection of a function declaration.  
Solution: Ignore preprocessor lines. (Lech Lorens) Also recognize the style to put a comma before the argument name.  
Files: src/miscl.c, testdir/test3.in, testdir/test3.ok

## Patch 7.3.165

Problem: ":find" completion does not escape spaces in a directory name. (Isz)  
Solution: Add backslashes for EXPAND\_FILES\_IN\_PATH. (Carlo Teubner)  
Files: src/ex\_getln.c

## Patch 7.3.166

Problem: Buffer on the stack may be too big  
Solution: Allocate the space.  
Files: src/option.c

## Patch 7.3.167

Problem: When using the internal grep QuickFixCmdPost is not triggered. (Yukihiro Nakadaira)  
Solution: Change the place where autocommands are triggered.  
Files: src/quickfix.c

## Patch 7.3.168

Problem: When the second argument of input() contains a CR the text up to that is used without asking the user. (Yasuhiro Matsumoto)  
Solution: Change CR, NL and ESC in the text to a space.  
Files: src/getchar.c

## Patch 7.3.169

Problem: Freeing memory already freed, warning from static code analyzer.  
Solution: Initialize pointers to NULL, correct use of "mustfree". (partly by Dominique Pelle)  
Files: src/misl.c

## Patch 7.3.170

Problem: VMS Makefile for testing was not updated for test77.  
Solution: Add test77 to the Makefile.  
Files: src/testdir/Make\_vms.mms

## Patch 7.3.171

Problem: When the clipboard isn't supported: ":yank\*" gives a confusing error message.

Solution: Specifically mention that the register name is invalid.  
(Jean-Rene David)  
Files: runtime/doc/change.txt, src/ex\_docmd.c, src/globals.h

#### Patch 7.3.172

Problem: MS-Windows: rename() might delete the file if the name differs but it's actually the same file.  
Solution: Use the file handle to check if it's the same file. (Yukihiro Nakadaira)  
Files: src/if\_cscope.c, src/fileio.c, src/os\_win32.c, src/proto/os\_win32.pro, src/vim.h

#### Patch 7.3.173

Problem: After using setqflist() to make the quickfix list empty ":cwindow" may open the window anyway. Also after ":vimgrep".  
Solution: Correctly check whether the list is empty. (Ingo Karkat)  
Files: src/quickfix.c

#### Patch 7.3.174

Problem: When Exuberant ctags binary is exctags it's not found.  
Solution: Add configure check for exctags. (Hong Xu)  
Files: src/configure.in, src/auto/configure

#### Patch 7.3.175

Problem: When 'colorcolumn' is set locally to a window, ":new" opens a window with the same highlighting but 'colorcolumn' is empty. (Tyru)  
Solution: Call check\_colorcolumn() after clearing and copying options. (Christian Brabandt)  
Files: src/buffer.c

#### Patch 7.3.176

Problem: Ruby linking doesn't work properly on Mac OS X.  
Solution: Fix the configure check for Ruby. (Bjorn Winckler)  
Files: src/configure.in, src/auto/configure

#### Patch 7.3.177

Problem: MS-Windows: mkdir() doesn't work properly when 'encoding' is "utf-8".  
Solution: Convert to utf-16. (Yukihiro Nakadaira)  
Files: src/os\_win32.c, src/os\_win32.h, src/proto/os\_win32.pro

#### Patch 7.3.178

Problem: C-indent doesn't handle code right after { correctly.  
Solution: Fix detecting unterminated line. (Lech Lorens)  
Files: src/miscl.c, src/testdir/test3.in, src/testdir/test3.ok

#### Patch 7.3.179

Problem: C-indent doesn't handle colon in string correctly.  
Solution: Skip the string. (Lech Lorens)  
Files: src/miscl.c, src/testdir/test3.in, src/testdir/test3.ok

#### Patch 7.3.180

Problem: When both a middle part of 'comments' matches and an end part, the middle part was used erroneously.  
Solution: After finding the middle part match continue looking for a better end part match. (partly by Lech Lorens)  
Files: src/miscl.c, src/testdir/test3.in, src/testdir/test3.ok

#### Patch 7.3.181

Problem: When repeating the insert of CTRL-V or a digraph the display may not be updated correctly.

Solution: Only call edit\_unputchar() after edit\_putchar(). (Lech Lorens)  
Files: src/edit.c

Patch 7.3.182 (after 7.3.180)

Problem: Compiler warning for uninitialized variable.  
Solution: Add dummy initializer.  
Files: src/misc1.c

Patch 7.3.183 (after 7.3.174)

Problem: When Exuberant ctags binary is exuberant-ctags it's not found.  
Solution: Add configure check for exuberant-ctags.  
Files: src/configure.in, src/auto/configure

Patch 7.3.184

Problem: Static code analysis errors in riscOS.  
Solution: Make buffer size bigger. (Dominique Pelle)  
Files: src/gui\_riscos.c

Patch 7.3.185

Problem: ":windo g/pattern/q" closes windows and reports "N more lines".  
(Tim Chase)  
Solution: Remember what buffer ":global" started in. (Jean-Rene David)  
Files: src/ex\_cmds.c

Patch 7.3.186

Problem: When 'clipboard' contains "unnamed" or "unnamedplus" the value of  
v:register is wrong for operators without a specific register.  
Solution: Adjust the register according to 'clipboard'. (Ingo Karkat)  
Files: src/normal.c

Patch 7.3.187

Problem: The RISC OS port has obvious errors and is not being maintained.  
Solution: Remove the RISC OS files and code.  
Files: src/ascii.h, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c,  
src/ex\_docmd.c, src/fileio.c, src/globals.h, src/gui.c, src/gui.h,  
src/main.c, src/memfile.c, src/memline.c, src/misc1.c,  
src/proto.h, src/quickfix.c, src/search.c, src/structs.h,  
src/term.c, src/termlib.c, src/version.c, src/vim.h,  
src/gui\_riscos.h, src/os\_riscos.h, src/gui\_riscos.c,  
src/os\_riscos.c, runtime/doc/os\_risc.txt

Patch 7.3.188

Problem: More RISC OS files to remove.  
Solution: Remove them. Update the file list.  
Files: src/proto/gui\_riscos.pro, src/proto/os\_riscos.pro, Filelist

Patch 7.3.189 (after 7.3.186)

Problem: Can't build without +clipboard feature. (Christian Ebert)  
Solution: Add the missing #ifdef.  
Files: src/normal.c

Patch 7.3.190

Problem: When there is a "containedin" syntax argument highlighting may be  
wrong. (Radek)  
Solution: Reset current\_next\_list. (Ben Schmidt)  
Files: src/syntax.c

Patch 7.3.191

Problem: Still some RISC OS stuff to remove.  
Solution: Remove files and lines. (Hong Xu)  
Remove the 'osfiletype' option code.  
Files: README\_extra.txt, src/Make\_ro.mak, src/INSTALL, src/Makefile,



src/buffer.c, src/eval.c, src/feature.h, src/option.c,  
src/option.h, src/structs.h, src/version.c, src/pty.c, Filelist

Patch 7.3.192

Problem: Ex command ":s/ \?/ /g" splits multi-byte characters into bytes.  
(Dominique Pelle)  
Solution: Advance over whole character instead of one byte.  
Files: src/ex\_cmds.c

Patch 7.3.193

Problem: In the command line window ":close" doesn't work properly. (Tony  
Mechelynck)  
Solution: Use Ctrl\_C instead of K\_IGNORE for cmdwin\_result. (Jean-Rene  
David)  
Files: src/ex\_docmd.c, src/ex\_getln.c

Patch 7.3.194

Problem: When "b" is a symlink to directory "a", resolve("b/") doesn't  
result in "a/". (ZyX)  
Solution: Remove the trailing slash. (Jean-Rene David)  
Files: src/eval.c

Patch 7.3.195

Problem: "} else" causes following lines to be indented too much. (Rouben  
Rostamian)  
Solution: Better detection for the "else". (Lech Lorens)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.196

Problem: Can't intercept a character that is going to be inserted.  
Solution: Add the InsertCharPre autocmd event. (Jakson A. Aquino)  
Files: runtime/doc/autocmd.txt, runtime/doc/eval.txt,  
runtime/doc/map.txt, src/edit.c, src/eval.c, src/fileio.c,  
src/vim.h

Patch 7.3.197

Problem: When a QuickfixCmdPost event removes all errors, Vim still tries  
to jump to the first error, resulting in E42.  
Solution: Get the number of error after the autocmd event. (Mike Lundy)  
Files: src/quickfix.c

Patch 7.3.198

Problem: No completion for ":lang".  
Solution: Get locales to complete from. (Dominique Pelle)  
Files: src/eval.c, src/ex\_cmds2.c, src/ex\_getln.c,  
src/proto/ex\_cmds2.pro, src/proto/ex\_getln.pro, src/vim.h

Patch 7.3.199

Problem: MS-Windows: Compilation problem of OLE with MingW compiler.  
Solution: Put #ifdef around declarations. (Guopeng Wen)  
Files: src/if\_ole.h

Patch 7.3.200 (after 7.3.198)

Problem: CTRL-D doesn't complete :lang.  
Solution: Add the missing part of the change. (Dominique Pelle)  
Files: src/ex\_docmd.c

Patch 7.3.201 (after 7.3.195)

Problem: "} else" still causes following lines to be indented too much.  
Solution: Better detection for the "else" block. (Lech Lorens)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.3.202

Problem: Cannot influence the indent inside a namespace.  
Solution: Add the "N" 'cino' parameter. (Konstantin Lepa)  
Files: runtime/doc/indent.txt, src/misc1.c, src/testdir/test3.in,  
src/testdir/test3.ok

## Patch 7.3.203

Problem: MS-Windows: Can't run an external command without a console window.  
Solution: Support "!!start /b cmd". (Xaizek)  
Files: runtime/doc/os\_win32.txt, src/os\_win32.c

## Patch 7.3.204 (after 7.3.201)

Problem: Compiler warning.  
Solution: Add type cast. (Mike Williams)  
Files: src/misc1.c

## Patch 7.3.205

Problem: Syntax "extend" doesn't work correctly.  
Solution: Avoid calling check\_state\_ends() recursively (Ben Schmidt)  
Files: src/syntax.c

## Patch 7.3.206

Problem: 64bit MS-Windows compiler warning.  
Solution: Use HandleToLong() instead of type cast. (Mike Williams)  
Files: src/gui\_w32.c

## Patch 7.3.207

Problem: Can't compile with MSVC with pentium4 and 64 bit.  
Solution: Only use SSE2 for 32 bit. (Mike Williams)  
Files: src/Make\_mvc.mak

## Patch 7.3.208

Problem: Early terminated if statement.  
Solution: Remove the semicolon. (Lech Lorens)  
Files: src/gui\_mac.c

## Patch 7.3.209

Problem: MSVC Install instructions point to wrong batch file.  
Solution: Add a batch file for use with MSVC 10.  
Files: src/msvc2010.bat, src/INSTALLpc.txt, Filelist

## Patch 7.3.210

Problem: Can't always find the file when using cscope.  
Solution: Add the 'cscoperelative' option. (Raghavendra D Prabhu)  
Files: runtime/doc/if\_cscop.txt, runtime/doc/options.txt,  
src/if\_cscope.c

## Patch 7.3.211 (after 7.3.210)

Problem: Compiler warning.  
Solution: Add type cast.  
Files: src/if\_cscope.c

## Patch 7.3.212

Problem: With Python 3.2 ":py3" fails.  
Solution: Move PyEval\_InitThreads() to after Py\_Initialize(). (Roland  
Puntaier) Check abiflags in configure. (Andreas Behr)  
Files: src/if\_python3.c, src/auto/configure, src/configure.in

## Patch 7.3.213

Problem: Javascript object literal is not indented correctly.  
Solution: Make a special case for when "J1" is in 'cino'. (Luc Deschenaux)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.3.214

Problem: The text displayed by ":z-" isn't exactly like old Vi.  
Solution: Add one to the start line number. (ChangZhao Chen)  
Files: src/ex\_cmds.c

## Patch 7.3.215 (after 7.3.210)

Problem: Wrong file names in previous patch. (Toothpik)  
Solution: Include the option changes.  
Files: src/option.c, src/option.h

## Patch 7.3.216

Problem: When recovering a file a range of lines is missing. (Charles Jie)  
Solution: Reset the index when advancing to the next pointer block. Add a test to verify recovery works.  
Files: src/memline.c, src/testdir/test78.in, src/testdir/test78.ok, src/testdir/Makefile, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.3.217

Problem: Inside an "if" a ":wincmd" causes problems.  
Solution: When skipping commands let ":wincmd" skip over its argument.  
Files: src/ex\_docmd.c

## Patch 7.3.218 (after 7.3.212)

Problem: Tiny configuration problem with Python 3.  
Solution: Add abiflags in one more place. (Andreas Behr)  
Files: src/auto/configure, src/configure.in

## Patch 7.3.219

Problem: Can't compile with GTK on Mac.  
Solution: Add some #ifdef trickery. (Ben Schmidt)  
Files: src/os\_mac\_conv.c, src/os\_macosx.m, src/vim.h

## Patch 7.3.220

Problem: Python 3: vim.error is a 'str' instead of an 'Exception' object, so 'except' or 'raise' it causes a 'SystemError' exception. Buffer objects do not support slice assignment. When exchanging text between Vim and Python, multibyte texts become garbage or cause Unicode Exceptions, etc. 'py3file' tries to read in the file as Unicode, sometimes causes UnicodeDecodeException  
Solution: Fix the problems. (lilydjwg)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.3.221

Problem: Text from the clipboard is sometimes handled as linewise, but not consistently.  
Solution: Assume the text is linewise when it ends in a CR or NL.  
Files: src/gui\_gtk\_x11.c, src/gui\_mac.c, src/ops.c, src/os\_msdos.c, src/os\_mswin.c, src/os\_qnx.c, src/ui.c

## Patch 7.3.222

Problem: Warning for building GvimExt.  
Solution: Comment-out the DESCRIPTION line. (Mike Williams)  
Files: src/GvimExt/gvimext.def, src/GvimExt/gvimext\_ming.def

## Patch 7.3.223

Problem: MingW cross compilation doesn't work with tiny features.  
Solution: Move acp\_to\_enc(), enc\_to\_utf16() and utf16\_to\_enc() outside of "#ifdef CLIPBOARD". Fix typo in makefile.

Files: src/Make\_ming.mak, src/os\_mswin.c

Patch 7.3.224

Problem: Can't pass dict to sort function.  
Solution: Add the optional {dict} argument to sort(). (ZyX)  
Files: runtime/doc/eval.txt, src/eval.c

Patch 7.3.225

Problem: Using "\n" in a substitute inside ":s" does not result in a line break.  
Solution: Change behavior inside vim\_regexexec\_nl(). Add tests. (Motoya Kurotsu)  
Files: src/regexp.c, src/testdir/test79.in, src/testdir/test79.ok, src/testdir/test80.in, src/testdir/test80.ok, src/testdir/Makefile, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

Patch 7.3.226

Problem: On a 64 bit system "syn sync fromstart" is very slow. (Bjorn Steinbrink)  
Solution: Store the state when starting to parse from the first line.  
Files: src/syntax.c

Patch 7.3.227 (after 7.3.221)

Problem: Mac OS doesn't have the linewise clipboard fix.  
Solution: Also change the Mac OS file. (Bjorn Winckler)  
Files: src/os\_macosx.m

Patch 7.3.228

Problem: "2gj" does not always move to the correct position.  
Solution: Get length of line after moving to a next line. (James Vega)  
Files: src/normal.c

Patch 7.3.229

Problem: Using fork() makes gvim crash on Mac when build with CoreFoundation.  
Solution: Disallow fork() when \_\_APPLE\_\_ is defined. (Hisashi T Fujinaka)  
Files: src/gui.c

Patch 7.3.230

Problem: ":wundo" and ":rundo" don't unescape their argument. (Aaron Thoma)  
Solution: Use FILE1 instead of XFILE.  
Files: src/ex\_cmds.h

Patch 7.3.231

Problem: Runtime file patches failed.  
Solution: Redo the patches made against the patched files instead of the files in the mercurial repository.  
Files: runtime/doc/indent.txt, runtime/doc/os\_win32.txt

Patch 7.3.232

Problem: Python doesn't compile without +multi\_byte  
Solution: Use "latin1" when MULTI\_BYTE is not defined.  
Files: src/if\_py\_both.h

Patch 7.3.233

Problem: ":scriptnames" and ":breaklist" show long file names.  
Solution: Shorten to use "~/\" when possible. (Jean-Rene David)  
Files: src/ex\_cmds2.c

## Patch 7.3.234

Problem: With GTK menu may be popping down.  
Solution: Use event time instead of GDK\_CURRENT\_TIME. (Hong Xu)  
Files: src/gui.c, src/gui.h, src/gui\_gtk.c, src/gui\_gtk\_x11.c

## Patch 7.3.235

Problem: ";" gets stuck on a "t" command, it's not useful.  
Solution: Add the ';' flag in 'cpo'. (Christian Brabandt)  
Files: runtime/doc/motion.txt, runtime/doc/options.txt, src/option.h,  
src/search.c src/testdir/test81.in, src/testdir/test81.ok,  
src/testdir/Makefile, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.3.236 (after 7.3.232)

Problem: Python 3 doesn't compile without +multi\_byte  
Solution: Use "latin1" when MULTI\_BYTE is not defined. (lilydjwg)  
Files: src/if\_python3.c

## Patch 7.3.237

Problem: "filetype" completion doesn't work on Windows. (Yue Wu)  
Solution: Don't use a glob pattern for the directories, use a list of  
directories. (Dominique Pelle)  
Files: src/ex\_getln.c

## Patch 7.3.238

Problem: Compiler warning for conversion.  
Solution: Add type cast. (Mike Williams)  
Files: src/ex\_getln.c

## Patch 7.3.239

Problem: Python corrects the cursor column without taking 'virtualedit'  
into account. (lilydjwg)  
Solution: Call check\_cursor\_col\_win().  
Files: src/if\_py\_both.h, src/mbyte.c, src/misc2.c, src/normal.c,  
src/proto/mbyte.pro, src/proto/misc2.pro

## Patch 7.3.240

Problem: External commands can't use pipes on MS-Windows.  
Solution: Implement pipes and use them when 'shelltemp' isn't set. (Vincent  
Berthoux)  
Files: src/eval.c, src/ex\_cmds.c, src/misc2.c, src/os\_unix.c,  
src/os\_win32.c, src/proto/misc2.pro, src/ui.c

## Patch 7.3.241

Problem: Using CTRL-R CTRL-W on the command line may insert only part of  
the word.  
Solution: Use the cursor position instead of assuming it is at the end of  
the command. (Tyru)  
Files: src/ex\_getln.c

## Patch 7.3.242

Problem: Illegal memory access in after\_pathsep().  
Solution: Check that the pointer is not at the start of the file name.  
(Dominique Pelle)  
Files: src/misc2.c

## Patch 7.3.243

Problem: Illegal memory access in readline().  
Solution: Swap the conditions. (Dominique Pelle)  
Files: src/eval.c

## Patch 7.3.244

Problem: MS-Windows: Build problem with old compiler. (John Beckett)  
Solution: Only use HandleToLong() when available. (Mike Williams)  
Files: src/gui\_w32.c

## Patch 7.3.245

Problem: Python 3.2 libraries not correctly detected.  
Solution: Add the suffix to the library name. (Niclas Zeising)  
Files: src/auto/configure, src/configure.in

## Patch 7.3.246 (after 7.3.235)

Problem: Repeating "f4" in "4444" skips one 4.  
Solution: Check the t\_cmd flag. (Christian Brabandt)  
Files: src/search.c

## Patch 7.3.247

Problem: Running tests changes the users viminfo file. Test for patch 7.3.246 missing.  
Solution: Add "nviminfo" to the 'viminfo' option. Include the test.  
Files: src/testdir/test78.in, src/testdir/test81.in

## Patch 7.3.248

Problem: PC Install instructions missing install instructions.  
Solution: Step-by-step explanation. (Michael Soyka)  
Files: src/INSTALLpc.txt

## Patch 7.3.249

Problem: Wrong indenting for array initializer.  
Solution: Detect '}' in a better way. (Lech Lorens)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.3.250

Problem: Python: Errors in Unicode characters not handled nicely.  
Solution: Add the surrogateescape error handler. (lilydjwg)  
Files: src/if\_python3.c

## Patch 7.3.251

Problem: "gH<Del>" deletes the current line, except when it's the last line.  
Solution: Set the "include" flag to indicate the last line is to be deleted.  
Files: src/normal.c, src/ops.c

## Patch 7.3.252 (after 7.3.247)

Problem: Tests fail. (David Northfield)  
Solution: Add missing update for .ok file.  
Files: src/testdir/test81.ok

## Patch 7.3.253

Problem: "echo 'abc' > ''" returns 0 or 1, depending on 'ignorecase'. Checks in mb\_strnicmp() for illegal and truncated bytes are wrong. Should not assume that byte length is equal before case folding.  
Solution: Add utf\_safe\_read\_char\_adv() and utf\_strnicmp(). Add a test for this. (Ivan Krasilnikov)  
Files: src/mbyte.c src/testdir/test82.in, src/testdir/test82.ok, src/testdir/Makefile, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.3.254

Problem: The coladd field is not reset when setting the line number for a ":call" command.

Solution: Reset it.  
Files: src/eval.c

Patch 7.3.255

Problem: When editing a file such as "File[2010-08-15].vim" an E16 error is given. (Manuel Stöl)  
Solution: Don't give an error for failing to compile the regexp.  
Files: src/ex\_docmd.c, src/misc1.c, src/vim.h

Patch 7.3.256

Problem: Javascript indenting not sufficiently tested.  
Solution: Add more tests. (Luc Deschenaux) Mark the lines that are indented wrong.  
Files: src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.257

Problem: Not all completions are available to user commands.  
Solution: Add "color", "compiler", "file\_in\_path" and "locale". (Dominique Pelle)  
Files: src/ex\_docmd.c, runtime/doc/map.txt

Patch 7.3.258

Problem: MS-Windows: The edit with existing vim context menu entries can be unwanted.  
Solution: Let a registry entry disable them. (Jerome Vuarand)  
Files: src/GvimExt/gvimext.cpp

Patch 7.3.259

Problem: Equivalence classes only work for latin characters.  
Solution: Add the Unicode equivalence characters. (Dominique Pelle)  
Files: runtime/doc/pattern.txt, src/regexp.c, src/testdir/test44.in, src/testdir/test44.ok

Patch 7.3.260

Problem: CursorHold triggers on an incomplete mapping. (Will Gray)  
Solution: Don't trigger CursorHold when there is typeahead.  
Files: src/fileio.c

Patch 7.3.261

Problem: G++ error message erroneously recognized as error.  
Solution: Ignore "In file included from" line also when it ends in a colon. (Fernando Castillo)  
Files: src/option.h

Patch 7.3.262

Problem: Photon code style doesn't match Vim style.  
Solution: Clean up some of it. (Elias Diem)  
Files: src/gui\_photon.c

Patch 7.3.263

Problem: Perl and Tcl have a few code style problems.  
Solution: Clean it up. (Elias Diem)  
Files: src/if\_perl.xs, src/if\_tcl.c

Patch 7.3.264

Problem: When the current directory name contains wildcard characters, such as "foo[with]bar", the tags file can't be found. (Jeremy Erickson)  
Solution: When searching for matching files also match without expanding wildcards. This is a bit of a hack.  
Files: src/vim.h, src/misc1.c, src/misc2.c

## Patch 7.3.265

Problem: When storing a pattern in search history there is no proper check for the separator character.  
Solution: Pass the separator character to in\_history(). (Taro Muraoka)  
Files: src/ex\_getln.c

## Patch 7.3.266

Problem: In gvim with iBus typing space in Insert mode doesn't work.  
Solution: Clear xim\_expected\_char after checking it.  
Files: src/mbyte.c

## Patch 7.3.267

Problem: Ruby on Mac OS X 10.7 may crash.  
Solution: Avoid alloc(0). (Bjorn Winckler)  
Files: src/if\_ruby.c

## Patch 7.3.268

Problem: Vim freezes when executing an external command with zsh.  
Solution: Use O\_NOCTTY both in the master and slave. (Bjorn Winckler)  
Files: src/os\_unix.c

## Patch 7.3.269

Problem: 'shellcmdflag' only works with one flag.  
Solution: Split into multiple arguments. (Gary Johnson)  
Files: src/os\_unix.c

## Patch 7.3.270

Problem: Illegal memory access.  
Solution: Swap conditions. (Dominique Pelle)  
Files: src/ops.c

## Patch 7.3.271

Problem: Code not following Vim coding style.  
Solution: Fix the style. (Elias Diem)  
Files: src/gui\_photon.c

## Patch 7.3.272

Problem: ":put =list" does not add an empty line for a trailing empty item.  
Solution: Add a trailing NL when turning a list into a string.  
Files: src/eval.c

## Patch 7.3.273

Problem: A BOM in an error file is seen as text. (Aleksey Baibarin)  
Solution: Remove the BOM from the text before evaluating. (idea by Christian Brabandt)  
Files: src/quickfix.c, src/mbyte.c, src/proto/mbyte.pro, src/testdir/test10.in

## Patch 7.3.274

Problem: With concealed characters tabs do not have the right size.  
Solution: Use VCOL\_HLC instead of vcol. (Eiichi Sato)  
Files: src/screen.c

## Patch 7.3.275

Problem: MS-Windows: When using a black background some screen updates cause the window to flicker.  
Solution: Add WS\_CLIPCHILDREN to CreateWindow(). (René Aguirre)  
Files: src/gui\_w32.c

## Patch 7.3.276

Problem: GvimExt sets \$LANG in the wrong way.



Solution: Save the environment and use it for gvim. (Yasuhiro Matsumoto)  
Files: src/GvimExt/gvimext.cpp

Patch 7.3.277

Problem: MS-Windows: some characters do not show in dialogs.  
Solution: Use the wide methods when available. (Yanwei Jia)  
Files: src/gui\_w32.c, src/gui\_w48.c, src/os\_mswin.c, src/os\_win32.c,  
src/os\_win32.h

Patch 7.3.278

Problem: Passing the file name to open in VisVim doesn't work.  
Solution: Adjust the index and check for end of buffer. (Jiri Sedlak)  
Files: src/VisVim/Commands.cpp

Patch 7.3.279

Problem: With GTK, when gvim is full-screen and a tab is opened and using a specific monitor configuration the window is too big.  
Solution: Adjust the window size like on MS-Windows. (Yukihiro Nakadaira)  
Files: src/gui.c, src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro

Patch 7.3.280

Problem: ":lmake" does not update the quickfix window title.  
Solution: Update the title. (Lech Lorens)  
Files: src/quickfix.c, src/testdir/test10.in, src/testdir/test10.ok

Patch 7.3.281

Problem: After using "expand('%:8')" the buffer name is changed.  
Solution: Make a copy of the file name before shortening it.  
Files: src/eval.c

Patch 7.3.282

Problem: When using input() and :echo in a loop the displayed text is incorrect. (Benjamin Fritz)  
Solution: Only restore the cursor position when there is a command line. (Ben Schmidt)  
Files: src/ex\_getln.c

Patch 7.3.283

Problem: An expression mapping with a multi-byte character containing a 0x80 byte gets messed up. (ZyX)  
Solution: Unescape the expression before evaluating it (Yukihiro Nakadaira)  
Files: src/getchar.c

Patch 7.3.284

Problem: The str2special() function doesn't handle multi-byte characters properly.  
Solution: Recognize multi-byte characters. (partly by Vladimir Vichniakov)  
Files: src/getchar.c, src/message.c, src/misc2.c

Patch 7.3.285 (after 7.3.284)

Problem: Mapping <Char-123> no longer works.  
Solution: Properly check for "char-". Add a test for it.  
Files: src/misc2.c, src/testdir/test75.in, src/testdir/test75.ok

Patch 7.3.286

Problem: Crash when using "zd" on a large number of folds. (Sam King)  
Solution: Recompute pointer after reallocating array. Move fewer entries when making room.  
Files: src/fold.c

Patch 7.3.287

Problem: Can't compile with MSVC and tiny options.

Solution: Move variables and #ifdefs. (Sergey Khorev)  
Files: src/os\_win32.c

Patch 7.3.288

Problem: has('python') may give an error message for not being able to load the library after using python3.  
Solution: Only give the error when the verbose argument is true.  
Files: src/if\_python.c, src/if\_python3.c

Patch 7.3.289

Problem: Complete function isn't called when the leader changed.  
Solution: Call ins\_compl\_restart() when the leader changed. (Taro Muraoka)  
Files: src/edit.c

Patch 7.3.290

Problem: When a BufWriteCmd autocommand resets 'modified' this doesn't change older buffer states to be marked as 'modified' like ":write" does. (Yukihiro Nakadaira)  
Solution: When the BufWriteCmd resets 'modified' then adjust the undo information like ":write" does.  
Files: src/fileio.c

Patch 7.3.291

Problem: Configure doesn't work properly with Python3.  
Solution: Put -ldl before \$LD\_FLAGS. Add PY3\_NO\_RTLD\_GLOBAL. (Roland Puntaier)  
Files: src/config.h.in, src/auto/configure, src/configure.in

Patch 7.3.292

Problem: Crash when using fold markers and selecting a visual block that includes a folded line and goes to end of line. (Sam Lidder)  
Solution: Check for the column to be MAXCOL. (James Vega)  
Files: src/screen.c

Patch 7.3.293

Problem: MSVC compiler has a problem with non-ASCII characters.  
Solution: Avoid non-ASCII characters. (Hong Xu)  
Files: src/ascii.h, src/spell.c

Patch 7.3.294 (after 7.3.289)

Problem: Patch 289 causes more problems than it solves.  
Solution: Revert the patch until a better solution is found.  
Files: src/edit.c

Patch 7.3.295

Problem: When filtering text with an external command Vim may not read all the output.  
Solution: When select() is interrupted loop and try again. (James Vega)  
Files: src/os\_unix.c

Patch 7.3.296

Problem: When writing to an external command a zombie process may be left behind.  
Solution: Wait on the process. (James Vega)  
Files: src/os\_unix.c

Patch 7.3.297

Problem: Can't load Perl 5.14 dynamically.  
Solution: Add code in #ifdefs. (Charles Cooper)  
Files: if\_perl.xs

Patch 7.3.298

Problem: Built-in colors are different from rgb.txt.  
Solution: Adjust the color values. (Benjamin Haskell)  
Files: src/gui\_photon.c, src/gui\_w48.c

#### Patch 7.3.299

Problem: Source code not in Vim style.  
Solution: Adjust the style. (Elias Diem)  
Files: src/gui\_photon.c

#### Patch 7.3.300

Problem: Python doesn't parse multi-byte argument correctly.  
Solution: Use "t" instead of "s". (lilydjwg)  
Files: src/if\_py\_both.h

#### Patch 7.3.301

Problem: When 'smartindent' and 'copyindent' are set a Tab is used even though 'expandtab' is set.  
Solution: Do not insert Tabs. Add a test. (Christian Brabandt)  
Files: src/miscl.c, src/testdir/test19.in, src/testdir/test19.ok

#### Patch 7.3.302 (after 7.3.301)

Problem: Test 19 fails without 'smartindent' and +eval.  
Solution: Don't use ":exe". Source small.vim.  
Files: src/testdir/test19.in

#### Patch 7.3.303 (after 7.3.296)

Problem: Compilation error.  
Solution: Correct return type from int to pid\_t. (Danek Duvall)  
Files: src/os\_unix.c

#### Patch 7.3.304

Problem: Strawberry Perl doesn't work on MS-Windows.  
Solution: Use xsubpp if needed. (Yasuhiro Matsumoto)  
Files: src/Make\_ming.mak, src/Make\_mvc.mak

#### Patch 7.3.305

Problem: Auto-loading a function while editing the command line causes scrolling up the display.  
Solution: Don't set msg\_scroll when defining a function and the user is not typing. (Yasuhiro Matsumoto)  
Files: src/eval.c

#### Patch 7.3.306

Problem: When closing a window there is a chance that deleting a scrollbar triggers a GUI resize, which uses the window while it is not in a valid state.  
Solution: Set the buffer pointer to NULL to be able to detect the invalid situation. Fix a few places that used the buffer pointer incorrectly.  
Files: src/buffer.c, src/ex\_cmds.c, src/term.c, src/window.c

#### Patch 7.3.307

Problem: Python 3 doesn't support slice assignment.  
Solution: Implement slices. (Brett Overesch, Roland Puntaier)  
Files: src/if\_python3.c

#### Patch 7.3.308

Problem: Writing to 'verbosefile' has problems, e.g. for :highlight.  
Solution: Do not use a separate verbose\_write() function but write with the same code that does redirecting. (Yasuhiro Matsumoto)  
Files: src/message.c

Patch 7.3.309 (after 7.3.307)

Problem: Warnings for pointer types.  
Solution: Change PySliceObject to PyObject.  
Files: src/if\_python3.c

Patch 7.3.310

Problem: Code not following Vim style.  
Solution: Fix the style. (Elias Diem)  
Files: src/gui\_photon.c

Patch 7.3.311 (replaces 7.3.289)

Problem: Complete function isn't called when the leader changed.  
Solution: Allow the complete function to return a dictionary with a flag that indicates ins\_compl\_restart() is to be called when the leader changes. (Taro Muraoka)  
Files: runtime/insert.txt, src/edit.c, src/eval.c, src/proto/eval.pro

Patch 7.3.312 (after 7.3.306)

Problem: Can't compile with tiny features.  
Solution: Add #ifdef around win\_valid().  
Files: src/buffer.c

Patch 7.3.313 (after 7.3.307)

Problem: One more warning when compiling with dynamic Python 3.  
Solution: Change PySliceObject to PyObject.  
Files: src/if\_python3.c

Patch 7.3.314 (after 7.3.304)

Problem: Missing parenthesis.  
Solution: Add it. (Benjamin R. Haskell)  
Files: src/Make\_mvc.mak

Patch 7.3.315

Problem: Opening a window before forking causes problems for GTK.  
Solution: Fork first, create the window in the child and report back to the parent process whether it worked. If successful the parent exits, if unsuccessful the child exits and the parent continues in the terminal. (Tim Starling)  
Files: src/gui.c

Patch 7.3.316 (after 7.3.306)

Problem: Crash when 'colorcolumn' is set and closing buffer.  
Solution: Check for w\_buffer to be NULL. (Yasuhiro Matsumoto)  
Files: src/option.c

Patch 7.3.317

Problem: Calling debug.debug() in Lua may cause Vim to hang.  
Solution: Add a better debug method. (Rob Hoelz, Luis Carvalho)  
Files: src/if\_lua.c

Patch 7.3.318

Problem: "C" on the last line deletes that line if it's blank.  
Solution: Only delete the last line for a delete operation. (James Vega)  
Files: src/ops.c

Patch 7.3.319 (after 7.3.311)

Problem: Redobuff doesn't always include changes of the completion leader.  
Solution: Insert backspaces as needed. (idea by Taro Muraoka)  
Files: src/edit.c

Patch 7.3.320

Problem: When a 0xa0 character is in a sourced file the error message for

unrecognized command does not show the problem.  
Solution: Display 0xa0 as <a0>.  
Files: src/ex\_docmd.c

#### Patch 7.3.321

Problem: Code not following Vim style.  
Solution: Fix the style. (Elias Diem)  
Files: src/os\_qnx.c

#### Patch 7.3.322

Problem: #ifdef for PDP\_RETVAL doesn't work, INT\_PTR can be a typedef.  
Solution: Check the MSC version and 64 bit flags. (Sergiu Dotenco)  
Files: src/os\_mswin.c

#### Patch 7.3.323

Problem: The default 'errorformat' does not ignore some "included from" lines.  
Solution: Add a few more patterns. (Ben Boeckel)  
Files: src/option.h

#### Patch 7.3.324 (after 7.3.237)

Problem: Completion for ":compiler" shows color scheme names.  
Solution: Fix the directory name. (James Vega)  
Files: src/ex\_getln.c

#### Patch 7.3.325

Problem: A duplicated function argument gives an internal error.  
Solution: Give a proper error message. (based on patch by Tyru)  
Files: src/eval.c

#### Patch 7.3.326

Problem: MingW 4.6 no longer supports the -mno-cygwin option.  
Solution: Split the Cygwin and MingW makefiles. (Matsushita Shougo)  
Files: src/GvimExt/Make\_cyg.mak, src/GvimExt/Make\_ming.mak,  
src/Make\_cyg.mak, src/Make\_ming.mak, src/xxd/Make\_ming.mak,  
Filelist

#### Patch 7.3.327

Problem: When jumping to a help tag a closed fold doesn't open.  
Solution: Save and restore KeyTyped. (Yasuhiro Matsumoto)  
Files: src/ex\_cmds.c

#### Patch 7.3.328

Problem: When command line wraps the cursor may be displayed wrong when there are multi-byte characters.  
Solution: Position the cursor before drawing the text. (Yasuhiro Matsumoto)  
Files: src/ex\_getln.c

#### Patch 7.3.329

Problem: When skipping over code from ":for" to ":endfor" get an error for calling a dict function. (Yasuhiro Matsumoto)  
Solution: Ignore errors when skipping over :call command.  
Files: src/ex\_docmd.c, src/eval.c

#### Patch 7.3.330

Problem: When longjmp() is invoked if the X server gives an error the state is not properly restored.  
Solution: Reset vgetc\_busy. (Yukihiro Nakadaira)  
Files: src/main.c

#### Patch 7.3.331

Problem: "vit" selects wrong text when a tag name starts with the same text

as an outer tag name. (Ben Fritz)  
Solution: Add "\>" to the pattern to check for word boundary.  
Files: src/search.c

Patch 7.3.332 (after 7.3.202)

Problem: Indent after "public:" is not increased in C++ code. (Lech Lorens)  
Solution: Check for namespace after the regular checks. (partly by Martin Giesekeing)  
Files: src/miscl.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.333

Problem: Using "." to repeat a Visual delete counts the size in bytes, not characters. (Connor Lane Smith)  
Solution: Store the virtual column numbers instead of byte positions.  
Files: src/normal.c

Patch 7.3.334

Problem: Latest MingW about XSUBPP referencing itself. (Gongqian Li)  
Solution: Rename the first use to XSUBPPTRY.  
Files: src/Make\_ming.mak

Patch 7.3.335

Problem: When 'imdisable' is reset from an autocommand in Insert mode it doesn't take effect.  
Solution: Call im\_set\_active() in Insert mode. (Taro Muraoka)  
Files: src/option.c

Patch 7.3.336

Problem: When a tags file specifies an encoding different from 'enc' it may hang and using a pattern doesn't work.  
Solution: Convert the whole line. Continue reading the header after the SORT tag. Add test83. (Yukihiro Nakadaira)  
Files: src/tag.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test83-tags2, src/testdir/test83-tags3, src/testdir/test83.in, src/testdir/test83.ok

Patch 7.3.337 (after 7.3.295)

Problem: Screen doesn't update after resizing the xterm until a character is typed.  
Solution: When the select call is interrupted check do\_resize. (Taylor Hedberg)  
Files: src/os\_unix.c

Patch 7.3.338

Problem: Using getchar() in an expression mapping doesn't work well.  
Solution: Don't save and restore the typeahead. (James Vega)  
Files: src/getchar.c, src/testdir/test34.ok

Patch 7.3.339

Problem: "make shadow" doesn't link all test files.  
Solution: Add a line in Makefile and Filelist.  
Files: src/Makefile, Filelist

Patch 7.3.340

Problem: When 'verbosefile' is set ftplugof.vim can give an error.  
Solution: Only remove filetypeplugin autocommands when they exist. (Yasuhiro Matsumoto)  
Files: runtime/ftplugof.vim

Patch 7.3.341

Problem: Local help files are only listed in help.txt, not in translated help files.  
Solution: Also find translated help files. (Yasuhiro Matsumoto)  
Files: src/ex\_cmds.c

Patch 7.3.342

Problem: Code not in Vim style.  
Solution: Fix the style. (Elias Diem)  
Files: src/os\_amiga.c, src/os\_mac\_conv.c, src/os\_win16.c

Patch 7.3.343

Problem: No mouse support for urxvt.  
Solution: Implement urxvt mouse support, also for > 252 columns. (Yiding Jia)  
Files: src/feature.h, src/keymap.h, src/option.h, src/os\_unix.c, src/term.c, src/version.c

Patch 7.3.344

Problem: Problem with GUI startup related to XInitThreads.  
Solution: Use read() and write() instead of fputs() and fread(). (James Vega)  
Files: src/gui.c

Patch 7.3.345

Problem: When switching language with ":lang" the window title doesn't change until later.  
Solution: Update the window title right away. (Dominique Pelle)  
Files: src/ex\_cmds2.c

Patch 7.3.346

Problem: It's hard to test netbeans commands.  
Solution: Process netbeans commands after :sleep. (Xavier de Gaye)  
Files: runtime/doc/netbeans.txt, src/ex\_docmd.c, src/netbeans.c

Patch 7.3.347

Problem: When dropping text from a browser on Vim it receives HTML even though "html" is excluded from 'clipboard'. (Andrei Avk)  
Solution: Fix the condition for TARGET\_HTML.  
Files: src/gui\_gtk\_x11.c

Patch 7.3.348

Problem: "call range(1, 947948399)" causes a crash. (ZyX)  
Solution: Avoid a loop in the out of memory message.  
Files: src/misc2.c

Patch 7.3.349

Problem: When running out of memory during startup trying to open a swapfile will loop forever.  
Solution: Let findswapname() set dirp to NULL if out of memory.  
Files: src/memline.c

Patch 7.3.350

Problem: Block of code after ":lua << EOF" may not work. (Paul Isambert)  
Solution: Recognize the ":lua" command, skip to EOF.  
Files: src/eval.c

Patch 7.3.351

Problem: Text formatting uses start of insert position when it should not. (Peter Wagenaar)  
Solution: Do not use Insstart when intentionally formatting.  
Files: src/edit.c

## Patch 7.3.352

Problem: When completing methods dict functions and script-local functions get in the way.  
Solution: Sort function names starting with "<" to the end. (Yasuhiro Matsumoto)  
Files: src/ex\_getln.c

## Patch 7.3.353 (after 7.3.343)

Problem: Missing part of the urxvt patch.  
Solution: Add the change in term.c  
Files: src/term.c

## Patch 7.3.354

Problem: ":set backspace+=eol" doesn't work when 'backspace' has a backwards compatible value of 2.  
Solution: Convert the number to a string. (Hirohito Higashi)  
Files: src/option.c

## Patch 7.3.355

Problem: GTK warnings when using netrw.vim. (Ivan Krasilnikov)  
Solution: Do not remove the beval event handler twice.  
Files: src/option.c

## Patch 7.3.356

Problem: Using "o" with 'cindent' set may freeze Vim. (lolilolicon)  
Solution: Skip over {} correctly. (Hari G)  
Files: src/misc1.c

## Patch 7.3.357

Problem: Compiler warning in MS-Windows console build.  
Solution: Adjust return type of PrintHookProc(). (Mike Williams)  
Files: src/os\_mswin.c

## Patch 7.3.358 (after 7.3.353)

Problem: Mouse support doesn't work properly.  
Solution: Add HMT\_URXVT. (lilydjwg, James McCoy)  
Files: src/term.c

## Patch 7.3.359

Problem: Command line completion shows dict functions.  
Solution: Skip dict functions for completion. (Yasuhiro Matsumoto)  
Files: src/eval.c

## Patch 7.3.360

Problem: Interrupting the load of an autoloader function may cause a crash.  
Solution: Do not use the hashitem when not valid. (Yukihiro Nakadaira)  
Files: src/eval.c

## Patch 7.3.361

Problem: Accessing memory after it is freed when EXITFREE is defined.  
Solution: Don't access curwin when firstwin is NULL. (Dominique Pelle)  
Files: src/buffer.c

## Patch 7.3.362

Problem: ml\_get error when using ":g" with folded lines.  
Solution: Adjust the line number for changed\_lines(). (Christian Brabandt)  
Files: src/ex\_cmds.c

## Patch 7.3.363

Problem: C indenting is wrong after #endif followed by a semicolon.  
Solution: Add special handling for a semicolon in a line by itself. (Lech Lorens)



Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.364 (after 7.3.353)

Problem: Can't compile on HP-UX. (John Marriott)

Solution: Only use TTYM\_URXVT when it is defined.

Files: src/term.c

Patch 7.3.365

Problem: Crash when using a large Unicode character in a file that has syntax highlighting. (ngollan)

Solution: Check for going past the end of the utf tables. (Dominique Pelle)

Files: src/mbyte.c

Patch 7.3.366

Problem: A tags file with an extremely long name causes errors.

Solution: Ignore tags that are too long. (Arno Renevier)

Files: src/tag.c

Patch 7.3.367

Problem: :wundo and :rundo use a wrong checksum.

Solution: Include the last line when computing the hash. (Christian Brabandt)

Files: src/undo.c

Patch 7.3.368

Problem: Gcc complains about redefining \_FORTIFY\_SOURCE.

Solution: Undefine it before redefining it.

Files: src/Makefile, src/configure.in, src/auto/configure

Patch 7.3.369

Problem: When compiled with Gnome get an error message when using --help.

Solution: Don't fork. (Ivan Krasilnikov)

Files: src/main.c

Patch 7.3.370

Problem: Compiler warns for unused variable in Lua interface.

Solution: Remove the variable.

Files: src/if\_lua.c

Patch 7.3.371

Problem: Crash in autocomplete. (Greg Weber)

Solution: Check not going over allocated buffer size.

Files: src/misc2.c

Patch 7.3.372

Problem: When using a command line mapping to <Up> with file name completion to go one directory up, 'wildchar' is inserted. (Yasuhiro Matsumoto)

Solution: Set the KeyTyped flag.

Files: src/ex\_getln.c

Patch 7.3.373 (after 7.3.366)

Problem: A tags file with an extremely long name may cause an infinite loop.

Solution: When encountering a long name switch to linear search.

Files: src/tag.c

Patch 7.3.374

Problem: ++encoding does not work properly.

Solution: Recognize ++encoding before ++enc. (Charles Cooper)

Files: src/ex\_docmd.c

Patch 7.3.375

Problem: Duplicate return statement.

Solution: Remove the superfluous one. (Dominique Pelle)  
Files: src/gui\_mac.c

Patch 7.3.376

Problem: Win32: Toolbar repainting does not work when the mouse pointer hovers over a button.

Solution: Call DefWindowProc() when not handling an event. (Sergiu Dotenco)  
Files: src/gui\_w32.c

Patch 7.3.377

Problem: No support for bitwise AND, OR, XOR and invert.

Solution: Add and(), or(), invert() and xor() functions.

Files: src/eval.c, src/testdir/test49.in, src/testdir/test65.in,  
src/testdir/test65.ok, runtime/doc/eval.txt

Patch 7.3.378

Problem: When cross-compiling the check for uint32\_t fails.

Solution: Only give a warning message. (Maksim Melnikau)

Files: src/configure.in, src/auto/configure

Patch 7.3.379

Problem: C-indenting wrong for static enum.

Solution: Skip over "static". (Lech Lorens)

Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.380

Problem: C-indenting wrong for a function header.

Solution: Skip to the start paren. (Lech Lorens)

Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.381

Problem: Configure silently skips interfaces that won't work.

Solution: Add the --enable-fail\_if\_missing argument. (Shlomi Fish)

Files: src/Makefile, src/configure.in, src/auto/configure

Patch 7.3.382 (after 7.3.376)

Problem: IME characters are inserted twice.

Solution: Do not call DefWindowProc() if the event was handled. (Yasuhiro Matsumoto)

Files: src/gui\_w32.c

Patch 7.3.383

Problem: For EBCDIC pound sign is defined as 't'.

Solution: Correctly define POUND.

Files: src/ascii.h

Patch 7.3.384

Problem: Mapping CTRL-K in Insert mode breaks CTRL-X CTRL-K for dictionary completion.

Solution: Add CTRL-K to the list of recognized keys. (James McCoy)

Files: src/edit.c

Patch 7.3.385

Problem: When using an expression mapping on the command line the cursor ends up in the wrong place. (Yasuhiro Matsumoto)

Solution: Save and restore msg\_col and msg\_row when evaluating the expression.

Files: src/getchar.

Patch 7.3.386

Problem: Test 83 fails when iconv does not support cp932. (raf)

Solution: Test if conversion works. (Yukihiro Nakadaira)

Files: src/testdir/test83.in

Patch 7.3.387 (after 7.3.386)

Problem: Test 83 may fail for some encodings.

Solution: Set 'encoding' to utf-8 earlier.

Files: src/testdir/test83.in

Patch 7.3.388

Problem: Crash on exit when EXITFREE is defined and using tiny features.

Solution: Check for NULL window pointer. (Dominique Pelle)

Files: src/buffer.c

Patch 7.3.389

Problem: After typing at a prompt the "MORE" message appears too soon.

Solution: reset lines\_left in msg\_end\_prompt(). (Eswald)

Files: src/message.c

Patch 7.3.390

Problem: Using NULL buffer pointer in a window.

Solution: Check for w\_buffer being NULL in more places. (Bjorn Winckler)

Files: src/ex\_cmds.c, src/quickfix.c, src/window.c

Patch 7.3.391

Problem: Can't check if the XPM\_W32 feature is enabled.

Solution: Add xpm\_w32 to the list of features. (kat)

Files: src/eval.c

Patch 7.3.392

Problem: When setting 'undofile' while the file is already loaded but unchanged, try reading the undo file. (Andy Wokula)

Solution: Compute a checksum of the text when 'undofile' is set. (Christian Brabandt)

Files: src/option.c, src/testdir/test72.in, src/testdir/test72.ok

Patch 7.3.393

Problem: Win32: When resizing Vim it is always moved to the primary monitor if the secondary monitor is on the left.

Solution: Use the nearest monitor. (Yukihiro Nakadaira)

Files: src/gui\_w32.c

Patch 7.3.394

Problem: When placing a mark while starting up a screen redraw messes up the screen. (lith)

Solution: Don't redraw while still starting up. (Christian Brabandt)

Files: src/screen.c

Patch 7.3.395 (after 7.3.251)

Problem: "dv?bar" in the last line deletes too much and breaks undo.

Solution: Only adjust the cursor position when it's after the last line of the buffer. Add a test. (Christian Brabandt)

Files: src/ops.c, src/testdir/test43.in, src/testdir/test43.ok

Patch 7.3.396

Problem: After forcing an operator to be characterwise it can still become linewise when spanning whole lines.

Solution: Don't make the operator linewise when motion\_force was set. (Christian Brabandt)

Files: src/ops.c

Patch 7.3.397

Problem: ":helpgrep" does not work properly when 'encoding' is not utf-8 or latin1.

Solution: Convert non-ascii lines to 'encoding'. (Yasuhiro Matsumoto)  
Files: src/quickfix.c, src/spell.c, src/misc2.c, src/proto/misc2.pro

#### Patch 7.3.398

Problem: When creating more than 10 location lists and adding items one by one a previous location may be used. (Audrius Kažukauskas)  
Solution: Clear the location list completely when adding the tenth one.  
Files: src/quickfix.c

#### Patch 7.3.399

Problem: ":cd" doesn't work when the path contains wildcards. (Yukihiro Nakadaira)  
Solution: Ignore wildcard errors when the EW\_NOTWILD flag is used.  
Files: src/misc1.c

#### Patch 7.3.400

Problem: Compiler warnings for shadowed variables.  
Solution: Remove or rename the variables.  
Files: src/charset.c, src/digraph.c, src/edit.c, src/eval.c, src/fold.c, src/getchar.c, src/message.c, src/misc2.c, src/move.c, src/netbeans.c, src/option.c, src/os\_unix.c, src/screen.c, src/search.c, src/spell.c, src/syntax.c, src/tag.c, src/window.c

#### Patch 7.3.401

Problem: A couple more shadowed variables.  
Solution: Rename the variables.  
Files: src/netbeans.c

#### Patch 7.3.402

Problem: When jumping to the first error a line of the buffer is sometimes redrawn on top of the list of errors.  
Solution: Do not call update\_toplevel\_redraw() if the display was scrolled up.  
Files: src/quickfix.c

#### Patch 7.3.403

Problem: ":helpgrep" does not trigger QuickFixCmd\* autocommands.  
Solution: Trigger the autocommands. (Christian Brabandt)  
Files: src/quickfix.c

#### Patch 7.3.404

Problem: When a complete function uses refresh "always" redo will not work properly.  
Solution: Do not reset compl\_leader when compl\_opt\_refresh\_always is set. (Yasuhiro Matsumoto)  
Files: src/edit.c

#### Patch 7.3.405

Problem: When xterm gets back the function keys it may delete the urxvt mouse termcap code.  
Solution: Check for the whole code, not just the start. (Egmont Koblinger)  
Files: src/keymap.h, src/misc2.c, src/term.c

#### Patch 7.3.406

Problem: Multi-byte characters in b:browsefilter are not handled correctly.  
Solution: First use convert\_filter() normally and then convert to wide characters. (Taro Muraoka)  
Files: src/gui\_w48.c

#### Patch 7.3.407

Problem: ":l2verbose call F()" may duplicate text while trying to truncate. (Thinca)

Solution: Only truncate when there is not enough room. Also check the byte length of the buffer.  
Files: src/buffer.c, src/eval.c, src/ex\_getln.c, src/message.c, src/proto/message.pro

Patch 7.3.408 (after 7.3.406)  
Problem: Missing declaration.  
Solution: Add the declaration. (John Marriott)  
Files: src/gui\_w48.c

Patch 7.3.409  
Problem: The license in pty.c is unclear.  
Solution: Add a comment about the license.  
Files: src/pty.c

Patch 7.3.410  
Problem: Compiler error for // comment. (Joachim Schmitz)  
Solution: Turn into /\* comment \*/.  
Files: src/message.c

Patch 7.3.411  
Problem: Pasting in Visual mode using the "" register does not work. (John Beckett)  
Solution: Detect that the write is overwriting the pasted register. (Christian Brabandt)  
Files: src/normal.c

Patch 7.3.412  
Problem: Storing a float in a session file has an additional '&'.  
Solution: Remove the '&'. (Yasuhiro Matsumoto)  
Files: src/eval.c

Patch 7.3.413  
Problem: Build warnings on MS-Windows.  
Solution: Add type casts. (Mike Williams)  
Files: src/ex\_getln.c, src/message.c, src/term.c

Patch 7.3.414  
Problem: Using CTRL-A on "000" drops the leading zero, while on "001" it doesn't.  
Solution: Detect "000" as an octal number. (James McCoy)  
Files: src/charset.c

Patch 7.3.415 (after 7.3.359)  
Problem: Completion of functions stops once a dictionary is encountered. (James McCoy)  
Solution: Return an empty string instead of NULL.  
Files: src/eval.c

Patch 7.3.416 (after 7.3.415)  
Problem: Compiler warning for wrong pointer.  
Solution: Add type cast.  
Files: src/eval.c

Patch 7.3.417 (after 7.3.395)  
Problem: Test 43 fails with a tiny build.  
Solution: Only run test 43 with at least a small build.  
Files: src/testdir/test43.in

Patch 7.3.418  
Problem: When a user complete function returns -1 an error message is given.

Solution: When -2 is returned stop completion silently. (Yasuhiro Matsumoto)  
Files: src/edit.

Patch 7.3.419

Problem: DBCS encoding in a user command does not always work.  
Solution: Skip over DBCS characters. (Yasuhiro Matsumoto)  
Files: src/ex\_docmd.c

Patch 7.3.420

Problem: "it" and "at" don't work properly with a dash in the tag name.  
Solution: Require a space to match the tag name. (Christian Brabandt)  
Files: src/search.c

Patch 7.3.421

Problem: Get E832 when setting 'undofile' in vimrc and there is a file to be edited on the command line. (Toothpik)  
Solution: Do not try reading the undo file for a file that wasn't loaded.  
Files: src/option.c

Patch 7.3.422

Problem: Python 3 does not have `__members__`.  
Solution: Add "name" and "number" in another way. (lilydjwg)  
Files: src/if\_py\_both.h, src/if\_python3.c

Patch 7.3.423

Problem: Small mistakes in comments, proto and indent.  
Solution: Fix the mistakes.  
Files: src/ex\_cmds2.c, src/structs.h, src/ui.c, src/proto/ex\_docmd.pro

Patch 7.3.424

Problem: Win16 version missing some functions.  
Solution: Add `#defines` for the functions.  
Files: src/gui\_w16.c

Patch 7.3.425 (after 7.3.265)

Problem: Search history lines are duplicated. (Edwin Steiner)  
Solution: Convert separator character from space to NUL.  
Files: src/ex\_getln.c

Patch 7.3.426

Problem: With '\$' in 'coptions' the \$ is not displayed in the first column.  
Solution: Use -1 instead of 0 as a special value. (Hideki Eiraku and Hirohito Higashi)  
Files: src/edit.c, src/globals.h, src/move.c, src/screen.c, src/search.c

Patch 7.3.427

Problem: `readfile()` can be slow with long lines.  
Solution: Use `realloc()` instead of `alloc()`. (John Little)  
Files: src/eval.c

Patch 7.3.428

Problem: Win32: an xpm file without a mask crashes Vim.  
Solution: Fail when the mask is missing. (Dave Bodenshtab)  
Files: src/xpm\_w32.c

Patch 7.3.429

Problem: When 'coptions' includes "E" "c0" in the first column is an error. The redo register is then set to the erroneous command.  
Solution: Do not set the redo register if the command fails because of an empty region. (Hideki Eiraku)  
Files: src/getchar.c, src/normal.c, src/proto/getchar.pro

## Patch 7.3.430

Problem: When a custom filetype detection uses "augroup END" the conf  
filetype detection does not have the filetype detect group.  
Solution: Always end the group and include filetype detect in the conf  
autocommand. (Lech Lorens)  
Files: runtime/filetype.vim

## Patch 7.3.431

Problem: Fetching a key at a prompt may be confused by escape sequences.  
Especially when getting a prompt at a VimEnter autocommand.  
(Alex Efros)  
Solution: Properly handle escape sequences deleted by check\_termcode().  
Files: src/getchar.c, src/misc1.c, src/term.c, src/proto/term.pro

## Patch 7.3.432

Problem: ACLs are not supported for ZFS or NFSv4 on Solaris.  
Solution: Add configure check and code. (Danek Duvall)  
Files: src/configure.in, src/auto/configure, src/config.h.in,  
src/os\_unix.c

## Patch 7.3.433

Problem: Using continued lines in a Vim script can be slow.  
Solution: Instead of reallocating for every line use a growarray. (Yasuhiro  
Matsumoto)  
Files: src/ex\_cmds2.c

## Patch 7.3.434

Problem: Using join() can be slow.  
Solution: Compute the size of the result before allocation to avoid a lot of  
allocations and copies. (Taro Muraoka)  
Files: src/eval.c

## Patch 7.3.435

Problem: Compiler warning for unused variable.  
Solution: Move the variable inside #ifdef.  
Files: src/ex\_cmds2.c

## Patch 7.3.436

Problem: Compiler warnings for types on Windows.  
Solution: Add type casts. (Mike Williams)  
Files: src/eval.c

## Patch 7.3.437

Problem: Continue looping inside FOR\_ALL\_TAB\_WINDOWS even when already done.  
Solution: Use goto instead of break. (Hirohito Higashi)  
Files: src/fileio.c, src/globals.h

## Patch 7.3.438

Problem: There is no way to avoid ":doautoall" reading modelines.  
Solution: Add the <nomodeline> argument. Adjust documentation.  
Files: src/fileio.c, runtime/doc/autocmd.txt

## Patch 7.3.439

Problem: Compiler warnings to size casts in Perl interface.  
Solution: Use XS macros. (James McCoy)  
Files: src/if\_perl.xs, src/typemap

## Patch 7.3.440

Problem: Vim does not support UTF8\_STRING for the X selection.  
Solution: Add UTF8\_STRING atom support. (Alex Efros) Use it only when  
'encoding' is set to Unicode.

Files: src/ui.c

Patch 7.3.441

Problem: Newer versions of MzScheme (Racket) require earlier (trampolined) initialisation.

Solution: Call `mzscheme_main()` early in `main()`. (Sergey Khorev)

Files: `src/Make_mvc.mak`, `src/if_mzsch.c`, `src/main.c`,  
`src/proto/if_mzsch.pro`

Patch 7.3.442 (after 7.3.438)

Problem: Still read modelines for `":doautocmd"`.

Solution: Move check for `<nomodeline>` to separate function.

Files: `src/fileio.c`, `src/ex_docmd.c`, `src/proto/fileio.pro`,  
`runtime/doc/autocmd.txt`

Patch 7.3.443

Problem: MS-Windows: `'shcf'` and `'shellxquote'` defaults are not very good.

Solution: Make a better guess when `'shell'` is set to `"cmd.exe"`. (Ben Fritz)

Files: `src/option.c`, `runtime/doc/options.txt`

Patch 7.3.444

Problem: `":all!"` and `":sall!"` give error E477, even though the documentation says these are valid commands.

Solution: Support the exclamation mark. (Hirohito Higashi)

Files: `src/ex_cmds.h`, `src/testdir/test31.in`, `src/testdir/test31.ok`

Patch 7.3.445 (after 7.3.443)

Problem: Can't properly escape commands for `cmd.exe`.

Solution: Default `'shellxquote'` to `'('`. Append `)'` to make `'(command)'`.  
No need to use `"/s"` for `'shellcmdflag'`.

Files: `src/misc2.c`, `src/option.c`, `src/os_win32.c`

Patch 7.3.446 (after 7.3.445)

Problem: Win32: External commands with special characters don't work.

Solution: Add the `'shellxescape'` option.

Files: `src/misc2.c`, `src/option.c`, `src/option.h`, `runtime/doc/options.txt`

Patch 7.3.447 (after 7.3.446)

Problem: Win32: External commands with `"start"` do not work.

Solution: Unescape part of the command. (Yasuhiro Matsumoto)

Files: `src/os_win32.c`

Patch 7.3.448 (after 7.3.447)

Problem: Win32: Still a problem with `"!start /b"`.

Solution: Escape only `'|'`. (Yasuhiro Matsumoto)

Files: `src/os_win32.c`

Patch 7.3.449

Problem: Crash when a `BufWinLeave` autocommand closes the only other window.  
(Daniel Hunt)

Solution: Abort closing a buffer when it becomes the only one.

Files: `src/buffer.c`, `src/proto/buffer.pro`, `src/ex_cmds.c`, `src/ex_getln.c`,  
`src/misc2.c`, `src/quickfix.c`, `src/window.c`, `src/proto/window.pro`

Patch 7.3.450 (after 7.3.448)

Problem: Win32: Still a problem with `"!start /b"`.

Solution: Fix pointer use. (Yasuhiro Matsumoto)

Files: `src/os_win32.c`

Patch 7.3.451

Problem: Tcl doesn't work on 64 MS-Windows.

Solution: Make it work. (Dave Bodenshtab)



Files: src/Make\_mvc.mak, src/if\_tcl.c

Patch 7.3.452

Problem: Undo broken when pasting close to the last line. (Andrey Radev)

Solution: Use a flag to remember if the deleted included the last line.  
(Christian Brabandt)

Files: src/ops.c

Patch 7.3.453

Problem: Pasting in the command line is slow.

Solution: Don't redraw if there is another character to read. (Dominique Pelle)

Files: src/ex\_getln.c

Patch 7.3.454

Problem: Re-allocating memory slows Vim down.

Solution: Use realloc() in ga\_grow(). (Dominique Pelle)

Files: src/misc2.c

Patch 7.3.455

Problem: Using many continuation lines can be slow.

Solution: Adjust the reallocation size to the current length.

Files: src/ex\_cmds2.c

Patch 7.3.456

Problem: ":tab drop file" has several problems, including moving the current window and opening a new tab for a file that already has a window.

Solution: Refactor ":tab drop" handling. (Hirohito Higashi)

Files: src/buffer.c, src/testdir/test62.in, src/testdir/test62.ok

Patch 7.3.457

Problem: When setting \$VIMRUNTIME later the directory for fetching translated messages is not adjusted.

Solution: Put bindtextdomain() in vim\_setenv().

Files: src/misc1.c

Patch 7.3.458

Problem: Crash when calling msg() during startup.

Solution: Don't use 'shortmess' when it is not set yet.

Files: src/option.c

Patch 7.3.459

Problem: Win32: Warnings for type conversion.

Solution: Add type casts. (Mike Williams)

Files: src/misc2.c, src/os\_win32.c

Patch 7.3.460

Problem: Win32: UPX does not compress 64 bit binaries.

Solution: Mention and add the alternative: mpress. (Dave Bodenstab)

Files: src/INSTALLpc.txt, src/Make\_ming.mak

Patch 7.3.461

Problem: The InsertCharPre autocommand event is not triggered during completion and when typing several characters quickly.

Solution: Also trigger InsertCharPre during completion. Do not read ahead when an InsertCharPre autocommand is defined. (Yasuhiro Matsumoto)

Files: src/edit.c, src/fileio.c, src/proto/fileio.pro

Patch 7.3.462

Problem: When using ":loadview" folds may be closed unexpectedly.

Solution: Take into account foldlevel. (Xavier de Gaye)

Files: src/fold.c

Patch 7.3.463

Problem: When using ":s///c" the cursor is moved away from the match.  
(Lawman)

Solution: Don't move the cursor when do\_ask is set. (Christian Brabandt)

Files: src/ex\_cmds.c

Patch 7.3.464

Problem: Compiler warning for sprintf.

Solution: Put the length in a variable. (Dominique Pelle)

Files: src/version.c

Patch 7.3.465

Problem: Cannot get file name with newline from glob().

Solution: Add argument to glob() and expand() to indicate they must return a list. (Christian Brabandt)

Files: runtime/doc/eval.txt, src/eval.c, src/ex\_getln.c, src/vim.h

Patch 7.3.466

Problem: Get ml\_get error hen ":behave mswin" was used and selecting several lines. (A. Sinan Unur)

Solution: Adjust the end of the operation. (Christian Brabandt)

Files: src/ops.c

Patch 7.3.467

Problem: Cursor positioned wrong at the command line when regaining focus and using some input method.

Solution: Do not position the cursor in command line mode.

Files: src/mbyte.c

Patch 7.3.468

Problem: For some compilers the error file is not easily readable.

Solution: Use QuickFixCmdPre for more commands. (Marcin Szamotulski)

Files: runtime/doc/autocmd.txt, src/quickfix.c

Patch 7.3.469

Problem: Compiler warning for unused argument without some features.

Solution: Add UNUSED.

Files: src/buffer.c

Patch 7.3.470

Problem: Test 62 fails when compiled without GUI and X11.

Solution: Don't test :drop when it is not supported.

Files: src/testdir/test62.in

Patch 7.3.471

Problem: Can't abort listing placed signs.

Solution: Check "got\_int". (Christian Brabandt)

Files: src/buffer.c, src/ex\_cmds.c

Patch 7.3.472

Problem: Crash when using ":redraw" in a BufEnter autocommand and switching to another tab. (驼峰)

Solution: Move triggering the autocommands to after correcting the option values. Also check the row value to be out of bounds.  
(Christian Brabandt, Sergey Khorev)

Files: src/screen.c, src/window.c

Patch 7.3.473

Problem: 'cursorbind' does not work correctly in combination with

Solution: 'virtualedit' set to "all".  
Copy coladd. (Gary Johnson)  
Files: src/move.c

Patch 7.3.474

Problem: Perl build with gcc 4 fails.  
Solution: Remove XS() statements. (Yasuhiro Matsumoto)  
Files: src/if\_perl.xs

Patch 7.3.475

Problem: In a terminal with few colors the omnicomplete menu may be hard to see when using the default colors.  
Solution: Use more explicit colors. (suggested by Alex Henrie)  
Files: src/syntax.c

Patch 7.3.476

Problem: When selecting a block, using "\$" to include the end of each line and using "A" and typing a backspace strange things happen.  
(Yuangchen Xie)  
Solution: Avoid using a negative length. (Christian Brabandt)  
Files: src/ops.c

Patch 7.3.477

Problem: Using ":echo" to output enough lines to scroll, then using "j" and "k" at the more prompt, displays the command on top of the output.  
(Marcin Szamotulski)  
Solution: Put the output below the command. (Christian Brabandt)  
Files: src/eval.c

Patch 7.3.478

Problem: Memory leak using the ':rv!' command when reading dictionary or list global variables i.e. with 'viminfo' containing !.  
Solution: Free the typeval. (Dominique Pelle)  
Files: src/eval.c

Patch 7.3.479

Problem: When 'cursorline' is set the line number highlighting can't be set separately.  
Solution: Add "CursorLineNr". (Howard Buchholz)  
Files: src/option.c, src/screen.c, src/syntax.c, src/vim.h

Patch 7.3.480

Problem: When using ":qa" and there is a changed buffer picking the buffer to jump to is not very good.  
Solution: Consider current and other tab pages. (Hirohito Higashi)  
Files: src/ex\_cmds2.c

Patch 7.3.481

Problem: Changing 'virtualedit' in an operator function to "all" does not have the desired effect. (Aaron Bohannon)  
Solution: Save, reset and restore virtual\_op when executing an operator function.  
Files: src/normal.c

Patch 7.3.482

Problem: With 'cursorbind' set moving up/down does not always keep the same column.  
Solution: Set curswant appropriately. (Gary Johnson)  
Files: src/move.c

Patch 7.3.483 (after 7.3.477)

Problem: More prompt shows up too often.

Solution: Instead of adding a line break, only start a new line in the message history. (Christian Brabandt)

Files: src/eval.c, src/message.c, src/proto/message.pro

#### Patch 7.3.484

Problem: The -E and --echo-wid command line arguments are not mentioned in "vim --help".

Solution: Add the help lines. (Dominique Pelle)

Files: src/main.c

#### Patch 7.3.485

Problem: When building Vim LDFLAGS isn't passed on to building xxd.

Solution: Pass the LDFLAGS value. (James McCoy)

Files: src/Makefile

#### Patch 7.3.486

Problem: Build error with mingw64 on Windows 7.

Solution: Avoid the step of going through vimres.res. (Guopeng Wen)

Files: src/Make\_ming.mak

#### Patch 7.3.487

Problem: When setting 'timeoutlen' or 'ttimeoutlen' the column for vertical movement is reset unnecessarily.

Solution: Do not set w\_set\_curswant for every option. Add a test for this. (Kana Natsuno) Add the P\_CURSWANT flag for options.

Files: src/option.c, src/testdir/test84.in, src/testdir/test84.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.3.488

Problem: ":help!" in a help file does not work as documented.

Solution: When in a help file don't give an error message. (thinca)

Files: src/ex\_cmds.c

#### Patch 7.3.489

Problem: CTRL-] in Insert mode does not expand abbreviation when used in a mapping. (Yichao Zhou)

Solution: Special case using CTRL-]. (Christian Brabandt)

Files: src/getchar.c, src/edit.c

#### Patch 7.3.490

Problem: Member confusion in Lua interface.

Solution: Fix it. Add luaeval(). (Taro Muraoka, Luis Carvalho)

Files: runtime/doc/if\_lua.txt, src/eval.c, src/if\_lua.c, src/proto/if\_lua.pro

#### Patch 7.3.491

Problem: No tests for Lua.

Solution: Add some simple tests for Lua. (Luis Carvalho)

Files: src/testdir/testl.in, src/testdir/test85.in, src/testdir/test85.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.3.492

Problem: Can't indent conditions separately from function arguments.

Solution: Add the 'k' flag in 'cino'. (Lech Lorens)

Files: runtime/doc/indent.txt, src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

#### Patch 7.3.493 (after 7.3.492)

Problem: Two unused variables.  
Solution: Remove them. (Hong Xu)  
Files: src/misc1.c

Patch 7.3.494 (after 7.3.491)

Problem: Can't compile with Lua 5.1 or dynamic Lua.  
Solution: Fix dll\_methods. Fix luado(). (Muraoka Taro, Luis Carvalho)  
Files: src/if\_lua.c

Patch 7.3.495 (after 7.3.492)

Problem: Compiler warnings.  
Solution: Add function declaration. Remove "offset" argument.  
Files: src/misc1.c

Patch 7.3.496

Problem: MS-DOS: When "diff" trips over difference in line separators some tests fail.  
Solution: Make some .ok files use unix line separators. (David Pope)  
Files: src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak

Patch 7.3.497

Problem: Crash when doing ":python print" and compiled with gcc and the optimizer enabled.  
Solution: Avoid the crash, doesn't really fix the problem. (Christian Brabandt)  
Files: src/if\_py\_both.h

Patch 7.3.498

Problem: The behavior of the "- register changes depending on value of the 'clipboard' option. (Szamotulski)  
Solution: Also set the "- register when the register is "\*" or "+". (Christian Brabandt)  
Files: src/ops.c

Patch 7.3.499

Problem: When using any interface language when Vim is waiting for a child process it gets confused by a child process started through the interface.  
Solution: Always used waitpid() instead of wait(). (Yasuhiro Matsumoto)  
Files: src/os\_unix.c

Patch 7.3.500

Problem: Ming makefile unconditionally sets WINVER.  
Solution: Only defined when not already defined. (Yasuhiro Matsumoto)  
Files: src/Make\_ming.mak

Patch 7.3.501

Problem: Error for "flush" not being defined when using Ruby command.  
Solution: Defined "flush" as a no-op method. (Kent Sibilev)  
Files: src/if\_ruby.c

Patch 7.3.502

Problem: Netbeans insert halfway a line actually appends to the line.  
Solution: Insert halfway the line. (Brian Victor)  
Files: src/netbeans.c

Patch 7.3.503 (after 7.3.501)

Problem: Warning for unused argument.  
Solution: Add UNUSED.  
Files: src/if\_ruby.c

Patch 7.3.504

Problem: Commands in help files are not highlighted.  
Solution: Allow for commands in backticks. Adjust CTRL-] to remove the backticks.  
Files: src/ex\_cmds.c

#### Patch 7.3.505

Problem: Test 11 fails on MS-Windows in some versions.  
Solution: Fix #ifdefs for whether filtering through a pipe is possible. Move setting b\_no\_eol\_lnum back to where it was before patch 7.3.124. (David Pope)  
Files: src/feature.h, src/eval.c, src/ex\_cmds.c, src/fileio.c

#### Patch 7.3.506

Problem: GTK gives an error when selecting a non-existent file.  
Solution: Add a handler to avoid the error. (Christian Brabandt)  
Files: src/gui\_gtk.c

#### Patch 7.3.507

Problem: When exiting with unsaved changes, selecting an existing file in the file dialog, there is no dialog to ask whether the existing file should be overwritten. (Felipe G. Nievinski)  
Solution: Call check\_overwrite() before writing. (Christian Brabandt)  
Files: src/ex\_cmds.c, src/ex\_cmds2.c, src/proto/ex\_cmds.pro

#### Patch 7.3.508

Problem: Default for v:register is not set.  
Solution: Init v:register in eval\_init(). Correct for 'clipboard' before the main loop. (Ingo Karkat)  
Files: src/eval.c, src/main.c

#### Patch 7.3.509

Problem: ":vimgrep" fails when 'autochdir' is set.  
Solution: A more generic solution for changing directory. (Ben Fritz)  
Files: src/quickfix.c

#### Patch 7.3.510

Problem: Test 77 fails on Solaris 7. (Michael Soyka)  
Solution: Replace any tabs with spaces.  
Files: src/testdir/test77.in

#### Patch 7.3.511

Problem: Using a FileReadCmd autocommand that does ":e! {file}" may cause a crash. (Christian Brabandt)  
Solution: Properly restore curwin->w\_s.  
Files: src/fileio.c

#### Patch 7.3.512

Problem: undofile() returns a useless name when passed an empty string.  
Solution: Return an empty string. (Christian Brabandt)  
Files: src/eval.c

#### Patch 7.3.513

Problem: Cannot use CTRL-E and CTRL-Y with "r".  
Solution: Make CTRL-E and CTRL-Y work like in Insert mode. (Christian Brabandt)  
Files: src/edit.c, src/normal.c, src/proto/edit.pro

#### Patch 7.3.514

Problem: No completion for :history command.  
Solution: Add the completion and update the docs. Also fix ":behave" completion. (Dominique Pelle)  
Files: runtime/doc/cmdline.txt, runtime/doc/map.txt, src/ex\_docmd.c,

src/ex\_getln.c, src/vim.h

Patch 7.3.515

Problem: 'wildignorecase' only applies to the last part of the path.  
Solution: Also ignore case for letters earlier in the path.  
Files: src/misc1.c

Patch 7.3.516

Problem: extend(o, o) may crash Vim.  
Solution: Fix crash and add test. (Thinca and Hirohito Higashi)  
Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

Patch 7.3.517

Problem: Crash when using "vipvv". (Alexandre Provencio)  
Solution: Don't let the text length become negative.  
Files: src/ops.c

Patch 7.3.518

Problem: When 'encoding' is a double-byte encoding ":helptags" may not find tags correctly.  
Solution: Use vim\_strbyte() instead of vim\_strchr(). (Yasuhiro Matsumoto)  
Files: src/ex\_cmds.c

Patch 7.3.519

Problem: When completefunction returns it cannot indicate end of completion mode.  
Solution: Recognize completefunction returning -3. (Matsushita Shougo)  
Files: src/edit.c

Patch 7.3.520

Problem: gvim starts up slow on Ubuntu 12.04.  
Solution: Move the call to gui\_mch\_init\_check() to after fork(). (Yasuhiro Matsumoto) Do check \$DISPLAY being set.  
Files: src/gui.c, src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro

Patch 7.3.521

Problem: Using "z=" on a multi-byte character may cause a crash.  
Solution: Don't use strlen() on an int pointer.  
Files: src/spell.c

Patch 7.3.522

Problem: Crash in vim\_realloc() when using MEM\_PROFILE.  
Solution: Avoid using a NULL argument. (Dominique Pelle)  
Files: src/eval.c

Patch 7.3.523

Problem: ":diffupdate" doesn't check for files changed elsewhere.  
Solution: Add the ! flag. (Christian Brabandt)  
Files: runtime/doc/diff.txt, src/diff.c, src/ex\_cmds.h

Patch 7.3.524 (after 7.3.523)

Problem: Missing comma.  
Solution: Add the comma.  
Files: src/version.c

Patch 7.3.525

Problem: Compiler warning on 64 bit MS-Windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/ex\_getln.c

Patch 7.3.526

Problem: Confusing indenting for #ifdef.

Solution: Remove and add indent. (Elias Diem)  
Files: src/normal.c

Patch 7.3.527

Problem: Clang complains about non-ASCII characters in a string.  
Solution: Change to \x88 form. (Dominique Pelle)  
Files: src/charset.c

Patch 7.3.528

Problem: Crash when closing last window in a tab. (Alex Efros)  
Solution: Use common code in close\_last\_window\_tabpage(). (Christian Brabandt)  
Files: src/window.c

Patch 7.3.529

Problem: Using a count before "v" and "V" does not work (Kikyous)  
Solution: Make the count select that many characters or lines. (Christian Brabandt)  
Files: src/normal.c

Patch 7.3.530 (after 7.3.520)

Problem: gvim does not work when 'guioptions' includes "f". (Davido)  
Solution: Call gui\_mch\_init\_check() when running GUI in the foreground. (Yasuhiro Matsumoto)  
Files: src/gui.c

Patch 7.3.531 (after 7.3.530)

Problem: GUI does not work on MS-Windows.  
Solution: Add the missing #ifdef. (Patrick Avery)  
Files: src/gui.c

Patch 7.3.532

Problem: Compiler warning from Clang.  
Solution: Use a different way to point inside a string. (Dominique Pelle)  
Files: src/syntax.c

Patch 7.3.533

Problem: Memory leak when writing undo file.  
Solution: Free the ACL. (Dominique Pelle)  
Files: src/undo.c

Patch 7.3.534 (after 7.3.461)

Problem: When using an InsertCharPre autocommand autoindent fails.  
Solution: Proper handling of v:char. (Alexey Radkov)  
Files: src/edit.c

Patch 7.3.535

Problem: Many #ifdefs for MB\_MAXBYTES.  
Solution: Also define MB\_MAXBYTES without the +multi\_byte feature. Fix places where the buffer didn't include space for a NUL byte.  
Files: src/arabic.c, src/edit.c, src/eval.c, src/getchar.c, src/mbyte.c, src/misc1.c, src/screen.c, src/spell.c, src/vim.h

Patch 7.3.536

Problem: When spell checking the German sharp s is not seen as a word character. (Aexl Bender)  
Solution: In utf\_islower() return true for the sharp s. Note: also need updated spell file for this to take effect.  
Files: src/mbyte.c

Patch 7.3.537

Problem: Unnecessary call to init\_spell\_chartab().



Solution: Delete the call.  
Files: src/spell.c

Patch 7.3.538

Problem: 'efm' does not handle Tabs in pointer lines.  
Solution: Add Tab support. Improve tests. (Lech Lorens)  
Files: src/quickfix.c, src/testdir/test10.in, src/testdir/test10.ok

Patch 7.3.539

Problem: Redrawing a character on the command line does not work properly for multi-byte characters.  
Solution: Count the number of bytes in a character. (Yukihiro Nakadaira)  
Files: src/ex\_getln.c

Patch 7.3.540

Problem: Cursor is left on the text instead of the command line.  
Solution: Don't call setcursor() in command line mode.  
Files: src/getchar.c

Patch 7.3.541

Problem: When joining lines comment leaders need to be removed manually.  
Solution: Add the 'j' flag to 'formatoptions'. (Lech Lorens)  
Files: runtime/doc/change.txt, src/edit.c, src/ex\_docmd.c, src/misc1.c, src/normal.c, src/ops.c, src/option.h, src/proto/misc1.pro, src/proto/ops.pro, src/search.c, src/testdir/test29.in, src/testdir/test29.ok

Patch 7.3.542 (after 7.3.506)

Problem: Function is sometimes unused.  
Solution: Add #ifdef.  
Files: src/gui\_gtk.c

Patch 7.3.543

Problem: The cursor is in the wrong line after using ":copen". (John Beckett)  
Solution: Invoke more drastic redraw method.  
Files: src/eval.c

Patch 7.3.544

Problem: There is no good way to close a quickfix window when closing the last ordinary window.  
Solution: Add the QuitPre autocommand.  
Files: src/ex\_docmd.c, src/fileio.c, src/vim.h

Patch 7.3.545

Problem: When closing a window or buffer autocommands may close it too, causing problems for where the autocommand was invoked from.  
Solution: Add the w\_closing and b\_closing flags. When set disallow ":q" and ":close" to prevent recursive closing.  
Files: src/structs.h, src/buffer.c, src/ex\_docmd.c, src/window.c

Patch 7.3.546

Problem: Bogus line break.  
Solution: Remove the line break.  
Files: src/screen.c

Patch 7.3.547 (after 7.3.541)

Problem: Compiler warning for uninitialized variable.  
Solution: Initialize it.  
Files: src/ops.c

Patch 7.3.548

Problem: Compiler warning on 64 bit Windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/ops.c

Patch 7.3.549

Problem: In 'cinoptions' "0s" is interpreted as one shiftwidth. (David Pineau)  
Solution: Use the zero as zero. (Lech Lorens)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.550 (after 7.3.541)

Problem: With "j" in 'formatoptions' a list leader is not removed. (Gary Johnson)  
Solution: Don't ignore the start of a three part comment. (Lech Lorens)  
Files: src/ops.c, src/testdir/test29.in, src/testdir/test29.ok

Patch 7.3.551

Problem: When using :tablose a TabEnter autocommand is triggered too early. (Karthick)  
Solution: Don't trigger \*Enter autocommands before closing the tab. (Christian Brabandt)  
Files: src/buffer.c, src/eval.c, src/ex\_cmds2.c, src/fileio.c, src/proto/window.pro, src/window.c

Patch 7.3.552

Problem: Formatting inside comments does not use the "2" flag in 'formatoptions'.  
Solution: Support the "2" flag. (Tor Perkins)  
Files: src/vim.h, src/ops.c, src/edit.c, src/misc1.c, src/testdir/test68.in, src/testdir/test68.ok

Patch 7.3.553

Problem: With double-width characters and 'listchars' containing "precedes" the text is displayed one cell off.  
Solution: Check for double-width character being overwritten by the "precedes" character. (Yasuhiro Matsumoto)  
Files: src/screen.c

Patch 7.3.554 (after 7.3.551)

Problem: Compiler warning for unused argument.  
Solution: Add UNUSED.  
Files: src/window.c

Patch 7.3.555

Problem: Building on IBM z/OS fails.  
Solution: Adjust configure. Use the QUOTED value from config.mk instead of the hard coded one in Makefile. (Stephen Bovy)  
Files: src/configure.in, src/auto/configure, src/Makefile

Patch 7.3.556

Problem: Compiler warnings on 64 bit Windows.  
Solution: Add type casts. (Mike Williams)  
Files: src/misc1.c

Patch 7.3.557

Problem: Crash when an autocommand wipes out a buffer when it is hidden.  
Solution: Restore the current window when needed. (Christian Brabandt)  
Files: src/buffer.c

Patch 7.3.558

Problem: Memory access error. (Gary Johnson)  
Solution: Allocate one more byte. (Dominique Pelle)

Files: src/misc1.c

Patch 7.3.559

Problem: home\_replace() does not work with 8.3 filename.

Solution: Make ":p" expand 8.3 name to full path. (Yasuhiro Matsumoto)

Files: src/eval.c, src/misc1.c

Patch 7.3.560

Problem: Get an error for a locked argument in extend().

Solution: Initialize the lock flag for a dictionary. (Yukihiro Nakadaira)

Files: src/eval.c

Patch 7.3.561

Problem: Using refresh: always in a complete function breaks the "." command. (Val Markovic)

Solution: Add match leader to the redo buffer. (Yasuhiro Matsumoto)

Files: src/edit.c

Patch 7.3.562

Problem: ":profdel" should not work when the +profile feature is disabled.

Solution: Call ex\_ni(). (Yasuhiro Matsumoto)

Files: src/ex\_cmds2.c

Patch 7.3.563 (after 7.3.557)

Problem: Can't build with tiny features.

Solution: Add #ifdef.

Files: src/buffer.c

Patch 7.3.564 (after 7.3.559)

Problem: Warning for pointer conversion.

Solution: Add type cast.

Files: src/misc1.c

Patch 7.3.565

Problem: Can't generate proto file for Python 3.

Solution: Add PYTHON3\_CFLAGS to LINT\_CFLAGS.

Files: src/Makefile

Patch 7.3.566 (after 7.3.561)

Problem: Redo after completion does not work correctly when refresh: always is not used. (Raymond Ko)

Solution: Check the compl\_opt\_refresh\_always flag. (Christian Brabandt)

Files: src/edit.c

Patch 7.3.567

Problem: Missing copyright notice.

Solution: Add Vim copyright notice. (Taro Muraoka)

Files: src/dehqx.py

Patch 7.3.568

Problem: Bad indents for #ifdefs.

Solution: Add and remove spaces. (Elias Diem)

Files: src/globals.h

Patch 7.3.569

Problem: Evaluating Vim expression in Python is insufficient.

Solution: Add vim.bindeval(). Also add pyeval() and py3eval(). (ZyX)

Files: runtime/doc/eval.txt, runtime/doc/if\_pyth.txt, src/eval.c, src/if\_lua.c, src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c, src/proto/eval.pro, src/proto/if\_python.pro, src/proto/if\_python3.pro, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,

```
src/testdir/Make_os2.mak, src/testdir/Makefile,
src/testdir/test86.in, src/testdir/test86.ok,
src/testdir/test87.in, src/testdir/test87.ok
```

## Patch 7.3.570

Problem: ":vimgrep" does not obey 'wildignore'.  
Solution: Apply 'wildignore' and 'suffixes' to ":vimgrep". (Ingo Karkat)  
Files: src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, src/quickfix.c, src/spell.c

## Patch 7.3.571

Problem: Duplicated condition.  
Solution: Remove one. (Dominique Pelle)  
Files: src/os\_win32.c

## Patch 7.3.572

Problem: Duplicate statement in if and else. (Dominique Pelle)  
Solution: Remove the condition and add a TODO.  
Files: src/gui\_xmew.c

## Patch 7.3.573

Problem: Using array index before bounds checking.  
Solution: Swap the parts of the condition. (Dominique Pelle)  
Files: src/ops.c

## Patch 7.3.574

Problem: When pasting a register in the search command line a CTRL-L character is not pasted. (Dominique Pelle)  
Solution: Escape the CTRL-L. (Christian Brabandt)  
Files: src/ex\_getln.c

## Patch 7.3.575

Problem: "ygt" tries to yank instead of giving an error. (Daniel Mueller)  
Solution: Check for a pending operator.  
Files: src/normal.c

## Patch 7.3.576

Problem: Formatting of lists inside comments is not right yet.  
Solution: Use another solution and add a test. (Tor Perkins)  
Files: src/edit.c, src/misc1.c, src/testdir/test68.in,  
src/testdir/test69.ok

## Patch 7.3.577

Problem: Size of memory does not fit in 32 bit unsigned.  
Solution: Use Kbyte instead of byte. Call GlobalMemoryStatusEx() instead of GlobalMemoryStatus() when available.  
Files: src/misc2.c, src/option.c, src/os\_amiga.c, src/os\_msdos.c,  
src/os\_win16.c, src/os\_win32.c

## Patch 7.3.578

Problem: Misplaced declaration.  
Solution: Move declaration to start of block.  
Files: src/if\_py\_both.h

## Patch 7.3.579 (after 7.3.569)

Problem: Can't compile with Python 2.5.  
Solution: Use PyCObject when Capsules are not available.  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.3.580

Problem: Warning on 64 bit MS-Windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/if\_py\_both.h

## Patch 7.3.581

Problem: Problems compiling with Python.  
Solution: Pick UCS2 or UCS4 function at runtime. (lilydjwg)  
Files: src/if\_python.c

## Patch 7.3.582 (after 7.3.576)

Problem: Missing parts of the test OK file.  
Solution: Add the missing parts.  
Files: src/testdir/test68.ok

## Patch 7.3.583

Problem: PyObject\_NextNotImplemented is not defined before Python 2.7.  
(Danek Duvall)  
Solution: Add #ifdefs.  
Files: src/if\_python.c

## Patch 7.3.584

Problem: PyCObject is not always defined.  
Solution: Use PyObject instead.  
Files: src/if\_py\_both.h, src/if\_python.c

## Patch 7.3.585

Problem: Calling changed\_bytes() too often.  
Solution: Move changed\_bytes() out of a loop. (Tor Perkins)  
Files: src/edit.c

## Patch 7.3.586

Problem: When compiling with Cygwin or MingW MEMORYSTATUSEX is not defined.  
Solution: Set the default for WINVER to 0x0500.  
Files: src/Make\_ming.mak, src/Make\_cyg.mak

## Patch 7.3.587

Problem: Compiler warning for local var shadowing global var.  
Solution: Rename the var and move it to an inner block. (Christian Brabandt)  
Files: src/buffer.c

## Patch 7.3.588

Problem: Crash on NULL pointer.  
Solution: Fix the immediate problem by checking for NULL. (Lech Lorens)  
Files: src/window.c

## Patch 7.3.589

Problem: Crash when \$HOME is not set.  
Solution: Check for a NULL pointer. (Chris Webb)  
Files: src/misc1.c

## Patch 7.3.590

Problem: The '<' and '>' marks cannot be set directly.  
Solution: Allow setting '<' and '>'. (Christian Brabandt)  
Files: src/mark.c

## Patch 7.3.591

Problem: Can only move to a tab by absolute number.  
Solution: Move a number of tabs to the left or the right. (Lech Lorens)  
Files: runtime/doc/tabpage.txt, src/ex\_cmds.h, src/ex\_docmd.c,  
src/testdir/test62.in, src/testdir/test62.ok, src/window.c

## Patch 7.3.592

Problem: Vim on GTK does not support g:browsefilter.  
Solution: Add a GtkFileFilter to the file chooser. (Christian Brabandt)  
Files: src/gui\_gtk.c

## Patch 7.3.593

Problem: No easy way to decide if b:browsefilter will work.  
Solution: Add the browsefilter feature.  
Files: src/gui\_gtk.c, src/eval.c, src/vim.h

## Patch 7.3.594

Problem: The X command server doesn't work perfectly. It sends an empty reply for as-keys requests.  
Solution: Remove duplicate ga\_init2(). Do not send a reply for as-keys requests. (Brian Burns)  
Files: src/if\_xcmdsrv.c

## Patch 7.3.595

Problem: The X command server responds slowly  
Solution: Change the loop that waits for replies. (Brian Burns)  
Files: src/if\_xcmdsrv.c

## Patch 7.3.596

Problem: Can't remove all signs for a file or buffer.  
Solution: Support "\*" for the sign id. (Christian Brabandt)  
Files: runtime/doc/sign.txt, src/buffer.c, src/ex\_cmds.c, src/proto/buffer.pro

## Patch 7.3.597

Problem: 'clipboard' "autoselect" only applies to the \* register. (Sergey Vakulenko)  
Solution: Make 'autoselect' work for the + register. (Christian Brabandt)  
Add the "autoselectplus" option in 'clipboard' and the "P" flag in 'guioptions'.  
Files: runtime/doc/options.txt, src/normal.c, src/ops.c, src/screen.c, src/ui.c, src/globals.h, src/proto/ui.pro, src/option.h, src/gui.c

## Patch 7.3.598

Problem: Cannot act upon end of completion. (Taro Muraoka)  
Solution: Add an autocommand event that is triggered when completion has finished. (Idea by Florian Klein)  
Files: src/edit.c, src/fileio.c, src/vim.h

## Patch 7.3.599 (after 7.3.597)

Problem: Missing change in one file.  
Solution: Patch for changed clip\_autoselect().  
Files: src/option.c

## Patch 7.3.600

Problem: <f-args> is not expanded properly with DBCS encoding.  
Solution: Skip over character instead of byte. (Yukihiro Nakadaira)  
Files: src/ex\_docmd.c

## Patch 7.3.601

Problem: Bad code style.  
Solution: Insert space, remove parens.  
Files: src/farsi.c

## Patch 7.3.602

Problem: Missing files in distribution.  
Solution: Update the list of files.  
Files: Filelist

## Patch 7.3.603

Problem: It is possible to add replace builtin functions by calling extend() on g:.

Solution: Add a flag to a dict to indicate it is a scope. Check for existing functions. (ZyX)  
Files: src/buffer.c, src/eval.c, src/proto/eval.pro, src/structs.h, src/testdir/test34.in, src/testdir/test34.ok, src/window.c

#### Patch 7.3.604

Problem: inputdialog() doesn't use the cancel argument in the console. (David Fishburn)  
Solution: Use the third argument. (Christian Brabandt)  
Files: src/eval.c

#### Patch 7.3.605 (after 7.3.577)

Problem: MS-Windows: Can't compile with older compilers. (Titov Anatoly)  
Solution: Add #ifdef for MEMORYSTATUSEX.  
Files: src/os\_win32.c

#### Patch 7.3.606

Problem: CTRL-P completion has a problem with multi-byte characters.  
Solution: Check for next character being NUL properly. (Yasuhiro Matsumoto)  
Files: src/search.c, src/macros.h

#### Patch 7.3.607

Problem: With an 8 color terminal the selected menu item is black on black, because darkGrey as bg is the same as black.  
Solution: Swap fg and bg colors. (James McCoy)  
Files: src/syntax.c

#### Patch 7.3.608

Problem: winrestview() does not always restore the view correctly.  
Solution: Call win\_new\_height() and win\_new\_width(). (Lech Lorens)  
Files: src/eval.c, src/proto/window.pro, src/window.c

#### Patch 7.3.609

Problem: File names in :checkpath! output are garbled.  
Solution: Check for \zs in the pattern. (Lech Lorens)  
Files: src/search.c, src/testdir/test17.in, src/testdir/test17.ok

#### Patch 7.3.610

Problem: Cannot operate on the text that a search pattern matches.  
Solution: Add the "gn" and "gN" commands. (Christian Brabandt)  
Files: runtime/doc/index.txt, runtime/doc/visual.txt, src/normal.c, src/proto/search.pro, src/search.c, src/testdir/test53.in, src/testdir/test53.ok

#### Patch 7.3.611

Problem: Can't use Vim dictionary as self argument in Python.  
Solution: Fix the check for the "self" argument. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.612

Problem: Auto formatting messes up text when 'fo' contains "2". (ZyX)  
Solution: Decrement "less\_cols". (Tor Perkins)  
Files: src/misc1.c, src/testdir/test68.in, src/testdir/test68.ok

#### Patch 7.3.613

Problem: Including Python's config.c in the build causes trouble. It is not clear why it was there.  
Solution: Omit the config file. (James McCoy)  
Files: src/Makefile, src/auto/configure, src/configure.in

#### Patch 7.3.614

Problem: Number argument gets turned into a number while it should be a

string.  
Solution: Add flag to the call\_vim\_function() call. (Yasuhiro Matsumoto)  
Files: src/edit.c, src/eval.c, src/proto/eval.pro

Patch 7.3.615

Problem: Completion for a user command does not recognize backslash before a space.

Solution: Recognize escaped characters. (Yasuhiro Matsumoto)  
Files: src/ex\_docmd.c

Patch 7.3.616 (after 7.3.610)

Problem: Can't compile without +visual.

Solution: Add #ifdef.

Files: src/normal.c

Patch 7.3.617 (after 7.3.615)

Problem: Hang on completion.

Solution: Skip over the space. (Yasuhiro Matsumoto)

Files: src/ex\_docmd.c

Patch 7.3.618 (after 7.3.616)

Problem: Still doesn't compile with small features.

Solution: Move current\_search() out of #ifdef. (Dominique Pelle)

Files: src/normal.c, src/search.c

Patch 7.3.619

Problem: When executing a shell command Vim may become slow to respond.

Solution: Don't wait after every processed message. (idea by Yasuhiro Matsumoto)

Files: src/os\_win32.c

Patch 7.3.620

Problem: Building with recent Ruby on Win32 doesn't work.

Solution: Add a separate argument for the API version. (Yasuhiro Matsumoto)

Files: src/Make\_ming.mak, src/Make\_mvc.mak

Patch 7.3.621

Problem: Compiler warnings on 64 bit windows.

Solution: Add type casts. (Mike Williams)

Files: src/ex\_docmd.c, src/search.c

Patch 7.3.622

Problem: XPM library for Win32 can't be found.

Solution: Suggest using the one from the Vim ftp site.

Files: src/Make\_mvc.mak

Patch 7.3.623

Problem: Perl 5.14 commands crash Vim on MS-Windows.

Solution: Use perl\_get\_sv() instead of GvSV(). (Raymond Ko)

Files: src/if\_perl.xs

Patch 7.3.624

Problem: When cancelling input() it returns the third argument. That should only happen for inputdialog().

Solution: Check if inputdialog() was used. (Hirohito Higashi)

Files: src/eval.c

Patch 7.3.625

Problem: "gn" does not handle zero-width matches correctly.

Solution: Handle zero-width patterns specially. (Christian Brabandt)

Files: src/search.c



## Patch 7.3.626

Problem: Python interface doesn't build with Python 2.4 or older.  
Solution: Define Py\_ssize\_t. (Benjamin Bannier)  
Files: src/if\_py\_both.h

## Patch 7.3.627

Problem: When using the "n" flag with the ":s" command a \= substitution will not be evaluated.  
Solution: Do perform the evaluation, so that a function can be invoked at every matching position without changing the text. (Christian Brabandt)  
Files: src/ex\_cmds.c

## Patch 7.3.628

Problem: ":open" does not allow for a !, which results in a confusing error message. (Shawn Wilson)  
Solution: Allow ! on ":open". (Christian Brabandt)  
Files: src/ex\_cmds.h

## Patch 7.3.629

Problem: There is no way to make 'shiftwidth' follow 'tabstop'.  
Solution: When 'shiftwidth' is zero use the value of 'tabstop'. (Christian Brabandt)  
Files: src/edit.c, src/ex\_getln.c, src/fold.c, src/misc1.c, src/ops.c, src/option.c, src/proto/option.pro

## Patch 7.3.630

Problem: "|" does not behave correctly when 'virtualedit' is set.  
Solution: Call validate\_virtcol(). (David Bürgin)  
Files: src/normal.c

## Patch 7.3.631

Problem: Cannot complete user names.  
Solution: Add user name completion. (Dominique Pelle)  
Files: runtime/doc/map.txt, src/auto/configure, src/config.h.in, src/configure.in, src/ex\_docmd.c, src/ex\_getln.c, src/misc1.c, src/misc2.c, src/proto/misc1.pro, src/vim.h

## Patch 7.3.632

Problem: Cannot select beyond 222 columns with the mouse in xterm.  
Solution: Add support for SGR mouse tracking. (Hayaki Saito)  
Files: runtime/doc/options.txt, src/feature.h, src/keymap.h, src/misc2.c, src/option.h, src/os\_unix.c, src/term.c, src/version.c

## Patch 7.3.633

Problem: Selection remains displayed as selected after selecting another text.  
Solution: Call xterm\_update() before select(). (Andrew Pimlott)  
Files: src/os\_unix.c

## Patch 7.3.634

Problem: Month/Day format for undo is confusing. (Marcin Szamotulski)  
Solution: Always use Year/Month/Day, should work for everybody.  
Files: src/undo.c

## Patch 7.3.635

Problem: Issue 21: System call during startup sets 'lines' to a wrong value. (Karl Yngve)  
Solution: Don't set the shell size while the GUI is still starting up. (Christian Brabandt)  
Files: src/ui.c

## Patch 7.3.636 (after 7.3.625)

Problem: Not all zero-width matches handled correctly for "gn".  
Solution: Move zero-width detection to a separate function. (Christian Brabandt)  
Files: src/search.c

## Patch 7.3.637

Problem: Cannot catch the error caused by a foldopen when there is no fold. (ZyX, Issue 48)  
Solution: Do not break out of the loop early when inside try/catch. (Christian Brabandt) Except when there is a syntax error.  
Files: src/ex\_docmd.c, src/globals.h

## Patch 7.3.638

Problem: Unnecessary redraw of the previous character.  
Solution: Check if the character is double-width. (Jon Long)  
Files: src/screen.c

## Patch 7.3.639

Problem: It's not easy to build Vim on Windows with XPM support.  
Solution: Include the required files, they are quite small. Update the MSVC makefile to use them. Binary files are in the next patch. (Sergey Khorev)  
Files: src/xpm/COPYRIGHT, src/xpm/README.txt, src/xpm/include/simx.h, src/xpm/include/xpm.h, src/Make\_mvc.mak, src/bigvim.bat, src/bigvim64.bat, Filelist

## Patch 7.3.640

Problem: It's not easy to build Vim on Windows with XPM support.  
Solution: Binary files for 7.3.639. (Sergey Khorev)  
Files: src/xpm/x64/lib/libXpm.lib, src/xpm/x86/lib/libXpm.a, src/xpm/x86/lib/libXpm.lib

## Patch 7.3.641

Problem: ":mkview" uses ":normal" instead of ":normal!" for folds. (Dan)  
Solution: Add the bang. (Christian Brabandt)  
Files: src/fold.c

## Patch 7.3.642

Problem: Segfault with specific autocommands. Was OK after 7.3.449 and before 7.3.545. (Richard Brown)  
Solution: Pass TRUE for abort\_if\_last in the call to close\_buffer(). (Christian Brabandt)  
Files: src/window.c

## Patch 7.3.643 (after 7.3.635)

Problem: MS-Windows: When starting gvim maximized 'lines' and 'columns' are wrong. (Christian Robinson)  
Solution: Move the check for gui.starting from ui\_get\_shellsize() to check\_shellsize().  
Files: src/ui.c, src/term.c

## Patch 7.3.644

Problem: Dead code for BeOS GUI.  
Solution: Remove unused \_\_BEOS\_\_ stuff.  
Files: src/gui.c

## Patch 7.3.645

Problem: No tests for patch 7.3.625 and 7.3.637.  
Solution: Add more tests for the "gn" command and try/catch. (Christian Brabandt)  
Files: src/testdir/test53.in, src/testdir/test53.ok,

src/testdir/test55.in, src/testdir/test55.ok

Patch 7.3.646

Problem: When reloading a buffer the undo file becomes unusable unless ":w" is executed. (Dmitri Frank)

Solution: After reloading the buffer write the undo file. (Christian Brabandt)

Files: src/fileio.c

Patch 7.3.647

Problem: "gnd" doesn't work correctly in Visual mode.

Solution: Handle Visual mode differently in "gn". (Christian Brabandt)

Files: src/search.c, src/testdir/test53.in, src/testdir/test53.ok

Patch 7.3.648

Problem: Crash when using a very long file name. (ZyX)

Solution: Properly check length of buffer space.

Files: src/buffer.c

Patch 7.3.649

Problem: When 'clipboard' is set to "unnamed" small deletes end up in the numbered registers. (Ingo Karkat)

Solution: Use the original register name to decide whether to put a delete in a numbered register. (Christian Brabandt)

Files: src/ops.c

Patch 7.3.650

Problem: Completion after ":help \{-" gives an error message and messes up the command line.

Solution: Cancel the tag search if the pattern can't be compiled. (Yasuhiro Matsumoto)

Files: src/tag.c

Patch 7.3.651

Problem: Completion after ":help \{-" gives an error message.

Solution: Prepend a backslash.

Files: src/ex\_cmds.c

Patch 7.3.652

Problem: Workaround for Python crash isn't perfect.

Solution: Change the type of the length argument. (Sean Estabrooks)

Files: src/if\_py\_both.h

Patch 7.3.653

Problem: MingW needs build rule for included XPM files. Object directory for 32 and 64 builds is the same, also for MSVC.

Solution: Add MingW build rule to use included XPM files. Add the CPU or architecture to the object directory name. (Sergey Khorev)

Files: src/Make\_ming.mak, src/Make\_mvc.mak, src/xpm/README.txt

Patch 7.3.654

Problem: When creating a Vim dictionary from Python objects an empty key might be used.

Solution: Do not use empty keys, throw an IndexError. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.655

Problem: 64 bit MingW xpm .a file is missing.

Solution: Add the file. (Sergey Khorev)

Files: src/xpm/x64/lib/libXpm.a

Patch 7.3.656

Problem: Internal error in :pyeval.  
Solution: Handle failed object conversion. (ZyX)  
Files: src/if\_python.c, src/if\_python3.c

Patch 7.3.657

Problem: Python bindings silently truncate string values containing NUL.  
Solution: Fail when a string contains NUL. (ZyX)  
Files: src/if\_python.c, src/if\_python3.c

Patch 7.3.658

Problem: NUL bytes truncate strings when converted from Python.  
Solution: Handle truncation as an error. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c

Patch 7.3.659

Problem: Recent Python changes are not tested.  
Solution: Add tests for Python bindings. (ZyX)  
Files: src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.660

Problem: ":help !" jumps to help for ":". (Andy Wokula)  
Solution: Adjust check for tag header line. (Andy Wokula)  
Files: src/tag.c

Patch 7.3.661 (after 7.3.652)

Problem: SEGV in Python code.  
Solution: Initialize len to zero. Use the right function depending on  
version. (Maxim Philippov)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

Patch 7.3.662

Problem: Can't build Ruby interface with Ruby 1.9.3.  
Solution: Add missing functions. (V. Ondruch)  
Files: src/if\_ruby.c

Patch 7.3.663

Problem: End of color scheme name not clear in E185. (Aaron Lewis)  
Solution: Put the name in single quotes.  
Files: src/ex\_docmd.c

Patch 7.3.664

Problem: Buffer overflow in unescaping text. (Raymond Ko)  
Solution: Limit check for multi-byte character to 4 bytes.  
Files: src/mbyte.c

Patch 7.3.665

Problem: MSVC 11 is not supported. (Raymond Ko)  
Solution: Recognize MSVC 11. (Gary Willoughby)  
Files: src/Make\_mvc.mak

Patch 7.3.666

Problem: With MSVC 11 Win32.mak is not found.  
Solution: Add the SDK\_INCLUDE\_DIR variable. (Raymond Ko)  
Files: src/Make\_mvc.mak

Patch 7.3.667

Problem: Unused variables in Perl interface.  
Solution: Adjust #ifdefs.  
Files: src/if\_perl.xs

Patch 7.3.668

Problem: Building with Perl loaded dynamically still uses static library.  
Solution: Adjust use of PL\_thr\_key. (Ken Takata)  
Files: src/if\_perl.xs

Patch 7.3.669

Problem: When building with Cygwin loading Python dynamically fails.  
Solution: Use DLLLIBRARY instead of INSTSONAME. (Ken Takata)  
Files: src/configure.in, src/auto/configure

Patch 7.3.670

Problem: Python: memory leaks when there are exceptions.  
Solution: Add DICTKEY\_UNREF in the right places. (ZyX)  
Files: src/if\_py\_both.h

Patch 7.3.671

Problem: More Python code can be shared between Python 2 and 3.  
Solution: Move code to if\_py\_both.h. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

Patch 7.3.672

Problem: Not possible to lock/unlock lists in Python interface.  
Solution: Add .locked and .scope attributes. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python.c,  
src/if\_python3.c, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.673

Problem: Using "gN" while 'selection' is "exclusive" misses one character.  
(Ben Fritz)  
Solution: Check the direction when compensating for exclusive selection.  
(Christian Brabandt)  
Files: src/search.c

Patch 7.3.674

Problem: Can't compile with Lua/dyn on Cygwin.  
Solution: Adjust configure to use the right library name. (Ken Takata)  
Files: src/configure.in, src/auto/configure

Patch 7.3.675

Problem: Using uninitialized memory with very long file name.  
Solution: Put NUL after text when it is truncated. (ZyX)  
Files: src/buffer.c

Patch 7.3.676

Problem: Ruby compilation on Windows 32 bit doesn't work.  
Solution: Only use some functions for 64 bit. (Ken Takata)  
Files: src/if\_ruby.c

Patch 7.3.677

Problem: buf\_spname() is used inconsistently.  
Solution: Make the return type a char\_u pointer. Check the size of the  
returned string.  
Files: src/buffer.c, src/proto/buffer.pro, src/ex\_cmds2.c,  
src/ex\_docmd.c, src/memline.c, src/screen.c

Patch 7.3.678

Problem: Ruby .so name may not be correct.  
Solution: Use the LIBRUBY\_SO entry from the config. (Vit Ondruch)  
Files: src/configure.in, src/auto/configure

Patch 7.3.679

Problem: Ruby detection uses Config, newer Ruby versions use RbConfig.

Solution: Detect the need to use RbConfig. (Vit Ondruch)  
Files: src/configure.in, src/auto/configure

Patch 7.3.680

Problem: Some files missing in the list of distributed files.  
Solution: Add lines for new files.  
Files: Filelist

Patch 7.3.681 (after 7.3.680)

Problem: List of distributed files picks up backup files.  
Solution: Make tutor patterns more specific.  
Files: Filelist

Patch 7.3.682 (after 7.3.677)

Problem: Compiler complains about incompatible types.  
Solution: Remove type casts. (hint by Danek Duvall)  
Files: src/edit.c

Patch 7.3.683

Problem: ":python" may crash when vimbindeval() returns None.  
Solution: Check for v\_string to be NULL. (Yukihiro Nakadaira)  
Files: src/if\_py\_both.h

Patch 7.3.684

Problem: "make test" does not delete lua.vim.  
Solution: Add lua.vim to the clean target. (Simon Ruderich)  
Files: src/testdir/Makefile, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_vms.mms

Patch 7.3.685

Problem: No test for what patch 7.3.673 fixes.  
Solution: Add a test. (Christian Brabandt)  
Files: src/testdir/test53.in, src/testdir/test53.ok

Patch 7.3.686

Problem: Using CTRL-\ e mappings is useful also when entering an  
expression, but it doesn't work. (Marcin Szamotulski)  
Solution: Allow using CTRL-\ e when entering an expression if it was not  
typed.  
Files: src/ex\_getln.c

Patch 7.3.687

Problem: Test 16 fails when \$DISPLAY is not set.  
Solution: Skip the test when \$DISPLAY is not set.  
Files: src/testdir/test16.in

Patch 7.3.688

Problem: Python 3.3 is not supported.  
Solution: Add Python 3.3 support (Ken Takata)  
Files: src/if\_python3.c

Patch 7.3.689

Problem: MzScheme and Lua may use a NULL string.  
Solution: Use an empty string instead of NULL. (Yukihiro Nakadaira)  
Files: src/if\_lua.c, src/if\_mzsch.c

Patch 7.3.690

Problem: When the current directory name is exactly the maximum path length  
Vim may crash.  
Solution: Only add "/" when there is room. (Danek Duvall)  
Files: src/os\_unix.c

## Patch 7.3.691

Problem: State specific to the Python thread is discarded.  
Solution: Keep state between threads. (Paul)  
Files: src/if\_python.c

## Patch 7.3.692

Problem: Can't build GTK version with GTK 2.0.  
Solution: Put GtkFileFilter declaration in the right place. (Yegappan Lakshmanan)  
Files: src/gui\_gtk.c

## Patch 7.3.693

Problem: Can't make 'softtabstop' follow 'shiftwidth'.  
Solution: When 'softtabstop' is negative use the value of 'shiftwidth'. (so8res)  
Files: src/edit.c, src/option.c, src/proto/option.pro

## Patch 7.3.694

Problem: Now that 'shiftwidth' may use the value of 'tabstop' it is not so easy to use in indent files.  
Solution: Add the shiftwidth() function. (so8res)  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.3.695

Problem: Balloon cannot show multi-byte text.  
Solution: Properly deal with multi-byte characters. (Dominique Pelle)  
Files: src/gui\_beval.c, src/ui.c

## Patch 7.3.696

Problem: Message about added spell language can be wrong.  
Solution: Give correct message. Add g:menutrans\_set\_lang\_to to allow for translation. (Jiri Sedlak)  
Files: runtime/menu.vim

## Patch 7.3.697

Problem: Leaking resources when setting GUI font.  
Solution: Free the font. (Ken Takata)  
Files: src/syntax.c

## Patch 7.3.698

Problem: Python 3 does not preserve state between commands.  
Solution: Preserve the state. (Paul Ollis)  
Files: src/if\_python.c, src/if\_python3.c

## Patch 7.3.699

Problem: When 'ttymouse' is set to "sgr" manually, it is overruled by automatic detection.  
Solution: Do not use automatic detection when 'ttymouse' was set manually. (Hayaki Saito)  
Files: src/term.c

## Patch 7.3.700

Problem: Cannot detect URXVT and SGR mouse support.  
Solution: add +mouse\_urxvt and +mouse\_sgr. (Hayaki Saito)  
Files: src/feature.h, src/eval.c

## Patch 7.3.701

Problem: MS-Windows: Crash with stack overflow when setting 'encoding'.  
Solution: Handle that loading the iconv library may be called recursively. (Jiri Sedlak)  
Files: src/os\_win32.c

## Patch 7.3.702

Problem: Nmake from VS6 service pack 6 is not recognized.  
Solution: Detect the version number. (Jiri Sedlak)  
Files: src/Make\_mvc.mak

## Patch 7.3.703

Problem: When 'undofile' is reset the hash is computed unnecessarily.  
Solution: Only compute the hash when the option was set. (Christian Brabandt)  
Files: src/option.c

## Patch 7.3.704

Problem: Repeating "cgn" does not always work correctly.  
Solution: Also fetch the operator character. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.3.705

Problem: Mouse features are not sorted properly. (Tony Mechelynck)  
Solution: Put the mouse features in alphabetical order.  
Files: src/version.c

## Patch 7.3.706 (after 7.3.697)

Problem: Can't build Motif version.  
Solution: Fix wrongly named variable. (Ike Devolder)  
Files: src/syntax.c

## Patch 7.3.707 (after 7.3.701)

Problem: Problems loading a library for a file name with non-latin characters.  
Solution: Use wide system functions when possible. (Ken Takata)  
Files: src/os\_win32.c, src/os\_win32.h

## Patch 7.3.708

Problem: Filler lines above the first line may be hidden when opening Vim.  
Solution: Change how topfill is computed. (Christian Brabandt)  
Files: src/diff.c, src/testdir/test47.in, src/testdir/test47.ok

## Patch 7.3.709

Problem: Compiler warning for unused argument.  
Solution: Add UNUSED.  
Files: src/eval.c

## Patch 7.3.710 (after 7.3.704)

Problem: Patch 7.3.704 breaks "fn".  
Solution: Add check for ca.cmdchar. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.3.711 (after 7.3.688)

Problem: vim.current.buffer is not available. (lilydjwg)  
Solution: Use py3\_PyUnicode\_AsUTF8 instead of py3\_PyUnicode\_AsUTF8String.  
(Ken Takata)  
Files: src/if\_python3.c

## Patch 7.3.712

Problem: Nmake from VS2010 SP1 is not recognized.  
Solution: Add the version number. (Ken Takata)  
Files: src/Make\_mvc.mak

## Patch 7.3.713

Problem: printf() can only align to bytes, not characters.  
Solution: Add the "S" item. (Christian Brabandt)  
Files: runtime/doc/eval.txt, src/message.c



## Patch 7.3.714

Problem: Inconsistency: :set can be used in the sandbox, but :setlocal and :setglobal cannot. (Michael Henry)  
Solution: Fix the flags for :setlocal and :setglobal. (Christian Brabandt)  
Files: src/ex\_cmds.h

## Patch 7.3.715

Problem: Crash when calling setloclist() in BufUnload autocmd. (Marcin Szamotulski)  
Solution: Set w\_llist to NULL when it was freed. Also add a test. (Christian Brabandt)  
Files: src/quickfix.c, src/testdir/test49.ok, src/testdir/test49.vim

## Patch 7.3.716

Problem: Error on exit when using Python 3.  
Solution: Remove PythonIO\_Fini(). (Roland Puntaier)  
Files: src/if\_python3.c

## Patch 7.3.717

Problem: When changing the font size, only MS-Windows limits the window size.  
Solution: Also limit the window size on other systems. (Roland Puntaier)  
Files: src/gui.c

## Patch 7.3.718

Problem: When re-using the current buffer the buffer-local options stay.  
Solution: Re-initialize the buffer-local options. (Christian Brabandt)  
Files: src/buffer.c

## Patch 7.3.719

Problem: Cannot run new version of cproto, it fails on missing include files.  
Solution: Add lots of #ifndef PROTO  
Files: src/os\_amiga.c, src/os\_amiga.h, src/gui\_w16.c, src/gui\_w48.c, src/gui\_w32.c, src/vimio.h, src/os\_msdos.c, src/os\_msdos.h, src/os\_win16.h, src/os\_win16.c, src/os\_win32.h, src/os\_win32.c, src/os\_mswin.c, src/gui\_photon.c, src/os\_unix.h, src/os\_beos.c, src/os\_beos.h

## Patch 7.3.720

Problem: Proto files are outdated.  
Solution: Update the newly generated proto files.  
Files: src/proto/digraph.pro, src/proto/fold.pro, src/proto/misc1.pro, src/proto/move.pro, src/proto/screen.pro, src/proto/search.pro, src/proto/os\_win32.pro, src/proto/os\_mswin.pro, src/proto/os\_beos.pro

## Patch 7.3.721

Problem: Ruby interface defines local functions globally.  
Solution: Make the functions static.  
Files: src/if\_ruby.c

## Patch 7.3.722

Problem: Perl flags may contain "-g", which breaks "make proto".  
Solution: Filter out the "-g" flag for cproto. (Ken Takata)  
Files: src/Makefile

## Patch 7.3.723

Problem: Various tiny problems.  
Solution: Various tiny fixes.  
Files: src/gui\_mac.c, src/xpm\_w32.c, src/netbeans.c, src/sha256.c, src/if\_sniff.c, README.txt

## Patch 7.3.724

Problem: Building with Ruby and Tcl on MS-Windows 64 bit does not work.  
Solution: Remove Ruby and Tcl from the big MS-Windows build.  
Files: src/bigvim64.bat

## Patch 7.3.725

Problem: :aboveleft and :belowright have no effect on :copen.  
Solution: Check for cmdmod.split. (Christian Brabandt)  
Files: src/quickfix.c

## Patch 7.3.726

Problem: Typos and duplicate info in README.  
Solution: Fix the text.  
Files: README.txt

## Patch 7.3.727

Problem: Can't always find Win32.mak when building GvimExt.  
Solution: Use same mechanism as in Make\_mvc.mak. (Cade Foster)  
Files: src/GvimExt/Makefile

## Patch 7.3.728

Problem: Cannot compile with MzScheme interface on Ubuntu 12.10.  
Solution: Find the collects directory under /usr/share.  
Files: src/configure.in, src/auto/configure

## Patch 7.3.729

Problem: Building with Ruby fails on some systems.  
Solution: Remove "static" and add #ifndef PROTO. (Ken Takata)  
Files: src/if\_ruby.c

## Patch 7.3.730

Problem: Crash in PHP file when using syntastic. (Ike Devolder)  
Solution: Avoid using NULL pointer. (Christian Brabandt)  
Files: src/quickfix.c

## Patch 7.3.731

Problem: Py3Init\_vim() is exported unnecessarily.  
Solution: Make it static. (Ken Takata)  
Files: src/if\_python3.c

## Patch 7.3.732

Problem: Compiler warnings for function arguments.  
Solution: Use inteptr\_t instead of long.  
Files: src/if\_mzsch.c, src/main.c

## Patch 7.3.733

Problem: Tests fail when including MzScheme.  
Solution: Change #ifdefs for vim\_main2().  
Files: src/main.c

## Patch 7.3.734

Problem: Cannot put help files in a sub-directory.  
Solution: Make :helptags work for sub-directories. (Charles Campbell)  
Files: src/ex\_cmds.c

## Patch 7.3.735

Problem: Cannot build Ruby 1.9 with MingW or Cygwin.  
Solution: Add another include directory. (Ken Takata)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak

## Patch 7.3.736

Problem: File name completion in input() escapes white space. (Frederic Hardy)  
Solution: Do not escape white space. (Christian Brabandt)  
Files: src/ex\_getln.c

Patch 7.3.737

Problem: When using do\_cmdline() recursively did\_endif is not reset, causing messages to be overwritten.  
Solution: Reset did\_endif. (Christian Brabandt)  
Files: src/ex\_docmd.c

Patch 7.3.738 (after 7.3.730)

Problem: Unused function argument.  
Solution: Remove it. (Christian Brabandt)  
Files: src/quickfix.c

Patch 7.3.739

Problem: Computing number of lines may have an integer overflow.  
Solution: Check for MAXCOL explicitly. (Dominique Pelle)  
Files: src/move.c

Patch 7.3.740

Problem: IOC tool complains about undefined behavior for int.  
Solution: Change to unsigned int. (Dominique Pelle)  
Files: src/hashtab.c, src/misc2.c

Patch 7.3.741 (after 7.3.737)

Problem: Tiny build fails.  
Solution: Move #ifdef. (Ike Devolder)  
Files: src/ex\_docmd.c

Patch 7.3.742

Problem: Leaking memory when :vimgrep restores the directory.  
Solution: Free the allocated memory. (Christian Brabandt)  
Files: src/quickfix.c

Patch 7.3.743 (after 7.3.741)

Problem: Tiny build still fails.  
Solution: Add #else in the right place.  
Files: src/ex\_docmd.c

Patch 7.3.744

Problem: 64 bit compiler warning.  
Solution: Add type cast. (Mike Williams)  
Files: src/ex\_cmds.c

Patch 7.3.745

Problem: Automatically setting 'ttymouse' doesn't work.  
Solution: Reset the "option was set" flag when using the default.  
Files: src/option.c, src/proto/option.pro, src/term.c

Patch 7.3.746

Problem: Memory leaks when using location lists.  
Solution: Set qf\_title to something. (Christian Brabandt)  
Files: src/eval.c, src/quickfix.c

Patch 7.3.747

Problem: When characters are concealed text aligned with tabs are no longer aligned, e.g. at ":help :index".  
Solution: Compensate space for tabs for concealed characters. (Dominique Pelle)  
Files: src/screen.c

## Patch 7.3.748

Problem: Cannot properly test conceal mode.

Solution: Add the screencol() and screenrow() functions. Use them in test88. (Simon Ruderich)

Files: runtime/doc/eval.txt, src/eval.c, src/proto/screen.pro,  
src/screen.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms  
src/testdir/Makefile, src/testdir/test88.in,  
src/testdir/test88.ok,

## Patch 7.3.749

Problem: Python interface doesn't build without the multi-byte feature.

Solution: Add #ifdef. (Ken Takata)

Files: src/if\_py\_both.h

## Patch 7.3.750

Problem: The justify macro does not always work correctly.

Solution: Fix off-by-one error (James McCoy)

Files: runtime/macros/justify.vim

## Patch 7.3.751

Problem: Test 61 is flaky, it fails once in a while.

Solution: When it fails retry once.

Files: src/testdir/Makefile

## Patch 7.3.752

Problem: Test 49 script file doesn't fold properly.

Solution: Add a colon.

Files: src/testdir/test49.vim

## Patch 7.3.753

Problem: When there is a QuitPre autocommand using ":q" twice does not work for exiting when there are more files to edit.

Solution: Do not decrement quitmore in an autocommand. (Techlive Zheng)

Files: src/ex\_docmd.c, src/fileio.c, src/proto/fileio.pro

## Patch 7.3.754

Problem: Latest nmake is not recognized.

Solution: Add nmake version 11.00.51106.1. (Raymond Ko)

Files: src/Make\_mvc.mak

## Patch 7.3.755

Problem: Autoconf doesn't find Python 3 if it's called "python".

Solution: Search for "python2" and "python3" first, then "python".

Files: src/configure.in, src/auto/configure

## Patch 7.3.756

Problem: A location list can get a wrong count in :lvimgrep.

Solution: Check if the list was changed by autocommands. (mostly by Christian Brabandt)

Files: src/quickfix.c

## Patch 7.3.757

Problem: Issue 96: May access freed memory when a put command triggers autocommands. (Dominique Pelle)

Solution: Call u\_save() before getting y\_array.

Files: src/ops.c

## Patch 7.3.758

Problem: Matchit plugin does not handle space in #ifdef.

Solution: Change matching pattern to allow spaces. (Mike Morearty)  
Files: runtime/macros/matchit.vim

Patch 7.3.759

Problem: MS-Windows: Updating the tabline is slow when there are many tabs.  
Solution: Disable redrawing while performing the update. (Arseny Kapoulkine)  
Files: src/gui\_w48.c

Patch 7.3.760

Problem: dv\_ deletes the white space before the line.  
Solution: Move the cursor to the first non-white. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test19.in, src/testdir/test19.ok

Patch 7.3.761

Problem: In Visual mode a "-p does not work. (Marcin Szamotulski)  
Solution: Avoid writing to "-" before putting it. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test48.in, src/testdir/test48.ok

Patch 7.3.762 (after 7.3.759)

Problem: On some systems the tabline is not redrawn.  
Solution: Call RedrawWindow(). (Charles Peacech)  
Files: src/gui\_w48.c

Patch 7.3.763

Problem: Jumping to a mark does not open a fold if it is in the same line.  
(Wiktor Ruben)  
Solution: Also compare the column after the jump. (Christian Brabandt)  
Files: src/normal.c

Patch 7.3.764

Problem: Not all message translation files are installed.  
Solution: Also install the converted files.  
Files: src/po/Makefile

Patch 7.3.765

Problem: Segfault when doing "cclose" on BufUnload in a python function.  
(Sean Reifschneider)  
Solution: Skip window with NULL buffer. (Christian Brabandt)  
Files: src/main.c, src/window.c

Patch 7.3.766

Problem: ":help cpo-\*" jumps to the wrong place.  
Solution: Make it equivalent to ":help cpo-star".  
Files: src/ex\_cmds.c

Patch 7.3.767

Problem: (Win32) The \_errno used for iconv may be the wrong one.  
Solution: Use the \_errno from iconv.dll. (Ken Takata)  
Files: src/mbyte.c

Patch 7.3.768

Problem: settabvar() and setwinvar() may move the cursor.  
Solution: Save and restore the cursor position when appropriate. (idea by  
Yasuhiro Matsumoto)  
Files: src/edit.c

Patch 7.3.769

Problem: 'matchpairs' does not work with multi-byte characters.  
Solution: Make it work. (Christian Brabandt)  
Files: src/miscl.c, src/option.c, src/proto/option.pro, src/search.c,  
src/testdir/test69.in, src/testdir/test69.ok

## Patch 7.3.770

Problem: Vim.h indentation is inconsistent.  
Solution: Adjust the indentation. (Elias Diem)  
Files: src/vim.h

## Patch 7.3.771 (after 7.3.769)

Problem: Uninitialized variable. (Yasuhiro Matsumoto)  
Solution: Set x2 to -1.  
Files: src/option.c

## Patch 7.3.772

Problem: Cursor is at the wrong location and below the end of the file  
after doing substitutions with confirm flag: %s/x/y/c  
(Dominique Pelle)  
Solution: Update the cursor position. (Christian Brabandt & Dominique)  
Files: src/ex\_cmds.c

## Patch 7.3.773 (after 7.3.767)

Problem: Crash when OriginalFirstThunk is zero.  
Solution: Skip items with OriginalFirstThunk not set. (Ken Takata)  
Files: src/mbyte.c

## Patch 7.3.774

Problem: Tiny GUI version misses console dialog feature.  
Solution: Define FEAT\_CON\_DIALOG when appropriate. (Christian Brabandt)  
Files: src/feature.h, src/gui.h

## Patch 7.3.775

Problem: Cygwin and Mingw builds miss dependency on gui\_w48.c.  
Solution: Add a build rule. (Ken Takata)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak

## Patch 7.3.776

Problem: ml\_get error when searching, caused by curwin not matching curbuf.  
Solution: Avoid changing curbuf. (Lech Lorens)  
Files: src/charset.c, src/eval.c, src/mark.c, src/proto/charset.pro,  
src/proto/mark.pro, src/regexp.c, src/syntax.c,

## Patch 7.3.777

Problem: When building with Gnome locale gets reset.  
Solution: Set locale after gnome\_program\_init(). (Christian Brabandt)  
Files: src/gui\_gtk\_x11.c

## Patch 7.3.778

Problem: Compiler error for adding up two pointers. (Titov Anatoly)  
Solution: Add a type cast. (Ken Takata)  
Files: src/mbyte.c

## Patch 7.3.779

Problem: Backwards search lands in wrong place when started on a multibyte  
character.  
Solution: Do not set extra\_col for a backwards search. (Sung Pae)  
Files: src/search.c, src/testdir/test44.in, src/testdir/test44.ok

## Patch 7.3.780

Problem: char2nr() and nr2char() always use 'encoding'.  
Solution: Add argument to use utf-8 characters. (Yasuhiro Matsumoto)  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.3.781

Problem: Drawing with 'guifontwide' can be slow.  
Solution: Draw multiple characters at a time. (Taro Muraoka)

Files: src/gui.c

Patch 7.3.782

Problem: Windows: IME composition may use a wrong font.  
Solution: Use 'guifontwide' for IME when it is set. (Taro Muraoka)  
Files: runtime/doc/options.txt, src/gui.c, src/gui\_w48.c,  
src/proto/gui\_w16.pro, src/proto/gui\_w32.pro

Patch 7.3.783

Problem: Crash when mark is not set. (Dominique Pelle)  
Solution: Check for NULL.  
Files: src/normal.c

Patch 7.3.784 (after 7.3.781)

Problem: Error when 'guifontwide' has a comma.  
Solution: Use gui.wide\_font. (Taro Muraoka)  
Files: src/gui\_w48.c

Patch 7.3.785 (after 7.3.776)

Problem: Crash with specific use of search pattern.  
Solution: Initialize reg\_buf to curbuf.  
Files: src/regexp.c

Patch 7.3.786

Problem: Python threads don't run in the background (issue 103).  
Solution: Move the statements to manipulate thread state.  
Files: src/if\_python.c

Patch 7.3.787

Problem: With 'relativenumber' set it is not possible to see the absolute line number.  
Solution: For the cursor line show the absolute line number instead of a zero. (Nazri Ramliy)  
Files: src/screen.c

Patch 7.3.788

Problem: When only using patches build fails on missing nl.po.  
Solution: Create an empty nl.po file.  
Files: src/po/Makefile

Patch 7.3.789 (after 7.3.776)

Problem: "\k" in regexp does not work in other window.  
Solution: Use the right buffer. (Yukihiro Nakadaira)  
Files: src/mbyte.c, src/proto/mbyte.pro, src/regexp.c

Patch 7.3.790

Problem: After reloading a buffer the modelines are not processed.  
Solution: call do\_modelines(). (Ken Takata)  
Files: src/fileio.c

Patch 7.3.791

Problem: MzScheme interface doesn't work properly.  
Solution: Make it work better. (Sergey Khorev)  
Files: runtime/doc/if\_mzsch.txt, src/configure.in, src/auto/configure,  
src/eval.c, src/if\_mzsch.c, src/if\_mzsch.h, src/Make\_ming.mak,  
src/Make\_mvc.mak, src/os\_unix.c, src/proto/eval.pro,  
src/testdir/test70.in, src/testdir/test70.ok

Patch 7.3.792

Problem: ":substitute" works differently without confirmation.  
Solution: Do not change the text when asking for confirmation, only display it.

Files: src/ex\_cmds.c

Patch 7.3.793 (after 7.3.792)

Problem: New interactive :substitute behavior is not tested.

Solution: Add tests. (Christian Brabandt)

Files: src/testdir/test80.in, src/testdir/test80.ok

Patch 7.3.794

Problem: Tiny build fails. (Tony Mechelynck)

Solution: Adjust #ifdefs.

Files: src/charset.c

Patch 7.3.795

Problem: MzScheme does not build with tiny features.

Solution: Add #ifdefs. Also add UNUSED to avoid warnings. And change library ordering.

Files: src/if\_mzsch.c, src/Makefile

Patch 7.3.796

Problem: "[^\n]" does match at a line break.

Solution: Make it do the same as "/.". (Christian Brabandt)

Files: src/regexp.c, src/testdir/test79.in, src/testdir/test79.ok

Patch 7.3.797 (after 7.3.792)

Problem: Compiler warning for size\_t to int conversion. (Skept)

Solution: Add type casts.

Files: src/ex\_cmds.c

Patch 7.3.798 (after 7.3.791)

Problem: MzScheme: circular list does not work correctly.

Solution: Separate Mac-specific code from generic code. (Sergey Khorev)

Files: src/if\_mzsch.c, src/testdir/test70.in

Patch 7.3.799

Problem: The color column is not correct when entering a buffer. (Ben Fritz)

Solution: Call check\_colorcolumn() if 'textwidth' changed. (Christian Brabandt)

Files: src/buffer.c

Patch 7.3.800

Problem: The " mark is not adjusted when inserting lines. (Roland Eggner)

Solution: Adjust the line number. (Christian Brabandt)

Files: src/mark.c

Patch 7.3.801

Problem: ":window set nu?" displays the cursor line. (Nazri Ramliy)

Solution: Do not update the cursor line when conceallevel is zero or the screen has scrolled. (partly by Christian Brabandt)

Files: src/window.c

Patch 7.3.802

Problem: After setting 'isk' to a value ending in a comma appending to the option fails.

Solution: Disallow a trailing comma for 'isk' and similar options.

Files: src/charset.c

Patch 7.3.803 (after 7.3.792)

Problem: Substitute with confirmation and then "q" does not replace anything. (John McGowan)

Solution: Do not break the loop, skip to the end.

Files: src/ex\_cmds.c, src/testdir/test80.in, src/testdir/test80.ok



## Patch 7.3.804 (after 7.3.799)

Problem: Compiler warning for tiny build. (Tony Mechelynck)  
Solution: Add #ifdefs around variable.  
Files: src/buffer.c

## Patch 7.3.805

Problem: Lua version 5.2 is not detected properly on Arch Linux.  
Solution: Adjust autoconf. (lilydjwg)  
Files: src/configure.in, src/auto/configure

## Patch 7.3.806

Problem: Compiler warnings in Perl code when building with Visual studio 2012. (skept)  
Solution: Add type casts. (Christian Brabandt, 2013 Jan 30)  
Files: src/if\_perl.xs

## Patch 7.3.807

Problem: Popup menu does not work properly with the preview window, folds and 'cursorcolumn'.  
Solution: Redraw the popup menu after redrawing windows. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.3.808

Problem: Python threads still do not work properly.  
Solution: Fix both Python 2 and 3. Add tests. (Ken Takata)  
Files: src/if\_python.c, src/if\_python3.c, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.809

Problem: The dosinst.c program has a buffer overflow. (Thomas Gwae)  
Solution: Ignore \$VIMRUNTIME if it is too long.  
Files: src/dosinst.c

## Patch 7.3.810

Problem: 'relativenumber' is reset unexpectedly. (François Ingelrest)  
Solution: After an option was reset also reset the global value. Add a test. (Christian Brabandt)  
Files: src/option.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test89.in, src/testdir/test89.ok

## Patch 7.3.811

Problem: Useless termresponse parsing for SGR mouse.  
Solution: Skip the parsing. (Hayaki Saito)  
Files: src/term.c

## Patch 7.3.812

Problem: When 'indentexpr' moves the cursor "curswant" not restored.  
Solution: Restore "curswant". (Sung Pae)  
Files: src/misc1.c

## Patch 7.3.813

Problem: The CompleteDone event is not triggered when there are no pattern matches. (Jianjun Mao)  
Solution: Trigger the event. (Christian Brabandt)  
Files: src/edit.c

## Patch 7.3.814

Problem: Can't input multibyte characters on Win32 console if 'encoding' is different from current codepage.  
Solution: Use convert\_input\_safe() instead of convert\_input(). Make string\_convert\_ext() return an error for incomplete input. (Ken Takata)  
Files: src/mbyte.c, src/os\_win32.c

## Patch 7.3.815

Problem: Building with Cygwin and Ruby doesn't work.  
Solution: Copy some things from the MingW build file. (Ken Takata)  
Files: src/Make\_cyg.mak

## Patch 7.3.816

Problem: Can't compute a hash.  
Solution: Add the sha256() function. (Tyru, Hirohito Higashi)  
Files: runtime/doc/eval.txt, src/eval.c, src/proto/sha256.pro, src/sha256.c, src/testdir/test90.in, src/testdir/test90.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

## Patch 7.3.817

Problem: Test 89 fails with tiny and small features.  
Solution: Add sourcing small.vim.  
Files: src/testdir/test89.in

## Patch 7.3.818

Problem: When test 40 fails because of a bad build it may leave files behind that cause it to fail later.  
Solution: Let the file names start with "X".  
Files: src/testdir/test40.in

## Patch 7.3.819

Problem: Compiling without +eval and with Python isn't working.  
Solution: Add the eval feature when building with Python.  
Files: src/if\_py\_both.h, src/feature.h, src/eval.c, src/ex\_docmd.c, src/normal.c, src/ex\_docmd.c, src/gui\_gtk\_x11.c

## Patch 7.3.820

Problem: Build errors and warnings when building with small features and Lua, Perl or Ruby.  
Solution: Add #ifdefs and UNUSED.  
Files: src/if\_perl.xs, src/if\_lua.c, src/if\_ruby.c

## Patch 7.3.821

Problem: Build with OLE and Cygwin is broken. (Steve Hall)  
Solution: Select static or shared stdc library. (Ken Takata)  
Files: src/Make\_cyg.mak

## Patch 7.3.822 (after 7.3.799)

Problem: Crash when accessing freed buffer.  
Solution: Get 'textwidth' in caller of enter\_buffer(). (Christian Brabandt)  
Files: src/buffer.c

## Patch 7.3.823 (after 7.3.821)

Problem: Building with Cygwin: '-lsupc++' is not needed.  
Solution: Remove it. (Ken Takata)  
Files: src/Make\_cyg.mak

## Patch 7.3.824

Problem: Can redefine builtin functions. (ZyX)

Solution: Disallow adding a function to g:.  
Files: src/eval.c

Patch 7.3.825

Problem: With Python errors are not always clear.  
Solution: Print the stack trace, unless :silent is used. (ZyX)  
Files: src/if\_python3.c, src/if\_python.c

Patch 7.3.826

Problem: List of features in :version output is hard to read.  
Solution: Make columns. (Nazri Ramliy)  
Files: src/version.c

Patch 7.3.827 (after 7.3.825)

Problem: Python tests fail.  
Solution: Adjust the output for the stack trace.  
Files: src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.ok

Patch 7.3.828

Problem: Mappings are not aware of wildmenu mode.  
Solution: Add wildmenumode(). (Christian Brabandt)  
Files: src/eval.c, runtime/doc/eval.txt

Patch 7.3.829

Problem: When compiled with the +rightleft feature 'showmatch' also shows a match for the opening paren. When 'revins' is set the screen may scroll.  
Solution: Only check the opening paren when the +rightleft feature was enabled. Do not show a match that is not visible. (partly by Christian Brabandt)  
Files: src/search.c

Patch 7.3.830

Problem: :mksession confuses bytes, columns and characters when positioning the cursor.  
Solution: Use w\_virtcol with "|" instead of w\_cursor.col with "l".  
Files: src/ex\_docmd.c

Patch 7.3.831

Problem: Clumsy to handle the situation that a variable does not exist.  
Solution: Add default value to getbufvar() et al. (Shougo Matsushita, Hirohito Higashi)  
Files: runtime/doc/eval.txt, src/eval.c src/testdir/test91.in,  
src/testdir/test91.ok, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile

Patch 7.3.832

Problem: Compiler warning.  
Solution: Add type cast. (Mike Williams)  
Files: src/version.c

Patch 7.3.833

Problem: In the terminal the scroll wheel always scrolls the active window.  
Solution: Scroll the window under the mouse pointer, like in the GUI. (Bradie Rao)  
Files: src/edit.c, src/normal.c

Patch 7.3.834

Problem: Ruby 2.0 has a few API changes.

Solution: Add handling of Ruby 2.0. (Yasuhiro Matsumoto)  
Files: src/if\_ruby.c

Patch 7.3.835

Problem: "xxd -i" fails on an empty file.  
Solution: Do output the closing } for an empty file. (partly by Lawrence Woodman)  
Files: src/xxd/xxd.c

Patch 7.3.836

Problem: Clipboard does not work on Win32 when compiled with Cygwin.  
Solution: Move the Win32 clipboard code to a separate file and use it when building with os\_unix.c. (Frodak Baksik, Ken Takata)  
Files: src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_ivc.mak, src/Make\_ming.mak, src/Make\_mvc.mak, src/Make\_wl6.mak, src/Makefile, src/config.h.in, src/configure.in, src/auto/configure, src/feature.h, src/globals.h, src/mbyte.c, src/os\_mswin.c, src/os\_unix.c, src/os\_win32.c, src/proto.h, src/proto/os\_mswin.pro, src/proto/winclip.pro, src/term.c, src/vim.h, src/winclip.c

Patch 7.3.837 (after 7.3.826)

Problem: Empty lines in :version output when 'columns' is 320.  
Solution: Simplify the logic of making columns. (Nazri Ramliy, Roland Eggner)  
Files: src/version.c

Patch 7.3.838 (after 7.3.830)

Problem: Insufficient testing for mksession.  
Solution: Add tests. (mostly by Roland Eggner)  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test92.in, src/testdir/test92.ok, src/testdir/test93.in, src/testdir/test93.ok, src/ex\_docmd.c

Patch 7.3.839

Problem: Some files missing in the list of distributed files.  
Solution: Add lines for new files.  
Files: Filelist

Patch 7.3.840

Problem: "\\@<!" in regexp does not work correctly with multi-byte characters, especially cp932.  
Solution: Move column to start of multi-byte character. (Yasuhiro Matsumoto)  
Files: src/regexp.c

Patch 7.3.841

Problem: When a "cond ? one : two" expression has a subscript it is not parsed correctly. (Andy Wokula)  
Solution: Handle a subscript also when the type is unknown. (Christian Brabandt)  
Files: src/eval.c

Patch 7.3.842

Problem: Compiler warning for signed/unsigned pointer.  
Solution: Add type cast. (Christian Brabandt)  
Files: src/eval.c

Patch 7.3.843 (after 7.3.841)

Problem: Missing test file changes.

Solution: Change the tests.  
Files: src/testdir/test49.vim, src/testdir/test49.ok

Patch 7.3.844

Problem: Enum is not indented correctly with "public" etc.  
Solution: Skip "public", "private" and "protected". (Hong Xu)  
Files: src/misc1.c

Patch 7.3.845 (after 7.3.844)

Problem: Enum indenting is not tested.  
Solution: Add tests. (Hong Xu)  
Files: src/testdir/test3.in, src/testdir/test3.ok

Patch 7.3.846

Problem: Missing proto files.  
Solution: Add the files.  
Files: Filelist, src/proto/os\_beos.pro

Patch 7.3.847

Problem: Test 55 fails when messages are translated.  
Solution: Set language to C. (Ken Takata)  
Files: src/testdir/test55.in

Patch 7.3.848

Problem: Can't build with Ruby 2.0 when using MinGW x64 or MSVC10.  
Solution: Fix it. Also detect RUBY\_PLATFORM and RUBY\_INSTALL\_NAME for x64.  
(Ken Takata)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/if\_ruby.c

Patch 7.3.849

Problem: ":g//" gives "Pattern not found error" with E486. Should not use  
the error number, it's not a regular error message.  
Solution: Use a normal message. (David Bürgin)  
Files: src/ex\_cmds.c

Patch 7.3.850

Problem: ":vimgrep //" matches everywhere.  
Solution: Make it use the previous search pattern. (David Bürgin)  
Files: runtime/doc/quickfix.txt, src/quickfix.c

Patch 7.3.851

Problem: Using an empty pattern with :sort silently continues when there is  
no previous search pattern.  
Solution: Give an error message. (David Bürgin)  
Files: src/ex\_cmds.c

Patch 7.3.852

Problem: system() breaks clipboard text. (Yukihiro Nakadaira)  
Solution: Use Xutf8TextPropertyToTextList(). (Christian Brabandt)  
Also do not put the text in the clip buffer if conversion fails.  
Files: src/ui.c, src/ops.c

Patch 7.3.853

Problem: Using "ra" in multiple lines on multi-byte characters leaves a few  
characters not replaced.  
Solution: Adjust the end column only in the last line. (Yasuhiro Matsumoto)  
Files: src/testdir/test69.in, src/testdir/test69.ok, src/ops.c

Patch 7.3.854

Problem: After using backspace in insert mode completion, CTRL-N and CTRL-P  
do not highlight the right entry. (Olivier Teuliere)  
Solution: Set the current item to the shown item after using backspace.

Files: src/edit.c

Patch 7.3.855

Problem: Compiler warnings.

Solution: Add type casts. (Mike Williams)

Files: src/misc1.c

Patch 7.3.856

Problem: When calling system() multi-byte clipboard contents is garbled.

Solution: Save and restore the clipboard contents. (Yukihiro Nakadaira)

Files: src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro, src/ops.c,  
src/proto/ops.pro, src/os\_unix.c, src/proto/ui.pro, src/ui.c

Patch 7.3.857

Problem: The QuitPre autocommand event does not trigger for :qa and :wq.

Solution: Trigger the event. (Tatsuro Fujii)

Files: src/ex\_docmd.c

Patch 7.3.858

Problem: "gv" selects the wrong area after some operators.

Solution: Save and restore the type of selection. (Christian Brabandt)

Files: src/testdir/test66.in, src/testdir/test66.ok, src/normal.c

Patch 7.3.859

Problem: 'ambiwidth' must be set by the user.

Solution: Detects East Asian ambiguous width (UAX #11) state of the terminal  
at the start-up time and 'ambiwidth' accordingly. (Hayaki Saito)

Files: src/main.c, src/option.c, src/term.c, src/term.h,  
src/proto/term.pro

Patch 7.3.860

Problem: When using --remote-expr try/catch does not work. (Andrey Radev)

Solution: Set emsg\_silent instead of emsg\_skip.

Files: src/main.c

Patch 7.3.861

Problem: ":setlocal number" clears global value of 'relativenumber'.

Solution: Do it properly. (Markus Heidelberg)

Files: src/testdir/test89.in, src/testdir/test89.ok, src/option.c

Patch 7.3.862

Problem: Dragging the status line can be slow.

Solution: Look ahead and drop the drag event if there is a next one.

Files: src/eval.c, src/misc1.c, src/proto/misc1.pro, src/normal.c

Patch 7.3.863 (after 7.3.859)

Problem: Problem with 'ambiwidth' detection for ANSI terminal.

Solution: Work around not recognizing a term response. (Hayaki Saito)

Files: src/term.c

Patch 7.3.864 (after 7.3.862)

Problem: Can't build without the mouse feature.

Solution: Add an #ifdef. (Ike Devolder)

Files: src/misc1.c

Patch 7.3.865 (after 7.3.862)

Problem: Mouse position may be wrong.

Solution: Let vungetc() restore the mouse position.

Files: src/getchar.c

Patch 7.3.866

Problem: Not serving the X selection during system() isn't nice.

Solution: When using fork() do not loose the selection, keep serving it.  
Add a loop similar to handling I/O. (Yukihiro Nakadaira)  
Files: src/os\_unix.c

#### Patch 7.3.867

Problem: Matchparen does not update match when using auto-indenting.  
(Marc Aldorasi)  
Solution: Add the TextChanged and TextChangedI autocommand events.  
Files: runtime/plugin/matchparen.vim, src/main.c, src/edit.c,  
src/globals.h, src/vim.h, src/fileio.c, src/proto/fileio.pro,  
runtime/doc/autocmd.txt

#### Patch 7.3.868

Problem: When at the hit-return prompt and using "k" while no text has  
scrolled off screen, then using "j", an empty line is displayed.  
Solution: Only act on "k" when text scrolled off screen. Also accept  
page-up and page-down. (cptstuding)  
Files: src/message.c

#### Patch 7.3.869

Problem: bufwinnr() matches buffers in other tabs.  
Solution: For bufwinnr() and ? only match buffers in the current tab.  
(Alexey Radkov)  
Files: src/buffer.c, src/diff.c, src/eval.c, src/ex\_docmd.c,  
src/if\_perl.xs, src/proto/buffer.pro

#### Patch 7.3.870

Problem: Compiler warnings when using MingW 4.5.3.  
Solution: Do not use MAKEINTRESOURCE. Adjust #if. (Ken Takata)  
Files: src/gui\_w32.c, src/gui\_w48.c, src/os\_mswin.c, src/os\_win32.c,  
src/os\_win32.h

#### Patch 7.3.871

Problem: search('^\$', 'c') does not use the empty match under the cursor.  
Solution: Special handling of the 'c' flag. (Christian Brabandt)  
Add tests.  
Files: src/search.c, src/testdir/test14.in, src/testdir/test14.ok

#### Patch 7.3.872

Problem: On some systems case of file names is always ignored, on others  
never.  
Solution: Add the 'fileignorecase' option to control this at runtime.  
Implies 'wildignorecase'.  
Files: src/buffer.c, src/edit.c, src/ex\_cmds2.c, src/ex\_getln.c,  
src/fileio.c, src/misc1.c, src/misc2.c, src/option.c,  
src/option.h, src/vim.h, runtime/doc/options.txt

#### Patch 7.3.873

Problem: Cannot easily use :s to make title case.  
Solution: Have "\L\u" result in title case. (James McCoy)  
Files: src/regexp.c, src/testdir/test79.in, src/testdir/test79.ok,  
src/testdir/test80.in, src/testdir/test80.ok

#### Patch 7.3.874

Problem: Comparing file names does not handle multi-byte characters  
properly.  
Solution: Implement multi-byte handling.  
Files: src/misc1.c, src/misc2.c

#### Patch 7.3.875 (after 7.3.866)

Problem: Build problem with some combination of features.  
Solution: Use FEAT\_XCLIPBOARD instead of FEAT\_CLIPBOARD.

Files: src/os\_unix.c

Patch 7.3.876

Problem: #if indents are off.  
Solution: Insert a space where appropriate. (Taro Muraoka)  
Files: src/gui.c

Patch 7.3.877 (after 7.3.871)

Problem: Forward searching with search() is broken.  
Solution: Fix it and add tests. (Sung Pae)  
Files: src/search.c, src/testdir/test14.in, src/testdir/test14.ok

Patch 7.3.878

Problem: 'fileignorecase' is missing in options window and quickref.  
Solution: Add the option.  
Files: runtime/optwin.vim, runtime/doc/quickref.txt

Patch 7.3.879

Problem: When using an ex command in operator pending mode, using Esc to abort the command still executes the operator. (David Bürgin)  
Solution: Clear the operator when the ex command fails. (Christian Brabandt)  
Files: src/normal.c

Patch 7.3.880

Problem: When writing viminfo, old history lines may replace lines written more recently by another Vim instance.  
Solution: Mark history entries that were read from viminfo and overwrite them when merging with the current viminfo.  
Files: src/ex\_getln.c

Patch 7.3.881

Problem: Python list does not work correctly.  
Solution: Fix it and add a test. (Yukihiro Nakadaira)  
Files: src/testdir/test86.in, src/testdir/test86.ok, src/if\_py\_both.h

Patch 7.3.882

Problem: CursorHold may trigger after receiving the termresponse.  
Solution: Set the did\_cursorhold flag. (Hayaki Saito)  
Files: src/term.c

Patch 7.3.883 (after 7.3.880)

Problem: Can't build with some combination of features.  
Solution: Adjust #ifdefs.  
Files: src/ex\_getln.c

Patch 7.3.884

Problem: Compiler warning for variable shadowing another. (John Little)  
Solution: Rename the variable. (Christian Brabandt)  
Files: src/term.c

Patch 7.3.885

Problem: Double free for list and dict in Lua. (Shougo Matsu)  
Solution: Do not unref list and dict. (Yasuhiro Matsumoto)  
Files: src/if\_lua.c

Patch 7.3.886

Problem: Can't build with multi-byte on Solaris 10.  
Solution: Add #ifdef X\_HAVE\_UTF8\_STRING. (Laurent Blume)  
Files: src/ui.c

Patch 7.3.887

Problem: No tests for Visual mode operators, what 7.3.879 fixes.



Solution: Add a new test file. (David Brigin)  
Files: src/testdir/test94.in, src/testdir/test94.ok,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.3.888

Problem: Filename completion with 'fileignorecase' does not work for  
multi-byte characters.  
Solution: Make 'fileignorecase' work properly. (Hirohito Higashi)  
Files: src/misc2.c

Patch 7.3.889

Problem: Can't build with Ruby 2.0 on a 64 bit system.  
Solution: Define rb\_fix2int and rb\_num2int. (Kohei Suzuki)  
Files: src/if\_ruby.c

Patch 7.3.890

Problem: Test 79 fails on Windows. (Michael Soyka)  
Solution: Add comment below line causing an error.  
Files: src/testdir/test79.in

Patch 7.3.891

Problem: Merging viminfo history doesn't work well.  
Solution: Don't stop when one type of history is empty. Don't merge history  
when writing viminfo.  
Files: src/ex\_getln.c

Patch 7.3.892 (after 7.3.891)

Problem: Still merging problems for viminfo history.  
Solution: Do not merge lines when writing, don't write old viminfo lines.  
Files: src/ex\_getln.c, src/ex\_cmds.c, src/proto/ex\_getln.pro

Patch 7.3.893

Problem: Crash when using b:, w: or t: after closing the buffer, window or  
tabpage.  
Solution: Allocate the dictionary instead of having it part of the  
buffer/window/tabpage struct. (Yukihiro Nakadaira)  
Files: src/buffer.c, src/eval.c, src/fileio.c, src/structs.h,  
src/window.c, src/proto/eval.pro

Patch 7.3.894

Problem: Using wrong RUBY\_VER causing Ruby build to break.  
Solution: Correct the RUBY\_VER value. (Yongwei Wu)  
Files: src/bigvim.bat

Patch 7.3.895

Problem: Valgrind error in test 91. (Issue 128)  
Solution: Pass scope name to find\_var\_in\_ht().  
Files: src/eval.c

Patch 7.3.896

Problem: Memory leaks in Lua interface.  
Solution: Fix the leaks, add tests. (Yukihiro Nakadaira)  
Files: src/testdir/test85.in, src/testdir/test85.ok, src/if\_lua.c

Patch 7.3.897

Problem: Configure doesn't always find the shared library.  
Solution: Change the configure script. (Ken Takata)  
Files: src/configure.in, src/auto/configure

Patch 7.3.898

Problem: Memory leak reported by valgrind in test 91.  
Solution: Only use default argument when needed.  
Files: src/eval.c, src/testdir/test91.in, src/testdir/test91.ok

Patch 7.3.899

Problem: #if indents are off.  
Solution: Fix the indents.  
Files: src/os\_unix.c

Patch 7.3.900

Problem: Not obvious that some mouse features are mutual-exclusive.  
Solution: Add a comment.  
Files: src/feature.h

Patch 7.3.901

Problem: Outdated comment, ugly condition.  
Solution: Update a few comments, break line.  
Files: src/getchar.c, src/misc1.c, src/undo.c

Patch 7.3.902

Problem: When deleting last buffer in other tab the tabline is not updated.  
Solution: Set the redraw\_tabline flag. (Yukihiro Nakadaira)  
Files: src/window.c

Patch 7.3.903 (after 7.3.892)

Problem: Crash on exit writing viminfo. (Ron Aaron)  
Solution: Check for the history to be empty.  
Files: src/ex\_getln.c

Patch 7.3.904 (after 7.3.893)

Problem: Using memory freed by the garbage collector.  
Solution: Mark items in aucmd\_win as used.  
Files: src/eval.c

Patch 7.3.905 (after 7.3.903)

Problem: Crash when writing viminfo. (Ron Aaron)  
Solution: Prevent freed history info to be used.  
Files: src/ex\_getln.c

Patch 7.3.906

Problem: The "sleep .2" for running tests does not work on Solaris.  
Solution: Fall back to using "sleep 1". (Laurent Blume)  
Files: src/testdir/Makefile

Patch 7.3.907

Problem: Python uses IndexError when a dict key is not found.  
Solution: Use KeyError instead. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.ok, src/testdir/test87.ok

Patch 7.3.908

Problem: Possible crash when using a list in Python.  
Solution: Return early if the list is NULL. (ZyX)  
Files: src/if\_py\_both.h

Patch 7.3.909

Problem: Duplicate Python code.  
Solution: Move more items to if\_py\_both.h. (ZyX) Also avoid compiler warnings for missing initializers.  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.910

Problem: Python code in #ifdef branches with only minor differences.  
Solution: Merge the #ifdef branches. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python.c

#### Patch 7.3.911

Problem: Python: Access to Vim variables is not so easy.  
Solution: Define vim.vars and vim.vvars. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/eval.c, src/globals.h,  
src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.912

Problem: Typing a ":" command at the hit-enter dialog does not work if the  
"file changed" dialog happens next.  
Solution: Check for changed files before giving the hit-enter dialog.  
Files: src/message.c

#### Patch 7.3.913 (after 7.3.905)

Problem: Still a crash when writing viminfo.  
Solution: Add checks for NULL pointers. (Ron Aaron)  
Files: src/ex\_getln.c

#### Patch 7.3.914

Problem: ~/.viminfo is messed up when running tests.  
Solution: Set the viminfo filename.  
Files: src/testdir/test89.in, src/testdir/test94.in

#### Patch 7.3.915

Problem: When reading a file with encoding conversion fails at the end the  
next encoding in 'fencs' is not used.  
Solution: Retry with another encoding when possible. (Taro Muraoka)  
Files: src/fileio.c

#### Patch 7.3.916

Problem: Using freed memory when pasting with the mouse (Issue 130).  
Solution: Get the byte value early. (hint by Dominique Pelle)  
Files: src/buffer.c

#### Patch 7.3.917

Problem: When a path ends in a backslash appending a comma has the wrong  
effect.  
Solution: Replace a trailing backslash with a slash. (Nazri Ramliy)  
Files: src/misc1.c, src/testdir/test73.in, src/testdir/test73.ok

#### Patch 7.3.918

Problem: Repeating an Ex command after using a Visual motion does not work.  
Solution: Check for an Ex command being used. (David Bürgin)  
Files: src/normal.c

#### Patch 7.3.919 (after 7.3.788)

Problem: An empty nl.po file does not work with an old msgfmt.  
Solution: Put a single # in the file. (Laurent Blume)  
Files: src/po/Makefile

#### Patch 7.3.920

Problem: Compiler warning for size\_t to int.  
Solution: Add a type cast. (Mike Williams)  
Files: src/misc1.c

#### Patch 7.3.921 (after 7.3.697)

Problem: Trying to create a fontset handle when 'guifontset' is not set.

Solution: Add curly braces around the code block. (Max Kirillov)  
Files: src/syntax.c

#### Patch 7.3.922

Problem: No test for what 7.3.918 fixes.  
Solution: Add a test. (David Bürgin)  
Files: src/testdir/test94.in, src/testdir/test94.ok

#### Patch 7.3.923

Problem: Check for X11 header files fails on Solaris.  
Solution: Only use -Werror for gcc. (Laurent Blume)  
Files: src/configure.in, src/auto/configure

#### Patch 7.3.924

Problem: Python interface can't easily access options.  
Solution: Add vim.options, vim.window.options and vim.buffer.options. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/eval.c, src/if\_py\_both.h,  
src/if\_python.c, src/if\_python3.c, src/option.c,  
src/proto/eval.pro, src/proto/option.pro, src/testdir/test86.in,  
src/testdir/test86.ok, src/testdir/test87.in,  
src/testdir/test87.ok, src/vim.h

#### Patch 7.3.925

Problem: Typos in source files.  
Solution: Fix the typos. (Ken Takata)  
Files: runtime/plugin/matchparen.vim, runtime/tools/vim\_vs\_net.cmd,  
src/GvimExt/gvimext.cpp, src/INSTALLvms.txt, src/Make\_cyg.mak,  
src/Make\_mvc.mak, src/Make\_sas.mak, src/Make\_vms.mms,  
src/Make\_wl6.mak, src/Makefile, src/VisVim/OleAut.cpp,  
src/VisVim/README\_VisVim.txt, src/auto/configure, src/buffer.c,  
src/configure.in, src/diff.c, src/dosinst.c, src/edit.c,  
src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_eval.c,  
src/farsi.c, src/feature.h, src/fileio.c, src/glbl\_ime.cpp,  
src/gui.c, src/gui\_athena.c, src/gui\_beval.c, src/gui\_gtk\_x11.c,  
src/gui\_mac.c, src/gui\_motif.c, src/gui\_photon.c, src/gui\_wl6.c,  
src/gui\_w32.c, src/gui\_w48.c, src/gui\_xmew.c, src/gui\_xmew.h,  
src/hardcopy.c, src/if\_cscope.c, src/if\_mzsch.c, src/if\_ole.cpp,  
src/if\_perl.xs, src/if\_py\_both.h, src/if\_python.c,  
src/if\_python3.c, src/if\_ruby.c, src/main.aap, src/mbyte.c,  
src/memfile.c, src/memline.c, src/misc1.c, src/misc2.c,  
src/nbdebug.c, src/normal.c, src/ops.c, src/os\_amiga.c,  
src/os\_mac.h, src/os\_msdos.c, src/os\_mswin.c, src/os\_win16.h,  
src/os\_win32.c, src/os\_win32.h, src/quickfix.c, src/screen.c,  
src/search.c, src/spell.c, src/structs.h, src/syntax.c,  
src/window.c, vimtutor.com

#### Patch 7.3.926

Problem: Autocommands are triggered by setwinvar() et al. Missing BufEnter on :tabclose. Duplicate WinEnter on :tabclose. Wrong order of events for :tablose and :tabnew.  
Solution: Fix these autocommand events. (ZyX)  
Files: runtime/doc/eval.txt, src/buffer.c, src/eval.c, src/ex\_cmds2.c,  
src/fileio.c, src/proto/window.pro, src/testdir/test62.in,  
src/testdir/test62.ok, src/window.c

#### Patch 7.3.927

Problem: Missing combining characters when putting text in a register.  
Solution: Include combining characters. (David Bürgin)  
Files: src/getchar.c, src/testdir/test44.in, src/testdir/test44.ok

#### Patch 7.3.928 (after 7.3.924)

Problem: Can't build with strict C compiler.  
Solution: Move declaration to start of block. (Taro Muraoka)  
Files: src/if\_py\_both.h

Patch 7.3.929 (after 7.3.924)

Problem: Compiler warning for unused variable. Not freeing unused string.  
Solution: Remove the variable. Clear the options.  
Files: src/option.c

Patch 7.3.930

Problem: MSVC 2012 update is not recognized.  
Solution: Update the version in the makefile. (Raymond Ko)  
Files: src/Make\_mvc.mak

Patch 7.3.931

Problem: No completion for :xmap and :smap. (Yukihiro Nakadaira)  
Solution: Add the case statements. (Christian Brabandt)  
Files: src/ex\_docmd.c

Patch 7.3.932

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)  
Solution: Initialize the variable.  
Files: src/option.c

Patch 7.3.933

Problem: Ruby on Mac crashes due to GC failure.  
Solution: Init the stack from main(). (Hiroshi Shirosaki)  
Files: src/main.c, src/if\_ruby.c, src/proto/if\_ruby.pro

Patch 7.3.934

Problem: E381 and E380 make the user think nothing happened.  
Solution: Display the message indicating what error list is now active.  
(Christian Brabandt)  
Files: src/quickfix.c

Patch 7.3.935 (after 7.3.933)

Problem: Ruby: Init stack works differently on 64 bit systems.  
Solution: Handle 64 bit systems and also static library. (Yukihiro Nakadaira)  
Files: src/if\_ruby.c

Patch 7.3.936 (after 7.3.935)

Problem: Ruby 1.8: Missing piece for static linking on 64 bit systems.  
Solution: Define ruby\_init\_stack() (Hiroshi Shirosaki)  
Also fix preprocessor indents.  
Files: src/if\_ruby.c

Patch 7.3.937

Problem: More can be shared between Python 2 and 3.  
Solution: Move code to if\_py\_both.h. (ZyX)  
Files: src/if\_python.c, src/if\_python3.c, src/if\_py\_both.h

Patch 7.3.938

Problem: Python: not easy to get to window number.  
Solution: Add vim.window.number. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/proto/window.pro, src/window.c

Patch 7.3.939

Problem: Using Py\_BuildValue is inefficient sometimes.  
Solution: Use PyLong\_FromLong(). (ZyX)  
Files: src/if\_py\_both.h

## Patch 7.3.940

Problem: Python: Can't get position of window.  
Solution: Add window.row and window.col. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h

## Patch 7.3.941

Problem: Stuff in if\_py\_both.h is ordered badly.  
Solution: Reorder by type. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python.c

## Patch 7.3.942

Problem: Python: SEGV in Buffer functions.  
Solution: Call CheckBuffer() at the right time. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.3.943

Problem: Python: Negative indices were failing.  
Solution: Fix negative indices. Add tests. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/testdir/test86.in,  
src/testdir/test86.ok, src/testdir/test87.in,  
src/testdir/test87.ok

## Patch 7.3.944

Problem: External program receives the termresponse.  
Solution: Insert a delay and discard input. (Hayaki Saito)  
Files: src/term.c

## Patch 7.3.945

Problem: Python: List of buffers is not very useful.  
Solution: Make vim.buffers a map. No iterator yet. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python3.c,  
src/if\_python.c, src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.946

Problem: Sometimes get stuck in waiting for cursor position report,  
resulting in keys starting with <Esc>[ not working.  
Solution: Only wait for more characters after <Esc>[ if followed by '?', '>'  
or a digit.  
Files: src/term.c

## Patch 7.3.947

Problem: Python: No iterator for vim.list and vim.bufferlist.  
Solution: Add the iterators. Also fix name of FunctionType. Add tests for  
vim.buffers. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/eval.c, src/if\_py\_both.h,  
src/if\_python3.c, src/if\_python.c, src/proto/eval.pro,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.948

Problem: Cannot build with Python 2.2  
Solution: Make Python interface work with Python 2.2  
Make 2.2 the first supported version. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.ok, src/configure.in, src/auto/configure

## Patch 7.3.949

Problem: Python: no easy access to tabpages.  
Solution: Add vim.tabpages and vim.current.tabpage. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python3.c,

```
src/if_python.c, src/proto/if_python3.pro,
src/proto/if_python.pro, src/proto/window.pro, src/structs.h,
src/window.c
```

## Patch 7.3.950

Problem: Python: Stack trace printer can't handle messages.  
Solution: Make KeyErrors use PyErr\_SetObject. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

## Patch 7.3.951

Problem: Python exceptions have problems.  
Solution: Change some IndexErrors to TypeErrors. Make "line number out of range" an IndexError. Make "unable to get option value" a RuntimeError. Make all PyErr\_SetString messages start with lowercase letter and use \_(). (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c, src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.952

Problem: Python: It's not easy to change window/buffer/tabpage.  
Solution: Add ability to assign to vim.current.{tabpage,buffer>window}. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h

## Patch 7.3.953

Problem: Python: string exceptions are deprecated.  
Solution: Make vim.error an Exception subclass. (ZyX)  
Files: src/if\_python.c, src/if\_python3.c

## Patch 7.3.954

Problem: No check if PyObject\_IsTrue fails.  
Solution: Add a check for -1 value. (ZyX)  
Files: src/if\_py\_both.h

## Patch 7.3.955

Problem: Python: Not enough tests.  
Solution: Add tests for vim.{current>window\*,tabpage\*}. (ZyX)  
Files: src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.956

Problem: Python vim.bindeval() causes SIGABRT.  
Solution: Make pygilstate a local variable. (Yukihiro Nakadaira)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.3.957

Problem: Python does not have a "do" command like Perl or Lua.  
Solution: Add the ":py3do" command. (Lilydjwg)  
Files: runtime/doc/if\_pyth.txt, src/ex\_cmds.h, src/ex\_docmd.c, src/if\_python3.c, src/proto/if\_python3.pro

## Patch 7.3.958

Problem: Python: Iteration destructor not set.  
Solution: Put IterDestructor to use. (ZyX)  
Files: src/if\_py\_both.c

## Patch 7.3.959 (after 7.3.957)

Problem: Missing error number.  
Solution: Assign an error number.  
Files: src/if\_python3.c

## Patch 7.3.960

Problem: Compiler warning for unused variable.  
Solution: Put declaration in #ifdef.  
Files: src/window.c

#### Patch 7.3.961

Problem: Tests 86 and 87 fail when using another language than English.  
Solution: Set the language to C in the test. (Dominique Pelle)  
Files: src/testdir/test86.in, src/testdir/test87.in,  
src/testdir/test87.ok

#### Patch 7.3.962

Problem: Python tests are not portable.  
Solution: Use shiftwidth instead of iminsert. (ZyX)  
Files: src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.963

Problem: Setting curbuf without curwin causes trouble.  
Solution: Add switch\_buffer() and restore\_buffer(). Block autocommands to avoid trouble.  
Files: src/eval.c, src/proto/eval.pro, src/proto/window.pro,  
src/if\_py\_both.h, src/window.c, src/testdir/test86.ok

#### Patch 7.3.964

Problem: Python: not so easy to access tab pages.  
Solution: Add window.tabpage, make window.number work with non-current tab pages. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python3.c,  
src/if\_python.c, src/testdir/test86.ok, src/testdir/test87.ok

#### Patch 7.3.965

Problem: Python garbage collection not working properly.  
Solution: Add support for garbage collection. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.966

Problem: There is ":py3do" but no ":pydo".  
Solution: Add the ":pydo" command. (Lilydjwg)  
Files: runtime/doc/if\_pyth.txt, src/ex\_cmds.h, src/ex\_docmd.c,  
src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c,  
src/proto/if\_python.pro

#### Patch 7.3.967 (after 7.3.965)

Problem: Build fails on Mac OSX. (Greg Novack)  
Solution: Undefine clear().  
Files: src/if\_py\_both.h

#### Patch 7.3.968

Problem: Multi-byte support is only available when compiled with "big" features.  
Solution: Include multi-byte by default, with "normal" features.  
Files: src/feature.h

#### Patch 7.3.969

Problem: Can't build with Python 3 and without Python 2.  
Solution: Adjust #ifdef. (Xavier de Gaye)  
Files: src/window.c

#### Patch 7.3.970

Problem: Syntax highlighting can be slow.  
Solution: Include the NFA regexp engine. Add the 'regengine' option to select which one is used. (various authors, including Ken Takata,



Files: Andrei Aiordachioaie, Russ Cox, Xiaozhou Liua, Ian Young)  
src/Make\_cyg.mak, src/Make\_ming.mak, src/Make\_mvc.mak,  
src/Makefile, src/regexp.c, src/regexp.h, src/regexp\_nfa.c,  
src/structs.h, src/testdir/Makefile, src/testdir/test64.in,  
src/testdir/test64.ok, Filelist, runtime/doc/pattern.txt,  
runtime/doc/option.txt, src/option.c, src/option.h,  
src/testdir/test95.in, src/testdir/test95.ok,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.3.971

Problem: No support for VS2012 static code analysis.  
Solution: Add the ANALYZE option. (Mike Williams)  
Files: src/Make\_mvc.mak

#### Patch 7.3.972

Problem: Cursor not restored after InsertEnter autocommand if it moved to another line.  
Solution: Also restore if the saved line number is still valid. Allow setting v:char to skip restoring.  
Files: src/edit.c, runtime/doc/autocmd.txt

#### Patch 7.3.973

Problem: Compiler warnings. Crash on startup. (Tony Mechelynck)  
Solution: Change MSG2 to MSGN. Make array one character longer.  
Files: src/regexp\_nfa.c

#### Patch 7.3.974

Problem: Can't build with ruby 1.8.5.  
Solution: Only use ruby\_init\_stack() when RUBY\_INIT\_STACK is defined. (Yukihiro Nakadaira)  
Files: src/if\_ruby.c

#### Patch 7.3.975

Problem: Crash in regexp parsing.  
Solution: Correctly compute the end of allocated memory.  
Files: src/regexp\_nfa.c

#### Patch 7.3.976

Problem: Can't build on HP-UX.  
Solution: Remove modern initialization. (John Marriott)  
Files: src/regexp\_nfa.c

#### Patch 7.3.977

Problem: Compiler warnings on 64 bit Windows.  
Solution: Add type casts. (Mike Williams) Also fix some white space and uncomment what was commented-out for testing.  
Files: src/regexp\_nfa.c

#### Patch 7.3.978

Problem: Regexp debug logs don't have a good name.  
Solution: Use clear names and make it possible to write logs for the old and new engines separately. (Taro Muraoka)  
Files: src/regexp.c, src/regexp\_nfa.c

#### Patch 7.3.979

Problem: Complex NFA regexp doesn't work.  
Solution: Set actual state stack end instead of using an arbitrary number. (Yasuhiro Matsumoto)  
Files: src/regexp\_nfa.c

## Patch 7.3.980

Problem: Regexp logs may contain garbage. Character classes don't work correctly for multi-byte characters.  
Solution: Check for end of post list. Only use "is" functions for characters up to 255. (Ken Takata)  
Files: src/regexp\_nfa.c

## Patch 7.3.981

Problem: In the old regexp engine \i, \I, \f and \F don't work on multi-byte characters.  
Solution: Dereference pointer properly.  
Files: src/regexp.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.982

Problem: In the new regexp engine \p does not work on multi-byte characters.  
Solution: Don't point to an integer but the characters.  
Files: src/regexp\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

## Patch 7.3.983

Problem: Unnecessary temp variable.  
Solution: Remove the variable.  
Files: src/regexp\_nfa.c

## Patch 7.3.984

Problem: A Visual mapping that uses CTRL-G works differently when started from Insert mode. (Ein Brown)  
Solution: Reset old\_mapped\_len when handling typed text in Select mode.  
Files: src/normal.c

## Patch 7.3.985

Problem: GTK vim not started as gvim doesn't set WM\_CLASS property to a useful value.  
Solution: Call g\_set\_prpname() on startup. (James McCoy)  
Files: src/gui\_gtk\_x11.c

## Patch 7.3.986

Problem: Test 95 doesn't pass when 'encoding' isn't utf-8. (Yasuhiro Matsumoto)  
Solution: Force 'encoding' to be utf-8.  
Files: src/testdir/test95.in

## Patch 7.3.987

Problem: No easy to run an individual test. Tests 64 fails when 'encoding' is not utf-8.  
Solution: Add individual test targets to the Makefile. Move some lines from test 64 to 95.  
Files: src/Makefile, src/testdir/test64.in, src/testdir/test64.ok, src/testdir/test95.in, src/testdir/test95.ok

## Patch 7.3.988

Problem: New regexp engine is slow.  
Solution: Break out of the loop when the state list is empty.  
Files: src/regexp\_nfa.c

## Patch 7.3.989

Problem: New regexp engine compares negative numbers to character.  
Solution: Add missing case statements.  
Files: src/regexp\_nfa.c

## Patch 7.3.990

Problem: Memory leak in new regexp engine.

Solution: Jump to end of function to free memory. (Dominique Pelle)  
Files: src/regexp\_nfa.c

Patch 7.3.991

Problem: More can be shared by Python 2 and 3.  
Solution: Move more stuff to if\_py\_both. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test87.ok

Patch 7.3.992

Problem: Python: Too many type casts.  
Solution: Change argument types. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.993

Problem: Python: Later patch does things slightly differently.  
Solution: Adjusted argument type changes. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.994

Problem: Python: using magic constants.  
Solution: Use descriptive values for ml\_flags. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c

Patch 7.3.995

Problem: Python: Module initialization is duplicated.  
Solution: Move to shared file. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.996

Problem: Python: Can't check types of what is returned by bindeval().  
Solution: Add vim.List, vim.Dictionary and vim.Function types. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/testdir/test86.in,  
src/testdir/test86.ok, src/testdir/test87.in,  
src/testdir/test87.ok

Patch 7.3.997

Problem: Vim and Python exceptions are different.  
Solution: Make Vim exceptions be Python exceptions. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.998

Problem: Python: garbage collection issues.  
Solution: Fix the GC issues: Use proper DESTRUCTOR\_FINISH: avoids negative  
refcounts, use PyObject\_GC\_\* for objects with tp\_traverse and  
tp\_clear, add RangeTraverse and RangeClear, use Py\_XDECREF in some  
places. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.999

Problem: New regexp engine sets curbuf temporarily.  
Solution: Use reg\_buf instead, like the old engine.  
Files: src/regexp\_nfa.c

Patch 7.3.1000 (whoa!)

Problem: Typo in char value causes out of bounds access.  
Solution: Fix character value. (Klemens Baum)  
Files: src/regexp.c

Patch 7.3.1001

Problem: Duplicate condition in if.

Solution: Remove one condition.  
Files: src/regex\_nfa.c

#### Patch 7.3.1002

Problem: Valgrind errors for Python interface.  
Solution: Fix memory leaks when running tests. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1003

Problem: Python interface does not compile with Python 2.2  
Solution: Fix thread issues and True/False. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.1004

Problem: No error when option could not be set.  
Solution: Report an error. (ZyX)  
Files: src/if\_py\_both.h, src/option.c, src/proto/option.pro,  
src/testdir/test86.ok, src/testdir/test87.ok

#### Patch 7.3.1005

Problem: Get stuck on regexp "\n\*" and on "%s/^\n\+/\r".  
Solution: Fix handling of matching a line break. (idea by Hirohito Higashi)  
Files: src/regex\_nfa.c

#### Patch 7.3.1006

Problem: NFA engine not used for "[0-9]".  
Solution: Enable this, fixed in patch 1005.  
Files: src/regex\_nfa.c

#### Patch 7.3.1007

Problem: Can't build on Minix 3.2.1.  
Solution: Add a condition to an #ifdef. (Gautam Tirumala)  
Files: src/memfile.c

#### Patch 7.3.1008

Problem: Test 95 fails on MS-Windows.  
Solution: Set 'nomore'. Change \i to \f. Change multi-byte character to something that is not matching \i. (Ken Takata)  
Files: src/testdir/test95.in, src/testdir/test95.ok

#### Patch 7.3.1009

Problem: Compiler warning for ambiguous else.  
Solution: Add curly braces.  
Files: src/if\_py\_both.h

#### Patch 7.3.1010

Problem: New regexp: adding \Z makes every character match.  
Solution: Only apply ireg\_icombo for composing characters.  
Also add missing change from patch 1008. (Ken Takata)  
Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

#### Patch 7.3.1011

Problem: New regexp engine is inefficient with multi-byte characters.  
Solution: Handle a character at a time instead of a byte at a time. Also make \Z partly work.  
Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

#### Patch 7.3.1012

Problem: \Z does not work properly with the new regexp engine.  
Solution: Make \Z work. Add tests.

Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

Patch 7.3.1013

Problem: New regexp logging is a bit messy.

Solution: Consistently use #defines, add explanatory comment. (Taro Muraoka)

Files: src/regex\_nfa.c

Patch 7.3.1014

Problem: New regexp state dump is hard to read.

Solution: Make the state dump more pretty. (Taro Muraoka)

Files: src/regex\_nfa.c

Patch 7.3.1015

Problem: New regexp engine: Matching composing characters is wrong.

Solution: Fix matching composing characters.

Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

Patch 7.3.1016

Problem: Unused field in nfa\_state.

Solution: Remove lastthread.

Files: src/regex.h, src/regex\_nfa.c

Patch 7.3.1017

Problem: Zero width match changes length of match.

Solution: For a zero width match put new states in the current position in the state list.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok, src/regex.h

Patch 7.3.1018

Problem: New regexp engine wastes memory.

Solution: Allocate prog with actual number of states, not estimated maximum number of states.

Files: src/regex\_nfa.c

Patch 7.3.1019

Problem: These do not work with the new regexp engine: \%o123, \%x123, \%d123, \%u123 and \%U123.

Solution: Implement these items.

Files: src/regex\_nfa.c

Patch 7.3.1020

Problem: Not all patterns are tested with auto / old / new engine.

Solution: Test patterns with three values of 'regengine'.

Files: src/testdir/test64.in, src/testdir/test64.ok, src/testdir/test95.in, src/testdir/test95.ok

Patch 7.3.1021

Problem: New regexp engine does not ignore order of composing chars.

Solution: Ignore composing chars order.

Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

Patch 7.3.1022

Problem: Compiler warning for shadowed variable. (John Little)

Solution: Move declaration, rename variables.

Files: src/regex\_nfa.c

Patch 7.3.1023

Problem: Searching for composing char only and using \Z has different results.

Solution: Make it match the composing char, matching everything is not useful.

Files: src/regex\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok

Patch 7.3.1024

Problem: New regexp: End of matching pattern not set correctly. (Cesar Romani)

Solution: Quit the loop after finding the match. Store nfa\_has\_zend in the program.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok, src/regex.h

Patch 7.3.1025

Problem: New regexp: not matching newline in string. (Marc Weber)

Solution: Check for "\n" character.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1026

Problem: New regexp: pattern that includes a new-line matches too early. (John McGowan)

Solution: Do not start searching in the second line.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1027

Problem: New regexp performance: Calling no\_Magic() very often.

Solution: Remove magicness inline.

Files: src/regex\_nfa.c

Patch 7.3.1028

Problem: New regexp performance: Copying a lot of position state.

Solution: Only copy the sub-expressions that are being used.

Files: src/regex\_nfa.c, src/regex.h

Patch 7.3.1029

Problem: New regexp performance: Unused position state being copied.

Solution: Keep track of which positions are actually valid.

Files: src/regex\_nfa.c

Patch 7.3.1030 (after 7.3.1028)

Problem: Can't build for debugging.

Solution: Fix struct member names.

Files: src/regex\_nfa.c

Patch 7.3.1031

Problem: Compiler warnings for shadowed variable. (John Little)

Solution: Move the variable declarations to the scope where they are used.

Files: src/regex\_nfa.c

Patch 7.3.1032

Problem: "\ze" is not supported by the new regexp engine.

Solution: Make "\ze" work.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1033

Problem: "\l" .. "\9" are not supported in the new regexp engine.

Solution: Implement them. Add a few more tests.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok, src/regex.h

Patch 7.3.1034

Problem: New regexp code using strange multi-byte code.

Solution: Use the normal code to advance and backup pointers.

Files: src/regex\_nfa.c

## Patch 7.3.1035

Problem: Compiler warning on 64 bit windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/if\_py\_both.h

## Patch 7.3.1036

Problem: Can't build on HP-UX.  
Solution: Give the union a name. (John Marriott)  
Files: src/regexp\_nfa.c

## Patch 7.3.1037

Problem: Look-behind matching is very slow on long lines.  
Solution: Add a byte limit to how far back an attempt is made.  
Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

## Patch 7.3.1038

Problem: Crash when using Cscope.  
Solution: Avoid negative argument to vim\_strncpy(). (Narendran  
Gopalakrishnan)  
Files: src/if\_cscope.c

## Patch 7.3.1039

Problem: New regexp engine does not support \%23c, \%<23c and the like.  
Solution: Implement them. (partly by Yasuhiro Matsumoto)  
Files: src/regexp.h, src/regexp\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

## Patch 7.3.1040

Problem: Python: Problems with debugging dynamic build.  
Solution: Python patch 1. (ZyX)  
Files: src/if\_python.c, src/if\_python3.c

## Patch 7.3.1041

Problem: Python: Invalid read valgrind errors.  
Solution: Python patch 2: defer DICTKEY\_UNREF until key is no longer needed.  
(ZyX)  
Files: src/if\_py\_both.h

## Patch 7.3.1042

Problem: Python: can't assign to vim.Buffer.name.  
Solution: Python patch 3. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/ex\_cmds.c, src/if\_py\_both.h,  
src/if\_python3.c, src/if\_python.c, src/proto/ex\_cmds.pro,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.1043

Problem: Python: Dynamic compilation with 2.3 fails.  
Solution: Python patch 4. (ZyX)  
Files: src/if\_python.c

## Patch 7.3.1044

Problem: Python: No {Buffer,TabPage,Window}.valid attributes.  
Solution: Python patch 5: add .valid (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.1045

Problem: Python: No error handling for VimToPython function.  
Solution: Python patch 6. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1046

Problem: Python: Using Py\_BuildValue for building strings.

Solution: Python patch 7 and 7.5: Replace Py\_BuildValue with PyString\_FromString. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1047

Problem: Python: dir() does not work properly.

Solution: Python patch 8. Add \_\_dir\_\_ method to all objects with custom tp\_getattr supplemented by \_\_members\_\_ attribute for at least python-2\* versions. \_\_members\_\_ is not mentioned in python-3\* dir() output even if it is accessible. (ZyX)

Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1048

Problem: Python: no consistent naming.

Solution: Python patch 9: Rename d to dict and lookupDict to lookup\_dict. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1049

Problem: Python: no consistent naming

Solution: Python patch 10: Rename DICTKEY\_GET\_NOTEMPTY to DICTKEY\_GET. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1050

Problem: Python: Typo in pyiter\_to\_tv.

Solution: Python patch 11. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1051

Problem: Python: possible memory leaks.

Solution: Python patch 12: fix the leaks (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1052

Problem: Python: possible SEGV and negative refcount.

Solution: Python patch 13: Fix IterIter function. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1053

Problem: Python: no flag for types with tp\_traverse+tp\_clear.

Solution: Python patch 14: Add Py\_TPFLAGS\_HAVE\_GC. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1054 (after 7.3.1042)

Problem: Can't build without the +autocmd feature. (Elimar Riesebieter)

Solution: Fix use of buf and curbuf.

Files: src/ex\_cmds.c, src/testdir/test86.ok, src/testdir/test87.ok

Patch 7.3.1055

Problem: Negated collection does not match newline.

Solution: Handle newline differently. (Hiroshi Shirosaki)

Files: src/regexp\_nfa.c, src/testdir/test64.ok, src/testdir/test64.in

Patch 7.3.1056

Problem: Python: possible memory leaks.

Solution: Python patch 15. (ZyX) Fix will follow later.



Files: src/eval.c, src/if\_py\_both.h, src/proto/eval.pro

Patch 7.3.1057

Problem: Python: not enough compatibility.

Solution: Python patch 16: Make OutputWritelines support any sequence object (ZyX) Note: tests fail

Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1058

Problem: Call of funcref does not succeed in other script.

Solution: Python patch 17: add get\_expanded\_name(). (ZyX)

Files: src/eval.c, src/proto/eval.pro

Patch 7.3.1059

Problem: Python: Using fixed size buffers.

Solution: Python patch 18: Use python's own formatter. (ZyX)

Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.1060

Problem: Python: can't repr() a function.

Solution: Python patch 19: add FunctionRepr(). (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1061

Problem: Python: Dictionary is not standard.

Solution: Python patch 20: Add standard methods and fields. (ZyX)

Files: runtime/doc/if\_pyth.txt, src/eval.c, src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c, src/proto/eval.pro, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1062

Problem: Python: List is not standard.

Solution: Python patch 21: Add standard methods and fields. (ZyX)

Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1063

Problem: Python: Function is not standard.

Solution: Python patch 22: make Function subclassable. (ZyX)

Files: src/eval.c, src/if\_py\_both.h, src/proto/eval.pro, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1064

Problem: Python: insufficient error checking.

Solution: Python patch 23. (ZyX)

Files: src/if\_py\_both.h

Patch 7.3.1065

Problem: Python: key mapping is not standard.

Solution: Python patch 24: use PyMapping\_Keys. (ZyX)

Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

Patch 7.3.1066

Problem: Python: Insufficient exception and error testing.

Solution: Python patch 25. (ZyX)

Files: src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.3.1067

Problem: Python: documentation lags behind.  
Solution: Python patch 26. (ZyX)  
Files: runtime/doc/if\_pyth.txt

#### Patch 7.3.1068

Problem: Python: Script is auto-loaded on function creation.  
Solution: Python patch 27. (ZyX)  
Files: src/eval.c, src/if\_py\_both.h, src/proto/eval.pro,  
src/testdir/test86.ok, src/testdir/test87.ok, src/vim.h

#### Patch 7.3.1069

Problem: Python: memory leaks.  
Solution: Python patch 28: Purge out DICTKEY\_CHECK\_EMPTY macros. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1070

Problem: Vim crashes in Python tests. Compiler warning for unused function.  
Solution: Disable the tests for now. Move the function.  
Files: src/if\_py\_both.h, src/if\_python.c, src/testdir/test86.in,  
src/testdir/test87.in

#### Patch 7.3.1071

Problem: New regexp engine: backreferences don't work correctly.  
Solution: Add every possible start/end position on the state stack.  
Files: src/regexp\_nfa.c, src/regexp.h, src/testdir/test64.in,  
src/testdir/test64.ok

#### Patch 7.3.1072

Problem: Compiler warning for uninitialized variable.  
Solution: Initialize it.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1073

Problem: New regexp engine may run out of states.  
Solution: Allocate states dynamically. Also make the test report errors.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok,  
src/testdir/test95.in

#### Patch 7.3.1074

Problem: Compiler warning for printf format. (Manuel Ortega)  
Solution: Add type casts.  
Files: src/if\_py\_both.h

#### Patch 7.3.1075

Problem: Compiler warning for storing a long\_u in an int.  
Solution: Declare the number as an int. (Mike Williams)  
Files: src/regexp\_nfa.c

#### Patch 7.3.1076

Problem: New regexp engine: \@= and \@& don't work.  
Solution: Make these items work. Add column info to logging.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

#### Patch 7.3.1077

Problem: Python: Allocating dict the wrong way, causing a crash.  
Solution: Use py\_dict\_alloc(). Fix some exception problems. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1078

Problem: New regexp engine: \@! doesn't work.  
Solution: Implement the negated version of \@=.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1079

Problem: Test 87 fails.

Solution: Fix the test for Python 3.3. (ZyX) Make it pass on 32 bit systems.

Files: src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.1080

Problem: Test 86 fails.

Solution: Comment out the parts that don't work. Make it pass on 32 bit systems.

Files: src/testdir/test86.in, src/testdir/test86.ok

## Patch 7.3.1081

Problem: Compiler warnings on 64-bit Windows.

Solution: Change variable types. (Mike Williams)

Files: src/if\_py\_both.h, src/regex\_nfa.c

## Patch 7.3.1082

Problem: New regex engine: Problem with \@= matching.

Solution: Save and restore nfa\_match.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1083

Problem: New regex engine: Does not support \%^ and \%\$.

Solution: Support matching start and end of file.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1084

Problem: New regex engine: only accepts up to \{,10}.

Solution: Remove upper limit. Remove dead code with NFA\_PLUS.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1085

Problem: New regex engine: Non-greedy multi doesn't work.

Solution: Implement \{-}.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1086

Problem: Old regex engine accepts illegal range, new one doesn't.

Solution: Also accept the illegal range with the new engine.

Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1087

Problem: A leading star is not seen as a normal char when \{} follows.

Solution: Save and restore the parse state properly.

Files: src/regex.c, src/regex\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

## Patch 7.3.1088

Problem: New regex engine: \@<= and \@<! are not implemented.

Solution: Implement look-behind matching. Fix off-by-one error in old regex engine.

Files: src/regex.c, src/regex\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

## Patch 7.3.1089

Problem: Tests 86 and 87 fail on MS-Windows. (Ken Takata)

Solution: Fix platform-specific stuff. (ZyX)

Files: src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.3.1090

Problem: New regexp engine does not support \z1 .. \z9 and \z(.  
Solution: Implement the syntax submatches.  
Files: src/regexp.h, src/regexp\_nfa.c

#### Patch 7.3.1091

Problem: New regexp engine: no error when using \z1 or \z( where it does not work.  
Solution: Give an error message.  
Files: src/regexp.c, src/regexp\_nfa.c

#### Patch 7.3.1092

Problem: Can't build with regexp debugging. NFA debug output shows wrong pattern.  
Solution: Fix debugging code for recent changes. Add the pattern to the program.  
Files: src/regexp\_nfa.c, src/regexp.h

#### Patch 7.3.1093

Problem: New regexp engine: When a sub expression is empty \1 skips a character.  
Solution: Make \1 try the current position when the match is empty.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

#### Patch 7.3.1094

Problem: New regexp engine: Attempts to match "^" at every character.  
Solution: Only try "^" at the start of a line.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1095

Problem: Compiler warnings for shadowed variables. (Christian Brabandt)  
Solution: Rename new\_state() to alloc\_state(). Remove unnecessary declaration.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1096

Problem: Python: popitem() was not defined in a standard way.  
Solution: Remove the argument from popitem(). (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.1097

Problem: Python: a few recently added items are not documented.  
Solution: Update the documentation. (ZyX)  
Files: runtime/doc/if\_pyth.txt

#### Patch 7.3.1098

Problem: Python: Possible memory leaks  
Solution: Add Py\_XDECREF() calls. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1099

Problem: Python: Changing directory with os.chdir() causes problems for Vim's notion of directories.  
Solution: Add vim.chdir() and vim.fchdir(). (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/ex\_docmd.c, src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c, src/proto/ex\_docmd.pro, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.1100

Problem: Python: a few more memory problems.

Solution: Add and remove Py\_XDECREF(). (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.1101

Problem: Configure doesn't find Python 3 on Ubuntu 13.04.  
Solution: First try distutils.sysconfig. Also fix some indents. (Ken Takata)  
Files: src/configure.in, src/auto/configure

#### Patch 7.3.1102

Problem: Completion of ":py3do" and ":py3file" does not work after ":py3".  
Solution: Make completion work. (Taro Muraoka)  
Files: src/ex\_docmd.c

#### Patch 7.3.1103

Problem: New regexp engine: overhead in saving and restoring.  
Solution: Make saving and restoring list IDs faster. Don't copy or check \z subexpressions when they are not used.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1104

Problem: New regexp engine does not handle "~".  
Solution: Add support for "~".  
Files: src/regexp\_nfa.c, src/testdir/test24.in, src/testdir/test24.ok

#### Patch 7.3.1105

Problem: New regexp engine: too much code in one function. Dead code.  
Solution: Move the recursive nfa\_regmatch call to a separate function.  
Remove the dead code.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1106

Problem: New regexp engine: saving and restoring lastlist in the states takes a lot of time.  
Solution: Use a second lastlist value for the first recursive call.  
Files: src/regexp.h, src/regexp\_nfa.c

#### Patch 7.3.1107

Problem: Compiler warnings for unused variables.  
Solution: Put the variables inside #ifdef.  
Files: src/regexp.c, src/regexp\_nfa.c

#### Patch 7.3.1108

Problem: Error message for os.fchdir() (Charles Peacech)  
Solution: Clear the error. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1109

Problem: Building on MS-Windows doesn't see changes in if\_py\_both.h.  
Solution: Add a dependency. (Ken Takata)  
Files: src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_ming.mak,  
src/Make\_mvc.mak

#### Patch 7.3.1110

Problem: New regexp matching: Using \@= and the like can be slow.  
Solution: Decide whether to first try matching the zero-width part or what follows, whatever is more likely to fail.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1111

Problem: nfa\_recognize\_char\_class() implementation is inefficient.

Solution: Use bits in an int instead of chars in a string. (Dominique Pelle)  
Files: src/regex\_nfa.c, src/testdir/test36.in, src/testdir/test36.ok

Patch 7.3.1112

Problem: New regex engine: \%V not supported.  
Solution: Implement \%V. Add tests.  
Files: src/regex.c, src/regex\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

Patch 7.3.1113

Problem: New regex engine: \%m not supported.  
Solution: Implement \%m. Add tests.  
Files: src/regex.c, src/regex\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

Patch 7.3.1114 (after 7.3.1110)

Problem: Can't build without the syntax feature.  
Solution: Add #ifdefs. (Erik Falor)  
Files: src/regex\_nfa.c

Patch 7.3.1115

Problem: Many users don't like the cursor line number when 'relativenumber'  
is set.  
Solution: Have four combinations with 'number' and 'relativenumber'.  
(Christian Brabandt)  
Files: runtime/doc/options.txt, src/option.c, src/screen.c,  
src/testdir/test89.in, src/testdir/test89.ok

Patch 7.3.1116

Problem: Can't build without Visual mode.  
Solution: Add #ifdefs.  
Files: src/regex\_nfa.c

Patch 7.3.1117

Problem: New regex engine: \%[abc] not supported.  
Solution: Implement \%[abc]. Add tests.  
Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1118

Problem: Match failure rate is not very specific.  
Solution: Tune the failure rate for match items.  
Files: src/regex\_nfa.c

Patch 7.3.1119

Problem: Flags in 'cpo' are search for several times.  
Solution: Store the result and re-use the flags.  
Files: src/regex.c, src/regex\_nfa.c

Patch 7.3.1120

Problem: Crash when regex logging is enabled.  
Solution: Avoid using NULL pointers. Advance over count argument.  
Files: src/regex.c, src/regex\_nfa.c

Patch 7.3.1121

Problem: New regex engine: adding states that are not used.  
Solution: Don't add the states.  
Files: src/regex\_nfa.c

Patch 7.3.1122

Problem: New regex engine: \@> not supported.  
Solution: Implement \@>.  
Files: src/regex\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1123

Problem: Can't build tiny Vim on MS-Windows.

Solution: Adjust #ifdef around using modif\_fname(). (Mike Williams)

Files: src/misc1.c

## Patch 7.3.1124

Problem: Python: Crash on MS-Windows when os.fchdir() is not available.

Solution: Check for \_chdir to be NULL. (Ken Takata)

Files: src/if\_py\_both.h

## Patch 7.3.1125

Problem: Error for using \%V in a pattern in tiny Vim.

Solution: Allow using \%V but never match. (Dominique Pelle)

Files: src/regexp\_nfa.c

## Patch 7.3.1126

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)

Solution: Assign something to the variable.

Files: src/regexp\_nfa.c

## Patch 7.3.1127

Problem: No error for using empty \%[.]

Solution: Give error message.

Files: src/regexp.c, src/regexp\_nfa.c

## Patch 7.3.1128

Problem: Now that the NFA engine handles everything every failure is a syntax error.

Solution: Remove the syntax\_error flag.

Files: src/regexp.c, src/regexp\_nfa.c

## Patch 7.3.1129

Problem: Can't see what pattern in syntax highlighting is slow.

Solution: Add the ":syntime" command.

Files: src/structs.h, src/syntax.c, src/ex\_cmds.h, src/ex\_docmd.c, src/proto/syntax.pro, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, runtime/doc/syntax.txt

## Patch 7.3.1130 (after 7.3.1129)

Problem: Can't build with anything but huge features.

Solution: Check for FEAT\_PROFILE. (Yasuhiro Matsumoto)

Files: src/ex\_docmd.c, src/structs.h, src/syntax.c

## Patch 7.3.1131

Problem: New regexp engine is a bit slow.

Solution: Do not clear the state list. Don't copy syntax submatches when not used.

Files: src/regexp\_nfa.c

## Patch 7.3.1132

Problem: Crash when debugging regexp.

Solution: Do not try to dump subexpr that were not set. Skip over count of \% items.

Files: src/regexp.c, src/regexp\_nfa.c

## Patch 7.3.1133

Problem: New regexp engine is a bit slow.

Solution: Skip ahead to a character that must match. Don't try matching a "^" patter past the start of line.

Files: src/regexp\_nfa.c, src/regexp.h

## Patch 7.3.1134

Problem: Running test 49 takes a long time.  
Solution: Don't have it grep all files.  
Files: src/testdir/test49.vim

## Patch 7.3.1135

Problem: Compiler warning for unused argument.  
Solution: Add UNUSED.  
Files: src/syntax.c

## Patch 7.3.1136

Problem: ":func Foo" does not show attributes.  
Solution: Add "abort", "dict" and "range". (Yasuhiro Matsumoto)  
Files: src/eval.c

## Patch 7.3.1137

Problem: New regexp engine: collections are slow.  
Solution: Handle all characters in one go.  
Files: src/regexp\_nfa.c

## Patch 7.3.1138

Problem: New regexp engine: neglist no longer used.  
Solution: Remove the now unused neglist.  
Files: src/regexp\_nfa.c

## Patch 7.3.1139

Problem: New regexp engine: negated flag is hardly used.  
Solution: Add separate \_NEG states, remove negated flag.  
Files: src/regexp\_nfa.c, src/regexp.h

## Patch 7.3.1140

Problem: New regexp engine: trying expensive match while the result is not going to be used.  
Solution: Check for output state already being in the state list.  
Files: src/regexp\_nfa.c

## Patch 7.3.1141

Problem: Win32: Check for available memory is not reliable and adds overhead.  
Solution: Remove mch\_avail\_mem(). (Mike Williams)  
Files: src/os\_win32.c, src/os\_win32.h

## Patch 7.3.1142

Problem: Memory leak in ":syntime report".  
Solution: Clear the grow array. (Dominique Pelle)  
Files: src/syntax.c

## Patch 7.3.1143

Problem: When mapping NUL it is displayed as an X.  
Solution: Check for KS\_ZERO instead of K\_ZERO. (Yasuhiro Matsumoto)  
Files: src/message.c

## Patch 7.3.1144

Problem: "R0" is not translated everywhere.  
Solution: Put inside \_(). (Sergey Alyoshin)  
Files: src/buffer.c, src/screen.c

## Patch 7.3.1145

Problem: New regexp engine: addstate() is called very often.  
Solution: Optimize adding the start state.  
Files: src/regexp\_nfa.c



## Patch 7.3.1146

Problem: New regexp engine: look-behind match not checked when followed by zero-width match.  
Solution: Do the look-behind match before adding the zero-width state.  
Files: src/regexp\_nfa.c

## Patch 7.3.1147

Problem: New regexp engine: regstart is only used to find the first match.  
Solution: Use regstart whenever adding the start state.  
Files: src/regexp\_nfa.c

## Patch 7.3.1148

Problem: No command line completion for ":syntime".  
Solution: Implement the completion. (Dominique Pelle)  
Files: runtime/doc/map.txt, src/ex\_cmds.h, src/ex\_docmd.c, src/ex\_getln.c, src/proto/syntax.pro, src/syntax.c, src/vim.h

## Patch 7.3.1149

Problem: New regexp engine: Matching plain text could be faster.  
Solution: Detect a plain text match and handle it specifically. Add vim\_regfree().  
Files: src/regexp.c, src/regexp.h, src/regexp\_nfa.c, src/proto/regexp.pro, src/buffer.c, src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_eval.c, src/ex\_getln.c, src/fileio.c, src/gui.c, src/misc1.c, src/misc2.c, src/option.c, src/syntax.c, src/quickfix.c, src/search.c, src/spell.c, src/tag.c, src/window.c, src/screen.c, src/macros.h, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1150

Problem: New regexp engine: Slow when a look-behind match does not have a width specified.  
Solution: Try to compute the maximum width.  
Files: src/regexp\_nfa.c

## Patch 7.3.1151

Problem: New regexp engine: Slow when a look-behind match is followed by a zero-width match.  
Solution: Postpone the look-behind match more often.  
Files: src/regexp\_nfa.c

## Patch 7.3.1152

Problem: In tiny build ireg\_icombine is undefined. (Tony Mechelynck)  
Solution: Add #ifdef.  
Files: src/regexp\_nfa.c

## Patch 7.3.1153

Problem: New regexp engine: Some look-behind matches are very expensive.  
Solution: Postpone invisible matches further, until a match is almost found.  
Files: src/regexp\_nfa.c

## Patch 7.3.1154

Problem: New regexp\_nfa engine: Unnecessary code.  
Solution: Remove unnecessary code.  
Files: src/regexp\_nfa.c

## Patch 7.3.1155

Problem: MS-DOS: "make test" uses external rmdir command.  
Solution: Rename "rmdir" to "rd". (Taro Muraoka)  
Files: src/testdir/Make\_dos.mak

## Patch 7.3.1156

Problem: Compiler warnings. (dv1445)  
Solution: Initialize variables, even when the value isn't really used.  
Files: src/regexp\_nfa.c, src/eval.c

#### Patch 7.3.1157

Problem: New regexp engine fails on "\\(<command\\)@<=.\*"  
Solution: Fix rule for postponing match. Further tune estimating whether postponing works better. Add test.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

#### Patch 7.3.1158

Problem: Crash when running test 86. (Jun Takimoto)  
Solution: Define PY\_SSIZE\_T\_CLEAN early. (Elimar Riesebieter)  
Files: src/if\_python.c, src/if\_python3.c

#### Patch 7.3.1159

Problem: The round() function is not always available. (Christ van Willegen)  
Solution: Use the solution from f\_round().  
Files: src/ex\_cmds2.c, src/eval.c, src/proto/eval.pro

#### Patch 7.3.1160

Problem: Mixing long and pointer doesn't always work.  
Solution: Avoid cast to pointer.  
Files: src/undo.c

#### Patch 7.3.1161

Problem: Python: PyList\_SetItem() is inefficient.  
Solution: Use PyList\_SET\_ITEM() (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1162

Problem: Python: Memory leaks  
Solution: Add more Py\_DECREF(). (ZyX)  
Files: src/if\_py\_both.h, src/if\_python.c

#### Patch 7.3.1163

Problem: Not easy to load Python modules.  
Solution: Search "python2", "python3" and "pythonx" directories in 'runtimepath' for Python modules. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/configure.in, src/ex\_cmds2.c, src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c, src/testdir/test86.in, src/testdir/test87.in, src/auto/configure

#### Patch 7.3.1164

Problem: Can't test what is actually displayed on screen.  
Solution: Add the screenchar() and screenattr() functions.  
Files: src/eval.c, runtime/doc/eval.txt

#### Patch 7.3.1165

Problem: HP-UX compiler can't handle zero size array. (Charles Cooper)  
Solution: Make the array one item big.  
Files: src/regexp.h, src/regexp\_nfa.c

#### Patch 7.3.1166

Problem: Loading Python modules is not tested.  
Solution: Enable commented-out tests, add missing files. (ZyX)  
Files: src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok, src/testdir/python2/module.py, src/testdir/python3/module.py, src/testdir/pythonx/module.py, src/testdir/pythonx/modulex.py, Filelist

## Patch 7.3.1167

Problem: Python configure check doesn't reject Python 2 when requesting Python 3. Some systems need -pthreads instead of -pthread.  
Solution: Adjust configure accordingly. (Andrei Olsen)  
Files: src/configure.in, src/auto/configure

## Patch 7.3.1168

Problem: Python "sane" configure checks give a warning message.  
Solution: Use single quotes instead of escaped double quotes. (Ben Fritz)  
Files: src/configure.in, src/auto/configure

## Patch 7.3.1169

Problem: New regexp engine: some work is done while executing a pattern, even though the result is predictable.  
Solution: Do the work while compiling the pattern.  
Files: src/regexp\_nfa.c

## Patch 7.3.1170

Problem: Patch 7.3.1058 breaks backwards compatibility, not possible to use a function reference as a string. (lilydjwg)  
Solution: Instead of translating the function name only translate "s:".  
Files: src/eval.c

## Patch 7.3.1171

Problem: Check for digits and ascii letters can be faster.  
Solution: Use a trick with one comparison. (Dominique Pelle)  
Files: src/macros.h

## Patch 7.3.1172

Problem: Python 2: loading modules doesn't work well.  
Solution: Fix the code. Add more tests. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python.c, src/testdir/python2/module.py, src/testdir/python3/module.py, src/testdir/python\_after/after.py, src/testdir/python\_before/before.py, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok, Filelist

## Patch 7.3.1173

Problem: Python 2 tests don't have the same output everywhere.  
Solution: Make the Python 2 tests more portable. (ZyX)  
Files: src/testdir/test86.in, src/testdir/test86.ok

## Patch 7.3.1174

Problem: Python 2 and 3 use different ways to load modules.  
Solution: Use the same method. (ZyX)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

## Patch 7.3.1175

Problem: Using isalpha() and isalnum() can be slow.  
Solution: Use range checks. (Mike Williams)  
Files: src/ex\_docmd.c, src/macros.h

## Patch 7.3.1176

Problem: Compiler warnings on 64 bit system.  
Solution: Add type casts. (Mike Williams)  
Files: src/eval.c, src/if\_py\_both.h

## Patch 7.3.1177

Problem: Wasting memory on padding.

Solution: Reorder struct fields. (Dominique Pelle)  
Files: src/structs.h, src/fileio.c

#### Patch 7.3.1178

Problem: Can't put all Vim config files together in one directory.  
Solution: Load ~/.vim/vimrc if ~/.vimrc does not exist. (Lech Lorens)  
Files: runtime/doc/gui.txt, runtime/doc/starting.txt, src/gui.c,  
src/main.c, src/os\_amiga.h, src/os\_dos.h, src/os\_unix.h

#### Patch 7.3.1179

Problem: When a global mapping starts with the same characters as a  
buffer-local mapping Vim waits for a character to be typed to find  
out whether the global mapping is to be used. (Andy Wokula)  
Solution: Use the local mapping without waiting. (Michael Henry)  
Files: runtime/doc/map.txt, src/getchar.c

#### Patch 7.3.1180

Problem: When current directory changes, path from cscope may no longer be  
valid. (AS Budden)  
Solution: Always store the absolute path. (Christian Brabandt)  
Files: src/if\_cscope.c

#### Patch 7.3.1181

Problem: Wrong error message for 1.0[0].  
Solution: Check for funcref and float separately. (Yasuhiro Matsumoto)  
Files: src/eval.c

#### Patch 7.3.1182

Problem: 'backupcopy' default on MS-Windows does not work for hard and soft  
links.  
Solution: Check for links. (David Pope, Ken Takata)  
Files: src/fileio.c, src/os\_win32.c, src/proto/os\_win32.pro

#### Patch 7.3.1183

Problem: Python tests 86 and 87 fail.  
Solution: Add "empty" files. (ZyX)  
Files: src/testdir/python\_before/before\_1.py,  
src/testdir/python\_before/before\_2.py

#### Patch 7.3.1184

Problem: Highlighting is sometimes wrong. (Axel Bender)  
Solution: Fetch regline again when returning from recursive regmatch.  
Files: src/regexp\_nfa.c

#### Patch 7.3.1185

Problem: New regexp engine: no match with ^ after \n. (SungHyun Nam)  
Solution: Fix it, add a test.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

#### Patch 7.3.1186

Problem: Python 3: test 87 may crash.  
Solution: Use \_PyArg\_Parse\_SizeT instead of PyArg\_Parse. (Jun Takimoto)  
Files: src/if\_python3.c

#### Patch 7.3.1187 (after 7.3.1170)

Problem: "s:" is recognized but "<SID>" is not. (ZyX)  
Solution: Translate "<SID>" like "s:".  
Files: src/eval.c

#### Patch 7.3.1188

Problem: Newline characters messing up error message.  
Solution: Remove the newlines. (Kazunobu Kuriyama)

Files: src/gui\_x11.c

Patch 7.3.1189 (after 7.3.1185)

Problem: Highlighting is still wrong sometimes. (Dominique Pelle)

Solution: Also restore reginput properly.

Files: src/regexp\_nfa.c

Patch 7.3.1190

Problem: Compiler warning for parentheses. (Christian Wellenbrock)

Solution: Change #ifdef.

Files: src/ex\_docmd.c

Patch 7.3.1191

Problem: Backreference to previous line doesn't work. (Lech Lorens)

Solution: Implement looking in another line.

Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok

Patch 7.3.1192

Problem: Valgrind reports errors when using backreferences. (Dominique Pelle)

Solution: Do not check the end of submatches.

Files: src/regexp\_nfa.c

Patch 7.3.1193

Problem: fail\_if\_missing not used for Python 3.

Solution: Give an error when Python 3 can't be configured. (Andrei Olsen)

Files: src/configure.in, src/auto/configure

Patch 7.3.1194

Problem: Yaml highlighting is slow.

Solution: Tune the estimation of pattern failure chance.

Files: src/regexp\_nfa.c

Patch 7.3.1195

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)

Solution: Set the length to the matching backref.

Files: src/regexp.c

Patch 7.3.1196

Problem: Old regexp engine does not match pattern with backref correctly.  
(Dominique Pelle)

Solution: Fix setting status. Test multi-line patterns better.

Files: src/regexp.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1197

Problem: ":wviminfo!" does not write history previously read from a viminfo  
file. (Roland Eggner)

Solution: When not merging history write all entries.

Files: src/ex\_cmds.c, src/ex\_getln.c, src/proto/ex\_getln.pro

Patch 7.3.1198

Problem: Build error when using Perl 5.18.0 and dynamic loading.

Solution: Change #ifdefs for Perl\_croak\_xs\_usage. (Ike Devolder)

Files: src/if\_perl.xs

Patch 7.3.1199

Problem: When evaluating 'foldexpr' causes an error this is silently  
ignored and evaluation is retried every time.

Solution: Set emsg\_silent instead of emsg\_off. Stop evaluating 'foldexpr' is  
it is causing errors. (Christian Brabandt)

Files: src/fold.c

## Patch 7.3.1200

Problem: When calling setline() from Insert mode, using CTRL-R =, undo does not work properly. (Israel Chauca)

Solution: Sync undo after evaluating the expression. (Christian Brabandt)

Files: src/edit.c, src/testdir/test61.in, src/testdir/test61.ok

## Patch 7.3.1201

Problem: When a startup script creates a preview window, it probably becomes the current window.

Solution: Make another window the current one. (Christian Brabandt)

Files: src/main.c

## Patch 7.3.1202 (after 7.3.660)

Problem: Tags are not found in case-folded tags file. (Darren cole, Issue 90)

Solution: Take into account that when case folding was used for the tags file "!rm" sorts before the "!\_TAG" header lines.

Files: src/tag.c

## Patch 7.3.1203

Problem: Matches from matchadd() might be highlighted incorrectly when they are at a fixed position and inserting lines. (John Szakmeister)

Solution: Redraw all lines below a change if there are highlighted matches. (idea by Christian Brabandt)

Files: src/screen.c

## Patch 7.3.1204

Problem: Calling gettabwinvar() in 'tabline' cancels Visual mode. (Hirohito Higashi)

Solution: Don't always use goto\_tabpage\_tp().

Files: src/window.c, src/proto/window.pro, src/eval.c, src/if\_py\_both.h

## Patch 7.3.1205

Problem: logtalk.dict is not removed on uninstall.

Solution: Remove the file. (Kazunobu Kuriyama)

Files: src/Makefile

## Patch 7.3.1206

Problem: Inconsistent function argument declarations.

Solution: Use ANSI style.

Files: src/if\_py\_both.h

## Patch 7.3.1207

Problem: New regexp engine: no match found on "#if F00". (Lech Lorens)

Solution: When adding a state gets skipped don't adjust the index.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.3.1208

Problem: Compiler warnings on MS-Windows.

Solution: Add type cast. Move variable declaration. (Mike Williams)

Files: src/option.c, src/os\_mswin.c

## Patch 7.3.1209

Problem: No completion for ":tabdo".

Solution: Add tabdo to the list of modifiers. (Dominique Pelle)

Files: src/ex\_docmd.c

## Patch 7.3.1210 (after 7.3.1182)

Problem: 'backupcopy' default on MS-Windows is wrong when 'encoding' equals the current codepage.

Solution: Change the #else block. (Ken Takata)

Files: src/os\_win32.c

Patch 7.3.1211

Problem: MS-Windows: When 'encoding' differs from the current codepage  
":hardcopy" does not work properly.

Solution: Use TextOutW() and SetDlgItemTextW(). (Ken Takata)

Files: src/os\_mswin.c, src/vim.rc

Patch 7.3.1212

Problem: "make test" on MS-Windows does not report failure like Unix does.

Solution: Make it work like on Unix. (Taro Muraoka)

Files: src/testdir/Make\_dos.mak

Patch 7.3.1213

Problem: Can't build with small features and Python.

Solution: Adjust #ifdefs.

Files: src/eval.c, src/buffer.c, src/eval.c, src/window.c

Patch 7.3.1214

Problem: Missing declaration for init\_users() and realloc\_post\_list().  
(Salman Halim)

Solution: Add the declarations.

Files: src/misc1.c, src/regexp\_nfa.c

Patch 7.3.1215

Problem: Compiler warning for function not defined.

Solution: Add #ifdef.

Files: src/misc1.c

Patch 7.3.1216

Problem: Configure can't find Motif on Ubuntu.

Solution: Search for libXm in /usr/lib/\*-linux-gnu.

Files: src/configure.in, src/auto/configure

Patch 7.3.1217

Problem: New regexp engine: Can't handle %[ao]]. (Yukihiro Nakadaira)

Solution: Support nested atoms inside %[].

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1218

Problem: "make test" on MS-Windows does not clean all temporary files and  
gives some unnecessary message.

Solution: Clean the right files. Create .failed files. (Ken Takata)

Files: src/testdir/Make\_dos.mak

Patch 7.3.1219

Problem: No test for using [] inside %[].

Solution: Add a test.

Files: src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1220

Problem: MS-Windows: When using wide font italic and bold are not included.

Solution: Support wide-bold, wide-italic and wide-bold-italic. (Ken Takata,  
Taro Muraoka)

Files: src/gui.c, src/gui.h, src/gui\_w48.c

Patch 7.3.1221

Problem: When build flags change "make distclean" run into a configure  
error.

Solution: When CFLAGS changes delete auto/config.cache. Also avoid adding  
duplicate text to flags. (Ken Takata)

Files: src/Makefile, src/configure.in, src/auto/configure

## Patch 7.3.1222

Problem: Cannot execute some tests from the src directly.  
Solution: Add missing targets.  
Files: src/Makefile

## Patch 7.3.1223

Problem: Tests fail on MS-Windows.  
Solution: Avoid depending on OS version. Use DOS commands instead of Unix commands. (Taro Muraoka, Ken Takata)  
Files: src/testdir/test17.in, src/testdir/test50.in,  
src/testdir/test71.in, src/testdir/test77.in

## Patch 7.3.1224

Problem: Clang gives warnings on xxd.  
Solution: Change how to use part of a string. (Dominique Pelle) Also avoid warning for return not reached.  
Files: src/xxd/xxd.c, src/regex\_nfa.c

## Patch 7.3.1225

Problem: Compiler warnings when building with Motif.  
Solution: Change set\_label() argument. (Kazunobu Kuriyama)  
Files: src/gui\_motif.c

## Patch 7.3.1226

Problem: Python: duplicate code.  
Solution: Share code between OutputWrite() and OutputWritelines(). (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.1227

Problem: Inconsistent string conversion.  
Solution: Use 'encoding' instead of utf-8. Use METH\_0 in place of METH\_VARARGS where appropriate. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.1228

Problem: Python: various inconsistencies and problems.  
Solution: StringToLine now supports both bytes() and unicode() objects. Make function names consistent. Fix memory leak fixed in StringToLine. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c

## Patch 7.3.1229

Problem: Python: not so easy to delete/restore translating.  
Solution: Make macros do translation of exception messages. (ZyX)  
Note: this breaks translations!  
Files: src/if\_py\_both.h, src/if\_python3.c

## Patch 7.3.1230

Problem: Python: Exception messages are not clear.  
Solution: Make exception messages more verbose. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.1231

Problem: Python: use of numbers not consistent.  
Solution: Add support for Number protocol. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/testdir/test86.ok, src/testdir/test87.ok

## Patch 7.3.1232

Problem: Python: inconsistencies in variable names.



Solution: Rename variables. (ZyX)  
Files: src/eval.c, src/if\_py\_both.h

#### Patch 7.3.1233

Problem: Various Python problems.  
Solution: Fix VimTryEnd. Crash with debug build and PYTHONDUMPREFS=1. Memory leaks in StringToLine(), BufferMark() and convert\_dl. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.3.1234 (after 7.3.1229)

Problem: Python: Strings are not marked for translation.  
Solution: Add N\_() where appropriate. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.3.1235

Problem: In insert mode CTRL-] is not inserted, on the command-line it is.  
Solution: Don't insert CTRL-] on the command line. (Yukihiro Nakadaira)  
Files: src/ex\_getln.c

#### Patch 7.3.1236

Problem: Python: WindowSetattr() missing support for NUMBER\_UNSIGNED.  
Solution: Add NUMBER\_UNSIGNED, add more tests. Various fixes. (ZyX)  
Files: src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c, src/testdir/pythonx/failing.py, src/testdir/pythonx/failing\_import.py, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok, src/testdir/pythonx/topmodule/\_\_init\_\_.py, src/testdir/pythonx/topmodule/submodule/\_\_init\_\_.py, src/testdir/pythonx/topmodule/submodule/subsubmodule/\_\_init\_\_.py, src/testdir/pythonx/topmodule/submodule/subsubmodule/subsubsubmodule.py

#### Patch 7.3.1237

Problem: Python: non-import errors not handled correctly.  
Solution: Let non-ImportError exceptions pass the finder. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.ok, src/testdir/test87.ok

#### Patch 7.3.1238

Problem: Crash in Python interface on 64 bit machines.  
Solution: Change argument type of PyString\_AsStringAndSize. (Taro Muraoka, Jun Takimoto)  
Files: src/if\_python.c

#### Patch 7.3.1239

Problem: Can't build with Python and MSVC10.  
Solution: Move #if outside of macro. (Taro Muraoka)  
Files: src/if\_py\_both.h

#### Patch 7.3.1240

Problem: Memory leak in findfile().  
Solution: Free the memory. (Christian Brabandt)  
Files: src/eval.c

#### Patch 7.3.1241 (after 7.3.1236)

Problem: Some test files missing from the distribution.  
Solution: Update the list of files.  
Files: Filelist

#### Patch 7.3.1242

Problem: No failure when trying to use a number as a string.  
Solution: Give an error when StringToLine() is called with an instance of the wrong type. (Jun Takimoto)

Files: src/if\_py\_both.h

Patch 7.3.1243

Problem: New regexp engine: back references in look-behind match don't work. (Lech Lorens)

Solution: Copy the submatches before a recursive match. Also fix function prototypes.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1244

Problem: MS-Windows: confirm() dialog text may not fit.

Solution: Use GetTextWidthEnc() instead of GetTextWidth(). (Yasuhiro Matsumoto)

Files: src/gui\_w32.c

Patch 7.3.1245

Problem: MS-Windows: confirm() dialog text may still not fit.

Solution: Use GetTextWidthEnc() instead of GetTextWidth() in two more places. (Yasuhiro Matsumoto)

Files: src/gui\_w32.c

Patch 7.3.1246

Problem: When setting 'winfixheight' and resizing the window causes the window layout to be wrong.

Solution: Add frame\_check\_height() and frame\_check\_width() (Yukihiro Nakadaira)

Files: src/window.c

Patch 7.3.1247

Problem: New regexp engine: '[ ]@!\p%([ ]@!\p\)\*:' does not always match.

Solution: When there is a PIM add a duplicate state that starts at another position.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1248

Problem: Still have old hacking code for Input Method.

Solution: Add 'imactivatefunc' and 'imstatusfunc' as a generic solution to Input Method activation. (Yukihiro Nakadaira)

Files: runtime/doc/options.txt, src/fileio.c, src/mbyte.c, src/option.c, src/option.h, src/proto/fileio.pro

Patch 7.3.1249

Problem: Modeline not recognized when using "Vim" instead of "vim".

Solution: Also accept "Vim".

Files: src/buffer.c

Patch 7.3.1250

Problem: Python tests fail on MS-Windows.

Solution: Change backslashes to slashes. (Taro Muraoka)

Files: src/testdir/test86.in, src/testdir/test87.in

Patch 7.3.1251

Problem: Test 61 messes up viminfo.

Solution: Specify a separate viminfo file.

Files: src/testdir/test61.in

Patch 7.3.1252

Problem: gvim does not find the toolbar bitmap files in ~/vimfiles/bitmaps if the corresponding menu command contains additional characters like the shortcut marker '&' or if you use a non-english locale.

Solution: Use menu->en\_dname or menu->dname. (Martin Giesekeing)

Files: src/gui\_w32.c

Patch 7.3.1253 (after 7.3.1200)

Problem: Still undo problem after using CTRL-R = setline(). (Hirohito Higashi)

Solution: Set the ins\_need\_undo flag.

Files: src/edit.c

Patch 7.3.1254 (after 7.3.1252)

Problem: Can't build without the multi-lang feature. (John Marriott)

Solution: Add #ifdef.

Files: src/gui\_w32.c

Patch 7.3.1255

Problem: Clang warnings when building with Athena.

Solution: Add type casts. (Dominique Pelle)

Files: src/gui\_at\_fs.c

Patch 7.3.1256

Problem: Can't build without eval or autocmd feature.

Solution: Add #ifdefs.

Files: src/mbyte.c, src/window.c

Patch 7.3.1257

Problem: With GNU gettext() ":lang de\_DE.utf8" does not always result in German messages.

Solution: Clear the \$LANGUAGE environment variable.

Files: src/ex\_cmds2.c

Patch 7.3.1258

Problem: Using submatch() may crash Vim. (Ingo Karkat)

Solution: Restore the number of subexpressions used.

Files: src/regexp\_nfa.c

Patch 7.3.1259

Problem: No test for patch 7.3.1258

Solution: Add a test entry.

Files: src/testdir/test64.in, src/testdir/test64.ok

Patch 7.3.1260

Problem: User completion does not get the whole command line in the command line window.

Solution: Pass on the whole command line. (Daniel Thau)

Files: src/ex\_getln.c, src/structs.h

Patch 7.3.1261 (after patch 7.3.1179)

Problem: A buffer-local language mapping from a keymap stops a global insert mode mapping from working. (Ron Aaron)

Solution: Do not wait for more characters to be typed only when the mapping was defined with <nowait>.

Files: runtime/doc/map.txt, src/eval.c, src/getchar.c, src/testdir/test75.in, src/testdir/test75.ok

Patch 7.3.1262

Problem: Crash and compilation warnings with Cygwin.

Solution: Check return value of XmbTextListToTextProperty(). Add type casts. Adjust #ifdefs. (Lech Lorens)

Files: src/main.c, src/os\_unix.c, src/ui.c

Patch 7.3.1263

Problem: Typo in short option name.

Solution: Change "imse" to "imsf".

Files: src/option.c

Patch 7.3.1264 (after 7.3.1261)

Problem: Missing m\_nowait.

Solution: Include missing part of the patch.

Files: src/structs.h

Patch 7.3.1265 (after 7.3.1249)

Problem: Accepting "Vim:" for a modeline causes errors too often.

Solution: Require "Vim:" to be followed by "set".

Files: src/buffer.c

Patch 7.3.1266

Problem: QNX: GUI fails to start.

Solution: Remove the QNX-specific #ifdef. (Sean Boudreau)

Files: src/gui.c

Patch 7.3.1267

Problem: MS-Windows ACL support doesn't work well.

Solution: Implement more ACL support. (Ken Takata)

Files: src/os\_win32.c

Patch 7.3.1268

Problem: ACL support doesn't work when compiled with MingW.

Solution: Support ACL on MingW. (Ken Takata)

Files: src/os\_win32.c, src/os\_win32.h

Patch 7.3.1269

Problem: Insert completion keeps entry selected even though the list has changed. (Olivier Teuliere)

Solution: Reset compl\_shown\_match and compl\_curr\_match. (Christian Brabandt)

Files: src/edit.c

Patch 7.3.1270

Problem: Using "Vp" in an empty buffer can't be undone. (Hauke Petersen)

Solution: Save one line in an empty buffer. (Christian Brabandt)

Files: src/ops.c

Patch 7.3.1271 (after 7.3.1260)

Problem: Command line completion does not work.

Solution: Move setting xp\_line down. (Daniel Thau)

Files: src/ex\_getln.c

Patch 7.3.1272

Problem: Crash when editing Ruby file. (Aliaksandr Rahalevich)

Solution: Reallocate the state list when necessary.

Files: src/regexp\_nfa.c

Patch 7.3.1273

Problem: When copying a location list the index might be wrong.

Solution: Set the index to one when using the first entry. (Lech Lorens)

Files: src/quickfix.c

Patch 7.3.1274

Problem: When selecting an entry from a location list it may pick an arbitrary window or open a new one.

Solution: Prefer using a window related to the location list. (Lech Lorens)

Files: src/quickfix.c

Patch 7.3.1275

Problem: "gn" does not work when the match is a single character.

Solution: Fix it, add a test. (Christian Brabandt)

Files: src/search.c, src/testdir/test53.in, src/testdir/test53.ok

## Patch 7.3.1276

Problem: When using a cscope connection resizing the window may send SIGWINCH to cscope and it quits.  
Solution: Call setpgid(0, 0) in the child process. (Narendran Gopalakrishnan)  
Files: src/if\_cscope.c

## Patch 7.3.1277

Problem: In diff mode 'cursorline' also draws in the non-active window. When 'nu' and 'sbr' are set the 'sbr' string is not underlined.  
Solution: Only draw the cursor line in the current window. Combine the 'cursorline' and other highlighting attributes. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.3.1278

Problem: When someone sets the screen size to a huge value with "stty" Vim runs out of memory before reducing the size.  
Solution: Limit Rows and Columns in more places.  
Files: src/gui.c, src/gui\_gtk\_x11.c, src/option.c, src/os\_unix.c, src/proto/term.pro, src/term.c

## Patch 7.3.1279

Problem: Compiler warning for variable uninitialized. (Tony Mechelynck)  
Solution: Add an init.  
Files: src/ex\_getln.c

## Patch 7.3.1280

Problem: Reading memory already freed since patch 7.3.1247. (Simon Ruderich, Dominique Pelle)  
Solution: Copy submatches before reallocating the state list.  
Files: src/regexp\_nfa.c

## Patch 7.3.1281

Problem: When 'ttymouse' is set to "xterm2" clicking in column 123 moves the cursor to column 96. (Kevin Goodsell)  
Solution: Decode KE\_CSI.  
Files: src/term.c

## Patch 7.3.1282 (after 7.3.1277)

Problem: 'cursorline' not drawn in any other window. (Charles Campbell)  
Solution: Do draw the cursor line in other windows.  
Files: src/screen.c

## Patch 7.3.1283

Problem: Test 71 fails on MS-Windows.  
Solution: Put the binary data in a separate file. (Ken Takata)  
Files: src/testdir/test71.in, src/testdir/test71a.in

## Patch 7.3.1284

Problem: Compiler warnings in MS-Windows clipboard handling.  
Solution: Add type casts. (Ken Takata)  
Files: src/winclip.c

## Patch 7.3.1285

Problem: No tests for picking a window when selecting an entry in a location list. Not picking the right window sometimes.  
Solution: Add test 96. Set usable\_win appropriately. (Lech Lorens)  
Files: src/quickfix.c, src/testdir/Makefile, src/testdir/test96.in, src/testdir/test96.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.3.1286

Problem: Check for screen size missing for Athena and Motif.  
Solution: Add call to limit\_screen\_size().  
Files: src/gui\_x11.c

## Patch 7.3.1287

Problem: Python SystemExit exception is not handled properly.  
Solution: Catch the exception and give an error. (Yasuhiro Matsumoto, Ken Takata)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.3.1288

Problem: The first ":echo 'hello'" command output doesn't show. Mapping for <S-F3> gets triggered during startup.  
Solution: Add debugging code for the termresponse. When receiving the "Co" entry and when setting 'ambiwidth' redraw right away if possible. Add redraw\_asap(). Don't set 'ambiwidth' if it already had the right value. Do the 'ambiwidth' check in the second row to avoid confusion with <S-F3>.  
Files: src/term.c, src/screen.c, src/proto/screen.pro

## Patch 7.3.1289

Problem: Get GLIB warning when removing a menu item.  
Solution: Reference menu-id and also call gtk\_container\_remove(). (Ivan Krasilnikov)  
Files: src/gui\_gtk.c

## Patch 7.3.1290 (after 7.3.1253)

Problem: CTRL-R = in Insert mode changes the start of the insert position. (Ingo Karkat)  
Solution: Only break undo, don't start a new insert.  
Files: src/edit.c

## Patch 7.3.1291 (after 7.3.1288)

Problem: Compiler warnings for uninitialized variables. (Tony Mechelynck)  
Solution: Initialize the variables.  
Files: src/screen.c

## Patch 7.3.1292

Problem: Possibly using invalid pointer when searching for window. (Raichoo)  
Solution: Use "firstwin" instead of "tp\_firstwin" for current tab.  
Files: src/window.c

## Patch 7.3.1293

Problem: Put in empty buffer cannot be undone.  
Solution: Save one more line for undo. (Ozaki)  
Files: src/ops.c

## Patch 7.3.1294

Problem: ":diffoff" resets options.  
Solution: Save and restore option values. (Christian Brabandt)  
Files: src/diff.c, src/structs.h, src/option.c

## Patch 7.3.1295

Problem: glob() and globpath() do not handle escaped special characters properly.  
Solution: Handle escaped characters differently. (Adnan Zafar)  
Files: src/testdir/Makefile, src/testdir/test97.in, src/testdir/test97.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,

src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/fileio.c,  
src/misc1.c

Patch 7.3.1296

Problem: Only MS-Windows limits the GUI window size to what fits on the monitor.

Solution: Limit the size for all systems. (Daniel Harding)

Files: src/ui.c

Patch 7.3.1297

Problem: findfile() directory matching does not work when a star follows text. (Markus Braun)

Solution: Make a wildcard work properly. (Christian Brabandt)

Files: src/misc2.c, src/testdir/test89.in, src/testdir/test89.ok

Patch 7.3.1298 (after 7.3.1297)

Problem: Crash.

Solution: Use STRCPY() instead of STRCAT() and allocate one more byte.

Files: src/misc2.c

Patch 7.3.1299

Problem: Errors when doing "make proto". Didn't do "make depend" for a while.

Solution: Add #ifdefs. Update dependencies. Update proto files.

Files: src/if\_python3.c, src/os\_win32.c, src/Makefile,  
src/proto/ex\_docmd.pro, src/proto/if\_python.pro,  
src/proto/if\_python3.pro, src/proto/gui\_wl6.pro,  
src/proto/gui\_w32.pro, src/proto/os\_win32.pro

Patch 7.3.1300

Problem: Mac: tiny and small build fails.

Solution: Don't include os\_macosx.m in tiny build. Include mouse support in small build. (Kazunobu Kuriyama)

Files: src/configure.in, src/auto/configure, src/vim.h

Patch 7.3.1301

Problem: Some tests fail on MS-Windows.

Solution: Fix path separators in test 89 and 96. Omit test 97, escaping works differently. Make findfile() work on MS-Windows.

Files: src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/test89.in,  
src/testdir/test96.in, src/misc2.c

Patch 7.3.1302

Problem: Test 17 fails on MS-Windows. Includes line break in file name everywhere.

Solution: Fix 'fileformat'. Omit CR-LF from a line read from an included file.

Files: src/search.c, src/testdir/test17.in, src/testdir/test17.ok

Patch 7.3.1303 (after 7.3.1290)

Problem: Undo is synced whenever CTRL-R = is called, breaking some plugins.

Solution: Only break undo when calling setline() or append().

Files: src/globals.h, src/eval.c, src/edit.c, src/testdir/test61.in,  
src/testdir/test61.ok

Patch 7.3.1304

Problem: Test 89 still fails on MS-Windows.

Solution: Set 'shellslash'. (Taro Muraoka)

Files: src/testdir/test89.in

Patch 7.3.1305

Problem: Warnings from 64 bit compiler.  
Solution: Add type casts.  
Files: src/misc2.c

#### Patch 7.3.1306

Problem: When redrawing the screen during startup the intro message may be cleared.  
Solution: Redisplay the intro message when appropriate.  
Files: src/screen.c, src/version.c, src/proto/version.pro

#### Patch 7.3.1307

Problem: MS-Windows build instructions are outdated.  
Solution: Adjust for building on Windows 7. Drop Windows 95/98/ME support.  
Files: Makefile, nsis/gvim.nsi

#### Patch 7.3.1308

Problem: Typos in MS-Windows build settings and README.  
Solution: Minor changes to MS-Windows files.  
Files: src/msvc2008.bat, src/msvc2010.bat, src/VisVim/README\_VisVim.txt

#### Patch 7.3.1309

Problem: When a script defines a function the flag to wait for the user to hit enter is reset.  
Solution: Restore the flag. (Yasuhiro Matsumoto) Except when the user was typing the function.  
Files: src/eval.c

#### Patch 7.3.1310

Problem: Typos in nsis script. Can use better compression.  
Solution: Fix typos. Use lzma compression. (Ken Takata)  
Files: nsis/gvim.nsi

#### Patch 7.3.1311

Problem: Compiler warnings on Cygwin.  
Solution: Add type casts. Add windows include files. (Ken Takata)  
Files: src/mbyte.c, src/ui.c

#### Patch 7.3.1312 (after 7.3.1287)

Problem: Not giving correct error messages for SystemExit().  
Solution: Move E858 into an else. (Ken Takata)  
Files: src/if\_py\_both.h

#### Patch 7.3.1313

Problem: :py and :py3 don't work when compiled with Cygwin or MingW with 64 bit.  
Solution: Add -DMS\_WIN64 to the build command. (Ken Takata)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak

#### Patch 7.3.1314

Problem: Test 87 fails with Python 3.3.  
Solution: Filter the error messages. (Taro Muraoka)  
Files: src/testdir/test87.in

#### Patch 7.4a.001

Problem: Script to update syntax menu is outdated.  
Solution: Add the missing items.  
Files: runtime/makemenu.vim

#### Patch 7.4a.002

Problem: Valgrind errors in test 89. (Simon Ruderich)  
Solution: Allocate one more byte. (Dominique Pelle)  
Files: src/misc2.c



## Patch 7.4a.003

Problem: Copyright year is outdated.  
Solution: Only use the first year.  
Files: src/vim.rc, src/viml6.rc

## Patch 7.4a.004

Problem: MSVC 2012 Update 3 is not recognized.  
Solution: Add the version number. (Raymond Ko)  
Files: src/Make\_mvc.mak

## Patch 7.4a.005

Problem: Scroll binding causes unexpected scroll.  
Solution: Store the topline after updating scroll binding. Add a test.  
(Lech Lorens)  
Files: src/testdir/test98.in, src/testdir/test98a.in,  
src/testdir/test98.ok, src/option.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile

## Patch 7.4a.006

Problem: Failure in po file check goes unnoticed.  
Solution: Fail "make test" if the po file check fails.  
Files: src/Makefile

## Patch 7.4a.007

Problem: After "g\$" with 'virtualedit' set, "k" moves to a different  
column. (Dimitar Dimitrov)  
Solution: Set w\_curswant. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.4a.008

Problem: Python 3 doesn't handle multibyte characters properly when  
'encoding' is not utf-8.  
Solution: Use PyUnicode\_Decode() instead of PyUnicode\_FromString(). (Ken  
Takata)  
Files: src/if\_python3.c

## Patch 7.4a.009

Problem: Compiler warnings for function prototypes.  
Solution: Add "void". Move list\_features() prototype. (Ken Takata)  
Files: src/gui\_w48.c, src/if\_py\_both.h, src/version.c

## Patch 7.4a.010

Problem: Test 86 and 87 fail when building with Python or Python 3 and  
using a static library.  
Solution: Add configure check to add -fPIE compiler flag.  
Files: src/configure.in, src/auto/configure

## Patch 7.4a.011

Problem: Configure check for Python 3 config name isn't right.  
Solution: Always include vi\_cv\_var\_python3\_version. (Tim Harder)  
Files: src/configure.in, src/auto/configure

## Patch 7.4a.012

Problem: "make test" fails when using a shadow directory.  
Solution: Create links for files in src/po. (James McCoy)  
Files: src/Makefile

## Patch 7.4a.013

Problem: Setting/resetting 'lbr' in the main help file changes alignment

after a Tab. (Dimitar Dimitrov)  
Solution: Also use the code for conceal mode where n\_extra is computed for  
'lbr'.  
Files: src/screen.c, src/testdir/test88.in, src/testdir/test88.ok

#### Patch 7.4a.014

Problem: Test 86 and 89 have a problem with using a shadow dir.  
Solution: Adjust for the different directory structure. (James McCoy)  
Files: src/testdir/test89.in, src/testdir/test86.in, src/Makefile

#### Patch 7.4a.015

Problem: No Japanese man pages.  
Solution: Add Japanese translations of man pages. (Ken Takata, Yukihiro  
Nakadaira, et al.)  
Files: Filelist, src/Makefile, runtime/doc/evim-ja.UTF-8.1,  
runtime/doc/vim-ja.UTF-8.1, runtime/doc/vimdiff-ja.UTF-8.1,  
runtime/doc/vimtutor-ja.UTF-8.1, runtime/doc/xxd-ja.UTF-8.1

#### Patch 7.4a.016 (after 7.4a.014)

Problem: Features enabled in Makefile.  
Solution: Undo accidental changes.  
Files: src/Makefile

#### Patch 7.4a.017

Problem: When 'foldmethod' is "indent", using ">>" on a line just above a  
fold makes the cursor line folded. (Evan Laforge)  
Solution: Call foldOpenCursor(). (Christian Brabandt)  
Files: src/ops.c

#### Patch 7.4a.018

Problem: Compiler warning for code unreachable. (Charles Campbell)  
Solution: Use "while" instead of endless loop. Change break to continue.  
Files: src/regexp\_nfa.c, src/ui.c

#### Patch 7.4a.019

Problem: Invalid closing parenthesis in test 62. Command truncated at  
double quote.  
Solution: Remove the parenthesis. Change double quote to ''. (ZyX)  
Files: src/testdir/test62.in, src/testdir/test62.ok

#### Patch 7.4a.020

Problem: Superfluous mb\_ptr\_adv().  
Solution: Remove the call. (Dominique Pelle)  
Files: src/regexp\_nfa.c

#### Patch 7.4a.021

Problem: Using feedkeys() doesn't always work.  
Solution: Omit feedkeys(). (Ken Takata)  
Files: src/testdir/test98a.in

#### Patch 7.4a.022

Problem: Using "d2g\$" does not delete the last character. (ZyX)  
Solution: Set the "inclusive" flag properly.  
Files: src/normal.c

#### Patch 7.4a.023 (after 7.4a.019)

Problem: Still another superfluous parenthesis. (ZyX)  
Solution: Remove it.  
Files: src/testdir/test62.in

#### Patch 7.4a.024

Problem: X11 GUI: Checking icon height twice.

Solution: Check height and width. (Dominique Pelle)  
Files: src/gui\_x11.c

Patch 7.4a.025

Problem: Get the press-Enter prompt even after using :redraw.  
Solution: Clear need\_wait\_return when executing :redraw.  
Files: src/ex\_docmd.c

Patch 7.4a.026

Problem: ":diffoff" does not remove folds. (Ramel)  
Solution: Do not restore 'foldenable' when 'foldmethod' is "manual".  
Files: src/diff.c

Patch 7.4a.027

Problem: When Python adds lines to another buffer the cursor position is wrong, it might be below the last line causing ml\_get errors. (Vlad Irnov)  
Solution: Temporarily change the current window, so that marks are corrected properly.  
Files: src/if\_py\_both.h, src/window.c, src/proto/buffer.pro

Patch 7.4a.028

Problem: Crash when spell checking in new buffer.  
Solution: Set the b\_p\_key field. (Mike Williams)  
Files: src/spell.c, src/testdir/test58.in

Patch 7.4a.029

Problem: Can't build with MzScheme on Ubuntu 13.04.  
Solution: Add configure check for the "ffi" library.  
Files: src/configure.in, src/auto/configure

Patch 7.4a.030 (after 7.4.027)

Problem: Missing find\_win\_for\_buf(). (toothpik)  
Solution: Add missing changes.  
Files: src/buffer.c

Patch 7.4a.031

Problem: Compiler warnings. (Charles Campbell)  
Solution: Initialize variables even when not needed.  
Files: src/regexp\_nfa.c, src/search.c

Patch 7.4a.032

Problem: New regexp engine: Does not match shorter alternative. (Ingo Karkat)  
Solution: Do not drop a new state when the PIM info is different.  
Files: src/regexp\_nfa.c

Patch 7.4a.033

Problem: Test 98 always passes.  
Solution: Include test98a.in in test98.in, execute the crucial command in one line. (Yukihiro Nakadaira)  
Files: src/testdir/test98.in, src/testdir/test98a.in

Patch 7.4a.034

Problem: The tabline may flicker when opening a new tab after 7.3.759 on Win32.  
Solution: Move call to TabCtrl\_SetCurSel(). (Ken Takata)  
Files: src/gui\_w48.c

Patch 7.4a.035

Problem: Fix in patch 7.4a.032 is not tested.  
Solution: Add test.

Files: src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4a.036

Problem: "\p" in a regexp does not match double-width characters.  
(Yukihiro Nakadaira)

Solution: Don't count display cells, use vim\_isprintc().

Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test64.in,  
src/testdir/test64.ok, src/testdir/test95.in,  
src/testdir/test95.ok

Patch 7.4a.037

Problem: Win32: When mouse is hidden and in the toolbar, moving it won't  
make it appear. (Sami Salonen)

Solution: Add tabline\_wndproc() and toolbar\_wndproc(). (Ken Takata)

Files: src/gui\_w32.c, src/gui\_w48.c

Patch 7.4a.038

Problem: When using MSVC 2012 there are various issues, including GUI size  
computations.

Solution: Use SM\_CXPADEDBORDER. (Mike Williams)

Files: src/gui\_w32.c, src/gui\_w48.c, src/os\_win32.h

Patch 7.4a.039

Problem: New regexp engine doesn't match pattern. (Ingo Karkat)

Solution: When adding a state also check for different PIM if the list of  
states has any state with a PIM.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4a.040

Problem: Win32: using uninitialized variable.

Solution: (Yukihiro Nakadaira)

Files: src/os\_win32.c

Patch 7.4a.041

Problem: When using ":new ++ff=unix" and "dos" is first in 'fileformats'  
then 'ff' is set to "dos" instead of "unix". (Ingo Karkat)

Solution: Create set\_file\_options() and invoke it from do\_ecmd().

Files: src/fileio.c, src/proto/fileio.pro, src/ex\_cmds.c,  
src/testdir/test91.in, src/testdir/test91.ok

Patch 7.4a.042

Problem: Crash when BufUnload autocommands close all buffers. (Andrew  
Pimlott)

Solution: Set curwin->w\_buffer to curbuf to avoid NULL.

Files: src/window.c, src/testdir/test8.in, src/testdir/test8.ok

Patch 7.4a.043

Problem: More ml\_get errors when adding or deleting lines from Python.  
(Vlad Irnov)

Solution: Switch to a window with the buffer when possible.

Files: src/if\_py\_both.h

Patch 7.4a.044

Problem: Test 96 sometimes fails.

Solution: Clear window from b\_wininfo in win\_free(). (Suggestion by  
Yukihiro Nakadaira)

Files: src/window.c

Patch 7.4a.045

Problem: Configure does not always find the right library for Lua. Missing  
support for LuaJit.

Solution: Improve the configure detection of Lua. (Hiroshi Shiroaki)



## Patch 7.4b.010

Problem: Win32: Tcl library load does not use standard mechanism.  
Solution: Call vimLoadLib() instead of LoadLibraryEx(). (Ken Takata)  
Files: src/if\_perl.xs, src/if\_tcl.c

## Patch 7.4b.011

Problem: ":he \%(\\)" does not work. (ZyX)  
Solution: Add an exception to the list.  
Files: src/ex\_cmds.c

## Patch 7.4b.012

Problem: Output from a shell command is truncated at a NUL. (lcd 47)  
Solution: Change every NUL into an SOH.  
Files: src/misc1.c

## Patch 7.4b.013

Problem: Install dir for JP man pages is wrong.  
Solution: Remove ".UTF-8" from the directory name. (Ken Takata)  
Files: src/Makefile

## Patch 7.4b.014 (after 7.4b.012)

Problem: Stupid mistake.  
Solution: Changle "len" to "i".  
Files: src/misc1.c

## Patch 7.4b.015 (after 7.4b.008)

Problem: Can't compile without the 'acd' feature.  
Solution: Add #ifdefs. (Kazunobu Kuriyama)  
Files: src/fileio.c

## Patch 7.4b.016

Problem: Ruby detection fails on Fedora 19.  
Solution: Use one way to get the Ruby version. (Michael Henry)  
Files: src/configure.in, src/auto/configure

## Patch 7.4b.017

Problem: ":he ^x" gives a strange error message. (glts)  
Solution: Do not translate ^x to \_CTRL-x.  
Files: src/ex\_cmds.c

## Patch 7.4b.018 (after 7.4b.001)

Problem: Win32: Dialog can still be too big.  
Solution: Move the check for height further down. (Andrei Olsen)  
Files: src/gui\_w32.c

## Patch 7.4b.019 (after 7.4a.034)

Problem: Tabline is not updated properly when closing a tab on Win32.  
Solution: Only reduce flickering when adding a tab. (Ken Takata)  
Files: src/gui\_w48.c

## Patch 7.4b.020

Problem: "g~ap" changes first character of next paragraph. (Manuel Ortega)  
Solution: Avoid subtracting (0 - 1) from todo. (Mike Williams)  
Files: src/ops.c, src/testdir/test82.in, src/testdir/test82.ok

## Patch 7.4b.021

Problem: Pressing "u" after an external command results in multiple press-enter messages. (glts)  
Solution: Don't call hit\_return\_msg() when we have K\_IGNORE. (Christian Brabandt)  
Files: src/message.c

Patch 7.4b.022

Problem: Not waiting for a character when the tick count overflows.

Solution: Subtract the unsigned numbers and cast to int. (Ken Takata)

Files: src/os\_win32.c

vim:tw=78:ts=8:ft=help:norl:

\*version8.txt\* For Vim version 8.0. Last change: 2017 Apr 23

## VIM REFERENCE MANUAL by Bram Moolenaar

\*vim8\* \*vim-8\* \*version-8.0\* \*version8.0\*

Welcome to Vim 8! A large number of bugs have been fixed and several nice features have been added. This file mentions all the new items and changes to existing features since Vim 7.4. The patches up to Vim 7.4 can be found here: [|vim-7.4|](#).

Use this command to see the full version and features information of the Vim program you are using: >

```
:version
```

|                         |                                     |
|-------------------------|-------------------------------------|
| NEW FEATURES            | <a href="#"> new-8 </a>             |
| Vim script enhancements | <a href="#"> new-vim-script-8 </a>  |
| Various new items       | <a href="#"> new-items-8 </a>       |
| INCOMPATIBLE CHANGES    | <a href="#"> incompatible-8 </a>    |
| IMPROVEMENTS            | <a href="#"> improvements-8 </a>    |
| COMPILE TIME CHANGES    | <a href="#"> compile-changes-8 </a> |
| PATCHES                 | <a href="#"> patches-8 </a>         |

See [|vi\\_diff.txt|](#) for an overview of differences between Vi and Vim 8.0. See [|version4.txt|](#), [|version5.txt|](#), [|version6.txt|](#) and [|version7.txt|](#) for differences between other versions.

### =====

#### NEW FEATURES

\*new-8\*

First an overview of the more interesting new features. A comprehensive list is below.

Asynchronous I/O support, channels ~

Vim can now exchange messages with other processes in the background. This makes it possible to have servers do work and send back the results to Vim. See [|channel-demo|](#) for an example, this shows communicating with a Python server.

Closely related to channels is JSON support. JSON is widely supported and can easily be used for inter-process communication, allowing for writing a server in any language. The functions to use are [|json\\_encode\(\)|](#) and [|json\\_decode\(\)|](#).

This makes it possible to build very complex plugins, written in any language and running in a separate process.

## Jobs ~

Vim can now start a job, communicate with it and stop it. This is very useful to run a process for completion, syntax checking, etc. Channels are used to communicate with the job. Jobs can also read from or write to a buffer or a file. See `|job_start()|`.

## Timers ~

Also asynchronous are timers. They can fire once or repeatedly and invoke a function to do any work. For example: >

```
let tempTimer = timer_start(4000, 'CheckTemp')
```

This will call the `CheckTemp()` function four seconds (4000 milli seconds) later. See `|timer_start()|`.

## Partials ~

Vim already had a `Funcref`, a reference to a function. A partial also refers to a function, and additionally binds arguments and/or a dictionary. This is especially useful for callbacks on channels and timers. E.g., for the timer example above, to pass an argument to the function: >

```
let tempTimer = timer_start(4000, function('CheckTemp', ['out']))
```

This will call `CheckTemp('out')` four seconds later.

## Lambda and Closure ~

A short way to create a function has been added: `{args -> expr}`. See `|lambda|`. This is useful for functions such as ``filter()`` and ``map()``, which now also accept a function argument. Example: >

```
:call filter(mylist, {idx, val -> val > 20})
```

A lambda can use variables defined in the scope where the lambda is defined. This is usually called a `|closure|`.

User defined functions can also be a closure by adding the "closure" argument `|:func-closure|`.

## Packages ~

Plugins keep growing and more of them are available than ever before. To keep the collection of plugins manageable package support has been added. This is a convenient way to get one or more plugins, drop them in a directory and possibly keep them updated. Vim will load them automatically, or only when desired. See `|packages|`.

## New style tests ~

This is for Vim developers. So far writing tests for Vim has not been easy. Vim 8 adds assert functions and a framework to run tests. This makes it a lot simpler to write tests and keep them updated. Also new are several functions that are added specifically for testing. See `|test-functions|`.

## Window IDs ~



Previously windows could only be accessed by their number. And every time a window would open, close or move that number changes. Each window now has a unique ID, so that they are easy to find. See `|win_getid()|` and `|win_id2win()|`.

Viminfo uses timestamps ~

Previously the information stored in viminfo was whatever the last Vim wrote there. Now timestamps are used to always keep the most recent items. See `|viminfo-timestamp|`.

Wrapping lines with indent ~

The 'breakindent' option has been added to be able to wrap lines without changing the amount of indent.

Windows: DirectX support ~

This adds the 'renderoptions' option to allow for switching on DirectX (DirectWrite) support on MS-Windows.

GTK+ 3 support ~

The GTK+ 3 GUI works just like GTK+ 2 except for hardly noticeable technical differences between them. Configure still chooses GTK+ 2 if both 2 and 3 are available. See `src/Makefile` for how to use GTK+ 3 instead. See `|gui-x11-compiling|` for other details.

Vim script enhancements

\*new-vim-script-8\*

-----

In Vim script the following types have been added:

|                        |                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------|
| <code> Special </code> | <code> v:false </code> , <code> v:true </code> , <code> v:none </code> and <code> v:null </code> |
| <code> Channel </code> | connection to another process for asynchronous I/O                                               |
| <code> Job </code>     | process control                                                                                  |

Many functions and commands have been added to support the new types.

On some systems the numbers used in Vim script are now 64 bit. This can be checked with the `|+num64|` feature.

Many items were added to support `|new-style-testing|`.

`printf()` now accepts any type of argument for `%s`. It is converted to a string like with `string()`.

Various new items

\*new-items-8\*

-----

Visual mode commands: ~

|                           |          |                                            |
|---------------------------|----------|--------------------------------------------|
| <code> v_CTRL-A </code>   | CTRL-A   | add N to number in highlighted text        |
| <code> v_CTRL-X </code>   | CTRL-X   | subtract N from number in highlighted text |
| <code> v_g_CTRL-A </code> | g CTRL-A | add N to number in highlighted text        |
| <code> v_g_CTRL-X </code> | g CTRL-X | subtract N from number in highlighted text |

Insert mode commands: ~

|            |          |                                            |
|------------|----------|--------------------------------------------|
| i_CTRL-G_U | CTRL-G U | don't break undo with next cursor movement |
|------------|----------|--------------------------------------------|

Cmdline mode commands: ~

|          |        |                                                |
|----------|--------|------------------------------------------------|
| /_CTRL-G | CTRL-G | move to the next match in 'incsearch' mode     |
| /_CTRL-T | CTRL-T | move to the previous match in 'incsearch' mode |

Options: ~

|                  |                                                 |
|------------------|-------------------------------------------------|
| 'belloff'        | do not ring the bell for these reasons          |
| 'breakindent'    | wrapped line repeats indent                     |
| 'breakindentopt' | settings for 'breakindent'.                     |
| 'emoji'          | emoji characters are considered full width      |
| 'fixendofline'   | make sure last line in file has <EOL>           |
| 'langremap'      | do apply 'langmap' to mapped characters         |
| 'lua.dll'        | name of the Lua dynamic library                 |
| 'packpath'       | list of directories used for packages           |
| 'perl.dll'       | name of the Perl dynamic library                |
| 'python.dll'     | name of the Python 2 dynamic library            |
| 'python3.dll'    | name of the Python 3 dynamic library            |
| 'renderoptions'  | options for text rendering on Windows           |
| 'ruby.dll'       | name of the Ruby dynamic library                |
| 'signcolumn'     | when to display the sign column                 |
| 'tagcase'        | how to handle case when searching in tags files |
| 'tcl.dll'        | name of the Tcl dynamic library                 |
| 'termguicolors'  | use GUI colors for the terminal                 |

Ex commands: ~

|              |                                                 |
|--------------|-------------------------------------------------|
| :cbottom     | scroll to the bottom of the quickfix window     |
| :cdo         | execute command in each valid error list entry  |
| :cfdo        | execute command in each file in error list      |
| :chistory    | display quickfix list stack                     |
| :clearjumps  | clear the jump list                             |
| :filter      | only output lines that (do not) match a pattern |
| :helpclose   | close one help window                           |
| :lbottom     | scroll to the bottom of the location window     |
| :ldo         | execute command in valid location list entries  |
| :lfdo        | execute command in each file in location list   |
| :lhistory    | display location list stack                     |
| :noswapfile  | following commands don't create a swap file     |
| :packadd     | add a plugin from 'packpath'                    |
| :packloadall | load all packages under 'packpath'              |
| :smile       | make the user happy                             |

Ex command modifiers: ~

|               |                                                   |
|---------------|---------------------------------------------------|
| :keeppatterns | following command keeps search pattern history    |
| <mods>        | supply command modifiers to user defined commands |

New and extended functions: ~

|                |                                              |
|----------------|----------------------------------------------|
| arglistid()    | get id of the argument list                  |
| assert_equal() | assert that two expressions values are equal |

---

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| assert_exception()        | assert that a command throws an exception        |
| assert_fails()            | assert that a function call fails                |
| assert_false()            | assert that an expression is false               |
| assert_inrange()          | assert that an expression is inside a range      |
| assert_match()            | assert that a pattern matches the value          |
| assert_notequal()         | assert that two expressions values are not equal |
| assert_notmatch()         | assert that a pattern does not match the value   |
| assert_true()             | assert that an expression is true                |
| bufwinid()                | get the window ID of a specific buffer           |
| byteidxcomp()             | like byteidx() but count composing characters    |
| ch_close()                | close a channel                                  |
| ch_close_in()             | close the in part of a channel                   |
| ch_evaexpr()              | evaluates an expression over channel             |
| ch_evalraw()              | evaluates a raw string over channel              |
| ch_getbufnr()             | get the buffer number of a channel               |
| ch_getjob()               | get the job associated with a channel            |
| ch_info()                 | get channel information                          |
| ch_log()                  | write a message in the channel log file          |
| ch_logfile()              | set the channel log file                         |
| ch_open()                 | open a channel                                   |
| ch_read()                 | read a message from a channel                    |
| ch_readraw()              | read a raw message from a channel                |
| ch_sendexpr()             | send a JSON message over a channel               |
| ch_sendraw()              | send a raw message over a channel                |
| ch_setoptions()           | set the options for a channel                    |
| ch_status()               | get status of a channel                          |
| execute()                 | execute an Ex command and get the output         |
| exepath()                 | full path of an executable program               |
| funcref()                 | return a reference to function {name}            |
| getbufinfo()              | get a list with buffer information               |
| getcharsearch()           | return character search information              |
| getcmdwintype()           | return the current command-line window type      |
| getcompletion()           | return a list of command-line completion matches |
| getcurpos()               | get position of the cursor                       |
| gettabinfo()              | get a list with tab page information             |
| getwininfo()              | get a list with window information               |
| glob2regpat()             | convert a glob pattern into a search pattern     |
| isnan()                   | check for not a number                           |
| job_getchannel()          | get the channel used by a job                    |
| job_info()                | get information about a job                      |
| job_setoptions()          | set options for a job                            |
| job_start()               | start a job                                      |
| job_status()              | get the status of a job                          |
| job_stop()                | stop a job                                       |
| js_decode()               | decode a JSON string to Vim types                |
| js_encode()               | encode an expression to a JSON string            |
| json_decode()             | decode a JSON string to Vim types                |
| json_encode()             | encode an expression to a JSON string            |
| matchaddpos()             | define a list of positions to highlight          |
| matchstrpos()             | match and positions of a pattern in a string     |
| perlval()                 | evaluate Perl expression                         |
| reltimefloat()            | convert reltime() result to a Float              |
| setcharsearch()           | set character search information                 |
| setfperm()                | set the permissions of a file                    |
| strcharpart()             | get part of a string using char index            |
| strgetchar()              | get character from a string using char index     |
| systemlist()              | get the result of a shell command as a list      |
| test_alloc_fail()         | make memory allocation fail                      |
| test_autochdir()          | test 'autochdir' functionality                   |
| test_disable_char_avail() | test without typeahead (removed later)           |
| test_garbagecollect_now() | free memory right now                            |
| test_null_channel()       | return a null Channel                            |

|                     |                                          |
|---------------------|------------------------------------------|
| test_null_dict()    | return a null Dict                       |
| test_null_job()     | return a null Job                        |
| test_null_list()    | return a null List                       |
| test_null_partial() | return a null Partial function           |
| test_null_string()  | return a null String                     |
| test_settime()      | set the time Vim uses internally         |
| timer_info()        | get information about timers             |
| timer_pause()       | pause or unpause a timer                 |
| timer_start()       | create a timer                           |
| timer_stop()        | stop a timer                             |
| timer_stopall()     | stop all timers                          |
| uniq()              | remove copies of repeated adjacent items |
| win_findbuf()       | find windows containing a buffer         |
| win_getid()         | get window ID of a window                |
| win_gotoid()        | go to window with ID                     |
| win_id2tabwin()     | get tab and window nr from window ID     |
| win_id2win()        | get window nr from window ID             |
| wordcount()         | get byte/word/char count of buffer       |

New Vim variables: ~

|                  |                                                      |
|------------------|------------------------------------------------------|
| v:beval_winid    | Window ID of the window where the mouse pointer is   |
| v:completed_item | complete items for the most recently completed word  |
| v:errors         | errors found by assert functions                     |
| v:false          | a Number with value zero                             |
| v:hlsearch       | indicates whether search highlighting is on          |
| v:mouse_winid    | Window ID for a mouse click obtained with  getchar() |
| v:none           | an empty String, used for JSON                       |
| v:null           | an empty String, used for JSON                       |
| v:option_new     | new value of the option, used by  OptionSet          |
| v:option_old     | old value of the option, used by  OptionSet          |
| v:option_type    | scope of the set command, used by  OptionSet         |
| v:progbath       | the command with which Vim was invoked               |
| v:t_bool         | value of Boolean type                                |
| v:t_channel      | value of Channel type                                |
| v:t_dict         | value of Dictionary type                             |
| v:t_float        | value of Float type                                  |
| v:t_func         | value of Funcref type                                |
| v:t_job          | value of Job type                                    |
| v:t_list         | value of List type                                   |
| v:t_none         | value of None type                                   |
| v:t_number       | value of Number type                                 |
| v:t_string       | value of String type                                 |
| v:testing        | must be set before using `test_garbagecollect_now()` |
| v:true           | a Number with value one                              |
| v:vim_did_enter  | set just before VimEnter autocommands are triggered  |

New autocommand events: ~

|              |                                                    |
|--------------|----------------------------------------------------|
| CmdUndefined | a user command is used but it isn't defined        |
| OptionSet    | after setting any option                           |
| TabClosed    | after closing a tab page                           |
| TabNew       | after creating a new tab page                      |
| TextChangedI | after a change was made to the text in Insert mode |
| TextChanged  | after a change was made to the text in Normal mode |
| WinNew       | after creating a new window                        |

New highlight groups: ~

EndOfBuffer                filler lines (~) after the last line in the buffer.  
                              |hl-EndOfBuffer|

New items in search patterns: ~

|/\%C|    \%C                match any composing characters

New Syntax/Indent/FTplugin files: ~

AVR Assembler (Avra) syntax  
 Arduino syntax  
 Bazel syntax and indent and ftplugin  
 Dockerfile syntax and ftplugin  
 Eiffel ftplugin  
 Euphoria 3 and 4 syntax  
 Go syntax and indent and ftplugin  
 Godoc syntax  
 Groovy ftplugin  
 HGcommit ftplugin  
 Hog indent and ftplugin  
 Innovation Data Processing upstream.pt syntax  
 J syntax and indent and ftplugin  
 Jproperties ftplugin  
 Json syntax and indent and ftplugin  
 Kivy syntax  
 Less syntax and indent  
 Mix syntax  
 Motorola S-Record syntax  
 R ftplugin  
 ReStructuredText syntax and indent and ftplugin  
 Registry ftplugin  
 Rhelp indent and ftplugin  
 Rmd (markdown with R code chunks) syntax and indent  
 Rmd ftplugin  
 Rnoweb ftplugin  
 Rnoweb indent  
 Scala syntax and indent and ftplugin  
 SystemVerilog syntax and indent and ftplugin  
 Systemd syntax and indent and ftplugin  
 Teraterm (TTL) syntax and indent  
 Text ftplugin  
 Vroom syntax and indent and ftplugin

New Keymaps: ~

Armenian eastern and western  
 Russian jcukenwintype  
 Vietnamese telex and vni

#### =====

#### INCOMPATIBLE CHANGES

\*incompatible-8\*

These changes are incompatible with previous releases. Check this list if you run into a problem when upgrading from Vim 7.4 to 8.0.

Better defaults without a vimrc ~

When no vimrc file is found, the |defaults.vim| script is loaded to set more

useful default values for new users. That includes setting 'nocompatible'. Thus Vim no longer starts up in Vi compatible mode. If you do want that, either create a .vimrc file that does "set compatible" or start Vim with "vim -C".

Support removed ~

The support for MS-DOS has been removed. It hasn't been working for a while (Vim doesn't fit in memory) and removing it cleans up the code quite a bit.

The support for Windows 16 bit (Windows 95 and older) has been removed.

The support for OS/2 has been removed. It probably hasn't been working for a while since nobody uses it.

The SNIFF+ support has been removed.

Minor incompatibilities: ~

Probably...

#### =====

#### IMPROVEMENTS

\*improvements-8\*

The existing blowfish encryption turned out to be much weaker than it was supposed to be. The blowfish2 method has been added to fix that. Note that this still isn't a state-of-the-art encryption, but good enough for most usage. See 'cryptmethod'.

#### =====

#### COMPILE TIME CHANGES

\*compile-changes-8\*

The Vim repository was moved from Google code to github, since Google code was shut down. It can now be found at <https://github.com/vim/vim>.

Functions now use ANSI-C declarations. At least a C-89 compatible compiler is required.

The +visual feature is now always included.

#### =====

#### PATCHES

\*patches-8\* \*bug-fixes-8\*

The list of patches that got included since 7.4.0. This includes all the new features, but does not include runtime file changes (syntax, indent, help, etc.)

##### Patch 7.4.001

Problem: Character classes such as [a-z] do not react to 'ignorecase'. Breaks man page highlighting. (Mario Grgic)

Solution: Add separate items for classes that react to 'ignorecase'. Clean up logic handling character classes. Add more tests.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

##### Patch 7.4.002

Problem: Pattern with two alternative look-behind matches does not match. (Amadeus Demarzi)

Solution: When comparing PIMs also compare their state ID to see if they are different.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4.003

Problem: Memory access error in Ruby syntax highlighting. (Christopher Chow)

Solution: Refresh stale pointer. (James McCoy)

Files: src/regexp\_nfa.c

Patch 7.4.004

Problem: When closing a window fails ":bwipe" may hang.

Solution: Let win\_close() return FAIL and break out of the loop.

Files: src/window.c, src/proto/window.pro, src/buffer.c

Patch 7.4.005

Problem: Using "vaB" while 'virtualedit' is set selects the wrong area.  
(Dimitar Dimitrov)

Solution: Reset coladd when finding a match.

Files: src/search.c

Patch 7.4.006

Problem: mkdir("foo/bar/", "p") gives an error message. (David Barnett)

Solution: Remove the trailing slash. (lcd)

Files: src/eval.c

Patch 7.4.007

Problem: Creating a preview window on startup leaves the screen layout in a  
messed up state. (Marius Gedminas)

Solution: Don't change firstwin. (Christian Brabandt)

Files: src/main.c

Patch 7.4.008

Problem: New regexp engine can't be interrupted.

Solution: Check for CTRL-C pressed. (Yasuhiro Matsumoto)

Files: src/regexp\_nfa.c, src/regexp.c

Patch 7.4.009

Problem: When a file was not decrypted (yet), writing it may destroy the  
contents.

Solution: Mark the file as readonly until decryption was done. (Christian  
Brabandt)

Files: src/fileio.c

Patch 7.4.010 (after 7.4.006)

Problem: Crash with invalid argument to mkdir().

Solution: Check for empty string. (lcd47)

Files: src/eval.c

Patch 7.4.011

Problem: Cannot find out if "acl" and "xpm" features are supported.

Solution: Add "acl" and "xpm" to the list of features. (Ken Takata)

Files: src/eval.c, src/version.c

Patch 7.4.012

Problem: MS-Windows: resolving shortcut does not work properly with  
multi-byte characters.

Solution: Use wide system functions. (Ken Takata)

Files: src/os\_mswin.c

Patch 7.4.013

Problem: MS-Windows: File name buffer too small for utf-8.

Solution: Use character count instead of byte count. (Ken Takata)

Files: src/os\_mswin.c

## Patch 7.4.014

Problem: MS-Windows: check for writing to device does not work.  
Solution: Fix #ifdefs. (Ken Takata)  
Files: src/fileio.c

## Patch 7.4.015

Problem: MS-Windows: Detecting node type does not work for multi-byte characters.  
Solution: Use wide character function when needed. (Ken Takata)  
Files: src/os\_win32.c

## Patch 7.4.016

Problem: MS-Windows: File name case can be wrong.  
Solution: Add fname\_casew(). (Ken Takata)  
Files: src/os\_win32.c

## Patch 7.4.017

Problem: ":help !!" does not find the "!!" tag in the help file. (Ben Fritz)  
Solution: When reading the start of the tags file do parse lines that are not header lines.  
Files: src/tag.c

## Patch 7.4.018

Problem: When completing item becomes unselected. (Shougo Matsu)  
Solution: Revert patch 7.3.1269.  
Files: src/edit.c

## Patch 7.4.019

Problem: MS-Windows: File name completion doesn't work properly with Chinese characters. (Yue Wu)  
Solution: Take care of multi-byte characters when looking for the start of the file name. (Ken Takata)  
Files: src/edit.c

## Patch 7.4.020

Problem: NFA engine matches too much with \@>. (John McGowan)  
Solution: When a whole pattern match is found stop searching.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.021

Problem: NFA regexp: Using \ze in one branch which doesn't match may cause end of another branch to be wrong. (William Fugh)  
Solution: Set end position if it wasn't set yet.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.022

Problem: Deadlock while exiting, because of allocating memory.  
Solution: Do not use gettext() in deathtrap(). (James McCoy)  
Files: src/os\_unix.c, src/misc1.c

## Patch 7.4.023

Problem: Compiler warning on 64 bit windows.  
Solution: Add type cast. (Mike Williams)  
Files: src/edit.c

## Patch 7.4.024

Problem: When root edits a file the undo file is owned by root while the edited file may be owned by another user, which is not allowed. (cac2s)  
Solution: Accept an undo file owned by the current user.  
Files: src/undo.c



## Patch 7.4.025 (after 7.4.019)

Problem: Reading before start of a string.

Solution: Do not call mb\_ptr\_back() at start of a string. (Dominique Pelle)

Files: src/edit.c

## Patch 7.4.026

Problem: Clang warning for int shift overflow.

Solution: Use unsigned and cast back to int. (Dominique Pelle)

Files: src/misc2.c

## Patch 7.4.027 (after 7.4.025)

Problem: Another valgrind error when using CTRL-X CTRL-F at the start of the line. (Dominique Pelle)

Solution: Don't call mb\_ptr\_back() at the start of the line. Add a test.

Files: src/edit.c, src/testdir/test32.in

## Patch 7.4.028

Problem: Equivalence classes are not working for multi-byte characters.

Solution: Copy the rules from the old to the new regexp engine. Add a test to check both engines.

Files: src/regexp\_nfa.c, src/testdir/test44.in, src/testdir/test99.in,  
src/testdir/test99.ok, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile

## Patch 7.4.029

Problem: An error in a pattern is reported twice.

Solution: Remove the retry with the backtracking engine, it won't work.

Files: src/regexp.c

## Patch 7.4.030

Problem: The -mno-cygwin argument is no longer supported by Cygwin.

Solution: Remove the arguments. (Steve Hall)

Files: src/GvimExt/Make\_cyg.mak, src/Make\_cyg.mak, src/xxd/Make\_cyg.mak

## Patch 7.4.031

Problem: ":diffoff!" resets options even when 'diff' is not set. (Charles Cooper)

Solution: Only resets related options in a window where 'diff' is set.

Files: src/diff.c

## Patch 7.4.032

Problem: NFA engine does not match the NUL character. (Jonathon Merz)

Solution: Use 0x0a instead of NUL. (Christian Brabandt)

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.033

Problem: When the terminal has only 20 lines test 92 and 93 overwrite the input file.

Solution: Explicitly write test.out. Check that the terminal is large enough to run the tests. (Hirohito Higashi)

Files: src/testdir/test92.in, src/testdir/test93.in,  
src/testdir/test1.in, src/testdir/Makefile

## Patch 7.4.034

Problem: Using "p" in Visual block mode only changes the first line.

Solution: Repeat the put in all text in the block. (Christian Brabandt)

Files: runtime/doc/change.txt, src/ops.c, src/normal.c,  
src/testdir/test20.in, src/testdir/test20.ok

## Patch 7.4.035

Problem: MS-Windows: The mouse pointer flickers when going from command line mode to Normal mode.  
Solution: Check for WM\_NCMOUSEMOVE. (Ken Takata)  
Files: src/gui\_w48.c

## Patch 7.4.036

Problem: NFA engine does not capture group correctly when using \@>. (ZyX)  
Solution: Copy submatches before doing the recursive match.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.037

Problem: Using "\ze" in a sub-pattern does not result in the end of the match to be set. (Axel Bender)  
Solution: Copy the end of match position when a recursive match was successful.  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.038

Problem: Using "zw" and "zg" when 'spell' is off give a confusing error message. (Gary Johnson)  
Solution: Ignore the error when locating the word. Explicitly mention what word was added. (Christian Brabandt)  
Files: src/normal.c, src/spell.c

## Patch 7.4.039

Problem: MS-Windows: MSVC10 and earlier can't handle symlinks to a directory properly.  
Solution: Add stat\_symlink\_aware() and wstat\_symlink\_aware(). (Ken Takata)  
Files: src/os\_mswin.c, src/os\_win32.c, src/os\_win32.h

## Patch 7.4.040

Problem: Valgrind error on exit when a script-local variable holds a reference to the scope of another script.  
Solution: First clear all variables, then free the scopes. (ZyX)  
Files: src/eval.c

## Patch 7.4.041 (after 7.4.034)

Problem: Visual selection does not remain after being copied over. (Axel Bender)  
Solution: Move when VIsual\_active is reset. (Christian Brabandt)  
Files: src/ops.c

## Patch 7.4.042

Problem: When using ":setlocal" for 'spell' and 'spelllang' then :spelldump doesn't work. (Dimitar Dimitrov)  
Solution: Copy the option variables to the new window used to show the dump. (Christian Brabandt)  
Files: src/spell.c

## Patch 7.4.043

Problem: VMS can't handle long function names.  
Solution: Shorten may\_req\_ambiguous\_character\_width. (Samuel Ferencik)  
Files: src/main.c, src/term.c, src/proto/term.pro

## Patch 7.4.044 (after 7.4.039)

Problem: Can't build with old MSVC. (Wang Shoulin)  
Solution: Define OPEN\_OH\_ARGTYPE instead of using intptr\_t directly.  
Files: src/os\_mswin.c

## Patch 7.4.045

Problem: substitute() does not work properly when the pattern starts with  
"\ze".  
Solution: Detect an empty match. (Christian Brabandt)  
Files: src/eval.c, src/testdir/test80.in, src/testdir/test80.ok

#### Patch 7.4.046

Problem: Can't use Tcl 8.6.  
Solution: Change how Tcl\_FindExecutable is called. (Jan Nijtmans)  
Files: src/if\_tcl.c

#### Patch 7.4.047

Problem: When using input() in a function invoked by a mapping it doesn't  
work.  
Solution: Temporarily reset ex\_normal\_busy. (Yasuhiro Matsumoto)  
Files: src/eval.c

#### Patch 7.4.048

Problem: Recent clang version complains about -fno-strength-reduce.  
Solution: Add a configure check for the clang version. (Kazunobu Kuriyama)  
Files: src/configure.in, src/auto/configure

#### Patch 7.4.049

Problem: In Ex mode, when line numbers are enabled the substitute prompt is  
wrong.  
Solution: Adjust for the line number size. (Benoit Pierre)  
Files: src/ex\_cmds.c

#### Patch 7.4.050

Problem: "gn" selects too much for the pattern "\d" when there are two  
lines with a single digit. (Ryan Carney)  
Solution: Adjust the logic of is\_one\_char(). (Christian Brabandt)  
Files: src/search.c, src/testdir/test53.in, src/testdir/test53.ok

#### Patch 7.4.051

Problem: Syntax highlighting a Yaml file causes a crash. (Blake Preston)  
Solution: Copy the pim structure before calling addstate() to avoid it  
becoming invalid when the state list is reallocated.  
Files: src/regexp\_nfa.c

#### Patch 7.4.052

Problem: With 'fo' set to "a2" inserting a space in the first column may  
cause the cursor to jump to the previous line.  
Solution: Handle the case when there is no comment leader properly. (Tor  
Perkins) Also fix that cursor is in the wrong place when spaces  
get replaced with a Tab.  
Files: src/misc1.c, src/ops.c, src/testdir/test68.in,  
src/testdir/test68.ok

#### Patch 7.4.053

Problem: Test75 has a wrong header. (ZyX)  
Solution: Fix the text and remove leading ".  
Files: src/testdir/test75.in

#### Patch 7.4.054

Problem: Reading past end of the 'stl' string.  
Solution: Don't increment pointer when already at the NUL. (Christian  
Brabandt)  
Files: src/buffer.c

#### Patch 7.4.055

Problem: Mac: Where availability macros are defined depends on the system.  
Solution: Add a configure check. (Felix Bünemann)

Files: src/config.h.in, src/configure.in, src/auto/configure,  
src/os\_mac.h

Patch 7.4.056

Problem: Mac: Compilation problem with OS X 10.9 Mavericks.  
Solution: Include AvailabilityMacros.h when available. (Kazunobu Kuriyama)  
Files: src/os\_unix.c

Patch 7.4.057

Problem: byteidx() does not work for composing characters.  
Solution: Add byteidxcomp().  
Files: src/eval.c, src/testdir/test69.in, src/testdir/test69.ok,  
runtime/doc/eval.txt

Patch 7.4.058

Problem: Warnings on 64 bit Windows.  
Solution: Add type casts. (Mike Williams)  
Files: src/ops.c

Patch 7.4.059

Problem: set\_last\_cursor() may encounter w\_buffer being NULL. (Matt  
Mkanianaris)  
Solution: Check for NULL.  
Files: src/mark.c

Patch 7.4.060

Problem: Declaration has wrong return type for PyObject\_SetAttrString().  
Solution: Use int instead of PyObject. (Andreas Schwab)  
Files: src/if\_python.c, src/if\_python3.c

Patch 7.4.061 (after 7.4.055 and 7.4.056)

Problem: Availability macros configure check in wrong place.  
Solution: Also check when not using Darwin. Remove version check.  
Files: src/configure.in, src/auto/configure, src/os\_unix.c

Patch 7.4.062 (after 7.4.061)

Problem: Configure check for AvailabilityMacros.h is wrong.  
Solution: Use AC\_CHECK\_HEADERS().  
Files: src/configure.in, src/auto/configure

Patch 7.4.063

Problem: Crash when using invalid key in Python dictionary.  
Solution: Check for object to be NULL. Add tests. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.4.064

Problem: When replacing a character in Visual block mode, entering a CR  
does not cause a repeated line break.  
Solution: Recognize the situation and repeat the line break. (Christian  
Brabandt)  
Files: src/normal.c, src/ops.c, src/testdir/test39.in,  
src/testdir/test39.ok

Patch 7.4.065

Problem: When recording, the character typed at the hit-enter prompt is  
recorded twice. (Urtica Dioica)  
Solution: Avoid recording the character twice. (Christian Brabandt)  
Files: src/message.c

Patch 7.4.066

Problem: MS-Windows: When there is a colon in the file name (sub-stream

feature) the swap file name is wrong.  
Solution: Change the colon to "%". (Yasuhiro Matsumoto)  
Files: src/fileio.c, src/memline.c, src/misc1.c, src/proto/misc1.pro

#### Patch 7.4.067

Problem: After inserting comment leader, CTRL-\ CTRL-O does move the cursor. (Wiktor Ruben)  
Solution: Avoid moving the cursor. (Christian Brabandt)  
Files: src/edit.c

#### Patch 7.4.068

Problem: Cannot build Vim on Mac with non-Apple compilers.  
Solution: Remove the -no-cpp-precomp flag. (Misty De Meo)  
Files: src/configure.in, src/auto/configure, src/osdef.sh

#### Patch 7.4.069

Problem: Cannot right shift lines starting with #.  
Solution: Allow the right shift when 'cino' contains #N with N > 0. (Christian Brabandt)  
Refactor parsing 'cino', store the values in the buffer.  
Files: runtime/doc/indent.txt, src/buffer.c, src/edit.c, src/eval.c, src/ex\_getln.c, src/fold.c, src/misc1.c, src/ops.c, src/proto/misc1.pro, src/proto/option.pro, src/structs.h, src/option.c

#### Patch 7.4.070 (after 7.4.069)

Problem: Can't compile with tiny features. (Tony Mechelynck)  
Solution: Add #ifdef.  
Files: src/buffer.c

#### Patch 7.4.071 (after 7.4.069)

Problem: Passing limits around too often.  
Solution: Use limits from buffer.  
Files: src/edit.c, src/misc1.c, src/proto/misc1.pro

#### Patch 7.4.072

Problem: Crash when using Insert mode completion.  
Solution: Avoid going past the end of pum\_array. (idea by Francisco Lopes)  
Files: src/popupmnu.c

#### Patch 7.4.073

Problem: Setting undolevels for one buffer changes undo in another.  
Solution: Make 'undolevels' a global-local option. (Christian Brabandt)  
Files: runtime/doc/options.txt, src/buffer.c, src/option.c, src/option.h, src/structs.h, src/undo.c

#### Patch 7.4.074

Problem: When undo'ing all changes and creating a new change the undo structure is incorrect. (Christian Brabandt)  
Solution: When deleting the branch starting at the old header, delete the whole branch, not just the first entry.  
Files: src/undo.c

#### Patch 7.4.075

Problem: Locally setting 'undolevels' is not tested.  
Solution: Add a test. (Christian Brabandt)  
Files: src/testdir/test100.in, src/testdir/test100.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/Makefile

#### Patch 7.4.076

Problem: "cgn" does not wrap around the end of the file. (Dimitar Dimitrov)  
Solution: Restore 'wrapscan' earlier. (Christian Brabandt)  
Files: src/search.c

#### Patch 7.4.077

Problem: DOS installer creates shortcut without a path, resulting in the current directory to be C:\Windows\system32.  
Solution: Use environment variables.  
Files: src/dosinst.c

#### Patch 7.4.078

Problem: MSVC 2013 is not supported.  
Solution: Recognize and support MSVC 2013. (Ed Brown)  
Files: src/Make\_mvc.mak

#### Patch 7.4.079

Problem: A script cannot detect whether 'hlsearch' highlighting is actually displayed.  
Solution: Add the "v:hlsearch" variable. (ZyX)  
Files: src/eval.c, src/ex\_docmd.c,  
src/option.c, src/screen.c, src/search.c, src/tag.c, src/vim.h,  
src/testdir/test101.in, src/testdir/test101.ok,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.4.080 (after 7.4.079)

Problem: Missing documentation for v:hlsearch.  
Solution: Include the right file in the patch.  
Files: runtime/doc/eval.txt

#### Patch 7.4.081 (after 7.4.078)

Problem: Wrong logic when ANALYZE is "yes".  
Solution: Use or instead of and. (KF Leong)  
Files: src/Make\_mvc.mak

#### Patch 7.4.082

Problem: Using "gf" in a changed buffer suggests adding "!", which is not possible. (Tim Chase)  
Solution: Pass a flag to check\_changed() whether adding ! make sense.  
Files: src/vim.h, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, src/globals.h,  
src/ex\_cmds.c, src/ex\_docmd.c

#### Patch 7.4.083

Problem: It's hard to avoid adding a used pattern to the search history.  
Solution: Add the ":keeppatterns" modifier. (Christian Brabandt)  
Files: runtime/doc/cmdline.txt, src/ex\_cmds.h, src/ex\_docmd.c,  
src/ex\_getln.c, src/structs.h

#### Patch 7.4.084

Problem: Python: interrupt not being properly discarded. (Yggdroot Chen)  
Solution: Discard interrupt in VimTryEnd. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

#### Patch 7.4.085

Problem: When inserting text in Visual block mode and moving the cursor the wrong text gets repeated in other lines.  
Solution: Use the '[' mark to find the start of the actually inserted text. (Christian Brabandt)  
Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

## Patch 7.4.086

Problem: Skipping over an expression when not evaluating it does not work properly for dict members.  
Solution: Skip over unrecognized expression. (ZyX)  
Files: src/eval.c, src/testdir/test34.in, src/testdir/test34.ok

## Patch 7.4.087

Problem: Compiler warning on 64 bit Windows systems.  
Solution: Fix type cast. (Mike Williams)  
Files: src/ops.c

## Patch 7.4.088

Problem: When spell checking is enabled Asian characters are always marked as error.  
Solution: When 'spellang' contains "cjk" do not mark Asian characters as error. (Ken Takata)  
Files: runtime/doc/options.txt, runtime/doc/spell.txt, src/mbyte.c, src/option.c, src/spell.c, src/structs.h

## Patch 7.4.089

Problem: When editing a file in a directory mounted through sshfs Vim doesn't set the security context on a renamed file.  
Solution: Add mch\_copy\_sec() to vim\_rename(). (Peter Backes)  
Files: src/fileio.c

## Patch 7.4.090

Problem: Win32: When a directory name contains an exclamation mark, completion doesn't complete the contents of the directory.  
Solution: Escape the exclamation mark. (Jan Stocker)  
Files: src/ex\_getln.c, src/testdir/test102.in, src/testdir/test102.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

## Patch 7.4.091 (after 7.4.089)

Problem: Missing semicolon.  
Solution: Add the semicolon.  
Files: src/fileio.c

## Patch 7.4.092 (after 7.4.088)

Problem: Can't build small version.  
Solution: Add #ifdef where the b\_cjk flag is used. (Ken Takata)  
Files: src/spell.c

## Patch 7.4.093

Problem: Configure can't use LuaJIT on ubuntu 12.04.  
Solution: Adjust the configure regexp that locates the version number. (Charles Strahan)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.094

Problem: Configure may not find that -lint is needed for gettext().  
Solution: Check for gettext() with empty \$LIBS. (Thomas De Schampheleire)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.095 (after 7.4.093)

Problem: Regexp for LuaJIT version doesn't work on BSD.  
Solution: Use "\*" instead of "\+" and "\?". (Ozaki Kiichi)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.096

Problem: Can't change directory to an UNC path.

Solution: Use win32\_getattns() in mch\_getperm(). (Christian Brabandt)  
Files: src/os\_win32.c

Patch 7.4.097 (after 7.4.034)

Problem: Unexpected behavior change related to 'virtualedit'. (Ingo Karkat)  
Solution: Update the valid cursor position. (Christian Brabandt)  
Files: src/ops.c

Patch 7.4.098

Problem: When using ":'<,'>del" errors may be given for the visual line numbers being out of range.

Solution: Reset Visual mode in ":'del". (Lech Lorens)

Files: src/ex\_docmd.c, src/testdir/test103.in, src/testdir/test103.ok,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.4.099

Problem: Append in blockwise Visual mode with "\$" is wrong.

Solution: After "\$" don't use the code that checks if the cursor was moved. (Hirohito Higashi, Ken Takata)

Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

Patch 7.4.100

Problem: NFA regexp doesn't handle backreference correctly. (Ryuichi Hayashida, Urtica Dioica)

Solution: Always add NFA\_SKIP, also when it already exists at the start position.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4.101

Problem: Using \l in pattern goes one line too far. (Bohr Shaw, John Little)

Solution: Only advance the match end for the matched characters in the last line.

Files: src/regexp.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4.102

Problem: Crash when interrupting "z=".

Solution: Add safety check for word length. (Christian Brabandt, Dominique Pelle)

Files: src/spell.c

Patch 7.4.103

Problem: Dos installer uses an old way to escape spaces in the diff command.

Solution: Adjust the quoting to the new default shellxquote. (Ben Fritz)

Files: src/dosinst.c

Patch 7.4.104

Problem: ":help s/\\_" reports an internal error. (John Beckett)

Solution: Check for NUL and invalid character classes.

Files: src/regexp\_nfa.c

Patch 7.4.105

Problem: Completing a tag pattern may give an error for invalid pattern.

Solution: Suppress the error, just return no matches.

Files: src/tag.c

Patch 7.4.106

Problem: Can't build with Ruby using Cygwin.

Solution: Fix library name in makefile. (Steve Hall)

Files: src/Make\_cyg.mak



## Patch 7.4.107

Problem: Python: When vim.eval() encounters a Vim error, a try/catch in the Python code doesn't catch it. (Yggdroot Chen)  
Solution: Throw exceptions on errors in vim.eval(). (ZyX)  
Files: src/ex\_eval.c, src/if\_py\_both.h, src/proto/ex\_eval.pro,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.4.108

Problem: "zG" and "zW" leave temp files around on MS-Windows.  
Solution: Delete the temp files when exiting. (Ken Takata)  
Files: src/memline.c, src/proto/spell.pro, src/spell.c

## Patch 7.4.109

Problem: ColorScheme autocommand matches with the current buffer name.  
Solution: Match with the colorscheme name. (Christian Brabandt)  
Files: runtime/doc/autocmd.txt, src/fileio.c, src/syntax.c

## Patch 7.4.110

Problem: "gUgn" cannot be repeated. (Dimitar Dimitrov)  
Solution: Don't put "gn" in a different order in the redo buffer. Restore 'wrapscan' when the pattern isn't found. (Christian Wellenbrock)  
Files: src/normal.c, src/search.c, src/test53.in, src/test53.ok

## Patch 7.4.111

Problem: Memory leak in Python OptionsAssItem. (Ken Takata)  
Solution: Call Py\_XDECREF() where needed. (ZyX)  
Files: src/if\_py\_both.h

## Patch 7.4.112

Problem: The defaults for 'directory' and 'backupdir' on MS-Windows do not include a directory that exists.  
Solution: Use \$TEMP.  
Files: src/os\_dos.h

## Patch 7.4.113

Problem: MSVC static analysis gives warnings.  
Solution: Avoid the warnings and avoid possible bugs. (Ken Takata)  
Files: src/os\_win32.c

## Patch 7.4.114

Problem: New GNU make outputs messages about changing directory in another format.  
Solution: Recognize the new format.  
Files: src/option.h

## Patch 7.4.115

Problem: When using Zsh expanding ~abc doesn't work when the result contains a space.  
Solution: Off-by-one error in detecting the NUL. (Pavol Juhas)  
Files: src/os\_unix.c

## Patch 7.4.116

Problem: When a mapping starts with a space, the typed space does not show up for 'showcmd'.  
Solution: Show "<20>". (Brook Hong)  
Files: src/normal.c

## Patch 7.4.117

Problem: Can't build with Cygwin/MingW and Perl 5.18.  
Solution: Add a linker argument for the Perl library. (Cesar Romani)

Adjust CFLAGS and LIB. (Cesar Romani)  
Move including inline.h further down. (Ken Takata)  
Files: src/Make\_cyg.mak, src/Make\_ming.mak, src/if\_perl.xs

Patch 7.4.118

Problem: It's possible that redrawing the status lines causes  
win\_redr\_custom() to be called recursively.  
Solution: Protect against recursiveness. (Yasuhiro Matsumoto)  
Files: src/screen.c

Patch 7.4.119

Problem: Vim doesn't work well on OpenVMS.  
Solution: Fix various problems. (Samuel Ferencik)  
Files: src/os\_unix.c, src/os\_unix.h, src/os\_vms.c

Patch 7.4.120 (after 7.4.117)

Problem: Can't build with Perl 5.18 on Linux. (Lcd 47)  
Solution: Add #ifdef. (Ken Takata)  
Files: src/if\_perl.xs

Patch 7.4.121

Problem: Completion doesn't work for ":py3d" and ":py3f". (Bohr Shaw)  
Solution: Skip over letters after ":py3".  
Files: src/ex\_docmd.c

Patch 7.4.122

Problem: Win32: When 'encoding' is set to "utf-8" and the active codepage  
is cp932 then ":grep" and other commands don't work for multi-byte  
characters.  
Solution: (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

Patch 7.4.123

Problem: Win32: Getting user name does not use wide function.  
Solution: Use GetUserNameW() if possible. (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.124

Problem: Win32: Getting host name does not use wide function.  
Solution: Use GetComputerNameW() if possible. (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.125

Problem: Win32: Dealing with messages may not work for multi-byte chars.  
Solution: Use pDispatchMessage(). (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.126

Problem: Compiler warnings for "const" and incompatible types.  
Solution: Remove "const", add type cast. (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.127

Problem: Perl 5.18 on Unix doesn't work.  
Solution: Move workaround to after including vim.h. (Ken Takata)  
Files: src/if\_perl.xs

Patch 7.4.128

Problem: Perl 5.18 for MSVC doesn't work.  
Solution: Add check in makefile and define \_\_inline. (Ken Takata)  
Files: src/Make\_mvc.mak, src/if\_perl.xs

## Patch 7.4.129

Problem: getline(-1) returns zero. (mvxxc)  
Solution: Return an empty string.  
Files: src/eval.c

## Patch 7.4.130

Problem: Relative line numbers mix up windows when using folds.  
Solution: Use hasFoldingWin() instead of hasFolding(). (Lech Lorens)  
Files: src/misc2.c

## Patch 7.4.131

Problem: Syncbind causes E315 errors in some situations. (Liang Li)  
Solution: Set and restore curbuf in ex\_syncbind(). (Christian Brabandt)  
Files: src/ex\_docmd.c, src/testdir/test37.ok

## Patch 7.4.132 (after 7.4.122)

Problem: Win32: flags and inherit\_handles arguments mixed up.  
Solution: Swap the argument. (cs86661)  
Files: src/os\_win32.c

## Patch 7.4.133

Problem: Clang warns for using NUL.  
Solution: Change NUL to NULL. (Dominique Pelle)  
Files: src/eval.c, src/misc2.c

## Patch 7.4.134

Problem: Spurious space in MingW Makefile.  
Solution: Remove the space. (Michael Soyka)  
Files: src/Make\_ming.mak

## Patch 7.4.135

Problem: Missing dot in MingW test Makefile.  
Solution: Add the dot. (Michael Soyka)  
Files: src/testdir/Make\_ming.mak

## Patch 7.4.136 (after 7.4.096)

Problem: MS-Windows: When saving a file with a UNC path the file becomes read-only.  
Solution: Don't mix up Win32 attributes and Unix attributes. (Ken Takata)  
Files: src/os\_mswin.c, src/os\_win32.c

## Patch 7.4.137

Problem: Cannot use IME with Windows 8 console.  
Solution: Change the user of ReadConsoleInput() and PeekConsoleInput(). (Nobuhiro Takasaki)  
Files: src/os\_win32.c

## Patch 7.4.138 (after 7.4.114)

Problem: Directory change messages are not recognized.  
Solution: Fix using a character range literally. (Lech Lorens)  
Files: src/option.h

## Patch 7.4.139

Problem: Crash when using :cd in autocommand. (François Ingelrest)  
Solution: Set w\_localdir to NULL after freeing it. (Dominique Pelle)  
Files: src/ex\_docmd.c, src/window.c

## Patch 7.4.140

Problem: Crash when wiping out buffer triggers autocommand that wipes out only other buffer.  
Solution: Do not delete the last buffer, make it empty. (Hirohito Higashi)  
Files: src/buffer.c

## Patch 7.4.141

Problem: Problems when building with Borland: st\_mode is signed short; can't build with Python; temp files not ignored by Mercurial; building with DEBUG doesn't define \_DEBUG.

Solution: Fix the problems. (Ken Takata)

Files: src/Make\_bc5.mak, src/if\_py\_both.h, src/os\_win32.c

## Patch 7.4.142 (after 7.4.137)

Problem: On MS-Windows 8 IME input doesn't work correctly.

Solution: Work around the problem. (Nobuhiro Takasaki)

Files: src/os\_win32.c

## Patch 7.4.143

Problem: TextChangedI is not triggered.

Solution: Reverse check for "ready". (lilydjwg)

Files: src/edit.c

## Patch 7.4.144

Problem: MingW also supports intptr\_t for OPEN\_OH\_ARGTYPE.

Solution: Adjust #ifdef. (Ken Takata)

Files: src/os\_mswin.c

## Patch 7.4.145

Problem: getregtype() does not return zero for unknown register.

Solution: Adjust documentation: return empty string for unknown register.

Check the register name to be valid. (Yukihiro Nakadaira)

Files: runtime/doc/eval.txt, src/ops.c

## Patch 7.4.146

Problem: When starting Vim with "-u NONE" v:oldfiles is NULL.

Solution: Set v:oldfiles to an empty list. (Yasuhiro Matsumoto)

Files: src/main.c

## Patch 7.4.147

Problem: Cursor moves to wrong position when using "gj" after "\$" and virtual editing is active.

Solution: Make "gj" behave differently when virtual editing is active. (Hirohito Higashi)

Files: src/normal.c, src/testdir/test39.in, src/testdir/test39.ok

## Patch 7.4.148

Problem: Cannot build with Cygwin and X11.

Solution: Include Xwindows.h instead of windows.h. (Lech Lorens)

Files: src/mbyte.c

## Patch 7.4.149

Problem: Get E685 error when assigning a function to an autoload variable. (Yukihiro Nakadaira)

Solution: Instead of having a global no\_autoload variable, pass an autoload flag down to where it is used. (ZyX)

Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok, src/testdir/test60.in, src/testdir/test60.ok, src/testdir/sautest/autoload/footest.vim

## Patch 7.4.150

Problem: :keeppatterns is not respected for :s.

Solution: Check the keeppatterns flag. (Yasuhiro Matsumoto)

Files: src/search.c, src/testdir/test14.in, src/testdir/test14.ok

## Patch 7.4.151

Problem: Python: slices with steps are not supported.

Solution: Support slices in Python vim.List. (ZyX)  
Files: src/eval.c, src/if\_py\_both.h, src/if\_python3.c, src/if\_python.c,  
src/proto/eval.pro, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

Patch 7.4.152

Problem: Python: Cannot iterate over options.  
Solution: Add options iterator. (ZyX)  
Files: src/if\_py\_both.h, src/option.c, src/proto/option.pro,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok, src/vim.h

Patch 7.4.153

Problem: Compiler warning for pointer type.  
Solution: Add type cast.  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

Patch 7.4.154 (after 7.4.149)

Problem: Still a problem with auto-loading.  
Solution: Pass no\_autoload to deref\_func\_name(). (Yukihiro Nakadaira)  
Files: src/eval.c

Patch 7.4.155

Problem: ":keeppatterns /pat" does not keep search pattern offset.  
Solution: Restore the offset after doing the search.  
Files: src/search.c, src/testdir/test14.in, src/testdir/test14.ok

Patch 7.4.156

Problem: Test file missing from distribution.  
Solution: Add new directory to file list.  
Files: Filelist

Patch 7.4.157

Problem: Error number used twice. (Yukihiro Nakadaira)  
Solution: Change the one not referred in the docs.  
Files: src/undo.c

Patch 7.4.158 (after 7.4.045)

Problem: Pattern containing \zs is not handled correctly by substitute().  
Solution: Change how an empty match is skipped. (Yukihiro Nakadaira)  
Files: src/eval.c, src/testdir/test80.in, src/testdir/test80.ok

Patch 7.4.159

Problem: Completion hangs when scanning the current buffer after doing  
keywords. (Christian Brabandt)  
Solution: Set the first match position when starting to scan the current  
buffer.  
Files: src/edit.c

Patch 7.4.160

Problem: Win32: Crash when executing external command.  
Solution: Only close the handle when it was created. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

Patch 7.4.161

Problem: Crash in Python exception handling.  
Solution: Only use exception variables if did\_throw is set. (ZyX)  
Files: if\_py\_both.h

Patch 7.4.162

Problem: Running tests in shadow dir doesn't work.  
Solution: Add testdir/sautest to the shadow target. (James McCoy)

Files: src/Makefile

Patch 7.4.163 (after 7.4.142)

Problem: MS-Windows input doesn't work properly on Windows 7 and earlier.

Solution: Add a check for Windows 8. (Yasuhiro Matsumoto)

Files: src/os\_win32.c

Patch 7.4.164 (after 7.4.163)

Problem: Problem with event handling on Windows 8.

Solution: Ignore duplicate WINDOW\_BUFFER\_SIZE\_EVENTS. (Nobuhiro Takasaki)

Files: src/os\_win32.c

Patch 7.4.165

Problem: By default, after closing a buffer changes can't be undone.

Solution: In the example vimrc file set 'undofile'.

Files: runtime/vimrc\_example.vim

Patch 7.4.166

Problem: Auto-loading a function for code that won't be executed.

Solution: Do not auto-load when evaluation is off. (Yasuhiro Matsumoto)

Files: src/eval.c

Patch 7.4.167 (after 7.4.149)

Problem: Fixes are not tested.

Solution: Add a test for not autoloading on assignment. (Yukihiro Nakadaira)

Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/sautest/autoload/Test104.vim, src/testdir/test104.in,  
src/testdir/test104.ok

Patch 7.4.168

Problem: Can't compile with Ruby 2.1.0.

Solution: Add support for new GC. (Kohei Suzuki)

Files: src/if\_ruby.c

Patch 7.4.169

Problem: ":sleep" puts cursor in the wrong column. (Liang Li)

Solution: Add the window offset. (Christian Brabandt)

Files: src/ex\_docmd.c

Patch 7.4.170

Problem: Some help tags don't work with ":help". (Tim Chase)

Solution: Add exceptions.

Files: src/ex\_cmds.c

Patch 7.4.171

Problem: Redo does not set v:count and v:count1.

Solution: Use a separate buffer for redo, so that we can set the counts when performing redo.

Files: src/getchar.c, src/globals.h, src/normal.c, src/proto/getchar.pro,  
src/structs.h

Patch 7.4.172

Problem: The blowfish code mentions output feedback, but the code is actually doing cipher feedback.

Solution: Adjust names and comments.

Files: src/blowfish.c, src/fileio.c, src/proto/blowfish.pro,  
src/memline.c

Patch 7.4.173

Problem: When using scrollbind the cursor can end up below the last line.

(mvxxc)  
Solution: Reset w\_botfill when scrolling up. (Christian Brabandt)  
Files: src/move.c

#### Patch 7.4.174

Problem: Compiler warnings for Python interface. (Tony Mechelynck)  
Solution: Add type casts, initialize variable.  
Files: src/if\_py\_both.h

#### Patch 7.4.175

Problem: When a wide library function fails, falling back to the non-wide function may do the wrong thing.  
Solution: Check the platform, when the wide function is supported don't fall back to the non-wide function. (Ken Takata)  
Files: src/os\_mswin.c, src/os\_win32.c

#### Patch 7.4.176

Problem: Dictionary.update() throws an error when used without arguments. Python programmers don't expect that.  
Solution: Make Dictionary.update() without arguments do nothing. (ZyX)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test87.in

#### Patch 7.4.177

Problem: Compiler warning for unused variable. (Tony Mechelynck)  
Solution: Add #ifdef.  
Files: src/move.c

#### Patch 7.4.178

Problem: The J command does not update '[' and ']' marks. (William Gardner)  
Solution: Set the marks. (Christian Brabandt)  
Files: src/ops.c

#### Patch 7.4.179

Problem: Warning for type-punned pointer. (Tony Mechelynck)  
Solution: Use intermediate variable.  
Files: src/if\_py\_both.h

#### Patch 7.4.180 (after 7.4.174)

Problem: Older Python versions don't support %ld.  
Solution: Use %d instead. (ZyX)  
Files: src/if\_py\_both.h

#### Patch 7.4.181

Problem: When using 'pastetoggle' the status lines are not updated. (Samuel Ferencik, Jan Christoph Ebersbach)  
Solution: Update the status lines. (Nobuhiro Takasaki)  
Files: src/getchar.c

#### Patch 7.4.182

Problem: Building with mzscheme and racket does not work. (David Chimay)  
Solution: Adjust autoconf. (Sergey Khorev)  
Files: src/configure.in, src/auto/configure

#### Patch 7.4.183

Problem: MSVC Visual Studio update not supported.  
Solution: Add version number. (Mike Williams)  
Files: src/Make\_mvc.mak

#### Patch 7.4.184

Problem: match() does not work properly with a {count} argument.  
Solution: Compute the length once and update it. Quit the loop when at the end. (Hirohito Higashi)

Files: src/eval.c, src/testdir/test53.in, src/testdir/test53.ok

Patch 7.4.185

Problem: Clang gives warnings.

Solution: Adjust how bigness is set. (Dominique Pelle)

Files: src/ex\_cmds.c

Patch 7.4.186 (after 7.4.085)

Problem: Insert in Visual mode sometimes gives incorrect results.  
(Dominique Pelle)

Solution: Remember the original insert start position. (Christian Brabandt,  
Dominique Pelle)

Files: src/edit.c, src/globals.h, src/ops.c, src/structs.h

Patch 7.4.187

Problem: Delete that crosses line break splits multi-byte character.

Solution: Advance a character instead of a byte. (Cade Foster)

Files: src/normal.c, src/testdir/test69.in, src/testdir/test69.ok

Patch 7.4.188

Problem: SIZEOF\_LONG clashes with similar defines in header files.

Solution: Rename to a name starting with VIM\_. Also for SIZEOF\_INT.

Files: src/if\_ruby.c, src/vim.h, src/configure.in, src/auto/configure,  
src/config.h.in, src/fileio.c, src/if\_python.c, src/message.c,  
src/spell.c, src/feature.h, src/os\_os2\_cfg.h, src/os\_vms\_conf.h,  
src/os\_win16.h, src/structs.h

Patch 7.4.189

Problem: Compiler warning for unused argument.

Solution: Add UNUSED.

Files: src/eval.c

Patch 7.4.190

Problem: Compiler warning for using %lld for off\_t.

Solution: Add type cast.

Files: src/fileio.c

Patch 7.4.191

Problem: Escaping a file name for shell commands can't be done without a  
function.

Solution: Add the :S file name modifier.

Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test105.in, src/testdir/test105.ok,  
runtime/doc/cmdline.txt, runtime/doc/eval.txt,  
runtime/doc/map.txt, runtime/doc/options.txt,  
runtime/doc/quickfix.txt, runtime/doc/usr\_30.txt,  
runtime/doc/usr\_40.txt, runtime/doc/usr\_42.txt,  
runtime/doc/vi\_diff.txt, src/eval.c, src/misc2.c, src/normal.c,  
src/proto/misc2.pro

Patch 7.4.192

Problem: Memory leak when giving E853.

Solution: Free the argument. (Dominique Pelle)

Files: src/eval.c

Patch 7.4.193

Problem: Typos in messages.

Solution: "then" -> "than". (Dominique Pelle)

Files: src/if\_py\_both.h, src/spell.c



## Patch 7.4.194

Problem: Can't build for Android.  
Solution: Add #if condition. (Fredrik Fornwall)  
Files: src/mbyte.c

## Patch 7.4.195 (after 7.4.193)

Problem: Python tests fail.  
Solution: Change "then" to "than" in more places. (Dominique Pelle, Taro Muraoka)  
Files: src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.4.196

Problem: Tests fail on Solaris 9 and 10.  
Solution: Use "test -f" instead of "test -e". (Laurent Blume)  
Files: src/testdir/Makefile

## Patch 7.4.197

Problem: Various problems on VMS.  
Solution: Fix several VMS problems. (Zoltan Arpadffy)  
Files: runtime/doc/os\_vms.txt, src/Make\_vms.mms, src/fileio.c,  
src/os\_unix.c, src/os\_unix.h, src/os\_vms.c, src/os\_vms\_conf.h,  
src/proto/os\_vms.pro, src/testdir/Make\_vms.mms,  
src/testdir/test72.in, src/testdir/test77a.com,  
src/testdir/test77a.in, src/testdir/test77a.ok src/undo.c

## Patch 7.4.198

Problem: Can't build Vim with Perl when -Dusethreads is not specified for building Perl, and building Vim with --enable-perlinterp=dynamic.  
Solution: Adjust #ifdefs. (Yasuhiro Matsumoto)  
Files: src/if\_perl.xs

## Patch 7.4.199

Problem: (issue 197) JP doesn't paste over Visual selection.  
Solution: Handle Visual mode specifically. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.4.200

Problem: Too many #ifdefs in the code.  
Solution: Enable FEAT\_VISUAL always, await any complaints  
Files: src/feature.h

## Patch 7.4.201

Problem: 'lispwords' is a global option.  
Solution: Make 'lispwords' global-local. (Sung Pae)  
Files: runtime/doc/options.txt, runtime/optwin.vim, src/buffer.c,  
src/misc1.c, src/option.c, src/option.h, src/structs.h,  
src/testdir/test100.in, src/testdir/test100.ok

## Patch 7.4.202

Problem: MS-Windows: non-ASCII font names don't work.  
Solution: Convert between the current code page and 'encoding'. (Ken Takata)  
Files: src/gui\_w48.c, src/os\_mswin.c, src/proto/winclip.pro,  
src/winclip.c

## Patch 7.4.203

Problem: Parsing 'errorformat' is not correct.  
Solution: Reset "multiignore" at the start of a multi-line message. (Lcd)  
Files: src/quickfix.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test106.in,

src/testdir/test106.ok

Patch 7.4.204

Problem: A mapping where the second byte is 0x80 doesn't work.  
Solution: Unescape before checking for incomplete multi-byte char. (Nobuhiro Takasaki)  
Files: src/getchar.c, src/testdir/test75.in, src/testdir/test75.ok

Patch 7.4.205

Problem: ":mksession" writes command to move to second argument while it does not exist. When it does exist the order might be wrong.  
Solution: Use ":argadd" for each argument instead of using ":args" with a list of names. (Nobuhiro Takasaki)  
Files: src/ex\_docmd.c

Patch 7.4.206

Problem: Compiler warnings on 64 bit Windows.  
Solution: Add type casts. (Mike Williams)  
Files: src/gui\_w48.c, src/os\_mswin.c

Patch 7.4.207

Problem: The cursor report sequence is sometimes not recognized and results in entering replace mode.  
Solution: Also check for the cursor report when not asked for.  
Files: src/term.c

Patch 7.4.208

Problem: Mercurial picks up some files that are not distributed.  
Solution: Add patterns to the ignore list. (Cade Forester)  
Files: .hgignore

Patch 7.4.209

Problem: When repeating a filter command "%" and "#" are expanded.  
Solution: Escape the command when storing for redo. (Christian Brabandt)  
Files: src/ex\_cmds.c

Patch 7.4.210

Problem: Visual block mode plus virtual edit doesn't work well with tabs. (Liang Li)  
Solution: Take coladd into account. (Christian Brabandt)  
Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

Patch 7.4.211

Problem: ":lu" is an abbreviation for ":lua", but it should be ":lunmap". (ZyX)  
Solution: Move "lunmap" to above "lua".  
Files: src/ex\_cmds.h

Patch 7.4.212 (after 7.4.200)

Problem: Now that the +visual feature is always enabled the #ifdefs for it are not useful.  
Solution: Remove the checks for FEAT\_VISUAL.  
Files: src/buffer.c, src/charset.c, src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_docmd.c, src/fold.c, src/getchar.c, src/gui.c, src/gui\_mac.c, src/gui\_w48.c, src/main.c, src/mark.c, src/menu.c, src/misc2.c, src/move.c, src/netbeans.c, src/normal.c, src/ops.c, src/option.c, src/os\_msdos.c, src/os\_qnx.c, src/quickfix.c, src/regexp.c, src/regexp\_nfa.c, src/screen.c, src/search.c, src/spell.c, src/syntax.c, src/term.c, src/ui.c, src/undo.c, src/version.c, src/window.c, src/feature.h, src/globals.h, src/option.h, src/os\_win32.h, src/structs.h

## Patch 7.4.213

Problem: It's not possible to open a new buffer without creating a swap file.  
Solution: Add the ":noswapfile" modifier. (Christian Brabandt)  
Files: runtime/doc/recover.txt, src/ex\_cmds.h, src/ex\_docmd.c, src/memline.c, src/structs.h

## Patch 7.4.214

Problem: Compilation problems on HP\_nonStop (Tandem).  
Solution: Add #defines. (Joachim Schmitz)  
Files: src/vim.h

## Patch 7.4.215

Problem: Inconsistency: ":sp foo" does not reload "foo", unless "foo" is the current buffer. (Liang Li)  
Solution: Do not reload the current buffer on a split command.  
Files: runtime/doc/windows.txt, src/ex\_docmd.c

## Patch 7.4.216

Problem: Compiler warnings. (Tony Mechelynck)  
Solution: Initialize variables, add #ifdef.  
Files: src/term.c, src/os\_unix.h

## Patch 7.4.217

Problem: When src/auto/configure was updated, "make clean" would run configure pointlessly.  
Solution: Do not run configure for "make clean" and "make distclean" when the make program supports \$MAKECMDGOALS. (Ken Takata)  
Files: src/Makefile

## Patch 7.4.218

Problem: It's not easy to remove duplicates from a list.  
Solution: Add the uniq() function. (Lcd)  
Files: runtime/doc/change.txt, runtime/doc/eval.txt, runtime/doc/usr\_41.txt, runtime/doc/version7.txt, src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.4.219

Problem: When 'relativenumber' or 'cursorline' are set the window is redrawn much too often. (Patrick Hemmer, Dominique Pelle)  
Solution: Check the VALID\_CROW flag instead of VALID\_WROW.  
Files: src/move.c

## Patch 7.4.220

Problem: Test 105 does not work in a shadow dir. (James McCoy)  
Solution: Omit "src/" from the checked path.  
Files: src/testdir/test105.in, src/testdir/test105.ok

## Patch 7.4.221

Problem: Quickfix doesn't resize on ":copen 20". (issue 199)  
Solution: Resize the window when requested. (Christian Brabandt)  
Files: src/quickfix.c

## Patch 7.4.222

Problem: The Ruby directory is constructed from parts.  
Solution: Use 'rubyarchhdrdir' if it exists. (James McCoy)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.223

Problem: Still using an older autoconf version.  
Solution: Switch to autoconf 2.69.  
Files: src/Makefile, src/configure.in, src/auto/configure

## Patch 7.4.224

Problem: /usr/bin/grep on Solaris does not support -F.  
Solution: Add configure check to find a good grep. (Danek Duvall)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.225

Problem: Dynamic Ruby doesn't work on Solaris.  
Solution: Always use the stubs. (Danek Duvall, Yukihiro Nakadaira)  
Files: src/if\_ruby.c

## Patch 7.4.226 (after 7.4.219)

Problem: Cursurline highlighting not redrawn when scrolling. (John Marriott)  
Solution: Check for required redraw in two places.  
Files: src/move.c

## Patch 7.4.227 (after 7.4.225)

Problem: Can't build with Ruby 1.8.  
Solution: Do include a check for the Ruby version. (Ken Takata)  
Files: src/if\_ruby.c

## Patch 7.4.228

Problem: Compiler warnings when building with Python 3.2.  
Solution: Make type cast depend on Python version. (Ken Takata)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.4.229

Problem: Using ":let" for listing variables and the second one is a curly braces expression may fail.  
Solution: Check for an "=" in a better way. (ZyX)  
Files: src/eval.c, src/testdir/test104.in, src/testdir/test104.ok

## Patch 7.4.230

Problem: Error when using ":options".  
Solution: Fix the entry for 'lispwords'. (Kenichi Ito)  
Files: runtime/optwin.vim

## Patch 7.4.231

Problem: An error in ":options" is not caught by the tests.  
Solution: Add a test for ":options". Set \$VIMRUNTIME for the tests so that it uses the current runtime files instead of the installed ones.  
Files: src/Makefile, src/testdir/Makefile, src/testdir/test\_options.in, src/testdir/test\_options.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.4.232

Problem: ":%s/\n/" uses a lot of memory. (Aidan Marlin)  
Solution: Turn this into a join command. (Christian Brabandt)  
Files: src/ex\_cmds.c, src/ex\_docmd.c, src/proto/ex\_docmd.pro

## Patch 7.4.233

Problem: Escaping special characters for using "%" with a shell command is inconsistent, parentheses are escaped but spaces are not.  
Solution: Only escape "!". (Gary Johnson)  
Files: src/ex\_docmd.c

## Patch 7.4.234

Problem: Can't get the command that was used to start Vim.  
Solution: Add v:progbath. (Viktor Kojouharov)  
Files: runtime/doc/eval.txt, src/eval.c, src/main.c, src/vim.h

## Patch 7.4.235

Problem: It is not easy to get the full path of a command.

Solution: Add the exepath() function.

Files: src/eval.c, src/misc1.c, src/os\_amiga.c, src/os\_msdos.c,  
src/os\_unix.c, src/os\_vms.c, src/os\_win32.c,  
src/proto/os\_amiga.pro, src/proto/os\_msdos.pro,  
src/proto/os\_unix.pro, src/proto/os\_win32.pro,  
runtime/doc/eval.txt

## Patch 7.4.236

Problem: It's not that easy to check the Vim patch version.

Solution: Make has("patch-7.4.123") work. (partly by Marc Weber)

Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test60.in,  
src/testdir/test60.ok

## Patch 7.4.237 (after 7.4.236)

Problem: When some patches were not included has("patch-7.4.123") may return true falsely.

Solution: Check for the specific patch number.

Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.4.238

Problem: Vim does not support the smack library.

Solution: Add smack support (Jose Bollo)

Files: src/config.h.in, src/configure.in, src/fileio.c, src/memfile.c,  
src/os\_unix.c, src/undo.c, src/auto/configure

## Patch 7.4.239

Problem: ":e +" does not position cursor at end of the file.

Solution: Check for "+" being the last character (ZyX)

Files: src/ex\_docmd.c

## Patch 7.4.240

Problem: ":tjump" shows "\n" as "\\n".

Solution: Skip over "\" that escapes a backslash. (Gary Johnson)

Files: src/tag.c

## Patch 7.4.241

Problem: The string returned by submatch() does not distinguish between a NL from a line break and a NL that stands for a NUL character.

Solution: Add a second argument to return a list. (ZyX)

Files: runtime/doc/eval.txt, src/eval.c, src/proto/regexp.pro,  
src/regexp.c, src/testdir/test79.in, src/testdir/test79.ok,  
src/testdir/test80.in, src/testdir/test80.ok

## Patch 7.4.242

Problem: getreg() does not distinguish between a NL used for a line break and a NL used for a NUL character.

Solution: Add another argument to return a list. (ZyX)

Files: runtime/doc/eval.txt, src/eval.c, src/ops.c, src/proto/ops.pro,  
src/vim.h, src/Makefile, src/testdir/test\_eval.in,  
src/testdir/test\_eval.ok, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

## Patch 7.4.243

Problem: Cannot use setreg() to add text that includes a NUL.

Solution: Make setreg() accept a list.

Files: runtime/doc/eval.txt, src/eval.c, src/ops.c, src/proto/ops.pro,  
src/testdir/test\_eval.in, src/testdir/test\_eval.ok

## Patch 7.4.244 (after 7.4.238)

Problem: The smack feature causes stray error messages.  
Solution: Remove the error messages.  
Files: src/os\_unix.c

## Patch 7.4.245

Problem: Crash for "vim -u NONE -N -c '&&'".  
Solution: Check for the pattern to be NULL. (Dominique Pelle)  
Files: src/ex\_cmds.c

## Patch 7.4.246

Problem: Configure message for detecting smack are out of sequence.  
Solution: Put the messages in the right place. (Kazunobu Kuriyama)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.247

Problem: When passing input to system() there is no way to keep NUL and NL characters separate.  
Solution: Optionally use a list for the system() input. (ZyX)  
Files: runtime/doc/eval.txt, src/eval.c

## Patch 7.4.248

Problem: Cannot distinguish between NL and NUL in output of system().  
Solution: Add systemlist(). (ZyX)  
Files: runtime/doc/eval.txt, src/eval.c, src/ex\_cmds2.c, src/misc1.c, src/proto/misc1.pro

## Patch 7.4.249

Problem: Using setreg() with a list of numbers does not work.  
Solution: Use a separate buffer for numbers. (ZyX)  
Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

## Patch 7.4.250

Problem: Some test files missing from distribution.  
Solution: Add pattern for newly added tests.  
Files: Filelist

## Patch 7.4.251

Problem: Crash when BufAdd autocommand wipes out the buffer.  
Solution: Check for buffer to still be valid. Postpone freeing the buffer structure. (Hirohito Higashi)  
Files: src/buffer.c, src/ex\_cmds.c, src/fileio.c, src/globals.h

## Patch 7.4.252

Problem: Critical error in GTK, removing timer twice.  
Solution: Clear the timer after removing it. (James McCoy)  
Files: src/gui\_gtk\_x11.c

## Patch 7.4.253

Problem: Crash when using cpp syntax file with pattern using external match. (Havard Garnes)  
Solution: Discard match when end column is before start column.  
Files: src/regexp.c, src/regexp\_nfa.c

## Patch 7.4.254

Problem: Smack support detection is incomplete.  
Solution: Check for attr/xattr.h and specific macro.  
Files: src/configure.in, src/auto/configure

## Patch 7.4.255

Problem: Configure check for smack doesn't work with all shells. (David Larson)

Solution: Remove spaces in set command.  
Files: src/configure.in, src/auto/configure

Patch 7.4.256 (after 7.4.248)

Problem: Using systemlist() may cause a crash and does not handle NUL characters properly.

Solution: Increase the reference count, allocate memory by length. (Yasuhiro Matsumoto)

Files: src/eval.c

Patch 7.4.257

Problem: Compiler warning, possibly for mismatch in parameter name.

Solution: Rename the parameter in the declaration.

Files: src/ops.c

Patch 7.4.258

Problem: Configure fails if \$CC contains options.

Solution: Remove quotes around \$CC. (Paul Barker)

Files: src/configure.in, src/auto/configure

Patch 7.4.259

Problem: Warning for misplaced "const".

Solution: Move the "const". (Yukihiro Nakadaira)

Files: src/os\_unix.c

Patch 7.4.260

Problem: It is possible to define a function with a colon in the name. It is possible to define a function with a lower case character if a "#" appears after the name.

Solution: Disallow using a colon other than with "s:". Ignore "#" after the name.

Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

Patch 7.4.261

Problem: When updating the window involves a regexp pattern, an interactive substitute to replace a "\n" with a line break fails. (Ingo Karkat)

Solution: Set reg\_line\_lbr in vim\_regsub() and vim\_regsub\_multi().

Files: src/regexp.c, src/testdir/test79.in, src/testdir/test79.ok

Patch 7.4.262

Problem: Duplicate code in regexexec().

Solution: Add line\_lbr flag to regexexec\_nl().

Files: src/regexp.c, src/regexp\_nfa.c, src/regexp.h

Patch 7.4.263

Problem: GCC 4.8 compiler warning for hiding a declaration (François Gannaz)

Solution: Remove the second declaration.

Files: src/eval.c

Patch 7.4.264 (after 7.4.260)

Problem: Can't define a function starting with "g:". Can't assign a funcref to a buffer-local variable.

Solution: Skip "g:" at the start of a function name. Don't check for colons when assigning to a variable.

Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

Patch 7.4.265 (after 7.4.260)

Problem: Can't call a global function with "g:" in an expression.

Solution: Skip the "g:" when looking up the function.

Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

## Patch 7.4.266

Problem: Test 62 fails.

Solution: Set the language to C. (Christian Brabandt)

Files: src/testdir/test62.in

## Patch 7.4.267 (after 7.4.178)

Problem: The '[' mark is in the wrong position after "gq". (Ingo Karkat)

Solution: Add the setmark argument to do\_join(). (Christian Brabandt)

Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_autoformat\_join.in,  
src/testdir/test\_autoformat\_join.ok, src/Makefile, src/edit.c,  
src/ex\_cmds.c, src/ex\_docmd.c, src/normal.c, src/ops.c,  
src/proto/ops.pro

## Patch 7.4.268

Problem: Using exists() on a funcref for a script-local function does not work.

Solution: Translate <SNR> to the special byte sequence. Add a test.

Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok,  
src/testdir/test\_eval\_func.vim, Filelist

## Patch 7.4.269

Problem: CTRL-U in Insert mode does not work after using a cursor key.  
(Pine Wu)

Solution: Use the original insert start position. (Christian Brabandt)

Files: src/edit.c, src/testdir/test29.in, src/testdir/test29.ok

## Patch 7.4.270

Problem: Comparing pointers instead of the string they point to.

Solution: Use strcmp(). (Ken Takata)

Files: src/gui\_gtk\_x11.c

## Patch 7.4.271

Problem: Compiler warning on 64 bit windows.

Solution: Add type cast. (Mike Williams)

Files: src/ops.c

## Patch 7.4.272

Problem: Using just "\$" does not cause an error message.

Solution: Check for empty environment variable name. (Christian Brabandt)

Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

## Patch 7.4.273

Problem: "make autoconf" and "make reconfig" may first run configure and then remove the output.

Solution: Add these targets to the exceptions. (Ken Takata)

Files: src/Makefile

## Patch 7.4.274

Problem: When doing ":update" just before running an external command that changes the file, the timestamp may be unchanged and the file is not reloaded.

Solution: Also check the file size.

Files: src/fileio.c

## Patch 7.4.275

Problem: When changing the type of a sign that hasn't been placed there is no error message.

Solution: Add an error message. (Christian Brabandt)



Files: src/ex\_cmds.c

Patch 7.4.276

Problem: The fish shell is not supported.

Solution: Use begin/end instead of () for fish. (Andy Russell)

Files: src/ex\_cmds.c, src/misc1.c, src/option.c, src/proto/misc1.pro

Patch 7.4.277

Problem: Using ":sign unplace \*" may leave the cursor in the wrong position (Christian Brabandt)

Solution: Update the cursor position when removing all signs.

Files: src/buffer.c

Patch 7.4.278

Problem: list\_remove() conflicts with function defined in Sun header file.

Solution: Rename the function. (Richard Palo)

Files: src/eval.c, src/if\_lua.c, src/if\_py\_both.h, src/proto/eval.pro

Patch 7.4.279

Problem: globpath() returns a string, making it difficult to get a list of matches. (Greg Novack)

Solution: Add an optional argument like with glob(). (Adnan Zafar)

Files: runtime/doc/eval.txt, src/eval.c, src/ex\_getln.c, src/misc1.c, src/misc2.c, src/proto/ex\_getln.pro, src/proto/misc2.pro, src/testdir/test97.in, src/testdir/test97.ok

Patch 7.4.280

Problem: When using a session file the relative position of the cursor is not restored if there is another tab. (Nobuhiro Takasaki)

Solution: Update w\_wrow before calculating the fraction.

Files: src/window.c

Patch 7.4.281

Problem: When a session file has more than one tabpage and 'showtabline' is one the positions may be slightly off.

Solution: Set 'showtabline' to two while positioning windows.

Files: src/ex\_docmd.c

Patch 7.4.282 (after 7.4.279)

Problem: Test 97 fails on Mac.

Solution: Do not ignore case in file names. (Jun Takimoto)

Files: src/testdir/test97.in

Patch 7.4.283 (after 7.4.276)

Problem: Compiler warning about unused variable. (Charles Cooper)

Solution: Move the variable inside the #if block.

Files: src/ex\_cmds.c

Patch 7.4.284

Problem: Setting 'langmap' in the modeline can cause trouble. E.g. mapping ":" breaks many commands. (Jens-Wolfhard Schicke-Uffmann)

Solution: Disallow setting 'langmap' from the modeline.

Files: src/option.c

Patch 7.4.285

Problem: When 'relativenumber' is set and deleting lines or undoing that, line numbers are not always updated. (Robert Arkwright)

Solution: (Christian Brabandt)

Files: src/misc1.c

Patch 7.4.286

Problem: Error messages are inconsistent. (ZyX)

Solution: Change "Lists" to "list".  
Files: src/eval.c

#### Patch 7.4.287

Problem: Patches for .hgignore don't work, since the file is not in the distribution.

Solution: Add .hgignore to the distribution. Will be effective with the next version.

Files: Filelist

#### Patch 7.4.288

Problem: When 'spellfile' is set the screen is not redrawn.

Solution: Redraw when updating the spelling info. (Christian Brabandt)

Files: src/spell.c

#### Patch 7.4.289

Problem: Pattern with repeated backreference does not match with new regexp engine. (Urtica Dioica)

Solution: Also check the end of a submatch when deciding to put a state in the state list.

Files: src/testdir/test64.in, src/testdir/test64.ok, src/regexp\_nfa.c

#### Patch 7.4.290

Problem: A non-greedy match followed by a branch is too greedy. (Ingo Karkat)

Solution: Add NFA\_MATCH when it is already in the state list if the position differs.

Files: src/testdir/test64.in, src/testdir/test64.ok, src/regexp\_nfa.c

#### Patch 7.4.291

Problem: Compiler warning for int to pointer of different size when DEBUG is defined.

Solution: use smsg() instead of EMSG3().

Files: src/regexp.c

#### Patch 7.4.292

Problem: Searching for "a" does not match accented "a" with new regexp engine, does match with old engine. (David Bürgin)

Solution: "ca" does not match "ca" with accented "a" with either engine. Change the old engine, check for following composing character also for single-byte patterns.

Files: src/regexp.c, src/testdir/test95.in, src/testdir/test95.ok

#### Patch 7.4.293

Problem: It is not possible to ignore composing characters at a specific point in a pattern.

Solution: Add the %C item.

Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test95.in, src/testdir/test95.ok, runtime/doc/pattern.txt

#### Patch 7.4.294 (7.4.293)

Problem: Test files missing from patch.

Solution: Patch the test files.

Files: src/testdir/test95.in, src/testdir/test95.ok

#### Patch 7.4.295

Problem: Various typos, bad white space and unclear comments.

Solution: Fix typos. Improve white space. Update comments.

Files: src/testdir/test49.in, src/macros.h, src/screen.c, src/structs.h, src/gui\_gtk\_x11.c, src/os\_unix.c

#### Patch 7.4.296

Problem: Can't run tests on Solaris.  
Solution: Change the way VIMRUNTIME is set. (Laurent Blume)  
Files: src/testdir/Makefile

Patch 7.4.297

Problem: Memory leak from result of get\_isolated\_shell\_name().  
Solution: Free the memory. (Dominique Pelle)  
Files: src/ex\_cmds.c, src/misc1.c

Patch 7.4.298

Problem: Can't have a funcref start with "t:".  
Solution: Add "t" to the list of accepted names. (Yukihiro Nakadaira)  
Files: src/eval.c

Patch 7.4.299

Problem: When running configure twice DYNAMIC\_PYTHON\_DLL may become empty.  
Solution: Use AC\_CACHE\_VAL. (Ken Takata)  
Files: src/configure.in, src/auto/configure

Patch 7.4.300

Problem: The way config.cache is removed doesn't always work.  
Solution: Always remove config.cache. (Ken Takata)  
Files: src/Makefile

Patch 7.4.301 (after 7.4.280)

Problem: Still a scrolling problem when loading a session file.  
Solution: Fix off-by-one mistake. (Nobuhiro Takasaki)  
Files: src/window.c

Patch 7.4.302

Problem: Signs placed with 'foldcolumn' set don't show up after filler lines.  
Solution: Take filler lines into account. (Olaf Dabrunz)  
Files: src/screen.c

Patch 7.4.303

Problem: When using double-width characters the text displayed on the command line is sometimes truncated.  
Solution: Reset the string length. (Nobuhiro Takasaki)  
Files: src/screen.c

Patch 7.4.304

Problem: Cannot always use Python with Vim.  
Solution: Add the manifest to the executable. (Jacques Germishuys)  
Files: src/Make\_mvc.mak

Patch 7.4.305

Problem: Making 'ttymouse' empty after the xterm version was requested causes problems. (Elijah Griffin)  
Solution: Do not check for DEC mouse sequences when the xterm version was requested. Also don't request the xterm version when DEC mouse was enabled.  
Files: src/term.c, src/os\_unix.c, src/proto/term.pro, src/globals.h

Patch 7.4.306

Problem: getchar(0) does not return Esc.  
Solution: Do not wait for an Esc sequence to be complete. (Yasuhiro Matsumoto)  
Files: src/eval.c, src/getchar.c

Patch 7.4.307 (after 7.4.305)

Problem: Can't build without the +termresponse feature.

Solution: Add proper #ifdefs.  
Files: src/os\_unix.c, src/term.c

#### Patch 7.4.308

Problem: When using ":diffsplit" on an empty file the cursor is displayed on the command line.

Solution: Limit the value of w\_topfill.  
Files: src/diff.c

#### Patch 7.4.309

Problem: When increasing the size of the lower window, the upper window jumps back to the top. (Ron Aaron)

Solution: Change setting the topline. (Nobuhiro Takasaki)  
Files: src/window.c

#### Patch 7.4.310

Problem: getpos()/setpos() don't include curswant.

Solution: Add a fifth number when getting/setting the cursor.  
Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok, runtime/doc/eval.txt

#### Patch 7.4.311

Problem: Can't use winrestview to only restore part of the view.

Solution: Handle missing items in the dict. (Christian Brabandt)  
Files: src/eval.c, runtime/doc/eval.txt

#### Patch 7.4.312

Problem: Cannot figure out what argument list is being used for a window.

Solution: Add the arglistid() function. (Marcin Szamotulski)  
Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/eval.c, src/ex\_docmd.c, src/globals.h, src/structs.h, src/main.c

#### Patch 7.4.313 (after 7.4.310)

Problem: Changing the return value of getpos() causes an error. (Jie Zhu)

Solution: Revert getpos() and add getcurpos().  
Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok, runtime/doc/eval.txt

#### Patch 7.4.314

Problem: Completion messages can get in the way of a plugin.

Solution: Add 'c' flag to 'shortmess' option. (Shougo Matsu)  
Files: runtime/doc/options.txt, src/edit.c, src/option.h, src/screen.c

#### Patch 7.4.315 (after 7.4.309)

Problem: Fixes for computation of topline not tested.

Solution: Add test. (Hirohito Higashi)  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test107.in, src/testdir/test107.ok

#### Patch 7.4.316

Problem: Warning from 64-bit compiler.

Solution: Add type cast. (Mike Williams)  
Files: src/ex\_getln.c

#### Patch 7.4.317

Problem: Crash when starting gvim. Issue 230.

Solution: Check for a pointer to be NULL. (Christian Brabandt)  
Files: src/window.c

#### Patch 7.4.318

Problem: Check for whether a highlight group has settings ignores fg and bg color settings.  
Solution: Also check cterm and GUI color settings. (Christian Brabandt)  
Files: src/syntax.c

#### Patch 7.4.319

Problem: Crash when putting zero bytes on the clipboard.  
Solution: Do not support the utf8\_atom target when not using a Unicode encoding. (Naofumi Honda)  
Files: src/ui.c

#### Patch 7.4.320

Problem: Possible crash when an BufLeave autocommand deletes the buffer.  
Solution: Check for the window pointer being valid. Postpone freeing the window until autocommands are done. (Yasuhiro Matsumoto)  
Files: src/buffer.c, src/fileio.c, src/globals.h, src/window.c

#### Patch 7.4.321

Problem: Can't build with strawberry perl 5.20 + mingw-w64-4.9.0.  
Solution: Define save\_strlen. (Ken Takata)  
Files: src/if\_perl.xs

#### Patch 7.4.322

Problem: Using "msgfmt" is hard coded, cannot use "gmsgfmt".  
Solution: Use the msgfmt command found by configure. (Danek Duvall)  
Files: src/config.mk.in, src/po/Makefile

#### Patch 7.4.323

Problem: Substitute() with zero width pattern breaks multi-byte character.  
Solution: Take multi-byte character size into account. (Yukihiro Nakadaira)  
Files: src/eval.c src/testdir/test69.in, src/testdir/test69.ok

#### Patch 7.4.324

Problem: In Ex mode, cyrillic characters are not handled. (Stas Malavin)  
Solution: Support multi-byte characters in Ex mode. (Yukihiro Nakadaira)  
Files: src/ex\_getln.c

#### Patch 7.4.325

Problem: When starting the gui and changing the window size the status line may not be drawn correctly.  
Solution: Catch new\_win\_height() being called recursively. (Christian Brabandt)  
Files: src/window.c

#### Patch 7.4.326

Problem: Can't build Tiny version. (Elimar Riesebieter)  
Solution: Add #ifdef.  
Files: src/window.c

#### Patch 7.4.327

Problem: When 'verbose' is set to display the return value of a function, may get E724 repeatedly.  
Solution: Do not give an error for verbose messages. Abort conversion to string after an error.  
Files: src/eval.c

#### Patch 7.4.328

Problem: Selection of inner block is inconsistent.  
Solution: Skip indent not only for '}' but all parens. (Tom McDonald)  
Files: src/search.c

#### Patch 7.4.329

Problem: When moving the cursor and then switching to another window the previous window isn't scrolled. (Yukihiro Nakadaira)  
Solution: Call update\_topleft() before leaving the window. (Christian Brabandt)  
Files: src/window.c

#### Patch 7.4.330

Problem: Using a regexp pattern to highlight a specific position can be slow.  
Solution: Add matchaddpos() to highlight specific positions efficiently. (Alexey Radkov)  
Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, runtime/plugin/matchparen.vim, src/eval.c, src/ex\_docmd.c, src/proto/window.pro, src/screen.c, src/structs.h, src/testdir/test63.in, src/testdir/test63.ok, src/window.c

#### Patch 7.4.331

Problem: Relative numbering not updated after a linewise yank. Issue 235.  
Solution: Redraw after the yank. (Christian Brabandt)  
Files: src/ops.c

#### Patch 7.4.332

Problem: GTK: When a sign icon doesn't fit exactly there can be ugly gaps.  
Solution: Scale the sign to fit when the aspect ratio is not too far off. (Christian Brabandt)  
Files: src/gui\_gtk\_x11.c

#### Patch 7.4.333

Problem: Compiler warning for unused function.  
Solution: Put the function inside the #ifdef.  
Files: src/screen.c

#### Patch 7.4.334 (after 7.4.330)

Problem: Uninitialized variables, causing some problems.  
Solution: Initialize the variables. (Dominique Pelle)  
Files: src/screen.c, src/window.c

#### Patch 7.4.335

Problem: No digraph for the new rouble sign.  
Solution: Add the digraphs =R and =P.  
Files: src/digraph.c, runtime/doc/digraph.txt

#### Patch 7.4.336

Problem: Setting 'history' to a big value causes out-of-memory errors.  
Solution: Limit the value to 10000. (Hirohito Higashi)  
Files: runtime/doc/options.txt, src/option.c

#### Patch 7.4.337

Problem: When there is an error preparing to edit the command line, the command won't be executed. (Hirohito Higashi)  
Solution: Reset did\_emsg before editing.  
Files: src/ex\_getln.c

#### Patch 7.4.338

Problem: Cannot wrap lines taking indent into account.  
Solution: Add the 'breakindent' option. (many authors, final improvements by Christian Brabandt)  
Files: runtime/doc/eval.txt, runtime/doc/options.txt, runtime/optwin.vim, src/buffer.c, src/charset.c, src/edit.c, src/ex\_getln.c, src/getchar.c, src/misc1.c, src/misc2.c, src/ops.c, src/option.c, src/option.h, src/proto/charset.pro, src/proto/misc1.pro, src/proto/option.pro, src/screen.c, src/structs.h,

```
src/testdir/Make_amiga.mak, src/testdir/Make_dos.mak,
src/testdir/Make_ming.mak, src/testdir/Make_os2.mak,
src/testdir/Make_vms.mms, src/testdir/Makefile,
src/testdir/test_breakindent.in, src/testdir/test_breakindent.ok,
src/ui.c, src/version.c
```

## Patch 7.4.339

Problem: Local function is available globally.  
Solution: Add "static".  
Files: src/option.c, src/proto/option.pro

## Patch 7.4.340

Problem: Error from sed about illegal bytes when installing Vim.  
Solution: Prepend LC\_ALL=C. (Itchyny)  
Files: src/installman.sh

## Patch 7.4.341

Problem: sort() doesn't handle numbers well.  
Solution: Add an argument to specify sorting on numbers. (Christian Brabandt)  
Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test55.in,  
src/testdir/test55.ok

## Patch 7.4.342

Problem: Clang gives warnings.  
Solution: Add an else block. (Dominique Pelle)  
Files: src/gui\_beval.c

## Patch 7.4.343

Problem: matchdelete() does not always update the right lines.  
Solution: Fix off-by-one error. (Ozaki Kiichi)  
Files: src/window.c

## Patch 7.4.344

Problem: Unnecessary initializations and other things related to  
matchaddpos().  
Solution: Code cleanup. (Alexey Radkov)  
Files: runtime/doc/eval.txt, src/screen.c, src/window.c

## Patch 7.4.345 (after 7.4.338)

Problem: Indent is not updated when deleting indent.  
Solution: Remember changedtick.  
Files: src/miscl.c

## Patch 7.4.346 (after 7.4.338)

Problem: Indent is not updated when changing 'breakindentopt'. (itchyny)  
Solution: Do not cache "brishift". (Christian Brabandt)  
Files: src/miscl.c

## Patch 7.4.347

Problem: test55 fails on some systems.  
Solution: Remove the elements that all result in zero and can end up in an  
arbitrary position.  
Files: src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.4.348

Problem: When using "Jl" in 'cinoptions' a line below a continuation line  
gets too much indent.  
Solution: Fix parentheses in condition.  
Files: src/miscl.c

## Patch 7.4.349

Problem: When there are matches to highlight the whole window is redrawn,

which is slow.  
Solution: Only redraw everything when lines were inserted or deleted.  
Reset `b_mod_xlines` when needed. (Alexey Radkov)  
Files: `src/screen.c`, `src/window.c`

## Patch 7.4.350

Problem: Using C indenting for Javascript does not work well for a `{}` block inside parentheses.  
Solution: When looking for a matching paren ignore one that is before the start of a `{}` block.  
Files: `src/misc1.c`, `src/testdir/test3.in`, `src/testdir/test3.ok`

## Patch 7.4.351

Problem: `sort()` is not stable.  
Solution: When the items are identical, compare the pointers.  
Files: `src/eval.c`, `src/testdir/test55.in`, `src/testdir/test55.ok`

## Patch 7.4.352

Problem: With 'linebreak' a tab causes a missing line break.  
Solution: Count a tab for what it's worth also for shorter lines.  
(Christian Brabandt)  
Files: `src/charset.c`

## Patch 7.4.353

Problem: 'linebreak' doesn't work with the 'list' option.  
Solution: Make it work. (Christian Brabandt)  
Files: `runtime/doc/options.txt`, `src/charset.c`, `src/screen.c`,  
`src/testdir/Make_amiga.mak`, `src/testdir/Make_dos.mak`,  
`src/testdir/Make_ming.mak`, `src/testdir/Make_os2.mak`,  
`src/testdir/Make_vms.mms`, `src/testdir/Makefile`,  
`src/testdir/test_listlbr.in`, `src/testdir/test_listlbr.ok`

## Patch 7.4.354

Problem: Compiler warning.  
Solution: Change NUL to NULL. (Ken Takata)  
Files: `src/screen.c`

## Patch 7.4.355

Problem: Several problems with Javascript indenting.  
Solution: Improve Javascript indenting.  
Files: `src/misc1.c`, `src/testdir/test3.in`, `src/testdir/test3.ok`

## Patch 7.4.356

Problem: Mercurial does not ignore `memfile_test`. (Daniel Hahler)  
Solution: Add `memfile_test` to ignored files, remove trailing spaces.  
Files: `.hgignore`

## Patch 7.4.357

Problem: After completion some characters are not redrawn.  
Solution: Clear the command line unconditionally. (Jacob Niehus)  
Files: `src/edit.c`

## Patch 7.4.358 (after 7.4.351)

Problem: Sort is not always stable.  
Solution: Add an index instead of relying on the pointer to remain the same.  
Idea by Jun Takimoto.  
Files: `src/eval.c`

## Patch 7.4.359

Problem: When 'ttymouse' is set to 'uxterm' the xterm version is not requested. (Tomas Janousek)  
Solution: Do not mark `uxterm` as a conflict mouse and add



Files: resume\_get\_esc\_sequence().  
src/term.c, src/os\_unix.c, src/proto/term.pro

Patch 7.4.360

Problem: In a regexp pattern a "\$" followed by \v or \V is not seen as the end-of-line.

Solution: Handle the situation. (Ozaki Kiichi)

Files: src/regexp.c

Patch 7.4.361

Problem: Lots of flickering when filling the preview window for 'omnifunc'.

Solution: Disable redrawing. (Hirohito Higashi)

Files: src/popupmnu.c

Patch 7.4.362

Problem: When matchaddpos() uses a length smaller than the number of bytes in the (last) character the highlight continues until the end of the line.

Solution: Change condition from equal to larger-or-equal.

Files: src/screen.c

Patch 7.4.363

Problem: In Windows console typing 0xCE does not work.

Solution: Convert 0xCE to K\_NUL 3. (Nobuhiro Takasaki et al.)

Files: src/os\_win32.c, src/term.c

Patch 7.4.364

Problem: When the viminfo file can't be renamed there is no error message. (Vladimir Berezhnoy)

Solution: Check for the rename to fail.

Files: src/ex\_cmds.c

Patch 7.4.365

Problem: Crash when using ":botright split" when there isn't much space.

Solution: Add a check for the minimum width/height. (Yukihiro Nakadaira)

Files: src/window.c

Patch 7.4.366

Problem: Can't run the linebreak test on MS-Windows.

Solution: Fix the output file name. (Taro Muraoka)

Files: src/testdir/Make\_dos.mak

Patch 7.4.367 (after 7.4.357)

Problem: Other solution for redrawing after completion.

Solution: Schedule a window redraw instead of just clearing the command line. (Jacob Niehus)

Files: src/edit.c

Patch 7.4.368

Problem: Restoring the window sizes after closing the command line window doesn't work properly if there are nested splits.

Solution: Restore the sizes twice. (Hirohito Higashi)

Files: src/window.c

Patch 7.4.369

Problem: Using freed memory when exiting while compiled with EXITFREE.

Solution: Set curwin to NULL and check for that. (Dominique Pelle)

Files: src/buffer.c, src/window.c

Patch 7.4.370

Problem: Linebreak test fails when encoding is not utf-8. (Daneek Duvall)

Solution: Split the test in a single byte one and a utf-8 one. (Christian

Files: Brabandt)  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_listlbr.in, src/testdir/test\_listlbr.ok,  
src/testdir/test\_listlbr\_utf8.in, src/testdir/test\_listlbr\_utf8.ok

#### Patch 7.4.371

Problem: When 'linebreak' is set control characters are not correctly  
displayed. (Kimmy Lindvall)  
Solution: Set n\_extra. (Christian Brabandt)  
Files: src/screen.c

#### Patch 7.4.372

Problem: When 'winminheight' is zero there might not be one line for the  
current window.  
Solution: Change the size computations. (Yukihiro Nakadaira)  
Files: src/window.c

#### Patch 7.4.373

Problem: Compiler warning for unused argument and unused variable.  
Solution: Add UNUSED. Move variable inside #ifdef.  
Files: src/charset.c, src/window.c

#### Patch 7.4.374

Problem: Character after "fb" command not mapped if it might be a composing  
character.  
Solution: Don't disable mapping when looking for a composing character.  
(Jacob Niehus)  
Files: src/normal.c

#### Patch 7.4.375

Problem: Test 63 fails when run with GUI-only Vim.  
Solution: Add guibg attributes. (suggested by Mike Soyka)  
Files: src/testdir/test63.in

#### Patch 7.4.376 (after 7.4.367)

Problem: Popup menu flickers too much.  
Solution: Remove the forced redraw. (Hirohito Higashi)  
Files: src/edit.c

#### Patch 7.4.377

Problem: When 'equalalways' is set a split may report "no room" even though  
there is plenty of room.  
Solution: Compute the available room properly. (Yukihiro Nakadaira)  
Files: src/window.c

#### Patch 7.4.378

Problem: Title of quickfix list is not kept for setqflist(list, 'r').  
Solution: Keep the title. Add a test. (Lcd)  
Files: src/quickfix.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_qf\_title.in,  
src/testdir/test\_qf\_title.ok

#### Patch 7.4.379

Problem: Accessing freed memory after using setqflist(list, 'r'). (Lcd)  
Solution: Reset qf\_index.  
Files: src/quickfix.c

#### Patch 7.4.380

Problem: Loading python may cause Vim to exit.  
Solution: Avoid loading the "site" module. (Taro Muraoka)  
Files: src/if\_python.c

#### Patch 7.4.381

Problem: Get u\_undo error when backspacing in Insert mode deletes more than one line break. (Ayberk Ozgur)  
Solution: Also decrement Insstart.lnum.  
Files: src/edit.c

#### Patch 7.4.382

Problem: Mapping characters may not work after typing Esc in Insert mode.  
Solution: Fix the noremap flags for inserted characters. (Jacob Niehus)  
Files: src/getchar.c

#### Patch 7.4.383

Problem: Bad interaction between preview window and omnifunc.  
Solution: Avoid redrawing the status line. (Hirohito Higashi)  
Files: src/popupmnu.c

#### Patch 7.4.384

Problem: Test 102 fails when compiled with small features.  
Solution: Source small.vim. (Jacob Niehus)  
Files: src/testdir/test102.in

#### Patch 7.4.385

Problem: When building with tiny or small features building the .mo files fails.  
Solution: In autoconf do not setup for building the .mo files when it would fail.  
Files: src/configure.in, src/auto/configure

#### Patch 7.4.386

Problem: When splitting a window the changelist position is wrong.  
Solution: Copy the changelist position. (Jacob Niehus)  
Files: src/window.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_changelist.in, src/testdir/test\_changelist.ok

#### Patch 7.4.387

Problem: "4gro" replaces one character then executes "ooo". (Urtica Dioica)  
Solution: Write the ESC in the second stuff buffer.  
Files: src/getchar.c, src/proto/getchar.pro, src/edit.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_insertcount.in, src/testdir/test\_insertcount.ok

#### Patch 7.4.388

Problem: With 'linebreak' set and 'list' unset a Tab is not counted properly. (Kent Sibilev)  
Solution: Check the 'list' option. (Christian Brabandt)  
Files: src/screen.c, src/testdir/test\_listlbr\_utf8.in, src/testdir/test\_listlbr\_utf8.ok

#### Patch 7.4.389

Problem: Still sometimes Vim enters Replace mode when starting up.  
Solution: Use a different solution in detecting the termresponse and location response. (Hayaki Saito)  
Files: src/globals.h, src/os\_unix.c, src/term.c, src/proto/term.pro

## Patch 7.4.390

Problem: Advancing pointer over end of a string.  
Solution: Init quote character to -1 instead of zero. (Dominique Pelle)  
Files: src/misc1.c

## Patch 7.4.391

Problem: No 'cursorline' highlighting when the cursor is on a line with  
diff highlighting. (Benjamin Fritz)  
Solution: Combine the highlight attributes. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.4.392

Problem: Not easy to detect type of command line window.  
Solution: Add the getcmdwintype() function. (Jacob Niehus)  
Files: src/eval.c

## Patch 7.4.393

Problem: Text drawing on newer MS-Windows systems is suboptimal. Some  
multi-byte characters are not displayed, even though the same font  
in Notepad can display them. (Srinath Avadhanula)  
Solution: Add the 'renderoptions' option to enable DirectX drawing. (Taro  
Muraoka)  
Files: runtime/doc/eval.txt, runtime/doc/options.txt,  
runtime/doc/variables.txt, src/Make\_cyg.mak, src/Make\_ming.mak,  
src/Make\_mvc.mak, src/eval.c, src/gui\_dwrite.cpp,  
src/gui\_dwrite.h, src/gui\_w32.c, src/gui\_w48.c, src/option.c,  
src/option.h, src/version.c, src/vim.h, src/proto/gui\_w32.pro

## Patch 7.4.394 (after 7.4.393)

Problem: When using DirectX last italic character is incomplete.  
Solution: Add one to the number of cells. (Ken Takata)  
Files: src/gui\_w32.c

## Patch 7.4.395 (after 7.4.355)

Problem: C indent is wrong below an if with wrapped condition followed by  
curly braces. (Trevor Powell)  
Solution: Make a copy of tryposBrace.  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.4.396

Problem: When 'clipboard' is "unnamed", :g/pat/d is very slow. (Praful)  
Solution: Only set the clipboard after the last delete. (Christian Brabandt)  
Files: src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/globals.h,  
src/ops.c, src/proto/ui.pro, src/ui.c

## Patch 7.4.397

Problem: Matchparen only uses the topmost syntax item.  
Solution: Go through the syntax stack to find items. (James McCoy)  
Also use getcurpos() when possible.  
Files: runtime/plugin/matchparen.vim

## Patch 7.4.398 (after 7.4.393)

Problem: Gcc error for the argument of InterlockedIncrement() and  
InterlockedDecrement(). (Axel Bender)  
Solution: Remove "unsigned" from the cRefCount\_ declaration.  
Files: src/gui\_dwrite.cpp

## Patch 7.4.399

Problem: Encryption implementation is messy. Blowfish encryption has a  
weakness.  
Solution: Refactor the encryption, store the state in an allocated struct

instead of using a save/restore mechanism. Introduce the "blowfish2" method, which does not have the weakness and encrypts the whole undo file. (largely by David Leadbeater)

Files: runtime/doc/editing.txt, runtime/doc/options.txt, src/Makefile, src/blowfish.c, src/crypt.c, src/crypt\_zip.c, src/ex\_docmd.c, src/fileio.c, src/globals.h, src/main.c, src/memline.c, src/misc2.c, src/option.c, src/proto.h, src/proto/blowfish.pro, src/proto/crypt.pro, src/proto/crypt\_zip.pro, src/proto/fileio.pro, src/proto/misc2.pro, src/structs.h, src/undo.c, src/testdir/test71.in, src/testdir/test71.ok, src/testdir/test71a.in, src/testdir/test72.in, src/testdir/test72.ok

#### Patch 7.4.400

Problem: List of distributed files is incomplete.  
Solution: Add recently added files.  
Files: Filelist

#### Patch 7.4.401 (after 7.4.399)

Problem: Can't build on MS-Windows.  
Solution: Include the new files in all the Makefiles.  
Files: src/Make\_bc3.mak, src/Make\_bc5.mak, src/Make\_cyg.mak, src/Make\_dice.mak, src/Make\_djg.mak, src/Make\_ivc.mak, src/Make\_manx.mak, src/Make\_ming.mak, src/Make\_morph.mak, src/Make\_mvc.mak, src/Make\_os2.mak, src/Make\_sas.mak, Make\_vms.mms

#### Patch 7.4.402

Problem: Test 72 crashes under certain conditions. (Kazunobu Kuriyama)  
Solution: Clear the whole bufinfo\_T early.  
Files: src/undo.c

#### Patch 7.4.403

Problem: Valgrind reports errors when running test 72. (Dominique Pelle)  
Solution: Reset the local 'cryptmethod' option before storing the seed. Set the seed in the memfile even when there is no block0 yet.  
Files: src/fileio.c, src/option.c, src/memline.c

#### Patch 7.4.404

Problem: Windows 64 bit compiler warnings.  
Solution: Add type casts. (Mike Williams)  
Files: src/crypt.c, src/undo.c

#### Patch 7.4.405

Problem: Screen updating is slow when using matches.  
Solution: Do not use the ">=" as in patch 7.4.362, check the lnum.  
Files: src/screen.c, src/testdir/test63.in, src/testdir/test63.ok

#### Patch 7.4.406

Problem: Test 72 and 100 fail on MS-Windows.  
Solution: Set fileformat to unix in the tests. (Taro Muraoka)  
Files: src/testdir/test72.in, src/testdir/test100.in

#### Patch 7.4.407

Problem: Inserting text for Visual block mode, with cursor movement, repeats the wrong text. (Aleksandar Ivanov)  
Solution: Reset the update\_Insstart\_orig flag. (Christian Brabandt)  
Files: src/edit.c, src/testdir/test39.in, src/testdir/test39.ok

#### Patch 7.4.408

Problem: Visual block insert breaks a multi-byte character.  
Solution: Calculate the position properly. (Yasuhiro Matsumoto)

Files: src/ops.c, src/testdir/test\_utf8.in, src/testdir/test\_utf8.ok,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.4.409

Problem: Can't build with Perl on Fedora 20.  
Solution: Find xsubpp in another directory. (Michael Henry)  
Files: src/Makefile, src/config.mk.in, src/configure.in,  
src/auto/configure

Patch 7.4.410

Problem: Fold does not open after search when there is a CmdwinLeave  
autocommand.  
Solution: Restore KeyTyped. (Jacob Niehus)  
Files: src/ex\_getln.c

Patch 7.4.411

Problem: "foo bar" sorts before "foo" with sort(). (John Little)  
Solution: Avoid putting quotes around strings before comparing them.  
Files: src/eval.c

Patch 7.4.412

Problem: Can't build on Windows XP with MSVC.  
Solution: Add SUBSYSTEM\_VER to the Makefile. (Yongwei Wu)  
Files: src/Make\_mvc.mak, src/INSTALLpc.txt

Patch 7.4.413

Problem: MS-Windows: Using US international keyboard layout, inserting dead  
key by pressing space does not always work. Issue 250.  
Solution: Let MS-Windows translate the message. (John Wellesz)  
Files: src/gui\_w48.c

Patch 7.4.414

Problem: Cannot define a command only when it's used.  
Solution: Add the CmdUndefined autocommand event. (partly by Yasuhiro  
Matsumoto)  
Files: runtime/doc/autocmd.txt, src/ex\_docmd.c, src/fileio.c,  
src/proto/fileio.pro

Patch 7.4.415 (after 7.4.414)

Problem: Cannot build. Warning for shadowed variable. (John Little)  
Solution: Add missing change. Remove declaration.  
Files: src/vim.h, src/ex\_docmd.c

Patch 7.4.416

Problem: Problem with breakindent/showbreak and tabs.  
Solution: Handle tabs differently. (Christian Brabandt)  
Files: src/testdir/test\_breakindent.in, src/testdir/test\_breakindent.ok,  
src/charset.c

Patch 7.4.417

Problem: After splitting a window and setting 'breakindent' the default  
minimum with is not respected.  
Solution: Call briopt\_check() when copying options to a new window.  
Files: src/option.c, src/proto/option.pro,  
src/testdir/test\_breakindent.in

Patch 7.4.418

Problem: When leaving ":append" the cursor shape is like in Insert mode.  
(Jacob Niehus)  
Solution: Do not have State set to INSERT when calling getline().

Files: src/ex\_cmds.c

Patch 7.4.419

Problem: When part of a list is locked it's possible to make changes.

Solution: Check if any of the list items is locked before make a change.  
(ZyX)

Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

Patch 7.4.420

Problem: It's not obvious how to add a new test.

Solution: Add a README file. (Christian Brabandt)

Files: src/testdir/README.txt

Patch 7.4.421

Problem: Crash when searching for "\ze\*". (Urtica Dioica)

Solution: Disallow a multi after \ze and \zs.

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4.422

Problem: When using conceal with linebreak some text is not displayed correctly. (Grüner Gimpel)

Solution: Check for conceal mode when using linebreak. (Christian Brabandt)

Files: src/screen.c, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok

Patch 7.4.423

Problem: expand("\$shell") does not work as documented.

Solution: Do not escape the \$ when expanding environment variables.

Files: src/os\_unix.c, src/misc1.c, src/vim.h

Patch 7.4.424

Problem: Get ml\_get error when using Python to delete lines in a buffer that is not in a window. issue 248.

Solution: Do not try adjusting the cursor for a different buffer.

Files: src/if\_py\_both.h

Patch 7.4.425

Problem: When 'showbreak' is used "gj" may move to the wrong position. (Nazri Ramliy)

Solution: Adjust virtcol when 'showbreak' is set. (Christian Brabandt)

Files: src/normal.c

Patch 7.4.426

Problem: README File missing from list of files.

Solution: Update the list of files.

Files: Filelist

Patch 7.4.427

Problem: When an InsertCharPre autocommand executes system() typeahead may be echoed and messes up the display. (Jacob Niehus)

Solution: Do not set cooked mode when invoked from ":silent".

Files: src/eval.c, runtime/doc/eval.txt

Patch 7.4.428

Problem: executable() may return a wrong result on MS-Windows.

Solution: Change the way SearchPath() is called. (Yasuhiro Matsumoto, Ken Takata)

Files: src/os\_win32.c

Patch 7.4.429

Problem: Build fails with fewer features. (Elimar Riesebieter)

Solution: Add #ifdef.

Files: src/normal.c

Patch 7.4.430

Problem: test\_listlbr fails when compiled with normal features.

Solution: Check for the +conceal feature.

Files: src/testdir/test\_listlbr.in

Patch 7.4.431

Problem: Compiler warning.

Solution: Add type cast. (Mike Williams)

Files: src/ex\_docmd.c

Patch 7.4.432

Problem: When the startup code expands command line arguments, setting 'encoding' will not properly convert the arguments.

Solution: Call get\_cmd\_argsW() early in main(). (Yasuhiro Matsumoto)

Files: src/os\_win32.c, src/main.c, src/os\_mswin.c

Patch 7.4.433

Problem: Test 75 fails on MS-Windows.

Solution: Use ":normal" instead of feedkeys(). (Michael Soyka)

Files: src/testdir/test75.in

Patch 7.4.434

Problem: gettabvar() is not consistent with getwinvar() and getbufvar().

Solution: Return a dict with all variables when the varname is empty. (Yasuhiro Matsumoto)

Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test91.in, src/testdir/test91.ok

Patch 7.4.435

Problem: Line formatting behaves differently when 'linebreak' is set. (mvxxc)

Solution: Disable 'linebreak' temporarily. (Christian Brabandt)

Files: src/edit.c

Patch 7.4.436

Problem: ml\_get error for autocommand that moves the cursor of the current window.

Solution: Check the cursor position after switching back to the current buffer. (Christian Brabandt)

Files: src/fileio.c

Patch 7.4.437

Problem: New and old regexp engine are not consistent.

Solution: Also give an error for "\ze\*" for the old regexp engine.

Files: src/regexp.c, src/regexp\_nfa.c

Patch 7.4.438

Problem: Cached values for 'cino' not reset for ":set all&".

Solution: Call parse\_cino(). (Yukihiro Nakadaira)

Files: src/option.c

Patch 7.4.439

Problem: Duplicate message in message history. Some quickfix messages appear twice. (Gary Johnson)

Solution: Do not reset keep\_msg too early. (Hirohito Higashi)

Files: src/main.c

Patch 7.4.440

Problem: Omni complete popup drawn incorrectly.

Solution: Call validate\_cursor() instead of check\_cursor(). (Hirohito



Files: Higashi)  
src/edit.c

Patch 7.4.441

Problem: Endless loop and other problems when 'cedit' is set to CTRL-C.  
Solution: Do not call ex\_window() when ex\_normal\_busy or got\_int was set.  
(Yasuhiro Matsumoto)  
Files: src/ex\_getln.c

Patch 7.4.442 (after 7.4.434)

Problem: Using uninitialized variable.  
Solution: Pass the first window of the tabpage.  
Files: src/eval.c

Patch 7.4.443

Problem: Error reported by ubsan when running test 72.  
Solution: Add type cast to unsigned. (Dominique Pelle)  
Files: src/undo.c

Patch 7.4.444

Problem: Reversed question mark not recognized as punctuation. (Issue 258)  
Solution: Add the Supplemental Punctuation range.  
Files: src/mbyte.c

Patch 7.4.445

Problem: Clipboard may be cleared on startup.  
Solution: Set clip\_did\_set\_selection to -1 during startup. (Christian Brabandt)  
Files: src/main.c, src/ui.c

Patch 7.4.446

Problem: In some situations, when setting up an environment to trigger an autocommand, the environment is not properly restored.  
Solution: Check the return value of switch\_win() and call restore\_win() always. (Daniel Hahler)  
Files: src/eval.c, src/misc2.c, src/window.c

Patch 7.4.447

Problem: Spell files from Hunspell may generate a lot of errors.  
Solution: Add the IGNOREEXTRA flag.  
Files: src/spell.c, runtime/doc/spell.txt

Patch 7.4.448

Problem: Using ETO\_IGNORELANGUAGE causes problems.  
Solution: Remove this flag. (Paul Moore)  
Files: src/gui\_w32.c

Patch 7.4.449

Problem: Can't easily close the help window. (Chris Gaal)  
Solution: Add ":helpclose". (Christian Brabandt)  
Files: runtime/doc/helphelp.txt, runtime/doc/index.txt, src/ex\_cmds.c, src/ex\_cmds.h, src/proto/ex\_cmds.pro

Patch 7.4.450

Problem: Not all commands that edit another buffer support the +cmd argument.  
Solution: Add the +cmd argument to relevant commands. (Marcin Szamotulski)  
Files: runtime/doc/windows.txt, src/ex\_cmds.h, src/ex\_docmd.c

Patch 7.4.451

Problem: Calling system() with empty input gives an error for writing the temp file.

Solution: Do not try writing if the string length is zero. (Olaf Dabrunz)  
Files: src/eval.c

Patch 7.4.452

Problem: Can't build with tiny features. (Tony Mechelynck)  
Solution: Use "return" instead of "break".  
Files: src/ex\_cmds.c

Patch 7.4.453

Problem: Still can't build with tiny features.  
Solution: Add #ifdef.  
Files: src/ex\_cmds.c

Patch 7.4.454

Problem: When using a Visual selection of multiple words and doing CTRL-W\_] it jumps to the tag matching the word under the cursor, not the selected text. (Patrick hemmer)  
Solution: Do not reset Visual mode. (idea by Christian Brabandt)  
Files: src/window.c

Patch 7.4.455

Problem: Completion for :buf does not use 'wildignorecase'. (Akshay H)  
Solution: Pass the 'wildignorecase' flag around.  
Files: src/buffer.c

Patch 7.4.456

Problem: 'backupcopy' is global, cannot write only some files in a different way.  
Solution: Make 'backupcopy' global-local. (Christian Brabandt)  
Files: runtime/doc/options.txt, src/buffer.c, src/fileio.c, src/option.c, src/option.h, src/proto/option.pro, src/structs.h

Patch 7.4.457

Problem: Using getchar() in an expression mapping may result in K\_CURSORHOLD, which can't be recognized.  
Solution: Add the <CursorHold> key. (Hirohito Higashi)  
Files: src/misc2.c

Patch 7.4.458

Problem: Issue 252: Cursor moves in a zero-height window.  
Solution: Check for zero height. (idea by Christian Brabandt)  
Files: src/move.c

Patch 7.4.459

Problem: Can't change the icon after building Vim.  
Solution: Load the icon from a file on startup. (Yasuhiro Matsumoto)  
Files: src/gui\_w32.c, src/os\_mswin.c, src/os\_win32.c, src/proto/os\_mswin.pro

Patch 7.4.460 (after 7.4.454)

Problem: Can't build without the quickfix feature. (Erik Falor)  
Solution: Add a #ifdef.  
Files: src/window.c

Patch 7.4.461

Problem: MS-Windows: When collate is on the number of copies is too high.  
Solution: Only set the collated/uncollated count when collate is on. (Yasuhiro Matsumoto)  
Files: src/os\_mswin.c

Patch 7.4.462

Problem: Setting the local value of 'backupcopy' empty gives an error.

(Peter Mattern)  
Solution: When using an empty value set the flags to zero. (Hirohito Higashi)  
Files: src/option.c

Patch 7.4.463

Problem: Test 86 and 87 may hang on MS-Windows.  
Solution: Call inputrestore() after inputsave(). (Ken Takata)  
Files: src/testdir/test86.in, src/testdir/test87.in

Patch 7.4.464 (after 7.4.459)

Problem: Compiler warning.  
Solution: Add type cast. (Ken Takata)  
Files: src/gui\_w32.c

Patch 7.4.465 (after 7.4.016)

Problem: Crash when expanding a very long string.  
Solution: Use wcsncpy() instead of wcscpy(). (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.466 (after 7.4.460)

Problem: CTRL-W } does not open preview window. (Erik Falor)  
Solution: Don't set g\_do\_tagpreview for CTRL-W }.  
Files: src/window.c

Patch 7.4.467

Problem: 'linebreak' does not work well together with Visual mode.  
Solution: Disable 'linebreak' while applying an operator. Fix the test. (Christian Brabandt)  
Files: src/normal.c, src/screen.c, src/testdir/test\_listlbr.in, src/testdir/test\_listlbr.ok

Patch 7.4.468

Problem: Issue 26: CTRL-C does not interrupt after it was mapped and then unmapped.  
Solution: Reset mapped\_ctrl\_c. (Christian Brabandt)  
Files: src/getchar.c

Patch 7.4.469 (after 7.4.467)

Problem: Can't build with MSVC. (Ken Takata)  
Solution: Move the assignment after the declarations.  
Files: src/normal.c

Patch 7.4.470

Problem: Test 11 and 100 do not work properly on Windows.  
Solution: Avoid using feedkeys(). (Ken Takata)  
Files: src/testdir/Make\_dos.mak, src/testdir/test11.in, src/testdir/test100.in

Patch 7.4.471

Problem: MS-Windows: When printer name contains multi-byte, the name is displayed as ???.  
Solution: Convert the printer name from the active codepage to 'encoding'. (Yasuhiro Matsumoto)  
Files: src/os\_mswin.c

Patch 7.4.472

Problem: The "precedes" entry in 'listchar' will be drawn when 'showbreak' is set and 'list' is not.  
Solution: Only draw this character when 'list' is on. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.4.473

Problem: Cursor movement is incorrect when there is a number/sign/fold column and 'sbr' is displayed.  
Solution: Adjust the column for 'sbr'. (Christian Brabandt)  
Files: src/charset.c

## Patch 7.4.474

Problem: AIX compiler can't handle // comment. Issue 265.  
Solution: Remove that line.  
Files: src/regex\_nfa.c

## Patch 7.4.475

Problem: Can't compile on a system where Xutf8SetWMProperties() is not in the X11 library. Issue 265.  
Solution: Add a configure check.  
Files: src/configure.in, src/auto/configure, src/config.h.in, src/os\_unix.c

## Patch 7.4.476

Problem: MingW: compiling with "XPM=no" doesn't work.  
Solution: Check for the "no" value. (KF Leong) Also for Cygwin. (Ken Takata)  
Files: src/Make\_ming.mak, src/Make\_cyg.mak

## Patch 7.4.477

Problem: When using ":%diffput" and the other file is empty an extra empty line remains.  
Solution: Set the buf\_empty flag.  
Files: src/diff.c

## Patch 7.4.478

Problem: Using byte length instead of character length for 'showbreak'.  
Solution: Compute the character length. (Marco Hinz)  
Files: src/charset.c

## Patch 7.4.479

Problem: MS-Windows: The console title can be wrong.  
Solution: Take the encoding into account. When restoring the title use the right function. (Yasuhiro Matsumoto)  
Files: src/os\_mswin.c, src/os\_win32.c

## Patch 7.4.480 (after 7.4.479)

Problem: MS-Windows: Can't build.  
Solution: Remove goto, use a flag instead.  
Files: src/os\_win32.c

## Patch 7.4.481 (after 7.4.471)

Problem: Compiler warning on MS-Windows.  
Solution: Add type casts. (Ken Takata)  
Files: src/os\_mswin.c

## Patch 7.4.482

Problem: When 'balloonexpr' results in a list, the text has a trailing newline. (Lcd)  
Solution: Remove one trailing newline.  
Files: src/gui\_beval.c

## Patch 7.4.483

Problem: A 0x80 byte is not handled correctly in abbreviations.  
Solution: Unescape special characters. Add a test. (Christian Brabandt)  
Files: src/getchar.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,

src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_mapping.in,  
src/testdir/test\_mapping.ok

Patch 7.4.484 (after 7.4.483)

Problem: Compiler warning on MS-Windows. (Ken Takata)  
Solution: Add type cast.  
Files: src/getchar.c

Patch 7.4.485 (after 7.4.484)

Problem: Abbreviations don't work. (Toothpik)  
Solution: Move the length computation inside the for loop. Compare against  
the unescaped key.  
Files: src/getchar.c

Patch 7.4.486

Problem: Check for writing to a yank register is wrong.  
Solution: Negate the check. (Zyx). Also clean up the #ifdefs.  
Files: src/ex\_docmd.c, src/ex\_cmds.h

Patch 7.4.487

Problem: ":sign jump" may use another window even though the file is  
already edited in the current window.  
Solution: First check if the file is in the current window. (James McCoy)  
Files: src/window.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_signs.in,  
src/testdir/test\_signs.ok

Patch 7.4.488

Problem: test\_mapping fails for some people.  
Solution: Set the 'encoding' option. (Ken Takata)  
Files: src/testdir/test\_mapping.in

Patch 7.4.489

Problem: Cursor movement still wrong when 'lbr' is set and there is a  
number column. (Hirohito Higashi)  
Solution: Add correction for number column. (Hiroyuki Takagi)  
Files: src/charset.c

Patch 7.4.490

Problem: Cannot specify the buffer to use for "do" and "dp", making them  
useless for three-way diff.  
Solution: Use the count as the buffer number. (James McCoy)  
Files: runtime/doc/diff.txt, src/diff.c, src/normal.c, src/proto/diff.pro

Patch 7.4.491

Problem: When winrestview() has a negative "topline" value there are  
display errors.  
Solution: Correct a negative value to 1. (Hirohito Higashi)  
Files: src/eval.c

Patch 7.4.492

Problem: In Insert mode, after inserting a newline that inserts a comment  
leader, CTRL-O moves to the right. (ZyX) Issue 57.  
Solution: Correct the condition for moving the cursor back to the NUL.  
(Christian Brabandt)  
Files: src/edit.c, src/testdir/test4.in, src/testdir/test4.ok

Patch 7.4.493

Problem: A TextChanged autocommand is triggered when saving a file.

(William Gardner)  
Solution: Update last\_changedtick after calling unchanged(). (Christian Brabandt)  
Files: src/fileio.c

#### Patch 7.4.494

Problem: Cursor shape is wrong after a CompleteDone autocommand.  
Solution: Update the cursor and mouse shape after ":normal" restores the state. (Jacob Niehus)  
Files: src/ex\_docmd.c

#### Patch 7.4.495

Problem: XPM isn't used correctly in the Cygwin Makefile.  
Solution: Include the rules like in Make\_ming.mak. (Ken Takata)  
Files: src/Make\_cyg.mak

#### Patch 7.4.496

Problem: Many lines are both in Make\_cyg.mak and Make\_ming.mak  
Solution: Move the common parts to one file. (Ken Takata)  
Files: src/INSTALLpc.txt, src/Make\_cyg.mak, src/Make\_cyg\_ming.mak, src/Make\_ming.mak, src/Make\_mvc.mak, Filelist

#### Patch 7.4.497

Problem: With some regexp patterns the NFA engine uses many states and becomes very slow. To the user it looks like Vim freezes.  
Solution: When the number of states reaches a limit fall back to the old engine. (Christian Brabandt)  
Files: runtime/doc/options.txt, src/Makefile, src/regexp.c, src/regexp.h, src/regexp\_nfa.c, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Makefile, src/testdir/samples/re.freeze.txt, src/testdir/bench\_re\_freeze.in, src/testdir/bench\_re\_freeze.vim, Filelist

#### Patch 7.4.498 (after 7.4.497)

Problem: Typo in DOS makefile.  
Solution: Change exists to exist. (Ken Takata)  
Files: src/testdir/Make\_dos.mak

#### Patch 7.4.499

Problem: substitute() can be slow with long strings.  
Solution: Store a pointer to the end, instead of calling strlen() every time. (Ozaki Kiichi)  
Files: src/eval.c

#### Patch 7.4.500

Problem: Test 72 still fails once in a while.  
Solution: Don't set 'fileformat' to unix, reset it. (Ken Takata)  
Files: src/testdir/test72.in

#### Patch 7.4.501 (after 7.4.497)

Problem: Typo in file pattern.  
Solution: Insert a slash and remove a dot.  
Files: Filelist

#### Patch 7.4.502

Problem: Language mapping also applies to mapped characters.  
Solution: Add the 'langnoremap' option, when on 'langmap' does not apply to mapped characters. (Christian Brabandt)  
Files: runtime/doc/options.txt, runtime/vimrc\_example.vim, src/macros.h, src/option.c, src/option.h

## Patch 7.4.503

Problem: Cannot append a list of lines to a file.  
Solution: Add the append option to writefile(). (Yasuhiro Matsumoto)  
Files: runtime/doc/eval.txt, src/Makefile, src/eval.c,  
src/testdir/test\_writefile.in, src/testdir/test\_writefile.ok

## Patch 7.4.504

Problem: Restriction of the MS-Windows installer that the path must end in  
"Vim" prevents installing more than one version.  
Solution: Remove the restriction. (Tim Lebedkov)  
Files: nsis/gvim.nsi

## Patch 7.4.505

Problem: On MS-Windows when 'encoding' is a double-byte encoding a file  
name longer than MAX\_PATH bytes but shorter than that in  
characters causes problems.  
Solution: Fail on file names longer than MAX\_PATH bytes. (Ken Takata)  
Files: src/os\_win32.c

## Patch 7.4.506

Problem: MS-Windows: Cannot open a file with 259 characters.  
Solution: Fix off-by-one error. (Ken Takata)  
Files: src/os\_mswin.c

## Patch 7.4.507 (after 7.4.496)

Problem: Building with MingW and Perl.  
Solution: Remove quotes. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak

## Patch 7.4.508

Problem: When generating ja.sjis.po the header is not correctly adjusted.  
Solution: Check for the right header string. (Ken Takata)  
Files: src/po/sjiscorr.c

## Patch 7.4.509

Problem: Users are not aware their encryption is weak.  
Solution: Give a warning when prompting for the key.  
Files: src/crypt.c, src/ex\_docmd.c, src/fileio.c, src/main.c,  
src/proto/crypt.pro

## Patch 7.4.510

Problem: "-fwrapv" argument breaks use of cproto.  
Solution: Remove the alphabetic arguments in a drastic way.  
Files: src/Makefile

## Patch 7.4.511

Problem: Generating proto for if\_ruby.c uses type not defined elsewhere.  
Solution: Do not generate a prototype for  
rb\_gc\_writebarrier\_unprotect\_promoted()  
Files: src/if\_ruby.c

## Patch 7.4.512

Problem: Cannot generate prototypes for Win32 files and VMS.  
Solution: Add typedefs and #ifdef  
Files: src/os\_win32.c, src/gui\_w32.c, src/os\_vms.c

## Patch 7.4.513

Problem: Crash because reference count is wrong for list returned by  
getreg().  
Solution: Increment the reference count. (Kimmy Lindvall)  
Files: src/eval.c

## Patch 7.4.514 (after 7.4.492)

Problem: Memory access error. (Dominique Pelle)  
Solution: Update tpos. (Christian Brabandt)  
Files: src/edit.c

## Patch 7.4.515

Problem: In a help buffer the global 'foldmethod' is used. (Paul Marshall)  
Solution: Reset 'foldmethod' when starting to edit a help file. Move the code to a separate function.  
Files: src/ex\_cmds.c

## Patch 7.4.516

Problem: Completing a function name containing a # does not work. Issue 253.  
Solution: Recognize the # character. (Christian Brabandt)  
Files: src/eval.c

## Patch 7.4.517

Problem: With a wrapping line the cursor may not end up in the right place. (Nazri Ramliy)  
Solution: Adjust n\_extra for a Tab that wraps. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.4.518

Problem: Using status line height in width computations.  
Solution: Use one instead. (Hirohito Higashi)  
Files: src/window.c

## Patch 7.4.519 (after 7.4.497)

Problem: Crash when using syntax highlighting.  
Solution: When regprog is freed and replaced, store the result.  
Files: src/buffer.c, src/regexp.c, src/syntax.c, src/spell.c,  
src/ex\_cmds2.c, src/fileio.c, src/proto/fileio.pro,  
src/proto/regexp.pro, src/os\_unix.c

## Patch 7.4.520

Problem: Sun PCK locale is not recognized.  
Solution: Add PCK in the table. (Keiichi Oono)  
Files: src/mbyte.c

## Patch 7.4.521

Problem: When using "vep" a mark is moved to the next line. (Maxi Padulo, Issue 283)  
Solution: Decrement the line number. (Christian Brabandt)  
Files: src/ops.c

## Patch 7.4.522

Problem: Specifying wrong buffer size for GetLongPathName().  
Solution: Use the actual size. (Ken Takata)  
Files: src/eval.c

## Patch 7.4.523

Problem: When the X11 server is stopped and restarted, while Vim is kept in the background, copy/paste no longer works. (Issue 203)  
Solution: Setup the clipboard again. (Christian Brabandt)  
Files: src/os\_unix.c

## Patch 7.4.524

Problem: When using ":ownsyntax" spell checking is messed up. (Issue 78)  
Solution: Use the window-local option values. (Christian Brabandt)  
Files: src/option.c, src/syntax.c



## Patch 7.4.525

Problem: map() leaks memory when there is an error in the expression.  
Solution: Call clear\_tv(). (Christian Brabandt)  
Files: src/eval.c

## Patch 7.4.526

Problem: matchstr() fails on long text. (Daniel Hahler)  
Solution: Return NFA\_T00\_EXPENSIVE from regexexec\_nl(). (Christian Brabandt)  
Files: src/regexp.c

## Patch 7.4.527

Problem: Still confusing regexp failure and NFA\_T00\_EXPENSIVE.  
Solution: NFA changes equivalent of 7.4.526.  
Files: src/regexp\_nfa.c

## Patch 7.4.528

Problem: Crash when using matchadd() (Yasuhiro Matsumoto)  
Solution: Copy the match regprog.  
Files: src/screen.c

## Patch 7.4.529

Problem: No test for what 7.4.517 fixes.  
Solution: Adjust the tests for breakindent. (Christian Brabandt)  
Files: src/testdir/test\_breakindent.in, src/testdir/test\_breakindent.ok

## Patch 7.4.530

Problem: Many commands take a count or range that is not using line numbers.  
Solution: For each command specify what kind of count it uses. For windows, buffers and arguments have "\$" and "." have a relevant meaning. (Marcin Szamotulski)  
Files: runtime/doc/editing.txt, runtime/doc/tabpage.txt, runtime/doc/windows.txt, src/Makefile, src/ex\_cmds.h, src/ex\_docmd.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_argument\_count.in, src/testdir/test\_argument\_count.ok, src/testdir/test\_close\_count.in, src/testdir/test\_close\_count.ok, src/window.c

## Patch 7.4.531

Problem: Comments about parsing an Ex command are wrong.  
Solution: Correct the step numbers.  
Files: src/ex\_docmd.c

## Patch 7.4.532

Problem: When using 'incsearch' "2/pattern/e" highlights the first match.  
Solution: Move the code to set extra\_col inside the loop for count. (Ozaki Kiichi)  
Files: src/search.c

## Patch 7.4.533

Problem: ":hardcopy" leaks memory in case of errors.  
Solution: Free memory in all code paths. (Christian Brabandt)  
Files: src/hardcopy.c

## Patch 7.4.534

Problem: Warnings when compiling if\_ruby.c.  
Solution: Avoid the warnings. (Ken Takata)  
Files: src/if\_ruby.c

## Patch 7.4.535 (after 7.4.530)

Problem: Can't build with tiny features.  
Solution: Add #ifdefs and skip a test.  
Files: src/ex\_docmd.c, src/testdir/test\_argument\_count.in

## Patch 7.4.536

Problem: Test 63 fails when using a black&white terminal.  
Solution: Add attributes for a non-color terminal. (Christian Brabandt)  
Files: src/testdir/test63.in

## Patch 7.4.537

Problem: Value of v:hlsearch reflects an internal variable.  
Solution: Make the value reflect whether search highlighting is actually displayed. (Christian Brabandt)  
Files: runtime/doc/eval.txt, src/testdir/test101.in,  
src/testdir/test101.ok, src/vim.h

## Patch 7.4.538

Problem: Tests fail with small features plus Python.  
Solution: Disallow weird combination of options. Do not set "fdm" when folding is disabled.  
Files: src/option.c, src/ex\_cmds.c, src/configure.in, src/auto/configure,  
src/feature.h

## Patch 7.4.539 (after 7.4.530)

Problem: Crash when computing buffer count. Problem with range for user commands. Line range wrong in Visual area.  
Solution: Avoid segfault in compute\_buffer\_local\_count(). Check for CMD\_USER when checking type of range. (Marcin Szamotulski)  
Files: runtime/doc/windows.txt, src/ex\_docmd.c

## Patch 7.4.540 (after 7.4.539)

Problem: Cannot build with tiny and small features. (Taro Muraoka)  
Solution: Add #ifdef around CMD\_USER.  
Files: src/ex\_docmd.c

## Patch 7.4.541

Problem: Crash when doing a range assign.  
Solution: Check for NULL pointer. (Yukihiro Nakadaira)  
Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.4.542

Problem: Using a range for window and buffer commands has a few problems. Cannot specify the type of range for a user command.  
Solution: Add the -addr argument for user commands. Fix problems. (Marcin Szamotulski)  
Files: src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok src/testdir/Make\_amiga.mak  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, runtime/doc/map.txt, src/Makefile,  
src/ex\_cmds.h, src/ex\_docmd.c, src/ex\_getln.c,  
src/proto/ex\_docmd.pro, src/vim.h,

## Patch 7.4.543

Problem: Since patch 7.4.232 "l,3s/\n/" joins two lines instead of three. (Eliseo Martínez) Issue 287  
Solution: Correct the line count. (Christian Brabandt)  
Also set the last used search pattern.  
Files: src/ex\_cmds.c, src/search.c, src/proto/search.pro

## Patch 7.4.544

Problem: Warnings for unused arguments when compiling with a combination of features.  
Solution: Add "UNUSED".  
Files: src/if\_cscope.c

#### Patch 7.4.545

Problem: Highlighting for multi-line matches is not correct.  
Solution: Stop highlight at the end of the match. (Hirohito Higashi)  
Files: src/screen.c

#### Patch 7.4.546

Problem: Repeated use of vim\_snprintf() with a number.  
Solution: Move these vim\_snprintf() calls into a function.  
Files: src/window.c

#### Patch 7.4.547

Problem: Using "vit" does not select a multi-byte character at the end correctly.  
Solution: Advance the cursor over the multi-byte character. (Christian Brabandt)  
Files: src/search.c

#### Patch 7.4.548

Problem: Compilation fails with native version of MinGW-w64, because it doesn't have x86\_64-w64-mingw32-windres.exe.  
Solution: Use windres instead. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak

#### Patch 7.4.549

Problem: Function name not recognized correctly when inside a function.  
Solution: Don't check for an alpha character. (Ozaki Kiichi)  
Files: src/eval.c, src/testdir/test\_nested\_function.in, src/testdir/test\_nested\_function.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.4.550

Problem: curs\_rows() function is always called with the second argument false.  
Solution: Remove the argument. (Christian Brabandt)  
validate\_botline\_win() can then also be removed.  
Files: src/move.c

#### Patch 7.4.551

Problem: "ygn" may yank too much. (Fritzophrenic) Issue 295.  
Solution: Check the width of the next match. (Christian Brabandt)  
Files: src/search.c, src/testdir/test53.in, src/testdir/test53.ok

#### Patch 7.4.552

Problem: Langmap applies to Insert mode expression mappings.  
Solution: Check for Insert mode. (Daniel Hahler)  
Files: src/getchar.c, src/testdir/test\_mapping.in, src/testdir/test\_mapping.ok

#### Patch 7.4.553

Problem: Various small issues.  
Solution: Fix those issues.  
Files: src/ex\_cmds.h, src/gui.h, src/message.c, src/testdir/test39.in, src/proto/eval.pro, src/proto/misc1.pro, src/proto/ops.pro, src/proto/screen.pro, src/proto/window.pro, src/os\_unix.c, src/Make\_vms.mms, src/proto/os\_vms.pro, src/INSTALL

## Patch 7.4.554

Problem: Missing part of patch 7.4.519.  
Solution: Copy back regprog after calling vim\_regex.  
Files: src/quickfix.c

## Patch 7.4.555

Problem: test\_close\_count may fail for some combination of features.  
Solution: Require normal features.  
Files: src/testdir/test\_close\_count.in

## Patch 7.4.556

Problem: Failed commands in Python interface not handled correctly.  
Solution: Restore window and buffer on failure.  
Files: src/if\_py\_both.h

## Patch 7.4.557

Problem: One more small issue.  
Solution: Update function proto.  
Files: src/proto/window.pro

## Patch 7.4.558

Problem: When the X server restarts Vim may get stuck.  
Solution: Destroy the application context and create it again. (Issue 203)  
Files: src/os\_unix.c

## Patch 7.4.559

Problem: Appending a block in the middle of a tab does not work correctly  
when virtualedit is set.  
Solution: Decrement spaces and count, don't reset them. (James McCoy)  
Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

## Patch 7.4.560

Problem: Memory leak using :wviminfo. Issue 296.  
Solution: Free memory when needed. (idea by Christian Brabandt)  
Files: src/ops.c

## Patch 7.4.561

Problem: Ex range handling is wrong for buffer-local user commands.  
Solution: Check for CMD\_USER\_BUF. (Marcin Szamotulski)  
Files: src/ex\_docmd.c, src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok

## Patch 7.4.562

Problem: Segfault with wide screen and error in 'rulerformat'. (Ingo Karkat)  
Solution: Check there is enough space. (Christian Brabandt)  
Files: src/buffer.c, src/screen.c

## Patch 7.4.563

Problem: No test for replacing on a tab in Virtual replace mode.  
Solution: Add a test. (Elias Diem)  
Files: src/testdir/test48.in, src/testdir/test48.ok

## Patch 7.4.564

Problem: FEAT\_OSFILETYPE is used even though it's never defined.  
Solution: Remove the code. (Christian Brabandt)  
Files: src/fileio.c

## Patch 7.4.565

Problem: Ranges for arguments, buffers, tabs, etc. are not checked to be  
valid but limited to the maximum. This can cause the wrong thing  
to happen.

Solution: Give an error for an invalid value. (Marcin Szamotulski)  
Use windows range for ":wincmd".  
Files: src/ex\_docmd.c, src/ex\_cmds.h, src/testdir/test62.in,  
src/testdir/test\_argument\_count.in,  
src/testdir/test\_argument\_count.ok,  
src/testdir/test\_close\_count.in,  
src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok

#### Patch 7.4.566

Problem: :argdo, :bufdo, :windo and :tabdo don't take a range.  
Solution: Support the range. (Marcin Szamotulski)  
Files: runtime/doc/editing.txt, runtime/doc/tabpage.txt,  
runtime/doc/windows.txt, src/ex\_cmds.h, src/ex\_cmds2.c,  
src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok

#### Patch 7.4.567

Problem: Non-ascii vertical separator characters are always redrawn.  
Solution: Compare only the one byte that's stored. (Thiago Padilha)  
Files: src/screen.c

#### Patch 7.4.568

Problem: Giving an error for ":0wincmd w" is a problem for some plugins.  
Solution: Allow the zero in the range. (Marcin Szamotulski)  
Files: src/ex\_docmd.c, src/testdir/test\_command\_count.ok

#### Patch 7.4.569 (after 7.4.468)

Problem: Having CTRL-C interrupt or not does not check the mode of the  
mapping. (Ingo Karkat)  
Solution: Use a bitmask with the map mode. (Christian Brabandt)  
Files: src/getchar.c, src/structs.h, src/testdir/test\_mapping.in,  
src/testdir/test\_mapping.ok, src/ui.c, src/globals.h

#### Patch 7.4.570

Problem: Building with dynamic library does not work for Ruby 2.2.0  
Solution: Change #ifdefs and #defines. (Ken Takata)  
Files: src/if\_ruby.c

#### Patch 7.4.571 (after 7.4.569)

Problem: Can't build with tiny features. (Ike Devolder)  
Solution: Add #ifdef.  
Files: src/getchar.c

#### Patch 7.4.572

Problem: Address type of :wincmd depends on the argument.  
Solution: Check the argument.  
Files: src/ex\_docmd.c, src/window.c, src/proto/window.pro

#### Patch 7.4.573 (after 7.4.569)

Problem: Mapping CTRL-C in Visual mode doesn't work. (Ingo Karkat)  
Solution: Call get\_real\_state() instead of using State directly.  
Files: src/ui.c, src/testdir/test\_mapping.in, src/testdir/test\_mapping.ok

#### Patch 7.4.574

Problem: No error for eval('\$').  
Solution: Check for empty name. (Yasuhiro Matsumoto)  
Files: src/eval.c

#### Patch 7.4.575

Problem: Unicode character properties are outdated.  
Solution: Update the tables with the latest version.

Files: src/mbyte.c

Patch 7.4.576

Problem: Redrawing problem with 'relativenumber' and 'linebreak'.  
Solution: Temporarily reset 'linebreak' and restore it in more places.  
(Christian Brabandt)  
Files: src/normal.c

Patch 7.4.577

Problem: Matching with a virtual column has a lot of overhead on very long  
lines. (Issue 310)  
Solution: Bail out early if there can't be a match. (Christian Brabandt)  
Also check for CTRL-C at every position.  
Files: src/regexp\_nfa.c

Patch 7.4.578

Problem: Using getcurpos() after "\$" in an empty line returns a negative  
number.  
Solution: Don't add one when this would overflow. (Hirohito Higashi)  
Files: src/eval.c

Patch 7.4.579

Problem: Wrong cursor positioning when 'linebreak' is set and lines wrap.  
Solution: Fix it. (Christian Brabandt)  
Files: src/charset.c, src/screen.c

Patch 7.4.580

Problem: ":52wincmd v" still gives an invalid range error. (Charles  
Campbell)  
Solution: Skip over white space.  
Files: src/ex\_docmd.c

Patch 7.4.581

Problem: Compiler warnings for uninitialized variables. (John Little)  
Solution: Initialize the variables.  
Files: src/ops.c

Patch 7.4.582 (after 7.4.577)

Problem: Can't match "%>80v" properly. (Axel Bender)  
Solution: Correctly handle ">". (Christian Brabandt)  
Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

Patch 7.4.583

Problem: With tiny features test 16 may fail.  
Solution: Source small.vim. (Christian Brabandt)  
Files: src/testdir/test16.in

Patch 7.4.584

Problem: With tiny features test\_command\_count may fail.  
Solution: Source small.vim. (Christian Brabandt)  
Files: src/testdir/test\_command\_count.in

Patch 7.4.585

Problem: Range for :bdelete does not work. (Ronald Schild)  
Solution: Also allow unloaded buffers.  
Files: src/ex\_cmds.h, src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok

Patch 7.4.586

Problem: Parallel building of the documentation html files is not reliable.  
Solution: Remove a cyclic dependency. (Reiner Herrmann)  
Files: runtime/doc/Makefile

## Patch 7.4.587

Problem: Conceal does not work properly with 'linebreak'. (cs86661)  
Solution: Save and restore boguscols. (Christian Brabandt)  
Files: src/screen.c, src/testdir/test\_listlbr\_utf8.in,  
src/testdir/test\_listlbr\_utf8.ok

## Patch 7.4.588

Problem: ":0argedit foo" puts the new argument in the second place instead of the first.  
Solution: Adjust the range type. (Ingo Karkat)  
Files: src/ex\_cmds.h, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_argument\_0count.in,  
src/testdir/test\_argument\_0count.ok

## Patch 7.4.589

Problem: In the MS-Windows console Vim can't handle greek characters when encoding is utf-8.  
Solution: Escape K\_NUL. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

## Patch 7.4.590

Problem: Using ctrl\_x\_mode as if it contains flags.  
Solution: Don't use AND with CTRL\_X\_OMNI. (Hirohito Higashi)  
Files: src/edit.c

## Patch 7.4.591 (after 7.4.587)

Problem: test\_listlbr\_utf8 fails when the conceal feature is not available.  
Solution: Check for the conceal feature. (Kazunobu Kuriyama)  
Files: src/testdir/test\_listlbr\_utf8.in

## Patch 7.4.592

Problem: When doing ":e foobar" when already editing "foobar" and 'buftype' is "nofile" the buffer is cleared. (Xavier de Gaye)  
Solution: Do no clear the buffer.  
Files: src/ex\_cmds.c

## Patch 7.4.593

Problem: Crash when searching for "x\{0,90000}". (Dominique Pelle)  
Solution: Bail out from the NFA engine when the max limit is much higher than the min limit.  
Files: src/regexp\_nfa.c, src/regexp.c, src/vim.h

## Patch 7.4.594

Problem: Using a block delete while 'breakindent' is set does not work properly.  
Solution: Use "line" instead of "prev\_pend" as the first argument to lbr\_chartabsize\_adv(). (Hirohito Higashi)  
Files: src/ops.c, src/testdir/test\_breakindent.in,  
src/testdir/test\_breakindent.ok

## Patch 7.4.595

Problem: The test\_command\_count test fails when using Japanese.  
Solution: Force the language to C. (Hirohito Higashi)  
Files: src/testdir/test\_command\_count.in

## Patch 7.4.596 (after 7.4.592)

Problem: Tiny build doesn't compile. (Ike Devolder)  
Solution: Add #ifdef.  
Files: src/ex\_cmds.c

## Patch 7.4.597

Problem: Cannot change the result of systemlist().  
Solution: Initialize v\_lock. (Yukihiro Nakadaira)  
Files: src/eval.c

## Patch 7.4.598

Problem: ":tabdo windo echo 'hi'" causes "\*" register not to be changed.  
(Salman Halim)  
Solution: Change how clip\_did\_set\_selection is used and add  
clipboard\_needs\_update and global\_change\_count. (Christian  
Brabandt)  
Files: src/main.c, src/ui.c, src/testdir/test\_eval.in,  
src/testdir/test\_eval.ok

## Patch 7.4.599

Problem: Out-of-memory error.  
Solution: Avoid trying to allocate a negative amount of memory, use size\_t  
instead of int. (Dominique Pelle)  
Files: src/regexp\_nfa.c

## Patch 7.4.600

Problem: Memory wasted in struct because of aligning.  
Solution: Split pos in lnum and col. (Dominique Pelle)  
Files: src/regexp\_nfa.c

## Patch 7.4.601

Problem: It is not possible to have feedkeys() insert characters.  
Solution: Add the 'i' flag.  
Files: src/eval.c, runtime/doc/eval.txt

## Patch 7.4.602

Problem: ":set" does not accept hex numbers as documented.  
Solution: Use vim\_str2nr(). (ZyX)  
Files: src/option.c, runtime/doc/options.txt

## Patch 7.4.603

Problem: 'foldcolumn' may be set such that it fills the whole window, not  
leaving space for text.  
Solution: Reduce the foldcolumn width when there is not sufficient room.  
(idea by Christian Brabandt)  
Files: src/screen.c

## Patch 7.4.604

Problem: Running tests changes viminfo.  
Solution: Disable viminfo.  
Files: src/testdir/test\_breakindent.in

## Patch 7.4.605

Problem: The # register is not writable, it cannot be restored after  
jumping around.  
Solution: Make the # register writable. (Marcin Szamotulski)  
Files: runtime/doc/change.txt, src/ops.c, src/buffer.c, src/globals.h

## Patch 7.4.606

Problem: May crash when using a small window.  
Solution: Avoid dividing by zero. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.4.607 (after 7.4.598)

Problem: Compiler warnings for unused variables.  
Solution: Move them inside #ifdef. (Kazunobu Kuriyama)



Files: src/ui.c

Patch 7.4.608 (after 7.4.598)

Problem: test\_eval fails when the clipboard feature is missing.

Solution: Skip part of the test. Reduce the text used.

Files: src/testdir/test\_eval.in, src/testdir/test\_eval.ok

Patch 7.4.609

Problem: For complicated list and dict use the garbage collector can run out of stack space.

Solution: Use a stack of dicts and lists to be marked, thus making it iterative instead of recursive. (Ben Fritz)

Files: src/eval.c, src/if\_lua.c, src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c, src/proto/eval.pro, src/proto/if\_lua.pro, src/proto/if\_python.pro, src/proto/if\_python3.pro, src/structs.h

Patch 7.4.610

Problem: Some function headers may be missing from generated .pro files.

Solution: Add PROTO to the #ifdef.

Files: src/option.c, src/syntax.c

Patch 7.4.611 (after 7.4.609)

Problem: Syntax error.

Solution: Change statement to return.

Files: src/if\_python3.c

Patch 7.4.612

Problem: test\_eval fails on Mac.

Solution: Use the \* register instead of the + register. (Jun Takimoto)

Files: src/testdir/test\_eval.in, src/testdir/test\_eval.ok

Patch 7.4.613

Problem: The NFA engine does not implement the 'redrawtime' time limit.

Solution: Implement the time limit.

Files: src/regexp\_nfa.c

Patch 7.4.614

Problem: There is no test for what patch 7.4.601 fixes.

Solution: Add a test. (Christian Brabandt)

Files: src/testdir/test\_mapping.in, src/testdir/test\_mapping.ok

Patch 7.4.615

Problem: Vim hangs when freeing a lot of objects.

Solution: Do not go back to the start of the list every time. (Yasuhiro Matsumoto and Ariya Mizutani)

Files: src/eval.c

Patch 7.4.616

Problem: Cannot insert a tab in front of a block.

Solution: Correctly compute aop->start. (Christian Brabandt)

Files: src/ops.c, src/testdir/test39.in, src/testdir/test39.ok

Patch 7.4.617

Problem: Wrong ":argdo" range does not cause an error.

Solution: Reset "cmd" to NULL. (Marcin Szamotulski, Ingo Karkat)

Files: src/ex\_docmd.c

Patch 7.4.618 (after 7.4.609)

Problem: luaV\_setref() is missing a return statement. (Ozaki Kiichi)

Solution: Put the return statement back.

Files: src/if\_lua.c

Patch 7.4.619 (after 7.4.618)

Problem: luaV\_setref() not returning the correct value.

Solution: Return one.

Files: src/if\_lua.c

Patch 7.4.620

Problem: Compiler warning for uninitialized variable. (Tony Mechelynck)

Solution: Initialize "did\_free". (Ben Fritz)

Files: src/eval.c

Patch 7.4.621 (after 7.4.619)

Problem: Returning 1 in the wrong function. (Raymond Ko)

Solution: Return 1 in the right function (hopefully).

Files: src/if\_lua.c

Patch 7.4.622

Problem: Compiler warning for unused argument.

Solution: Add UNUSED.

Files: src/regexp\_nfa.c

Patch 7.4.623

Problem: Crash with pattern: \\(\\){80000} (Dominique Pelle)

Solution: When the max limit is large fall back to the old engine.

Files: src/regexp\_nfa.c

Patch 7.4.624

Problem: May leak memory or crash when vim\_realloc() returns NULL.

Solution: Handle a NULL value properly. (Mike Williams)

Files: src/if\_cscope.c, src/memline.c, src/misc1.c, src/netbeans.c

Patch 7.4.625

Problem: Possible NULL pointer dereference.

Solution: Check for NULL before using it. (Mike Williams)

Files: src/if\_py\_both.h

Patch 7.4.626

Problem: MSVC with W4 gives useless warnings.

Solution: Disable more warnings. (Mike Williams)

Files: src/vim.h

Patch 7.4.627

Problem: The last screen cell is not updated.

Solution: Respect the "tn" termcap feature. (Hayaki Saito)

Files: runtime/doc/term.txt, src/option.c, src/screen.c, src/term.c, src/term.h

Patch 7.4.628

Problem: Compiler warning for variable might be clobbered by longjmp.

Solution: Add volatile. (Michael Jarvis)

Files: src/main.c

Patch 7.4.629

Problem: Coverity warning for Out-of-bounds read.

Solution: Increase MAXWLEN to 254. (Eliseo Martínez)

Files: src/spell.c

Patch 7.4.630

Problem: When using Insert mode completion combined with autocommands the redo command may not work.

Solution: Do not save the redo buffer when executing autocommands. (Yasuhiro Matsumoto)

Files: src/fileio.c

## Patch 7.4.631

Problem: The default conceal character is documented to be a space but it's initially a dash. (Christian Brabandt)  
Solution: Make the initial value a space.  
Files: src/globals.h

## Patch 7.4.632 (after 7.4.592)

Problem: 7.4.592 breaks the netrw plugin, because the autocommands are skipped.  
Solution: Roll back the change.  
Files: src/ex\_cmds.c

## Patch 7.4.633

Problem: After 7.4.630 the problem persists.  
Solution: Also skip redo when calling a user function.  
Files: src/eval.c

## Patch 7.4.634

Problem: Marks are not restored after redo + undo.  
Solution: Fix the way marks are restored. (Olaf Dabrunz)  
Files: src/undo.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_marks.in, src/testdir/test\_marks.ok

## Patch 7.4.635

Problem: If no NL or CR is found in the first block of a file then the 'fileformat' may be set to "mac". (Issue 77)  
Solution: Check if a CR was found. (eswald)  
Files: src/fileio.c

## Patch 7.4.636

Problem: A search with end offset gets stuck at end of file. (Gary Johnson)  
Solution: When a search doesn't move the cursor repeat it with a higher count. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test44.in, src/testdir/test44.ok

## Patch 7.4.637

Problem: Incorrectly read the number of buffer for which an autocommand should be registered.  
Solution: Reverse check for "<buffer=abuf>". (Lech Lorens)  
Files: src/fileio.c

## Patch 7.4.638

Problem: Can't build with Lua 5.3 on Windows.  
Solution: use luaL\_optinteger() instead of LuaL\_optlong(). (Ken Takata)  
Files: src/if\_lua.c

## Patch 7.4.639

Problem: Combination of linebreak and conceal doesn't work well.  
Solution: Fix the display problems. (Christian Brabandt)  
Files: src/screen.c, src/testdir/test88.in, src/testdir/test88.ok, src/testdir/test\_listlbr\_utf8.in, src/testdir/test\_listlbr\_utf8.ok

## Patch 7.4.640

Problem: After deleting characters in Insert mode such that lines are joined undo does not work properly. (issue 324)  
Solution: Use Insstart instead of Insstart\_orig. (Christian Brabandt)  
Files: src/edit.c

## Patch 7.4.641

Problem: The tabline menu was using ":999tabnew" which is now invalid.  
Solution: Use ":%\$tabnew" instead. (Florian Degner)  
Files: src/normal.c

#### Patch 7.4.642

Problem: When using "gf" escaped spaces are not handled.  
Solution: Recognize escaped spaces.  
Files: src/vim.h, src/normal.h, src/window.c, src/misc2.c

#### Patch 7.4.643

Problem: Using the default file format for Mac files. (Issue 77)  
Solution: Reset the try\_mac counter in the right place. (Oswald)  
Files: src/fileio.c, src/testdir/test30.in, src/testdir/test30.ok

#### Patch 7.4.644

Problem: Stratus VOS doesn't have sync().  
Solution: Use fflush(). (Karli Aurelia)  
Files: src/memfile.c

#### Patch 7.4.645

Problem: When splitting the window in a BufAdd autocommand while still in the first, empty buffer the window count is wrong.  
Solution: Do not reset b\_nwindows to zero and don't increment it.  
Files: src/buffer.c, src/ex\_cmds.c

#### Patch 7.4.646

Problem: ":bufdo" may start at a deleted buffer.  
Solution: Find the first not deleted buffer. (Shane Harper)  
Files: src/ex\_cmds2.c, src/testdir/test\_command\_count.in, src/testdir/test\_command\_count.ok

#### Patch 7.4.647

Problem: After running the tests on MS-Windows many files differ from their originals as they were checked out.  
Solution: Use a temp directory for executing the tests. (Ken Takata, Taro Muraoka)  
Files: src/testdir/Make\_dos.mak

#### Patch 7.4.648 (after 7.4.647)

Problem: Tests broken on MS-Windows.  
Solution: Delete wrong copy line. (Ken Takata)  
Files: src/testdir/Make\_dos.mak

#### Patch 7.4.649

Problem: Compiler complains about ignoring return value of fwrite(). (Michael Jarvis)  
Solution: Add (void).  
Files: src/misc2.c

#### Patch 7.4.650

Problem: Configure check may fail because the dl library is not used.  
Solution: Put "-ldl" in LIBS rather than LDFLAGS. (Ozaki Kiichi)  
Files: src/configure.in, src/auto/configure

#### Patch 7.4.651 (after 7.4.582)

Problem: Can't match "%>80v" properly for multi-byte characters.  
Solution: Multiply the character number by the maximum number of bytes in a character. (Yasuhiro Matsumoto)  
Files: src/regexp\_nfa.c

#### Patch 7.4.652

Problem: Xxd lacks a few features.

Solution: Use 8 characters for the file position. Add the -e and -o arguments. (Vadim Vygonets)  
Files: src/xxd/xxd.c, runtime/doc/xxd.1

#### Patch 7.4.653

Problem: Insert mode completion with complete() may have CTRL-L work like CTRL-P.  
Solution: Handle completion with complete() differently. (Yasuhiro Matsumoto, Christian Brabandt, Hirohito Higashi)  
Files: src/edit.c

#### Patch 7.4.654

Problem: glob() and globpath() cannot include links to non-existing files. (Charles Campbell)  
Solution: Add an argument to include all links with glob(). (James McCoy) Also for globpath().  
Files: src/vim.h, src/eval.c, src/ex\_getln.c

#### Patch 7.4.655

Problem: Text deleted by "dit" depends on indent of closing tag. (Jan Parthey)  
Solution: Do not adjust oap->end in do\_pending\_operator(). (Christian Brabandt)  
Files: src/normal.c, src/search.c, src/testdir/test53.in, src/testdir/test53.ok

#### Patch 7.4.656 (after 7.4.654)

Problem: Missing changes for glob() in one file.  
Solution: Add the missing changes.  
Files: src/misc1.c

#### Patch 7.4.657 (after 7.4.656)

Problem: Compiler warnings for pointer mismatch.  
Solution: Add a typecast. (John Marriott)  
Files: src/misc1.c

#### Patch 7.4.658

Problem: 'formatexpr' is evaluated too often.  
Solution: Only invoke it when beyond the 'textwidth' column, as it is documented. (James McCoy)  
Files: src/edit.c

#### Patch 7.4.659

Problem: When 'ruler' is set the preferred column is reset. (Issue 339)  
Solution: Don't set curswant when redrawing the status lines.  
Files: src/option.c

#### Patch 7.4.660

Problem: Using freed memory when g:colors\_name is changed in the colors script. (oni-link)  
Solution: Make a copy of the variable value.  
Files: src/syntax.c

#### Patch 7.4.661

Problem: Using "0 CTRL-D" in Insert mode may have CursorHoldI interfere. (Gary Johnson)  
Solution: Don't store K\_CURSORHOLD as the last character. (Christian Brabandt)  
Files: src/edit.c

#### Patch 7.4.662

Problem: When 'M' is in the 'cpo' option then selecting a text object in

parentheses does not work correctly.  
Solution: Keep 'M' in 'cpo' when finding a match. (Hirohito Higashi)  
Files: src/search.c, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_textobjects.in,  
src/testdir/test\_textobjects.ok

#### Patch 7.4.663

Problem: When using netbeans a buffer is not found in another tab.  
Solution: When 'switchbuf' is set to "usetab" then switch to another tab  
when possible. (Xavier de Gaye)  
Files: src/netbeans.c

#### Patch 7.4.664

Problem: When 'compatible' is reset 'numberwidth' is set to 4, but the  
effect doesn't show until a change is made.  
Solution: Check if 'numberwidth' changed. (Christian Brabandt)  
Files: src/screen.c, src/structs.h

#### Patch 7.4.665

Problem: 'linebreak' does not work properly with multi-byte characters.  
Solution: Compute the pointer offset with mb\_head\_off(). (Yasuhiro  
Matsumoto)  
Files: src/screen.c

#### Patch 7.4.666

Problem: There is a chance that Vim may lock up.  
Solution: Handle timer events differently. (Aaron Burrow)  
Files: src/os\_unix.c

#### Patch 7.4.667

Problem: 'colorcolumn' isn't drawn in a closed fold while 'cursorcolumn'  
is. (Carlos Pita)  
Solution: Make it consistent. (Christian Brabandt)  
Files: src/screen.c

#### Patch 7.4.668

Problem: Can't use a glob pattern as a regexp pattern.  
Solution: Add glob2regpat(). (Christian Brabandt)  
Files: src/eval.c, runtime/doc/eval.txt

#### Patch 7.4.669

Problem: When netbeans is active the sign column always shows up.  
Solution: Only show the sign column once a sign has been added. (Xavier de  
Gaye)  
Files: src/buffer.c, src/edit.c, src/move.c, src/netbeans.c,  
src/screen.c, src/structs.h

#### Patch 7.4.670

Problem: Using 'cindent' for Javascript is less than perfect.  
Solution: Improve indenting of continuation lines. (Hirohito Higashi)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

#### Patch 7.4.671 (after 7.4.665)

Problem: Warning for shadowing a variable.  
Solution: Rename off to mb\_off. (Kazunobu Kuriyama)  
Files: src/screen.c

#### Patch 7.4.672

Problem: When completing a shell command, directories in the current  
directory are not listed.

Solution: When "." is not in \$PATH also look in the current directory for directories.

Files: src/ex\_getln.c, src/vim.h, src/misc1.c, src/eval.c,  
src/os\_amiga.c, src/os\_msdos.c, src/os\_unix.c, src/os\_vms.c,  
src/proto/os\_amiga.pro, src/proto/os\_msdos.pro,  
src/proto/os\_unix.pro, src/proto/os\_win32.pro

#### Patch 7.4.673

Problem: The first syntax entry gets sequence number zero, which doesn't work. (Clinton McKay)

Solution: Start at number one. (Bjorn Linse)

Files: src/syntax.c

#### Patch 7.4.674 (after 7.4.672)

Problem: Missing changes in one file.

Solution: Also change the win32 file.

Files: src/os\_win32.c

#### Patch 7.4.675

Problem: When a FileReadPost autocommand moves the cursor inside a line it gets moved back.

Solution: When checking whether an autocommand moved the cursor store the column as well. (Christian Brabandt)

Files: src/ex\_cmds.c

#### Patch 7.4.676

Problem: On Mac, when not using the default Python framework configure doesn't do the right thing.

Solution: Use a linker search path. (Kazunobu Kuriyama)

Files: src/configure.in, src/auto/configure

#### Patch 7.4.677 (after 7.4.676)

Problem: Configure fails when specifying a python-config-dir. (Lcd)

Solution: Check if PYTHONFRAMEWORKPREFIX is set.

Files: src/configure.in, src/auto/configure

#### Patch 7.4.678

Problem: When using --remote the directory may end up being wrong.

Solution: Use localdir() to find out what to do. (Xaizek)

Files: src/main.c

#### Patch 7.4.679

Problem: Color values greater than 255 cause problems on MS-Windows.

Solution: Truncate to 255 colors. (Yasuhiro Matsumoto)

Files: src/os\_win32.c

#### Patch 7.4.680

Problem: CTRL-W in Insert mode does not work well for multi-byte characters.

Solution: Use mb\_get\_class(). (Yasuhiro Matsumoto)

Files: src/edit.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_erasebackward.in,  
src/testdir/test\_erasebackward.ok,

#### Patch 7.4.681

Problem: MS-Windows: When Vim is minimized the window height is computed incorrectly.

Solution: When minimized use the previously computed size. (Ingo Karkat)

Files: src/gui\_w32.c

## Patch 7.4.682

Problem: The search highlighting and match highlighting replaces the cursorline highlighting, this doesn't look good.  
Solution: Combine the highlighting. (Yasuhiro Matsumoto)  
Files: src/screen.c

## Patch 7.4.683

Problem: Typo in the vimtutor command.  
Solution: Fix the typo. (Corey Farwell, github pull 349)  
Files: vimtutor.com

## Patch 7.4.684

Problem: When starting several Vim instances in diff mode, the temp files used may not be unique. (Issue 353)  
Solution: Add an argument to vim\_tempname() to keep the file.  
Files: src/diff.c, src/eval.c, src/ex\_cmds.c, src/fileio.c, src/hardcopy.c, src/proto/fileio.pro, src/if\_cscope.c, src/memline.c, src/misc1.c, src/os\_unix.c, src/quickfix.c, src/spell.c

## Patch 7.4.685

Problem: When there are illegal utf-8 characters the old regexp engine may go past the end of a string.  
Solution: Only advance to the end of the string. (Dominique Pelle)  
Files: src/regexp.c

## Patch 7.4.686

Problem: "zr" and "zm" do not take a count.  
Solution: Implement the count, restrict the fold level to the maximum nesting depth. (Marcin Szamotulski)  
Files: runtime/doc/fold.txt, src/normal.c

## Patch 7.4.687

Problem: There is no way to use a different in Replace mode for a terminal.  
Solution: Add t\_SR. (Omar Sandoval)  
Files: runtime/doc/options.txt, runtime/doc/term.txt, runtime/syntax/vim.vim, src/option.c, src/term.c, src/term.h

## Patch 7.4.688

Problem: When "\$" is in 'cpo' the popup menu isn't undrawn correctly. (Issue 166)  
Solution: When using the popup menu remove the "\$".  
Files: src/edit.c

## Patch 7.4.689

Problem: On MS-Windows, when 'autochdir' is set, diff mode with files in different directories does not work. (Axel Bender)  
Solution: Remember the current directory and use it where needed. (Christian Brabandt)  
Files: src/main.c

## Patch 7.4.690

Problem: Memory access errors when changing indent in Ex mode. Also missing redraw when using CTRL-U. (Knir Ino)  
Solution: Update pointers after calling ga\_grow().  
Files: src/ex\_getln.c

## Patch 7.4.691 (after 7.4.689)

Problem: Can't build with MzScheme.  
Solution: Change "cwd" into the global variable "start\_dir".  
Files: src/main.c



## Patch 7.4.692

Problem: Defining SOLARIS for no good reason. (Danek Duvall)  
Solution: Remove it.  
Files: src/os\_unix.h

## Patch 7.4.693

Problem: Session file is not correct when there are multiple tab pages.  
Solution: Reset the current window number for each tab page. (Jacob Niehus)  
Files: src/ex\_docmd.c

## Patch 7.4.694

Problem: Running tests changes the .viminfo file.  
Solution: Disable viminfo in the text objects test.  
Files: src/testdir/test\_textobjects.in

## Patch 7.4.695

Problem: Out-of-bounds read, detected by Coverity.  
Solution: Remember the value of cmap for the first matching encoding. Reset cmap to that value if first matching encoding is going to be used. (Eliseo Martínez)  
Files: src/hardcopy.c

## Patch 7.4.696

Problem: Not freeing memory when encountering an error.  
Solution: Free the stack before returning. (Eliseo Martínez)  
Files: src/regexp\_nfa.c

## Patch 7.4.697

Problem: The filename used for ":profile" must be given literally.  
Solution: Expand "~" and environment variables. (Marco Hinz)  
Files: src/ex\_cmds2.c

## Patch 7.4.698

Problem: Various problems with locked and fixed lists and dictionaries.  
Solution: Disallow changing locked items, fix a crash, add tests. (Olaf Dabrunz)  
Files: src/structs.h, src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.4.699

Problem: E315 when trying to delete a fold. (Yutao Yuan)  
Solution: Make sure the fold doesn't go beyond the last buffer line. (Christian Brabandt)  
Files: src/fold.c

## Patch 7.4.700

Problem: Fold can't be opened after ":move". (Ein Brown)  
Solution: Delete the folding information and update it afterwards. (Christian Brabandt)  
Files: src/ex\_cmds.c, src/fold.c, src/testdir/test45.in, src/testdir/test45.ok

## Patch 7.4.701

Problem: Compiler warning for using uninitialized variable. (Yasuhiro Matsumoto)  
Solution: Initialize it.  
Files: src/hardcopy.c

## Patch 7.4.702

Problem: Joining an empty list does unnecessary work.  
Solution: Let join() return early. (Marco Hinz)  
Files: src/eval.c

## Patch 7.4.703

Problem: Compiler warning for start\_dir unused when building unittests.  
Solution: Move start\_dir inside the #ifdef.  
Files: src/main.c

## Patch 7.4.704

Problem: Searching for a character matches an illegal byte and causes invalid memory access. (Dominique Pelle)  
Solution: Do not match an invalid byte when search for a character in a string. Fix equivalence classes using negative numbers, which result in illegal bytes.  
Files: src/misc2.c, src/regex.c, src/testdir/test44.in

## Patch 7.4.705

Problem: Can't build with Ruby 2.2.  
Solution: Add #ifdefs to handle the incompatible change. (Andrei Olsen)  
Files: src/if\_ruby.c

## Patch 7.4.706

Problem: Window drawn wrong when 'laststatus' is zero and there is a command-line window. (Yclept Nemo)  
Solution: Set the status height a bit later. (Christian Brabandt)  
Files: src/window.c

## Patch 7.4.707

Problem: Undo files can have their executable bit set.  
Solution: Strip of the executable bit. (Mikael Berthe)  
Files: src/undo.c

## Patch 7.4.708

Problem: gettext() is called too often.  
Solution: Do not call gettext() for messages until they are actually used. (idea by Yasuhiro Matsumoto)  
Files: src/eval.c

## Patch 7.4.709

Problem: ":tabmove" does not work as documented.  
Solution: Make it work consistently. Update documentation and add tests. (Hirohito Higashi)  
Files: src/window.c, runtime/doc/tabpage.txt, src/ex\_docmd.c, src/testdir/test62.in, src/testdir/test62.ok

## Patch 7.4.710

Problem: It is not possible to make spaces visible in list mode.  
Solution: Add the "space" item to 'listchars'. (David Bürgin, issue 350)  
Files: runtime/doc/options.txt, src/globals.h, src/message.h, src/screen.c, src/testdir/test\_listchars.in, src/testdir/test\_listchars.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

## Patch 7.4.711 (after 7.4.710)

Problem: Missing change in one file.  
Solution: Also change option.c  
Files: src/option.c

## Patch 7.4.712 (after 7.4.710)

Problem: Missing change in another file.  
Solution: Also change message.c  
Files: src/message.c

## Patch 7.4.713

Problem: Wrong condition for #ifdef.

Solution: Change USR\_EXRC\_FILE2 to USR\_VIMRC\_FILE2. (Mikael Fourrier)

Files: src/os\_unix.h

## Patch 7.4.714

Problem: Illegal memory access when there are illegal bytes.

Solution: Check the byte length of the character. (Dominique Pelle)

Files: src/regexp.c

## Patch 7.4.715

Problem: Invalid memory access when there are illegal bytes.

Solution: Get the length from the text, not from the character. (Dominique Pelle)

Files: src/regexp\_nfa.c

## Patch 7.4.716

Problem: When using the 'c' flag of ":substitute" and selecting "a" or "l" at the prompt the flags are not remembered for ":%&". (Ingo Karkat)

Solution: Save the flag values and restore them. (Hirohito Higashi)

Files: src/ex\_cmds.c

## Patch 7.4.717

Problem: ":let list += list" can change a locked list.

Solution: Check for the lock earlier. (Olaf Dabrunz)

Files: src/eval.c, src/testdir/test55.in, src/testdir/test55.ok

## Patch 7.4.718

Problem: Autocommands triggered by quickfix cannot get the current title value.

Solution: Set w:quickfix\_title earlier. (Yannick)

Also move the check for a title into the function.

Files: src/quickfix.c

## Patch 7.4.719

Problem: Overflow when adding MAXCOL to a pointer.

Solution: Subtract pointers instead. (James McCoy)

Files: src/screen.c

## Patch 7.4.720

Problem: Can't build with Visual Studio 2015.

Solution: Recognize the "version 14" numbers and omit /nodefaultlib when appropriate. (Paul Moore)

Files: src/Make\_mvc.mak

## Patch 7.4.721

Problem: When 'list' is set Visual mode does not highlight anything in empty lines. (mgaleski)

Solution: Check the value of lcs\_eol in another place. (Christian Brabandt)

Files: src/screen.c

## Patch 7.4.722

Problem: 0x202f is not recognized as a non-breaking space character.

Solution: Add 0x202f to the list. (Christian Brabandt)

Files: runtime/doc/options.txt, src/message.c, src/screen.c

## Patch 7.4.723

Problem: For indenting, finding the C++ baseclass can be slow.

Solution: Cache the result. (Hirohito Higashi)

Files: src/misc1.c

## Patch 7.4.724

Problem: Vim icon does not show in Windows context menu. (issue 249)  
Solution: Load the icon in GvimExt.  
Files: src/GvimExt/gvimext.cpp, src/GvimExt/gvimext.h

## Patch 7.4.725

Problem: ":call setreg('"', [])" reports an internal error.  
Solution: Make the register empty. (Yasuhiro Matsumoto)  
Files: src/ops.c

## Patch 7.4.726 (after 7.4.724)

Problem: Cannot build GvimExt.  
Solution: Set APPVER to 5.0. (KF Leong)  
Files: src/GvimExt/Makefile

## Patch 7.4.727 (after 7.4.724)

Problem: Cannot build GvimExt with MingW.  
Solution: Add -lgdi32. (KF Leong)  
Files: src/GvimExt/Make\_ming.mak

## Patch 7.4.728

Problem: Can't build with some version of Visual Studio 2015.  
Solution: Recognize another version 14 number. (Sinan)  
Files: src/Make\_mvc.mak

## Patch 7.4.729 (after 7.4.721)

Problem: Occasional crash with 'list' set.  
Solution: Fix off-by-one error. (Christian Brabandt)  
Files: src/screen.c

## Patch 7.4.730

Problem: When setting the crypt key and using a swap file, text may be encrypted twice or unencrypted text remains in the swap file. (Issue 369)  
Solution: Call ml\_preserve() before re-encrypting. Set correct index for next pointer block.  
Files: src/memfile.c, src/memline.c, src/proto/memline.pro, src/option.c

## Patch 7.4.731

Problem: The tab menu shows "Close tab" even when it doesn't work.  
Solution: Don't show "Close tab" for the last tab. (John Marriott)  
Files: src/gui\_w48.c, src/gui\_gtk\_x11.c, src/gui\_mac.c, src/gui\_motif.c

## Patch 7.4.732

Problem: The cursor line is not always updated for the "O" command.  
Solution: Reset the VALID\_CROW flag. (Christian Brabandt)  
Files: src/normal.c

## Patch 7.4.733

Problem: test\_listchars breaks on MS-Windows. (Kenichi Ito)  
Solution: Set fileformat to "unix". (Christian Brabandt)  
Files: src/testdir/test\_listchars.in

## Patch 7.4.734

Problem: ml\_get error when using "p" in a Visual selection in the last line.  
Solution: Change the behavior at the last line. (Yukihiro Nakadaira)  
Files: src/normal.c, src/ops.c, src/testdir/test94.in, src/testdir/test94.ok

## Patch 7.4.735

Problem: Wrong argument for sizeof().  
Solution: Use a pointer argument. (Chris Hall)  
Files: src/eval.c

#### Patch 7.4.736

Problem: Invalid memory access.  
Solution: Avoid going over the end of a NUL terminated string. (Dominique Pelle)  
Files: src/regexp.c

#### Patch 7.4.737

Problem: On MS-Windows vimgrep over arglist doesn't work (Issue 361)  
Solution: Only escape backslashes in ## expansion when it is not used as the path separator. (James McCoy)  
Files: src/ex\_docmd.c

#### Patch 7.4.738 (after 7.4.732)

Problem: Can't compile without the syntax highlighting feature.  
Solution: Add #ifdef around use of w\_p\_cul. (Hirohito Higashi)  
Files: src/normal.c, src/screen.c

#### Patch 7.4.739

Problem: In a string "\U" only takes 4 digits, while after CTRL-V U eight digits can be used.  
Solution: Make "\U" also take eight digits. (Christian Brabandt)  
Files: src/eval.c

#### Patch 7.4.740

Problem: ":lquit" works like ":.quit". (Bohr Shaw)  
Solution: Don't exit Vim when a range is specified. (Christian Brabandt)  
Files: src/ex\_docmd.c, src/testdir/test13.in, src/testdir/test13.ok

#### Patch 7.4.741

Problem: When using += with ":set" a trailing comma is not recognized. (Issue 365)  
Solution: Don't add a second comma. Add a test. (partly by Christian Brabandt)  
Files: src/option.c, src/testdir/test\_set.in, src/testdir/test\_set.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.4.742

Problem: Cannot specify a vertical split when loading a buffer for a quickfix command.  
Solution: Add the "vsplit" value to 'switchbuf'. (Brook Hong)  
Files: runtime/doc/options.txt, src/buffer.c, src/option.h

#### Patch 7.4.743

Problem: "p" in Visual mode causes an unexpected line split.  
Solution: Advance the cursor first. (Yukihiro Nakadaira)  
Files: src/ops.c, src/testdir/test94.in, src/testdir/test94.ok

#### Patch 7.4.744

Problem: No tests for Ruby and Perl.  
Solution: Add minimal tests. (Ken Takata)  
Files: src/testdir/test\_perl.in, src/testdir/test\_perl.ok, src/testdir/test\_ruby.in, src/testdir/test\_ruby.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

## Patch 7.4.745

Problem: The entries added by matchaddpos() are returned by getmatches()  
but can't be set with setmatches(). (Lcd)  
Solution: Fix setmatches(). (Christian Brabandt)  
Files: src/eval.c, src/testdir/test63.in, src/testdir/test63.ok

## Patch 7.4.746

Problem: ":[count]tag" is not always working. (cs86661)  
Solution: Set cur\_match a bit later. (Hirohito Higashi)  
Files: src/tag.c,

## Patch 7.4.747

Problem: ":cnext" may jump to the wrong column when setting  
'virtualedit=all' (cs86661)  
Solution: Reset the coladd field. (Hirohito Higashi)  
Files: src/quickfix.c

## Patch 7.4.748 (after 7.4.745)

Problem: Buffer overflow.  
Solution: Make the buffer larger. (Kazunobu Kuriyama)  
Files: src/eval.c

## Patch 7.4.749 (after 7.4.741)

Problem: For some options two consecutive commas are OK. (Nikolai Pavlov)  
Solution: Add the P\_ONECOMMA flag.  
Files: src/option.c

## Patch 7.4.750

Problem: Cannot build with clang 3.5 on Cygwin with perl enabled.  
Solution: Strip "-fdebug-prefix-map" in configure. (Ken Takata)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.751

Problem: It is not obvious how to enable the address sanitizer.  
Solution: Add commented-out flags in the Makefile. (Dominique Pelle)  
Also add missing test targets.  
Files: src/Makefile

## Patch 7.4.752

Problem: Unicode 8.0 not supported.  
Solution: Update tables for Unicode 8.0. Avoid E36 when running the script.  
(James McCoy)  
Files: runtime/tools/unicode.vim, src/mbyte.c

## Patch 7.4.753

Problem: Appending in Visual mode with 'linebreak' set does not work  
properly. Also when 'selection' is "exclusive". (Ingo Karkat)  
Solution: Recalculate virtual columns. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok, src/testdir/test\_listlbr\_utf8.in,  
src/testdir/test\_listlbr\_utf8.ok

## Patch 7.4.754

Problem: Using CTRL-A in Visual mode does not work well. (Gary Johnson)  
Solution: Make it increment all numbers in the Visual area. (Christian  
Brabandt)  
Files: runtime/doc/change.txt, src/normal.c, src/ops.c,  
src/proto/ops.pro, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_increment.in,  
src/testdir/test\_increment.ok

## Patch 7.4.755

Problem: It is not easy to count the number of characters.

Solution: Add the skipcc argument to strchr(). (Hirohito Higashi, Ken Takata)

Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test\_utf8.in, src/testdir/test\_utf8.ok

## Patch 7.4.756

Problem: Can't use strawberry Perl 5.22 x64 on MS-Windows.

Solution: Add new defines and #if. (Ken Takata)

Files: src/Make\_cyg\_ming.mak, src/Make\_mvc.mak, src/if\_perl.xs

## Patch 7.4.757

Problem: Cannot detect the background color of a terminal.

Solution: Add T\_RGB to request the background color if possible. (Lubomir Rintel)

Files: src/main.c, src/term.c, src/term.h, src/proto/term.pro

## Patch 7.4.758

Problem: When 'conceallevel' is 1 and quitting the command-line window with CTRL-C the first character ':' is erased.

Solution: Reset 'conceallevel' in the command-line window. (Hirohito Higashi)

Files: src/ex\_getln.c

## Patch 7.4.759

Problem: Building with Lua 5.3 doesn't work, symbols have changed.

Solution: Use the new names for the new version. (Felix Schnizlein)

Files: src/if\_lua.c

## Patch 7.4.760

Problem: Spelling mistakes are not displayed after ":syn spell".

Solution: Force a redraw after ":syn spell" command. (Christian Brabandt)

Files: src/syntax.c

## Patch 7.4.761 (after 7.4.757)

Problem: The request-background termcode implementation is incomplete.

Solution: Add the missing pieces.

Files: src/option.c, src/term.c

## Patch 7.4.762 (after 7.4.757)

Problem: Comment for may\_req\_bg\_color() is wrong. (Christ van Willegen)

Solution: Rewrite the comment.

Files: src/term.c

## Patch 7.4.763 (after 7.4.759)

Problem: Building with Lua 5.1 doesn't work.

Solution: Define lua\_replace and lua\_remove. (KF Leong)

Files: src/if\_lua.c

## Patch 7.4.764 (after 7.4.754)

Problem: test\_increment fails on MS-Windows. (Ken Takata)

Solution: Clear Visual mappings. (Taro Muraoka)

Files: src/testdir/test\_increment.in

## Patch 7.4.765 (after 7.4.754)

Problem: CTRL-A and CTRL-X in Visual mode do not always work well.

Solution: Improvements for increment and decrement. (Christian Brabandt)

Files: src/normal.c, src/ops.c, src/testdir/test\_increment.in, src/testdir/test\_increment.ok

## Patch 7.4.766 (after 7.4.757)

Problem: Background color check does not work on Tera Term.  
Solution: Also recognize ST as a termination character. (Hirohito Higashi)  
Files: src/term.c

## Patch 7.4.767

Problem: --remote-tab-silent can fail on MS-Windows.  
Solution: Use single quotes to avoid problems with backslashes. (Idea by Weiyong Mao)  
Files: src/main.c

## Patch 7.4.768

Problem: :diffoff only works properly once.  
Solution: Also make :diffoff work when used a second time. (Olaf Dabrunz)  
Files: src/diff.c

## Patch 7.4.769 (after 7.4.768)

Problem: Behavior of :diffoff is not tested.  
Solution: Add a bit of testing. (Olaf Dabrunz)  
Files: src/testdir/test47.in, src/testdir/test47.ok

## Patch 7.4.770 (after 7.4.766)

Problem: Background color response with transparency is not ignored.  
Solution: Change the way escape sequences are recognized. (partly by Hirohito Higashi)  
Files: src/ascii.h, src/term.c

## Patch 7.4.771

Problem: Search does not handle multi-byte character at the start position correctly.  
Solution: Take byte size of character into account. (Yukihiro Nakadaira)  
Files: src/search.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_search\_mbyte.in, src/testdir/test\_search\_mbyte.ok

## Patch 7.4.772

Problem: Racket 6.2 is not supported on MS-Windows.  
Solution: Check for the "racket" subdirectory. (Weiyong Mao)  
Files: src/Make\_mvc.mak, src/if\_mzsch.c

## Patch 7.4.773

Problem: 'langmap' is used in command-line mode when checking for mappings. Issue 376.  
Solution: Do not use 'langmap' in command-line mode. (Larry Velazquez)  
Files: src/getchar.c, src/testdir/test\_mapping.in, src/testdir/test\_mapping.ok

## Patch 7.4.774

Problem: When using the CompleteDone autocommand event it's difficult to get to the completed items.  
Solution: Add the v:completed\_items variable. (Shougo Matsu)  
Files: runtime/doc/autocmd.txt, runtime/doc/eval.txt, src/edit.c, src/eval.c, src/macros.h, src/proto/eval.pro, src/vim.h

## Patch 7.4.775

Problem: It is not possible to avoid using the first item of completion.  
Solution: Add the "noininsert" and "noselect" values to 'completeopt'. (Shougo Matsu)  
Files: runtime/doc/options.txt, src/edit.c, src/option.c



## Patch 7.4.776

Problem: Equivalence class for 'd' does not work correctly.  
Solution: Fix 0x1e0f and 0x1d0b. (Dominique Pelle)  
Files: src/regexp.c, src/regexp\_nfa.c

## Patch 7.4.777

Problem: The README file doesn't look nice on github.  
Solution: Add a markdown version of the README file.  
Files: Filelist, README.md

## Patch 7.4.778

Problem: Coverity warns for uninitialized variable.  
Solution: Change condition of assignment.  
Files: src/ops.c

## Patch 7.4.779

Problem: Using CTRL-A in a line without a number moves the cursor. May cause a crash when at the start of the line. (Urtica Dioica)  
Solution: Do not move the cursor if no number was changed.  
Files: src/ops.c

## Patch 7.4.780

Problem: Compiler complains about uninitialized variable and clobbered variables.  
Solution: Add Initialization. Make variables static.  
Files: src/ops.c, src/main.c

## Patch 7.4.781

Problem: line2byte() returns one less when 'bin' and 'noeol' are set.  
Solution: Only adjust the size for the last line. (Rob Wu)  
Files: src/memline.c

## Patch 7.4.782

Problem: Still a few problems with CTRL-A and CTRL-X in Visual mode.  
Solution: Fix the reported problems. (Christian Brabandt)  
Files: src/charset.c, src/eval.c, src/ex\_cmds.c, src/ex\_getln.c, src/misc2.c, src/normal.c, src/ops.c, src/option.c, src/proto/charset.pro, src/testdir/test\_increment.in, src/testdir/test\_increment.ok

## Patch 7.4.783

Problem: copy\_chars() and copy\_spaces() are inefficient.  
Solution: Use memset() instead. (Dominique Pelle)  
Files: src/ex\_getln.c, src/misc2.c, src/ops.c, src/proto/misc2.pro, src/screen.c

## Patch 7.4.784

Problem: Using both "noinvert" and "noselect" in 'completeopt' does not work properly.  
Solution: Change the ins\_complete() calls. (Ozaki Kiichi)  
Files: src/edit.c

## Patch 7.4.785

Problem: On some systems automatically adding the missing EOL causes problems. Setting 'binary' has too many side effects.  
Solution: Add the 'fixeol' option, default on. (Pavel Samarkin)  
Files: src/buffer.c, src/fileio.c, src/memline.c, src/netbeans.c, src/ops.c, src/option.c, src/option.h, src/os\_unix.c, src/os\_win32.c, src/structs.h, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile, src/testdir/test\_fixeol.in,

src/testdir/test\_fixeol.ok, runtime/doc/options.txt,  
runtime/optwin.vim

#### Patch 7.4.786

Problem: It is not possible for a plugin to adjust to a changed setting.

Solution: Add the OptionSet autocommand event. (Christian Brabandt)

Files: runtime/doc/autocmd.txt, runtime/doc/eval.txt, src/eval.c,  
src/fileio.c, src/option.c, src/proto/eval.pro,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_autocmd\_option.in,  
src/testdir/test\_autocmd\_option.ok, src/vim.h

#### Patch 7.4.787 (after 7.4.786)

Problem: snprintf() isn't available everywhere.

Solution: Use vim\_snprintf(). (Ken Takata)

Files: src/option.c

#### Patch 7.4.788 (after 7.4.787)

Problem: Can't build without the crypt feature. (John Marriott)

Solution: Add #ifdef's.

Files: src/option.c

#### Patch 7.4.789 (after 7.4.788)

Problem: Using freed memory and crash. (Dominique Pelle)

Solution: Correct use of pointers. (Hirohito Higashi)

Files: src/option.c

#### Patch 7.4.790 (after 7.4.786)

Problem: Test fails when the autochdir feature is not available. Test  
output contains the test script.

Solution: Check for the autochdir feature. (Kazunobu Kuriyama) Only write  
the relevant test output.

Files: src/testdir/test\_autocmd\_option.in,  
src/testdir/test\_autocmd\_option.ok

#### Patch 7.4.791

Problem: The buffer list can be very long.

Solution: Add an argument to ":ls" to specify the type of buffer to list.  
(Marcin Szamotulski)

Files: runtime/doc/windows.txt, src/buffer.c, src/ex\_cmds.h

#### Patch 7.4.792

Problem: Can only conceal text by defining syntax items.

Solution: Use matchadd() to define concealing. (Christian Brabandt)

Files: runtime/doc/eval.txt, src/eval.c, src/ex\_docmd.c,  
src/proto/window.pro, src/screen.c, src/structs.h,  
src/testdir/Make\_amiga.mak,  
src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms,  
src/testdir/Makefile, src/testdir/test\_match\_conceal.in,  
src/testdir/test\_match\_conceal.ok, src/window.c

#### Patch 7.4.793

Problem: Can't specify when not to ring the bell.

Solution: Add the 'belloff' option. (Christian Brabandt)

Files: runtime/doc/options.txt, src/edit.c, src/ex\_getln.c,  
src/hangulin.c, src/if\_lua.c, src/if\_mzsch.c, src/if\_tcl.c,  
src/message.c, src/misc1.c, src/normal.c, src/option.c,  
src/option.h, src/proto/misc1.pro, src/search.c, src/spell.c

## Patch 7.4.794

Problem: Visual Studio 2015 is not recognized.  
Solution: Add the version numbers to the makefile. (Taro Muraoka)  
Files: src/Make\_mvc.mak

## Patch 7.4.795

Problem: The 'fixeol' option is not copied to a new window.  
Solution: Copy the option value. (Yasuhiro Matsumoto)  
Files: src/option.c

## Patch 7.4.796

Problem: Warning from 64 bit compiler.  
Solution: Add type cast. (Mike Williams)  
Files: src/ops.c

## Patch 7.4.797

Problem: Crash when using more lines for the command line than  
'maxcombine'.  
Solution: Use the correct array index. Also, do not try redrawing when  
exiting. And use screen\_Columns instead of Columns.  
Files: src/screen.c

## Patch 7.4.798 (after 7.4.753)

Problem: Repeating a change in Visual mode does not work as expected.  
(Urtica Dioica)  
Solution: Make redo in Visual mode work better. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok

## Patch 7.4.799

Problem: Accessing memory before an allocated block.  
Solution: Check for not going before the start of a pattern. (Dominique  
Pelle)  
Files: src/fileio.c

## Patch 7.4.800

Problem: Using freed memory when triggering CmdUndefined autocommands.  
Solution: Set pointer to NULL. (Dominique Pelle)  
Files: src/ex\_docmd.c

## Patch 7.4.801 (after 7.4.769)

Problem: Test for ":diffoff" doesn't catch all potential problems.  
Solution: Add a :diffthis and a :diffoff command. (Olaf Dabrunz)  
Files: src/testdir/test47.in

## Patch 7.4.802

Problem: Using "A" in Visual mode while 'linebreak' is set is not tested.  
Solution: Add a test for this, verifies the problem is fixed. (Ingo Karkat)  
Files: src/testdir/test39.in, src/testdir/test39.ok

## Patch 7.4.803

Problem: C indent does not support C11 raw strings. (Mark Lodato)  
Solution: Do not change indent inside the raw string.  
Files: src/search.c, src/misc1.c, src/edit.c, src/ops.c,  
src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.4.804

Problem: Xxd doesn't have a license notice.  
Solution: Add license as indicated by Juergen.  
Files: src/xxd/xxd.c

## Patch 7.4.805

Problem: The ruler shows "Bot" even when there are only filler lines missing. (Gary Johnson)  
Solution: Use "All" when the first line and one filler line are visible.  
Files: src/buffer.c

#### Patch 7.4.806

Problem: CTRL-A in Visual mode doesn't work properly with "alpha" in 'nrformats'.  
Solution: Make it work. (Christian Brabandt)  
Files: src/ops.c, src/testdir/test\_increment.in, src/testdir/test\_increment.ok

#### Patch 7.4.807 (after 7.4.798)

Problem: After CTRL-V CTRL-A mode isn't updated. (Hirohito Higashi)  
Solution: Clear the command line or update the displayed command.  
Files: src/normal.c

#### Patch 7.4.808

Problem: On MS-Windows 8 IME input doesn't work correctly.  
Solution: Read console input before calling MsgWaitForMultipleObjects(). (vim-jp, Nobuhiro Takasaki)  
Files: src/os\_win32.c

#### Patch 7.4.809 (after 7.4.802)

Problem: Test is duplicated.  
Solution: Roll back 7.4.802.  
Files: src/testdir/test39.in, src/testdir/test39.ok

#### Patch 7.4.810

Problem: With a sequence of commands using buffers in diff mode E749 is given. (itchyny)  
Solution: Skip unloaded buffer. (Hirohito Higashi)  
Files: src/diff.c

#### Patch 7.4.811

Problem: Invalid memory access when using "exe 'sc'".  
Solution: Avoid going over the end of the string. (Dominique Pelle)  
Files: src/ex\_docmd.c

#### Patch 7.4.812

Problem: Gcc sanitizer complains about using a NULL pointer to memmove().  
Solution: Only call memmove when there is something to move. (Vittorio Zecca)  
Files: src/memline.c

#### Patch 7.4.813

Problem: It is not possible to save and restore character search state.  
Solution: Add getcharsearch() and setcharsearch(). (James McCoy)  
Files: runtime/doc/eval.txt, src/eval.c, src/proto/search.pro, src/search.c, src/testdir/test\_charsearch.in, src/testdir/test\_charsearch.ok, src/testdir/Makefile, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms

#### Patch 7.4.814

Problem: Illegal memory access with "sy match a fold".  
Solution: Check for empty string. (Dominique Pelle)  
Files: src/syntax.c

#### Patch 7.4.815

Problem: Invalid memory access when doing ":call g:".

Solution: Check for an empty name. (Dominique Pelle)  
Files: src/eval.c

Patch 7.4.816

Problem: Invalid memory access when doing ":fun X(".  
Solution: Check for missing ')'. (Dominique Pelle)  
Files: src/eval.c

Patch 7.4.817

Problem: Invalid memory access in file\_pat\_to\_reg\_pat().  
Solution: Use vim\_isspace() instead of checking for a space only. (Dominique Pelle)  
Files: src/fileio.c

Patch 7.4.818

Problem: 'linebreak' breaks c% if the last Visual selection was block.  
(Chris Morganiser, Issue 389)  
Solution: Handle Visual block mode differently. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok

Patch 7.4.819

Problem: Beeping when running the tests.  
Solution: Fix 41 beeps. (Roland Eggner)  
Files: src/testdir/test17.in, src/testdir/test29.in,  
src/testdir/test4.in, src/testdir/test61.in,  
src/testdir/test82.in, src/testdir/test83.in,  
src/testdir/test90.in, src/testdir/test95.in,  
src/testdir/test\_autoformat\_join.in

Patch 7.4.820

Problem: Invalid memory access in file\_pat\_to\_reg\_pat.  
Solution: Avoid looking before the start of a string. (Dominique Pelle)  
Files: src/fileio.c

Patch 7.4.821

Problem: Coverity reports a few problems.  
Solution: Avoid the warnings. (Christian Brabandt)  
Files: src/ex\_docmd.c, src/option.c, src/screen.c

Patch 7.4.822

Problem: More problems reported by coverity.  
Solution: Avoid the warnings. (Christian Brabandt)  
Files: src/os\_unix.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c,  
src/ex\_getln.c, src/fold.c, src/gui.c, src/gui\_wl6.c,  
src/gui\_w32.c, src/if\_cscope.c, src/if\_xcmdsrv.c, src/move.c,  
src/normal.c, src/regexp.c, src/syntax.c, src/ui.c, src/window.c

Patch 7.4.823

Problem: Cursor moves after CTRL-A on alphabetic character.  
Solution: (Hirohito Higashi, test by Christian Brabandt)  
Files: src/testdir/test\_increment.in, src/testdir/test\_increment.ok,  
src/ops.c

Patch 7.4.824 (after 7.4.813)

Problem: Can't compile without the multi-byte feature. (John Marriott)  
Solution: Add #ifdef.  
Files: src/eval.c

Patch 7.4.825

Problem: Invalid memory access for ":syn keyword x a[".  
Solution: Do not skip over the NUL. (Dominique Pelle)

Files: src/syntax.c

Patch 7.4.826

Problem: Compiler warnings and errors.

Solution: Make it build properly without the multi-byte feature.

Files: src/eval.c, src/search.c

Patch 7.4.827

Problem: Not all test targets are in the Makefile.

Solution: Add the missing targets.

Files: src/Makefile

Patch 7.4.828

Problem: Crash when using "syn keyword x c". (Dominique Pelle)

Solution: Initialize the keyword table. (Raymond Ko, PR 397)

Files: src/syntax.c

Patch 7.4.829

Problem: Crash when clicking in beval balloon. (Travis Lebsack)

Solution: Use PostMessage() instead of DestroyWindow(). (Raymond Ko, PR 298)

Files: src/gui\_w32.c

Patch 7.4.830

Problem: Resetting 'encoding' when doing ":set all&" causes problems.  
(Bjorn Linse) Display is not updated.

Solution: Do not reset 'encoding'. Do a full redraw.

Files: src/option.c

Patch 7.4.831

Problem: When expanding `=expr` on the command line and encountering an  
error, the command is executed anyway.

Solution: Bail out when an error is detected.

Files: src/misc1.c

Patch 7.4.832

Problem: \$HOME in `=\$HOME . '/.vimrc` is expanded too early.

Solution: Skip over `=expr` when expanding environment names.

Files: src/misc1.c

Patch 7.4.833

Problem: More side effects of ":set all&" are missing. (Björn Linse)

Solution: Call didset\_options() and add didset\_options2() to collect more  
side effects to take care of. Still not everything...

Files: src/option.c

Patch 7.4.834

Problem: gettabvar() doesn't work after Vim start. (Szymon Wrozynski)

Solution: Handle first window in tab still being NULL. (Christian Brabandt)

Files: src/eval.c, src/testdir/test91.in, src/testdir/test91.ok

Patch 7.4.835

Problem: Comparing utf-8 sequences does not handle different byte sizes  
correctly.

Solution: Get the byte size of each character. (Dominique Pelle)

Files: src/misc2.c

Patch 7.4.836

Problem: Accessing uninitialized memory.

Solution: Add missing calls to init\_tv(). (Dominique Pelle)

Files: src/eval.c

Patch 7.4.837

Problem: Compiler warning with MSVC compiler when using +sniff.  
Solution: Use Sleep() instead of \_sleep(). (Tux)  
Files: src/if\_sniff.c

Patch 7.4.838 (after 7.4.833)

Problem: Can't compile without the crypt feature. (John Marriott)  
Solution: Add #ifdef.  
Files: src/option.c

Patch 7.4.839

Problem: Compiler warning on 64-bit system.  
Solution: Add cast to int. (Mike Williams)  
Files: src/search.c

Patch 7.4.840 (after 7.4.829)

Problem: Tooltip window stays open.  
Solution: Send a WM\_CLOSE message. (Jurgen Kramer)  
Files: src/gui\_w32.c

Patch 7.4.841

Problem: Can't compile without the multi-byte feature. (John Marriott)  
Solution: Add more #ifdef's.  
Files: src/option.c

Patch 7.4.842 (after 7.4.840)

Problem: Sending too many messages to close the balloon.  
Solution: Only send a WM\_CLOSE message. (Jurgen Kramer)  
Files: src/gui\_w32.c

Patch 7.4.843 (after 7.4.835)

Problem: Still possible to go beyond the end of a string.  
Solution: Check for NUL also in second string. (Dominique Pelle)  
Files: src/misc2.c

Patch 7.4.844

Problem: When '#' is in 'isident' the is# comparator doesn't work.  
Solution: Don't use vim\_isIDc(). (Yasuhiro Matsumoto)  
Files: src/eval.c, src/testdir/test\_comparators.in,  
src/testdir/test\_comparators.ok, src/testdir/Makefile,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms

Patch 7.4.845

Problem: Compiler warning for possible loss of data.  
Solution: Add a type cast. (Erich Ritz)  
Files: src/misc1.c

Patch 7.4.846

Problem: Some GitHub users don't know how to use issues.  
Solution: Add a file that explains the basics of contributing.  
Files: Filelist, CONTRIBUTING.md

Patch 7.4.847

Problem: "vi)d" may leave a character behind.  
Solution: Skip over multi-byte character. (Christian Brabandt)  
Files: src/search.c

Patch 7.4.848

Problem: CTRL-A on hex number in Visual block mode is incorrect.  
Solution: Account for the "0x". (Hirohito Higashi)  
Files: src/charset.c, src/testdir/test\_increment.in,

src/testdir/test\_increment.ok

Patch 7.4.849

Problem: Moving the cursor in Insert mode starts new undo sequence.

Solution: Add CTRL-G U to keep the undo sequence for the following cursor movement command. (Christian Brabandt)

Files: runtime/doc/insert.txt, src/edit.c, src/testdir/test\_mapping.in, src/testdir/test\_mapping.ok

Patch 7.4.850 (after 7.4.846)

Problem: <Esc> does not show up.

Solution: Use &gt; and &lt; . (Kazunobu Kuriyama)

Files: CONTRIBUTING.md

Patch 7.4.851

Problem: Saving and restoring the console buffer does not work properly.

Solution: Instead of ReadConsoleOutputA/WriteConsoleOutputA use CreateConsoleScreenBuffer and SetConsoleActiveScreenBuffer. (Ken Takata)

Files: src/os\_win32.c

Patch 7.4.852

Problem: On MS-Windows console Vim uses ANSI APIs for keyboard input and console output, it cannot input/output Unicode characters.

Solution: Use Unicode APIs for console I/O. (Ken Takata, Yasuhiro Matsumoto)

Files: src/os\_win32.c, src/ui.c, runtime/doc/options.txt

Patch 7.4.853

Problem: "zt" in diff mode does not always work properly. (Gary Johnson)

Solution: Don't count filler lines twice. (Christian Brabandt)

Files: src/move.c

Patch 7.4.854 (after 7.4.850)

Problem: Missing information about runtime files.

Solution: Add section about runtime files. (Christian Brabandt)

Files: CONTRIBUTING.md

Patch 7.4.855

Problem: GTK: font glitches for combining characters

Solution: Use pango\_shape\_full() instead of pango\_shape(). (luchr, PR #393)

Files: src/gui\_gtk\_x11.c

Patch 7.4.856

Problem: "zt" still doesn't work well with filler lines. (Gary Johnson)

Solution: Check for filler lines above the cursor. (Christian Brabandt)

Files: src/move.c

Patch 7.4.857

Problem: Dragging the current tab with the mouse doesn't work properly.

Solution: Take the current tabpage index into account. (Hirohito Higashi)

Files: src/normal.c

Patch 7.4.858

Problem: It's a bit clumsy to execute a command on a list of matches.

Solution: Add the ":ldo", ":lfd", ":cdo" and ":cfdo" commands. (Yegappan Lakshmanan)

Files: runtime/doc/cmdline.txt, runtime/doc/editing.txt, runtime/doc/index.txt, runtime/doc/quickfix.txt, runtime/doc/tabpage.txt, runtime/doc/windows.txt, src/ex\_cmds.h, src/ex\_cmds2.c, src/ex\_docmd.c, src/proto/quickfix.pro, src/quickfix.c, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,



```
src/testdir/Make_os2.mak, src/testdir/Make_vms.mms,
src/testdir/Makefile, src/testdir/test_cdo.in,
src/testdir/test_cdo.ok
```

Patch 7.4.859

Problem: Vim doesn't recognize all htmdjango files.  
Solution: Recognize a comment. (Daniel Hahler, PR #410)  
Files: runtime/filetype.vim

Patch 7.4.860

Problem: Filetype detection is outdated.  
Solution: Include all recent and not-so-recent changes.  
Files: runtime/filetype.vim

Patch 7.4.861 (after 7.4.855)

Problem: pango\_shape\_full() is not always available.  
Solution: Add a configure check.  
Files: src/configure.in, src/auto/configure, src/config.h.in,  
src/gui\_gtk\_x11.c

Patch 7.4.862 (after 7.4.861)

Problem: Still problems with pango\_shape\_full() not available.  
Solution: Change AC\_TRY\_COMPILE to AC\_TRY\_LINK.  
Files: src/configure.in, src/auto/configure

Patch 7.4.863 (after 7.4.856)

Problem: plines\_nofill() used without the diff feature.  
Solution: Define PLINES\_NOFILL().  
Files: src/macros.h, src/move.c

Patch 7.4.864 (after 7.4.858)

Problem: Tiny build fails.  
Solution: Put qf\_items inside #ifdef.  
Files: src/ex\_docmd.c

Patch 7.4.865

Problem: Compiler warning for uninitialized variable.  
Solution: Initialize.  
Files: src/ex\_cmds2.c

Patch 7.4.866

Problem: Crash when changing the 'tags' option from a remote command.  
(Benjamin Fritz)  
Solution: Instead of executing messages immediately, use a queue, like for  
netbeans. (James Kolb)  
Files: src/ex\_docmd.c, src/getchar.c, src/gui\_gtk\_x11.c, src/gui\_w48.c,  
src/gui\_x11.c, src/if\_xcmdsrv.c, src/misc2.c, src/os\_unix.c,  
src/proto/if\_xcmdsrv.pro, src/proto/misc2.pro, src/macros.h

Patch 7.4.867 (after 7.4.866)

Problem: Can't build on MS-Windows. (Taro Muraoka)  
Solution: Adjust #ifdef.  
Files: src/misc2.c

Patch 7.4.868

Problem: 'smarttab' is also effective when 'paste' is enabled. (Alexander  
Monakov)  
Solution: Disable 'smarttab' when 'paste' is set. (Christian Brabandt)  
Do the same for 'expandtab'.  
Files: src/option.c, src/structs.h

Patch 7.4.869

Problem: MS-Windows: scrolling may cause text to disappear when using an Intel GPU.  
Solution: Call GetPixel(). (Yohei Endo)  
Files: src/gui\_w48.c

#### Patch 7.4.870

Problem: May get into an invalid state when using getchar() in an expression mapping.  
Solution: Anticipate mod\_mask to change. (idea by Yukihiro Nakadaira)  
Files: src/getchar.c

#### Patch 7.4.871

Problem: Vim leaks memory, when 'wildignore' filters out all matches.  
Solution: Free the files array when it becomes empty.  
Files: src/misc1.c

#### Patch 7.4.872

Problem: Not using CI services available.  
Solution: Add configuration files for travis and appveyor. (Ken Takata, vim-jp, PR #401)  
Files: .travis.yml, appveyor.yml, Filelist

#### Patch 7.4.873 (after 7.4.866)

Problem: Compiler warning for unused variable. (Tony Mechelynck)  
Solution: Remove the variable. Also fix int vs long\_u mixup.  
Files: src/if\_xcmdsrv.c

#### Patch 7.4.874

Problem: MS-Windows: When Vim runs inside another application, the size isn't right.  
Solution: When in child mode compute the size differently. (Agorgianitis Loukas)  
Files: src/gui\_w48.c

#### Patch 7.4.875

Problem: Not obvious how to contribute.  
Solution: Add a remark about CONTRIBUTING.md to README.md  
Files: README.md

#### Patch 7.4.876

Problem: Windows7: when using vim.exe with msys or msys2, conhost.exe (console window provider on Windows7) will freeze or crash.  
Solution: Make original screen buffer active, before executing external program. And when the program is finished, revert to vim's one. (Taro Muraoka)  
Files: src/os\_win32.c

#### Patch 7.4.877 (after 7.4.843)

Problem: ":find" sometimes fails. (Excanoe)  
Solution: Compare current characters instead of previous ones.  
Files: src/misc2.c

#### Patch 7.4.878

Problem: Coverity error for clearing only one byte of struct.  
Solution: Clear the whole struct. (Dominique Pelle)  
Files: src/ex\_docmd.c

#### Patch 7.4.879

Problem: Can't see line numbers in nested function calls.  
Solution: Add line number to the file name. (Alberto Fanjul)  
Files: src/eval.c

## Patch 7.4.880

Problem: No build and coverage status.  
Solution: Add links to the README file. (Christian Brabandt)  
Files: README.md

## Patch 7.4.881 (after 7.4.879)

Problem: Test 49 fails.  
Solution: Add line number to check of call stack.  
Files: src/testdir/test49.vim

## Patch 7.4.882

Problem: When leaving the command line window with CTRL-C while a completion menu is displayed the menu isn't removed.  
Solution: Force a screen update. (Hirohito Higashi)  
Files: src/edit.c

## Patch 7.4.883 (after 7.4.818)

Problem: Block-mode replace works characterwise instead of blockwise after column 147. (Issue #422)  
Solution: Set Visual mode. (Christian Brabandt)  
Files: src/normal.c, src/testdir/test\_listlbr.in, src/testdir/test\_listlbr.ok

## Patch 7.4.884

Problem: Travis also builds on a tag push.  
Solution: Filter out tag pushes. (Kenichi Ito)  
Files: .travis.yml

## Patch 7.4.885

Problem: When doing an upwards search without wildcards the search fails if the initial directory doesn't exist.  
Solution: Fix the non-wildcard case. (Stefan Kempf)  
Files: src/misc2.c

## Patch 7.4.886 (after 7.4.876)

Problem: Windows7: Switching screen buffer causes flicker when using system().  
Solution: Instead of actually switching screen buffer, duplicate the handle. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

## Patch 7.4.887

Problem: Using uninitialized memory for regexp with back reference. (Dominique Pelle)  
Solution: Initialize end\_lnum.  
Files: src/regexp\_nfa.c

## Patch 7.4.888

Problem: The OptionSet autocommands are not triggered from setwinvar().  
Solution: Do not use switch\_win() when not needed. (Hirohito Higashi)  
Files: src/eval.c

## Patch 7.4.889

Problem: Triggering OptionSet from setwinvar() isn't tested.  
Solution: Add a test. (Christian Brabandt)  
Files: src/testdir/test\_autocmd\_option.in, src/testdir/test\_autocmd\_option.ok

## Patch 7.4.890

Problem: Build failure when using dynamic python but not python3.  
Solution: Adjust the #if to also include DYNAMIC\_PYTHON3 and UNIX.  
Files: src/if\_python3.c

## Patch 7.4.891

Problem: Indentation of array initializer is wrong.  
Solution: Avoid that calling find\_start\_rawstring() changes the position returned by find\_start\_comment(), add a test. (Hirohito Higashi)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.4.892

Problem: On MS-Windows the iconv DLL may have a different name.  
Solution: Also try libiconv2.dll and libiconv-2.dll. (Yasuhiro Matsumoto)  
Files: src/mbyte.c

## Patch 7.4.893

Problem: C indenting is wrong below a "case (foo):" because it is recognized as a C++ base class construct. Issue #38.  
Solution: Check for the case keyword.  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.4.894

Problem: vimrun.exe is picky about the number of spaces before -s.  
Solution: Skip all spaces. (Cam Sinclair)  
Files: src/vimrun.c

## Patch 7.4.895

Problem: Custom command line completion does not work for a command containing digits.  
Solution: Skip over the digits. (suggested by Yasuhiro Matsumoto)  
Files: src/ex\_docmd.c

## Patch 7.4.896

Problem: Editing a URL, which netrw should handle, doesn't work.  
Solution: Avoid changing slashes to backslashes. (Yasuhiro Matsumoto)  
Files: src/fileio.c, src/os\_mswin.c

## Patch 7.4.897

Problem: Freeze and crash when there is a sleep in a remote command. (Karl Yngve Lervåg)  
Solution: Remove a message from the queue before dealing with it. (James Kolb)  
Files: src/if\_xcmdsrv.c

## Patch 7.4.898

Problem: The 'fixendofline' option is set on with ":edit".  
Solution: Don't set the option when clearing a buffer. (Yasuhiro Matsumoto)  
Files: src/buffer.c

## Patch 7.4.899

Problem: README file is not optimal.  
Solution: Move buttons, update some text. (closes #460)  
Files: README.txt, README.md

## Patch 7.4.900 (after 7.4.899)

Problem: README file can still be improved  
Solution: Add a couple of links. (Christian Brabandt)  
Files: README.md

## Patch 7.4.901

Problem: When a BufLeave autocommand changes folding in a way it syncs undo, undo can be corrupted.  
Solution: Prevent undo sync. (Jacob Niehus)  
Files: src/popupmnu.c

## Patch 7.4.902

Problem: Problems with using the MS-Windows console.  
Solution: Revert patches 7.4.851, 7.4.876 and 7.4.886 until we find a better solution. (suggested by Ken Takata)  
Files: src/os\_win32.c

## Patch 7.4.903

Problem: MS-Windows: When 'encoding' differs from the current code page, expanding wildcards may cause illegal memory access.  
Solution: Allocate a longer buffer. (Ken Takata)  
Files: src/misc1.c

## Patch 7.4.904

Problem: Vim does not provide .desktop files.  
Solution: Include and install .desktop files. (James McCoy, closes #455)  
Files: Filelist, runtime/vim.desktop, runtime/gvim.desktop, src/Makefile

## Patch 7.4.905

Problem: Python interface can produce error "vim.message' object has no attribute 'isatty'".  
Solution: Add dummy isatty(), readable(), etc. (closes #464)  
Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.4.906

Problem: On MS-Windows the viminfo file is (always) given the hidden attribute. (raulnac)  
Solution: Check the hidden attribute in a different way. (Ken Takata)  
Files: src/ex\_cmds.c, src/os\_win32.c, src/os\_win32.pro

## Patch 7.4.907

Problem: Libraries for dynamically loading interfaces can only be defined at compile time.  
Solution: Add options to specify the dll names. (Kazuki Sakamoto, closes #452)  
Files: runtime/doc/if\_lua.txt, runtime/doc/if\_perl.txt, runtime/doc/if\_pyth.txt, runtime/doc/if\_ruby.txt, runtime/doc/options.txt, src/if\_lua.c, src/if\_perl.xs, src/if\_python.c, src/if\_python3.c, src/if\_ruby.c, src/option.c, src/option.h

## Patch 7.4.908 (after 7.4.907)

Problem: Build error with MingW compiler. (Cesar Romani)  
Solution: Change #if into #ifdef.  
Files: src/if\_perl.xs

## Patch 7.4.909 (after 7.4.905)

Problem: "make install" fails.  
Solution: Only try installing desktop files if the destination directory exists.  
Files: src/Makefile

## Patch 7.4.910 (after 7.4.905)

Problem: Compiler complains about type punned pointer.  
Solution: Use another way to increment the ref count.  
Files: src/if\_py\_both.h

## Patch 7.4.911

Problem: t\_Ce and t-Cs are documented but not supported. (Hirohito Higashi)  
Solution: Define the options.  
Files: src/option.c

## Patch 7.4.912

Problem: Wrong indenting for C++ constructor.  
Solution: Recognize ::. (Anhong)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 7.4.913

Problem: No utf-8 support for the hangul input feature.  
Solution: Add utf-8 support. (Namsh)  
Files: src/gui.c, src/hangulin.c, src/proto/hangulin.pro, src/screen.c,  
src/ui.c, runtime/doc/hangulin.txt, src/feature.h

## Patch 7.4.914

Problem: New compiler warning: logical-not-parentheses  
Solution: Silence the warning.  
Files: src/term.c

## Patch 7.4.915

Problem: When removing from 'path' and then adding, a comma may go missing.  
(Malcolm Rowe)  
Solution: Fix the check for P\_ONECOMMA. (closes #471)  
Files: src/option.c, src/testdir/test\_options.in,  
src/testdir/test\_options.ok

## Patch 7.4.916

Problem: When running out of memory while copying a dict memory may be  
freed twice. (ZyX)  
Solution: Do not call the garbage collector when running out of memory.  
Files: src/misc2.c

## Patch 7.4.917

Problem: Compiler warning for comparing signed and unsigned.  
Solution: Add a type cast.  
Files: src/hangulin.c

## Patch 7.4.918

Problem: A digit in an option name has problems.  
Solution: Rename 'python3dll' to 'pythonthreedll'.  
Files: src/option.c, src/option.h, runtime/doc/options.txt

## Patch 7.4.919

Problem: The dll options are not in the options window.  
Solution: Add the dll options. And other fixes.  
Files: runtime/optwin.vim

## Patch 7.4.920

Problem: The rubydll option is not in the options window.  
Solution: Add the rubydll option.  
Files: runtime/optwin.vim

## Patch 7.4.921 (after 7.4.906)

Problem: Missing proto file update. (Randall W. Morris)  
Solution: Add the missing line for mch\_ishidden.  
Files: src/proto/os\_win32.pro

## Patch 7.4.922

Problem: Leaking memory with ":helpt {dir-not-exists}".  
Solution: Free dirname. (Dominique Pelle)  
Files: src/ex\_cmds.c

## Patch 7.4.923

Problem: Prototypes not always generated.  
Solution: Change #if to OR with PROTO.

Files: src/window.c

Patch 7.4.924

Problem: DEVELOPER\_DIR gets reset by configure.

Solution: Do not reset DEVELOPER\_DIR when there is no --with-developer-dir argument. (Kazuki Sakamoto, closes #482)

Files: src/configure.in, src/auto/configure

Patch 7.4.925

Problem: User may yank or put using the register being recorded in.

Solution: Add the recording register in the message. (Christian Brabandt, closes #470)

Files: runtime/doc/options.txt, runtime/doc/repeat.txt, src/ops.c, src/option.h, src/screen.c

Patch 7.4.926

Problem: Completing the longest match doesn't work properly with multi-byte characters.

Solution: When using multi-byte characters use another way to find the longest match. (Hirohito Higashi)

Files: src/ex\_getln.c, src/testdir/test\_utf8.in, src/testdir/test\_utf8.ok

Patch 7.4.927

Problem: Ruby crashes when there is a runtime error.

Solution: Use ruby\_options() instead of ruby\_process\_options(). (Damien)

Files: src/if\_ruby.c

Patch 7.4.928

Problem: A clientserver message interrupts handling keys of a mapping.

Solution: Have mch\_inchar() send control back to WaitForChar when it is interrupted by server message. (James Kolb)

Files: src/os\_unix.c

Patch 7.4.929

Problem: "gv" after paste selects one character less if 'selection' is "exclusive".

Solution: Increment the end position. (Christian Brabandt)

Files: src/normal.c, src/testdir/test94.in, src/testdir/test94.ok

Patch 7.4.930

Problem: MS-Windows: Most users appear not to like the window border.

Solution: Remove WS\_EX\_CLIENTEDGE. (Ian Halliday)

Files: src/gui\_w32.c

Patch 7.4.931 (after 7.4.929)

Problem: Test 94 fails on some systems.

Solution: Set 'encoding' to utf-8.

Files: src/testdir/test94.in

Patch 7.4.932 (after 7.4.926)

Problem: test\_utf8 has confusing dummy command.

Solution: Use a real command instead of a colon.

Files: src/testdir/test\_utf8.in

Patch 7.4.933 (after 7.4.926)

Problem: Crash when using longest completion match.

Solution: Fix array index.

Files: src/ex\_getln.c

Patch 7.4.934

Problem: Appveyor also builds on a tag push.

Solution: Add a skip\_tags line. (Kenichi Ito, closes #489)

Files: appveyor.yml

Patch 7.4.935 (after 7.4.932)

Problem: test\_utf8 fails on MS-Windows when executed with gvim.

Solution: Use the insert flag on feedkeys() to put the string before the ":" that was already read when checking for available chars.

Files: src/testdir/test\_utf8.in

Patch 7.4.936

Problem: Crash when dragging with the mouse.

Solution: Add safety check for NULL pointer. Check mouse position for valid value. (Hirohito Higashi)

Files: src/window.c, src/term.c

Patch 7.4.937

Problem: Segfault reading uninitialized memory.

Solution: Do not read match \z0, it does not exist. (Marius Gedminas, closes #497)

Files: src/regexp\_nfa.c

Patch 7.4.938

Problem: X11 and GTK have more mouse buttons than Vim supports.

Solution: Recognize more mouse buttons. (Benoit Pierre, closes #498)

Files: src/gui\_gtk\_x11.c, src/gui\_x11.c

Patch 7.4.939

Problem: Memory leak when encountering a syntax error.

Solution: Free the memory. (Dominique Pelle)

Files: src/ex\_docmd.c

Patch 7.4.940

Problem: vt52 terminal codes are not correct.

Solution: Move entries outside of #if. (Random) Adjustments based on documented codes.

Files: src/term.c

Patch 7.4.941

Problem: There is no way to ignore case only for tag searches.

Solution: Add the 'tagcase' option. (Gary Johnson)

Files: runtime/doc/options.txt, runtime/doc/quickref.txt,  
runtime/doc/tagsrch.txt, runtime/doc/usr\_29.txt,  
runtime/optwin.vim, src/Makefile, src/buffer.c, src/option.c,  
src/option.h, src/structs.h, src/tag.c,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_tagcase.in, src/testdir/test\_tagcase.ok

Patch 7.4.942 (after 7.4.941)

Problem: test\_tagcase breaks for small builds.

Solution: Bail out of the test early. (Hirohito Higashi)

Files: src/testdir/test\_tagcase.in

Patch 7.4.943

Problem: Tests are not run.

Solution: Add test\_writefile to makefiles. (Ken Takata)

Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.4.944

Problem: Writing tests for Vim script is hard.



Solution: Add assertEquals(), assertFalse() and assertTrue() functions. Add the v:errors variable. Add the runtest script. Add a first new style test script.

Files: src/eval.c, src/vim.h, src/misc2.c, src/testdir/Makefile, src/testdir/runtest.vim, src/testdir/test\_assert.vim, runtime/doc/eval.txt

Patch 7.4.945 (after 7.4.944)

Problem: New style testing is incomplete.

Solution: Add the runtest script to the list of distributed files. Add the new functions to the function overview. Rename the functions to match Vim function style. Move undolevels testing into a new style test script.

Files: Filelist, runtime/doc/usr\_41.txt, runtime/doc/eval.txt, src/testdir/test\_assert.vim, src/testdir/Makefile, src/testdir/test\_undolevels.vim, src/testdir/testl100.in, src/testdir/testl100.ok

Patch 7.4.946 (after 7.4.945)

Problem: Missing changes in source file.

Solution: Include changes to the eval.c file.

Files: src/eval.c

Patch 7.4.947

Problem: Test\_listchars fails with MingW. (Michael Soyka)

Solution: Add the test to the ones that need the fileformat fixed. (Christian Brabandt)

Files: src/testdir/Make\_ming.mak

Patch 7.4.948

Problem: Can't build when the insert\_expand feature is disabled.

Solution: Add #ifdefs. (Dan Pasanen, closes #499)

Files: src/eval.c, src/fileio.c

Patch 7.4.949

Problem: When using 'colorcolumn' and there is a sign with a fullwidth character the highlighting is wrong. (Andrew Stewart)

Solution: Only increment vcol when in the right state. (Christian Brabandt)

Files: src/screen.c, src/testdir/test\_listlbr\_utf8.in, src/testdir/test\_listlbr\_utf8.ok

Patch 7.4.950

Problem: v:errors is not initialized.

Solution: Initialize it to an empty list. (Thinca)

Files: src/eval.c

Patch 7.4.951

Problem: Sorting number strings does not work as expected. (Luc Hermitte)

Solution: Add the "N" argument to sort()

Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test\_alot.vim, src/testdir/test\_sort.vim, src/testdir/Makefile

Patch 7.4.952

Problem: 'lispwords' is tested in the old way.

Solution: Make a new style test for 'lispwords'.

Files: src/testdir/test\_alot.vim, src/testdir/test\_lispwords.vim, src/testdir/testl100.in, src/testdir/testl100.ok, src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak, src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.4.953

Problem: When a test script navigates to another buffer the .res file is created with the wrong name.  
Solution: Use the "testname" for the .res file. (Damien)  
Files: src/testdir/runtest.vim

#### Patch 7.4.954

Problem: When using Lua there may be a crash. (issue #468)  
Solution: Avoid using an uninitialized tv. (Yukihiro Nakadaira)  
Files: src/if\_lua.c

#### Patch 7.4.955

Problem: Vim doesn't recognize .pl6 and .pod6 files.  
Solution: Recognize them as perl6 and pod6. (Mike Eve, closes #511)  
Files: runtime/filetype.vim

#### Patch 7.4.956

Problem: A few more file name extensions not recognized.  
Solution: Add .asciidoc, .bzl, .gradle, etc.  
Files: runtime/filetype.vim

#### Patch 7.4.957

Problem: Test\_tagcase fails when using another language than English.  
Solution: Set the messages language to C. (Kenichi Ito)  
Files: src/testdir/test\_tagcase.in

#### Patch 7.4.958

Problem: Vim checks if the directory "\$TMPDIR" exists.  
Solution: Do not check if the name starts with "\$".  
Files: src/fileio.c

#### Patch 7.4.959

Problem: When setting 'term' the clipboard ownership is lost.  
Solution: Do not call clip\_init(). (James McCoy)  
Files: src/term.c

#### Patch 7.4.960

Problem: Detecting every version of nmake is clumsy.  
Solution: Use a tiny C program to get the version of \_MSC\_VER. (Ken Takata)  
Files: src/Make\_mvc.mak

#### Patch 7.4.961

Problem: Test107 fails in some circumstances.  
Solution: When using "zt", "zb" and "z=" recompute the fraction.  
Files: src/normal.c, src/window.c, src/proto/window.pro

#### Patch 7.4.962

Problem: Cannot run the tests with gvim. Cannot run individual new tests.  
Solution: Add the -f flag. Add new test targets in Makefile.  
Files: src/Makefile, src/testdir/Makefile

#### Patch 7.4.963

Problem: test\_listlbr\_utf8 sometimes fails.  
Solution: Don't use a literal multibyte character but <C-V>uXXXX. Do not dump the screen highlighting. (Christian Brabandt, closes #518)  
Files: src/testdir/test\_listlbr\_utf8.in, src/testdir/test\_listlbr\_utf8.ok

#### Patch 7.4.964

Problem: Test 87 doesn't work in a shadow directory.  
Solution: Handle the extra subdirectory. (James McCoy, closes #515)  
Files: src/testdir/test87.in

#### Patch 7.4.965

Problem: On FreeBSD /dev/fd/ files are special.  
Solution: Use `is_dev_fd_file()` also for FreeBSD. (Derek Schrock, closes #521)  
Files: `src/fileio.c`

#### Patch 7.4.966

Problem: Configure doesn't work with a space in a path.  
Solution: Put paths in quotes. (James McCoy, closes #525)  
Files: `src/configure.in`, `src/auto/configure`

#### Patch 7.4.967

Problem: Cross compilation on MS-windows doesn't work well.  
Solution: Tidy up cross compilation across architectures with Visual Studio.  
(Mike Williams)  
Files: `src/Make_mvc.mak`

#### Patch 7.4.968

Problem: `test86` and `test87` are flaky in Appveyor.  
Solution: Reduce the count from 8 to 7. (suggested by ZyX)  
Files: `src/testdir/test86.in`, `src/testdir/test87.in`

#### Patch 7.4.969

Problem: Compiler warnings on Windows x64 build.  
Solution: Add type casts. (Mike Williams)  
Files: `src/option.c`

#### Patch 7.4.970

Problem: Rare crash in `getvcol()`. (Timo Mihaljov)  
Solution: Check for the buffer being NULL in `init_preedit_start_col`.  
(Hirohito Higashi, Christian Brabandt)  
Files: `src/mbyte.c`

#### Patch 7.4.971

Problem: The `asin()` function can't be used.  
Solution: Sort the function table properly. (Watiko)  
Files: `src/eval.c`

#### Patch 7.4.972

Problem: Memory leak when there is an error in setting an option.  
Solution: Free the saved value (Christian Brabandt)  
Files: `src/option.c`

#### Patch 7.4.973

Problem: When pasting on the command line line breaks result in literal  
<CR> characters. This makes pasting a long file name difficult.  
Solution: Skip the characters.  
Files: `src/ex_getln.c`, `src/ops.c`

#### Patch 7.4.974

Problem: When using `:diffsplit` the cursor jumps to the first line.  
Solution: Put the cursor on the line related to where the cursor was before  
the split.  
Files: `src/diff.c`

#### Patch 7.4.975

Problem: Using `":sort"` on a very big file sometimes causes text to be  
corrupted. (John Beckett)  
Solution: Copy the line into a buffer before calling `ml_append()`.  
Files: `src/ex_cmds.c`

#### Patch 7.4.976

Problem: When compiling Vim for MSYS2 (linked with `msys-2.0.dll`), the Win32  
clipboard is not enabled.

Solution: Recognize MSYS like CYGWIN. (Ken Takata)  
Files: src/configure.in, src/auto/configure

Patch 7.4.977

Problem: 'linebreak' does not work properly when using "space" in  
'listchars'.

Solution: (Hirohito Higashi, Christian Brabandt)  
Files: src/screen.c, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok

Patch 7.4.978

Problem: test\_cdo fails when using another language than English.  
Solution: Set the language to C. (Dominique Pelle, Kenichi Ito)  
Files: src/testdir/test\_cdo.in

Patch 7.4.979

Problem: When changing the crypt key the blocks read from disk are not  
decrypted.  
Solution: Also call ml\_decrypt\_data() when mf\_old\_key is set. (Ken Takata)  
Files: src/memfile.c

Patch 7.4.980

Problem: Tests for :cdo, :ldo, etc. are outdated.  
Solution: Add new style tests for these commands. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/test\_cdo.in, src/testdir/test\_cdo.ok,  
src/testdir/test\_cdo.vim

Patch 7.4.981

Problem: An error in a test script goes unnoticed.  
Solution: Source the test script inside try/catch. (Hirohito Higashi)  
Files: src/testdir/runtest.vim

Patch 7.4.982

Problem: Keeping the list of tests updated is a hassle.  
Solution: Move the list to a separate file, so that it only needs to be  
updated in one place.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/Make\_all.mak

Patch 7.4.983

Problem: Executing one test after "make testclean" doesn't work.  
Solution: Add a dependency on test1.out.  
Files: src/testdir/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile,  
src/testdir/Make\_all.mak

Patch 7.4.984

Problem: searchpos() always starts searching in the first column, which is  
not what some people expect. (Brett Stahlman)  
Solution: Add the 'z' flag: start at the specified column.  
Files: src/vim.h, src/eval.c, src/search.c,  
src/testdir/test\_searchpos.vim, src/testdir/test\_alot.vim,  
runtime/doc/eval.txt

Patch 7.4.985

Problem: Can't build with Ruby 2.3.0.

Solution: Use the new TypedData\_XXX macro family instead of Data\_XXX. Use TypedData. (Ken Takata)  
Files: src/if\_ruby.c

#### Patch 7.4.986

Problem: Test49 doesn't work on MS-Windows. test70 is listed twice.  
Solution: Move test49 to the group not used on Amiga and MS-Windows.  
Remove test70 from SCRIPTS\_WIN32.  
Files: src/testdir/Make\_all.mak, src/testdir/Make\_dos.mak

#### Patch 7.4.987 (after 7.4.985)

Problem: Can't build with Ruby 1.9.2.  
Solution: Require Rub 2.0 for defining USE\_TYPEDDATA.  
Files: src/if\_ruby.c

#### Patch 7.4.988 (after 7.4.982)

Problem: Default test target is test49.out.  
Solution: Add a build rule before including Make\_all.mak.  
Files: src/testdir/Make\_dos.mak, src/testdir/Make\_amiga.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_os2.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

#### Patch 7.4.989

Problem: Leaking memory when hash\_add() fails. Coverity error 99126.  
Solution: When hash\_add() fails free the memory.  
Files: src/eval.c

#### Patch 7.4.990

Problem: Test 86 fails on AppVeyor.  
Solution: Do some registry magic. (Ken Takata)  
Files: appveyor.yml

#### Patch 7.4.991

Problem: When running new style tests the output is not visible.  
Solution: Add the testdir/messages file and show it. Update the list of test names.  
Files: src/Makefile, src/testdir/Makefile, src/testdir/runtest.vim

#### Patch 7.4.992

Problem: Makefiles for MS-Windows in src/po are outdated.  
Solution: Make them work. (Ken Takata, Taro Muraoka)  
Files: src/po/Make\_cyg.mak, src/po/Make\_ming.mak, src/po/Make\_mvc.mak,  
src/po/README\_mingw.txt, src/po/README\_mvc.txt

#### Patch 7.4.993

Problem: Test 87 is flaky on AppVeyor.  
Solution: Reduce the minimum background thread count.  
Files: src/testdir/test86.in, src/testdir/test87.in

#### Patch 7.4.994

Problem: New style tests are not run on MS-Windows.  
Solution: Add the new style tests.  
Files: src/testdir/Make\_dos.mak

#### Patch 7.4.995

Problem: gdk\_pixbuf\_new\_from\_inline() is deprecated.  
Solution: Generate auto/gui\_gtk\_gresources.c. (Kazunobu Kuriyama, closes #507)  
Files: src/Makefile, src/auto/configure, src/config.h.in,  
src/config.mk.in, src/configure.in, src/gui\_gtk.c,  
src/gui\_gtk\_gresources.xml, src/gui\_gtk\_x11.c,  
src/proto/gui\_gtk\_gresources.pro,

```
pixmap/stock_vim_build_tags.png, pixmap/stock_vim_find_help.png,
pixmap/stock_vim_save_all.png,
pixmap/stock_vim_session_load.png,
pixmap/stock_vim_session_new.png,
pixmap/stock_vim_session_save.png, pixmap/stock_vim_shell.png,
pixmap/stock_vim_window_maximize.png,
pixmap/stock_vim_window_maximize_width.png,
pixmap/stock_vim_window_minimize.png,
pixmap/stock_vim_window_minimize_width.png,
pixmap/stock_vim_window_split.png,
pixmap/stock_vim_window_split_vertical.png
```

#### Patch 7.4.996

Problem: New GDK files and testdir/Make\_all.mak missing from distribution.  
PC build instructions are outdated.  
Solution: Add the file to the list. Update PC build instructions.  
Files: Filelist, Makefile

#### Patch 7.4.997

Problem: "make shadow" was sometimes broken.  
Solution: Add a test for it. (James McCoy, closes #520)  
Files: .travis.yml

#### Patch 7.4.998

Problem: Running tests in shadow directory fails. Test 49 fails.  
Solution: Link more files for the shadow directory. Make test 49 ends up in  
the right buffer.  
Files: src/Makefile, src/testdir/test49.in

#### Patch 7.4.999

Problem: "make shadow" creates a broken link. (Tony Mechelynck)  
Solution: Remove vimrc.unix from the list.  
Files: src/Makefile

#### Patch 7.4.1000

Problem: Test 49 is slow and doesn't work on MS-Windows.  
Solution: Start moving parts of test 49 to test\_viml.  
Files: src/Makefile, src/testdir/runtest.vim, src/testdir/test\_viml.vim,  
src/testdir/test49.vim, src/testdir/test49.ok

#### Patch 7.4.1001 (after 7.4.1000)

Problem: test\_viml isn't run.  
Solution: Include change in makefile.  
Files: src/testdir/Make\_all.mak

#### Patch 7.4.1002

Problem: Cannot run an individual test on MS-Windows.  
Solution: Move the rule to run test1 downwards. (Ken Takata)  
Files: src/testdir/Make\_dos.mak

#### Patch 7.4.1003

Problem: Travis could check a few more things.  
Solution: Run autoconf on one of the builds. (James McCoy, closes #510)  
Also build with normal features.  
Files: .travis.yml

#### Patch 7.4.1004

Problem: Using Makefile when auto/config.mk does not exist results in  
warnings.  
Solution: Use default values for essential variables.  
Files: src/Makefile

## Patch 7.4.1005

Problem: Vim users are not always happy.  
Solution: Make them happy.  
Files: src/ex\_cmds.h, src/ex\_cmds.c, src/proto/ex\_cmds.pro

## Patch 7.4.1006

Problem: The fix in patch 7.3.192 is not tested.  
Solution: Add a test, one for each regexp engine. (Elias Diem)  
Files: src/testdir/test44.in, src/testdir/test44.ok,  
src/testdir/test99.in, src/testdir/test99.ok

## Patch 7.4.1007

Problem: When a symbolic link points to a file in the root directory, the swapfile is not correct.  
Solution: Do not try getting the full name of a file in the root directory. (Milly, closes #501)  
Files: src/os\_unix.c

## Patch 7.4.1008

Problem: The OS/2 code pollutes the source while nobody uses it these days.  
Solution: Drop the support for OS/2.  
Files: src/feature.h, src/globals.h, src/macros.h, src/option.h,  
src/os\_unix.c, src/os\_unix.h, src/proto/os\_unix.pro, src/vim.h,  
src/digraph.c, src/eval.c, src/ex\_cmds.c, src/ex\_docmd.c,  
src/ex\_getln.c, src/fileio.c, src/getchar.c, src/memline.c,  
src/misc1.c, src/misc2.c, src/netbeans.c, src/option.c,  
src/term.c, src/ui.c, src/window.c, src/os\_os2\_cfg.h,  
src/Make\_os2.mak, src/testdir/Make\_os2.mak, src/testdir/os2.vim,  
src/INSTALL, runtime/doc/os\_os2.txt

## Patch 7.4.1009

Problem: There are still #ifdefs for ARCHIE.  
Solution: Remove references to ARCHIE, the code was removed in Vim 5.  
Files: src/ex\_cmds.c, src/ex\_docmd.c, src/fileio.c, src/main.c,  
src/memline.c, src/option.c, src/term.c

## Patch 7.4.1010

Problem: Some developers are unhappy while running tests.  
Solution: Add a test and some color.  
Files: src/ex\_cmds.c, src/testdir/test\_assert.vim

## Patch 7.4.1011

Problem: Can't build with Strawberry Perl.  
Solution: Include stdbool.h. (Ken Takata, closes #328)  
Files: Filelist, src/Make\_mvc.mak, src/if\_perl\_msvc/stdbool.h

## Patch 7.4.1012

Problem: Vim overwrites the value of \$PYTHONHOME.  
Solution: Do not set \$PYTHONHOME if it is already set. (Kazuki Sakamoto, closes #500)  
Files: src/if\_python.c, src/if\_python3.c

## Patch 7.4.1013

Problem: The local value of 'errorformat' is not used for ":lexpr" and ":cexpr".  
Solution: Use the local value if it exists. (Christian Brabandt) Adjust the help for this.  
Files: runtime/doc/quickfix.txt, src/quickfix.c

## Patch 7.4.1014

Problem: `fnamemodify('.', ':.')` returns an empty string in Cygwin.  
Solution: Use CCP\_RELATIVE in the call to cygwin\_conv\_path. (Jacob Niehus,

closes #505)  
Files:     src/os\_unix.c

Patch 7.4.1015

Problem:   The column is not restored properly when the matchparen plugin is  
            used in Insert mode and the cursor is after the end of the line.

Solution:  Set the curswant flag. (Christian Brabandt). Also fix  
            highlighting the match of the character before the cursor.

Files:     src/eval.c, runtime/plugin/matchparen.vim

Patch 7.4.1016

Problem:   Still a few OS/2 pieces remain.

Solution:  Delete more.

Files:     Filelist, README\_os2.txt, testdir/todos.vim, src/xxd/Make\_os2.mak

Patch 7.4.1017

Problem:   When there is a backslash in an option ":set -=" doesn't work.

Solution:  Handle a backslash better. (Jacob Niehus) Add a new test, merge  
            in old test.

Files:     src/testdir/test\_cdo.vim, src/testdir/test\_set.vim,  
            src/testdir/test\_alot.vim, src/option.c, src/testdir/test\_set.in,  
            src/testdir/test\_set.ok, src/Makefile

Patch 7.4.1018 (after 7.4.1017)

Problem:   Failure running tests.

Solution:  Add missing change to list of old style tests.

Files:     src/testdir/Make\_all.mak

Patch 7.4.1019

Problem:   Directory listing of "src" is too long.

Solution:  Rename the resources file to make it shorter.

Files:     src/gui\_gtk\_gresources.xml, src/gui\_gtk\_res.xml, src/Makefile,  
            Filelist

Patch 7.4.1020

Problem:   On MS-Windows there is no target to run tests with gvim.

Solution:  Add the testgvim target.

Files:     src/Make\_mvc.mak

Patch 7.4.1021

Problem:   Some makefiles are outdated.

Solution:  Add a note to warn developers.

Files:     src/Make\_manx.mak, src/Make\_bc3.mak, src/Make\_bc5.mak,  
            src/Make\_djg.mak, src/Make\_wl6.mak

Patch 7.4.1022

Problem:   The README file contains some outdated information.

Solution:  Update the information about supported systems.

Files:     README.txt, README.md

Patch 7.4.1023

Problem:   The distribution files for MS-Windows use CR-LF, which is  
            inconsistent with what one gets from github.

Solution:  Use LF in the distribution files.

Files:     Makefile

Patch 7.4.1024

Problem:   Interfaces for MS-Windows are outdated.

Solution:  Use Python 2.7.10, Python 3.4.4, Perl 5.22, TCL 8.6.

Files:     src/bigvim.bat

Patch 7.4.1025



Problem: Version in installer needs to be updated manually.  
Solution: Generate a file with the version number. (Guopeng Wen)  
Files: Makefile, nsis/gvim.nsi, nsis/gvim\_version.nsh

#### Patch 7.4.1026

Problem: When using MingW the tests do not clean up all files. E.g. test 17 leaves Xdir1 behind. (Michael Soyka)  
Solution: Also delete directories, like Make\_dos.mak. Delete files after directories to reduce warnings.  
Files: src/testdir/Make\_ming.mak, src/testdir/Make\_dos.mak

#### Patch 7.4.1027

Problem: No support for binary numbers.  
Solution: Add "bin" to 'nrformats'. (Jason Schulz)  
Files: runtime/doc/change.txt, runtime/doc/eval.txt,  
runtime/doc/version7.txt, src/charset.c, src/eval.c,  
src/ex\_cmds.c, src/ex\_getln.c, src/misc2.c, src/ops.c,  
src/option.c, src/proto/charset.pro, src/spell.c,  
src/testdir/test57.in, src/testdir/test57.ok,  
src/testdir/test58.in, src/testdir/test58.ok,  
src/testdir/test\_increment.in, src/testdir/test\_increment.ok,  
src/vim.h

#### Patch 7.4.1028

Problem: Nsis version file missing from the distribution.  
Solution: Add the file to the list.  
Files: Filelist

#### Patch 7.4.1029 (after 7.4.1027)

Problem: test\_increment fails on systems with 32 bit long.  
Solution: Only test with 32 bits.  
Files: src/testdir/test\_increment.in, src/testdir/test\_increment.ok

#### Patch 7.4.1030

Problem: test49 is still slow.  
Solution: Move more tests from old to new style.  
Files: src/testdir/test\_viml.vim, src/testdir/test49.vim,  
src/testdir/test49.ok, src/testdir/runtest.vim

#### Patch 7.4.1031

Problem: Can't build with Python interface using MingW.  
Solution: Update the Makefile. (Yasuhiro Matsumoto)  
Files: src/INSTALLpc.txt, src/Make\_cyg\_ming.mak

#### Patch 7.4.1032

Problem: message from assert\_false() does not look nice.  
Solution: Handle missing sourcing\_name. Use right number of spaces. (Watiko)  
Don't use line number if it's zero.  
Files: src/eval.c

#### Patch 7.4.1033

Problem: Memory use on MS-Windows is very conservative.  
Solution: Use the global memory status to estimate amount of memory.  
(Mike Williams)  
Files: src/os\_win32.c, src/os\_win32.h, src/proto/os\_win32.pro

#### Patch 7.4.1034

Problem: There is no test for the 'backspace' option behavior.  
Solution: Add a test. (Hirohito Higashi)  
Files: src/testdir/test\_alot.vim, src/testdir/test\_backspace\_opt.vim

#### Patch 7.4.1035

Problem: An Ex range gets adjusted for folded lines even when the range is not using line numbers.  
Solution: Only adjust line numbers for folding. (Christian Brabandt)  
Files: runtime/doc/fold.txt, src/ex\_docmd.c

#### Patch 7.4.1036

Problem: Only terminals with up to 256 colors work properly.  
Solution: Use the 256 color behavior for all terminals with 256 or more colors. (Robert de Bath, closes #504)  
Files: src/syntax.c

#### Patch 7.4.1037

Problem: Using "q!" when there is a modified hidden buffer does not unload the current buffer, resulting in the need to abandon it again.  
Solution: When using "q!" unload the current buffer when needed. (Yasuhiro Matsumoto, Hirohito Higashi)  
Files: src/testdir/test31.in, src/testdir/test31.ok, runtime/doc/editing.txt, src/ex\_cmds2.c, src/ex\_docmd.c, src/gui.c, src/gui\_gtk\_x11.c, src/os\_unix.c, src/proto/ex\_cmds2.pro

#### Patch 7.4.1038

Problem: Still get a warning for a deprecated function with gdk-pixbuf 2.31.  
Solution: Change minimum minor version from 32 to 31.  
Files: src/configure.in, src/auto/configure

#### Patch 7.4.1039 (after 7.4.1037)

Problem: Test 31 fails with small build.  
Solution: Bail out for small build. (Hirohito Higashi)  
Files: src/testdir/test31.in

#### Patch 7.4.1040

Problem: The tee command is not available on MS-Windows.  
Solution: Adjust tee.c for MSVC and add a makefile. (Yasuhiro Matsumoto)  
Files: src/tee/tee.c, src/tee/Make\_mvc.mak, src/Make\_mvc.mak

#### Patch 7.4.1041

Problem: Various small things.  
Solution: Add file to list of distributed files. Adjust README. Fix typo.  
Files: Filelist, src/testdir/README.txt, src/testdir/test\_charsearch.in, src/INSTALLmac.txt

#### Patch 7.4.1042

Problem: g-CTRL-G shows the word count, but there is no way to get the word count in a script.  
Solution: Add the wordcount() function. (Christian Brabandt)  
Files: runtime/doc/editing.txt, runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/eval.c, src/normal.c, src/ops.c, src/proto/ops.pro, src/testdir/test\_wordcount.in, src/testdir/test\_wordcount.ok, src/testdir/Make\_all.mak

#### Patch 7.4.1043

Problem: Another small thing.  
Solution: Now really update the Mac install text.  
Files: src/INSTALLmac.txt

#### Patch 7.4.1044 (after 7.4.1042)

Problem: Can't build without the +eval feature.  
Solution: Add #ifdef.  
Files: src/ops.c

## Patch 7.4.1045

Problem: Having shadow and coverage on the same build results in the source files not being available in the coverage view.  
Solution: Move using shadow to the normal build.  
Files: .travis.yml

## Patch 7.4.1046

Problem: No test coverage for menus.  
Solution: Load the standard menus and check there is no error.  
Files: testdir/test\_menu.vim, testdir/test\_alot.vim

## Patch 7.4.1047 (after patch 7.4.1042)

Problem: Tests fail on MS-Windows.  
Solution: Set 'selection' to inclusive.  
Files: src/testdir/test\_wordcount.in

## Patch 7.4.1048 (after patch 7.4.1047)

Problem: Wordcount test still fail on MS-Windows.  
Solution: Set 'fileformat' to "unix".  
Files: src/testdir/test\_wordcount.in

## Patch 7.4.1049 (after patch 7.4.1048)

Problem: Wordcount test still fails on MS-Windows.  
Solution: Set 'fileformats' to "unix".  
Files: src/testdir/test\_wordcount.in

## Patch 7.4.1050

Problem: Warning for unused var with tiny features. (Tony Mechelynck)  
Solution: Add #ifdef. Use vim\_snprintf(). Reduce number of statements.  
Files: src/ops.c

## Patch 7.4.1051

Problem: Segfault when unletting "count".  
Solution: Check for readonly and locked first. (Dominique Pelle)  
Add a test.  
Files: src/eval.c, src/testdir/test\_alot.vim, src/testdir/test\_unlet.vim

## Patch 7.4.1052

Problem: Illegal memory access with weird syntax command. (Dominique Pelle)  
Solution: Check for column past end of line.  
Files: src/syntax.c

## Patch 7.4.1053

Problem: Insufficient testing for quickfix commands.  
Solution: Add a new style quickfix test. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_all.mak, src/testdir/test\_quickfix.vim

## Patch 7.4.1054

Problem: Illegal memory access.  
Solution: Check for missing pattern. (Dominique Pelle)  
Files: src/syntax.c

## Patch 7.4.1055

Problem: Running "make newtests" in src/testdir has no output.  
Solution: List the messages file when a test fails. (Christian Brabandt)  
Update the list of tests.  
Files: src/Makefile, src/testdir/Makefile

## Patch 7.4.1056

Problem: Don't know why finding spell suggestions is slow.  
Solution: Add some code to gather profiling information.  
Files: src/spell.c

## Patch 7.4.1057

Problem: Typos in the :options window.  
Solution: Fix the typos. (Dominique Pelle)  
Files: runtime/optwin.vim

## Patch 7.4.1058

Problem: It is not possible to test code that is only reached when memory allocation fails.  
Solution: Add the alloc\_fail() function. Try it out with :vimgrep.  
Files: runtime/doc/eval.txt, src/globals.h, src/eval.c, src/quickfix.c, src/misc2.c, src/proto/misc2.pro, src/testdir/test\_quickfix.vim

## Patch 7.4.1059

Problem: Code will never be executed.  
Solution: Remove the code.  
Files: src/quickfix.c

## Patch 7.4.1060

Problem: Instructions for writing tests are outdated.  
Solution: Mention Make\_all.mak. Add steps for new style tests.  
Files: src/testdir/README.txt

## Patch 7.4.1061

Problem: Compiler warning for ignoring return value of fwrite().  
Solution: Do use the return value. (idea: Charles Campbell)  
Files: src/misc2.c, src/proto/misc2.pro

## Patch 7.4.1062

Problem: Building with Ruby on MS-Windows requires a lot of arguments.  
Solution: Make it simpler. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak, src/Make\_mvc.mak

## Patch 7.4.1063

Problem: TCL\_VER\_LONG and DYNAMIC\_TCL\_VER are not set when building with Cygwin and MingW.  
Solution: Add TCL\_VER\_LONG and DYNAMIC\_TCL\_VER to the makefile. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak

## Patch 7.4.1064

Problem: When a spell file has single letter compounding creating suggestions takes an awful long time.  
Solution: Add the NOCOMPOUNDSUGS flag.  
Files: runtime/doc/spell.txt, src/spell.c

## Patch 7.4.1065

Problem: Cannot use the "dll" options on MS-Windows.  
Solution: Support the options on all platforms. Use the built-in name as the default, so that it's clear what Vim is looking for.  
Files: src/if\_python.c, src/if\_python3.c, src/if\_lua.c, src/if\_perl.xs, src/if\_ruby.c, src/option.c, runtime/doc/options.txt, src/Makefile

## Patch 7.4.1066 (after 7.4.1065)

Problem: Build fails on MS-Windows.  
Solution: Adjust the #ifdefs for "dll" options.  
Files: src/option.h

## Patch 7.4.1067 (after 7.4.1065)

Problem: Can't build with MingW and Python on MS-Windows.  
Solution: Move the build flags to CFLAGS.  
Files: src/Make\_cyg\_ming.mak

## Patch 7.4.1068

Problem: Wrong way to check for unletting internal variables.  
Solution: Use a better way. (Olaf Dabrunz)  
Files: src/testdir/test\_unlet.c, src/eval.c

## Patch 7.4.1069

Problem: Compiler warning for unused argument.  
Solution: Add UNUSED.  
Files: src/misc2.c

## Patch 7.4.1070

Problem: The Tcl interface can't be loaded dynamically on Unix.  
Solution: Make it possible to load it dynamically. (Ken Takata)  
Files: runtime/doc/if\_tcl.txt, runtime/doc/options.txt,  
runtime/doc/quickref.txt, runtime/optwin.vim, src/Makefile,  
src/config.h.in, src/configure.in, src/auto/configure,  
src/if\_tcl.c, src/option.c, src/option.h

## Patch 7.4.1071

Problem: New style tests are executed in arbitrary order.  
Solution: Sort the test function names. (Hirohito Higashi)  
Fix the quickfix test that depended on the order.  
Files: src/testdir/runtest.vim, src/testdir/test\_quickfix.vim

## Patch 7.4.1072

Problem: Increment test is old style.  
Solution: Make the increment test a new style test. (Hirohito Higashi)  
Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_increment.in, src/testdir/test\_increment.ok,  
src/testdir/test\_increment.vim

## Patch 7.4.1073

Problem: Alloc\_id depends on numbers, may use the same one twice. It's not clear from the number what it's for.  
Solution: Use an enum. Add a function to lookup the enum value from the name.  
Files: src/misc2.c, src/vim.h, src/alloc.h, src/globals.h,  
src/testdir/runtest.vim, src/proto/misc2.pro,  
src/testdir/test\_quickfix.vim

## Patch 7.4.1074

Problem: Warning from VC2015 compiler.  
Solution: Add a type cast. (Mike Williams)  
Files: src/gui\_dwrite.cpp

## Patch 7.4.1075

Problem: Crash when using an invalid command.  
Solution: Fix generating the error message. (Dominique Pelle)  
Files: src/ex\_docmd.c

## Patch 7.4.1076

Problem: CTRL-A does not work well in right-left mode.  
Solution: Remove reversing the line, add a test. (Hirohito Higashi)  
Files: src/ops.c, src/testdir/test\_increment.vim

## Patch 7.4.1077

Problem: The build instructions for MS-Windows are incomplete.  
Solution: Add explanations for how to build with various interfaces. (Ken Takata)  
Files: src/INSTALLpc.txt

## Patch 7.4.1078

Problem: MSVC: "make clean" doesn't cleanup in the tee directory.  
Solution: Add the commands to cleanup tee. (Erich Ritz)  
Files: src/Make\_mvc.mak

Patch 7.4.1079 (after 7.4.1073)

Problem: New include file missing from distribution. Missing changes to quickfix code.  
Solution: Add alloc.h to the list of distributed files. Use the enum in quickfix code.  
Files: Filelist, src/quickfix.c

Patch 7.4.1080

Problem: VS2015 has a function HandleToLong() that is shadowed by the macro that Vim defines.  
Solution: Do not define HandleToLong() for MSVC version 1400 and later. (Mike Williams)  
Files: src/gui\_w32.c

Patch 7.4.1081

Problem: No test for what previously caused a crash.  
Solution: Add test for unletting errmsg.  
Files: src/testdir/test\_unlet.vim

Patch 7.4.1082

Problem: The Tcl interface is always skipping memory free on exit.  
Solution: Only skip for dynamically loaded Tcl.  
Files: src/if\_tcl.c

Patch 7.4.1083

Problem: Building GvimExt with VS2015 may fail.  
Solution: Adjust the makefile. (Mike Williams)  
Files: src/GvimExt/Makefile

Patch 7.4.1084

Problem: Using "." to repeat CTRL-A in Visual mode increments the wrong numbers.  
Solution: Append right size to the redo buffer. (Ozaki Kiichi)  
Files: src/normal.c, src/testdir/test\_increment.vim

Patch 7.4.1085

Problem: The CTRL-A and CTRL-X commands do not update the '[' and ']' marks.  
Solution: (Yukihiro Nakadaira)  
Files: src/ops.c, src/testdir/test\_marks.in, src/testdir/test\_marks.ok

Patch 7.4.1086

Problem: Crash with an extremely long buffer name.  
Solution: Limit the return value of vim\_snprintf(). (Dominique Pelle)  
Files: src/buffer.c

Patch 7.4.1087

Problem: CTRL-A and CTRL-X do not work properly with blockwise visual selection if there is a mix of Tab and spaces.  
Solution: Add OP\_NR\_ADD and OP\_NR\_SUB. (Hirohito Higashi)  
Files: src/testdir/test\_increment.vim, src/normal.c, src/ops.c, src/proto/ops.pro, src/vim.h

Patch 7.4.1088

Problem: Coverity warns for uninitialized variables. Only one is an actual problem.  
Solution: Move the conditions. Don't use endpos if handling an error.  
Files: src/ops.c

## Patch 7.4.1089

Problem: Repeating CTRL-A doesn't work.  
Solution: Call prep\_redo\_cmd(). (Hirohito Higashi)  
Files: src/normal.c, src/testdir/test\_increment.vim

## Patch 7.4.1090

Problem: No tests for :hardcopy and related options.  
Solution: Add test\_hardcopy.  
Files: src/testdir/test\_hardcopy.vim, src/Makefile,  
src/testdir/Make\_all.mak

## Patch 7.4.1091

Problem: When making a change while need\_wait\_return is set there is a two second delay.  
Solution: Do not assume the ATTENTION prompt was given when need\_wait\_return was set already.  
Files: src/misc1.c

## Patch 7.4.1092

Problem: It is not simple to test for an exception and give a proper error message.  
Solution: Add assert\_exception().  
Files: src/eval.c, runtime/doc/eval.txt

## Patch 7.4.1093

Problem: Typo in test goes unnoticed.  
Solution: Fix the typo. Give error for wrong arguments to cursor(). (partly by Hirohito Higashi) Add a test for cursor().  
Files: src/testdir/test\_searchpos.vim, src/testdir/test\_cursor\_func.vim,  
src/eval.c, src/testdir/test\_alot.vim

## Patch 7.4.1094

Problem: Test for :hardcopy fails on MS-Windows.  
Solution: Check for the +postscript feature.  
Files: src/testdir/test\_hardcopy.vim

## Patch 7.4.1095

Problem: Can't build GvimExt with SDK 7.1.  
Solution: Support using setenv.bat instead of vcvars32.bat. (Ken Takata)  
Files: src/Make\_mvc.mak, src/GvimExt/Makefile

## Patch 7.4.1096

Problem: Need several lines to verify a command produces an error.  
Solution: Add assert\_fails(). (suggested by Nikolai Pavlov)  
Make the quickfix alloc test actually work.  
Files: src/testdir/test\_quickfix.vim, src/eval.c, runtime/doc/eval.txt,  
src/misc2.c, src/alloc.h

## Patch 7.4.1097

Problem: Looking up the alloc ID for tests fails.  
Solution: Fix the line computation. Use assert\_fails() for unlet test.  
Files: src/testdir/runtest.vim, src/testdir/test\_unlet.vim

## Patch 7.4.1098

Problem: Still using old style C function declarations.  
Solution: Always define \_\_ARGS() to include types. Turn a few functions into ANSI style to find out if this causes problems for anyone.  
Files: src/vim.h, src/os\_unix.h, src/eval.c, src/main.c

## Patch 7.4.1099

Problem: It's not easy to know if Vim supports blowfish. (Smu Johnson)  
Solution: Add has('crypt-blowfish') and has('crypt-blowfish2').

Files: src/eval.c

Patch 7.4.1100

Problem: Cygwin makefiles are unused.

Solution: Remove them.

Files: src/GvimExt/Make\_ming.mak, src/GvimExt/Make\_cyg.mak,  
src/xxd/Make\_ming.mak, src/xxd/Make\_cyg.mak

Patch 7.4.1101

Problem: With 'rightleft' and concealing the cursor may move to the wrong position.

Solution: Compute the column differently when 'rightleft' is set. (Hirohito Higashi)

Files: src/screen.c

Patch 7.4.1102

Problem: Debugger has no stack backtrace support.

Solution: Add "backtrace", "frame", "up" and "down" commands. (Alberto Fanjul, closes #433)

Files: runtime/doc/repeat.txt, src/eval.c, src/ex\_cmds2.c, src/globals.h,  
src/testdir/Make\_all.mak, src/testdir/testl08.in,  
src/testdir/testl08.ok

Patch 7.4.1103 (after 7.4.1100)

Problem: Removed file still in distribution.

Solution: Remove Make\_cyg.mak from the list of files.

Files: Filelist

Patch 7.4.1104

Problem: Various problems building with MzScheme/Racket.

Solution: Make it work with new versions of Racket. (Yukihiro Nakadaira, Ken Takata)

Files: runtime/doc/if\_mzsch.txt, src/INSTALLpc.txt,  
src/Make\_cyg\_ming.mak, src/Make\_mvc.mak, src/auto/configure,  
src/configure.in, src/if\_mzsch.c

Patch 7.4.1105

Problem: When using slices there is a mixup of variable name and namespace.

Solution: Recognize variables that can't be a namespace. (Hirohito Higashi)

Files: src/eval.c, src/testdir/test\_eval.in, src/testdir/test\_eval.ok

Patch 7.4.1106

Problem: The nsis script can't be used from the appveyor build.

Solution: Add "ifndef" to allow for variables to be set from the command line. Remove duplicate SetCompressor command. Support using other gettext binaries. (Ken Takata) Update build instructions to use libintl-8.dll.

Files: Makefile, nsis/gvim.nsi, src/os\_win32.c, src/proto/os\_win32.pro,  
src/main.c, os\_w32exe.c

Patch 7.4.1107

Problem: Vim can create a directory but not delete it.

Solution: Add an argument to delete() to make it possible to delete a directory, also recursively.

Files: src/fileio.c, src/eval.c, src/proto/fileio.pro,  
src/testdir/test\_delete.vim, src/testdir/test\_alot.vim,  
runtime/doc/eval.txt

Patch 7.4.1108

Problem: Expanding "~" halfway a file name.

Solution: Handle the file name as one name. (Marco Hinz) Add a test. Closes #564.



Files: src/testdir/test27.in, src/testdir/test27.ok,  
src/testdir/test\_expand.vim, src/testdir/test\_alot.vim,  
src/Makefile, src/misc2.c

Patch 7.4.1109 (after 7.4.1107)

Problem: MS-Windows doesn't have rmdir().

Solution: Add mch\_rmdir().

Files: src/os\_win32.c, src/proto/os\_win32.pro

Patch 7.4.1110

Problem: Test 108 fails when language is French.

Solution: Force English messages. (Dominique Pelle)

Files: src/testdir/test108.in

Patch 7.4.1111

Problem: test\_expand fails on MS-Windows.

Solution: Always use forward slashes. Remove references to test27.

Files: src/testdir/runtest.vim, src/testdir/test\_expand.vim,  
src/testdir/Make\_dos.mak, src/testdir/Make\_all.mak,  
src/testdir/Make\_amiga.mak, src/testdir/Make\_ming.mak

Patch 7.4.1112

Problem: When using ":next" with an illegal file name no error is reported.

Solution: Give an error message.

Files: src/ex\_cmds2.c

Patch 7.4.1113 (after 7.4.1105)

Problem: Using {ns} in variable name does not work. (lilydjpg)

Solution: Fix recognizing colon. Add a test.

Files: src/eval.c, src/testdir/test\_viml.vim

Patch 7.4.1114 (after 7.4.1107)

Problem: delete() does not work well with symbolic links.

Solution: Recognize symbolic links.

Files: src/eval.c, src/fileio.c, src/os\_unix.c, src/proto/os\_unix.pro,  
src/testdir/test\_delete.vim, runtime/doc/eval.txt

Patch 7.4.1115

Problem: MS-Windows: make clean in testdir doesn't clean everything.

Solution: Add command to delete X\* directories. (Ken Takata)

Files: src/testdir/Make\_dos.mak

Patch 7.4.1116

Problem: delete(x, 'rf') does not delete files starting with a dot.

Solution: Also delete files starting with a dot.

Files: src/misc1.c, src/fileio.c, src/vim.h

Patch 7.4.1117 (after 7.4.1116)

Problem: No longer get "." and ".." in directory list.

Solution: Do not skip "." and ".." unless EW\_DODOT is set.

Files: src/misc1.c

Patch 7.4.1118

Problem: Tests hang in 24 line terminal.

Solution: Set the 'more' option off.

Files: src/testdir/runtest.vim

Patch 7.4.1119

Problem: argidx() has a wrong value after ":%argdelete". (Yegappan  
Lakshmanan)

Solution: Correct the value of w\_arg\_idx. Add a test.

Files: src/ex\_cmds2.c, src/testdir/test\_arglist.vim,

src/testdir/Make\_all.mak

Patch 7.4.1120

Problem: delete(x, 'rf') fails if a directory is empty. (Lcd)

Solution: Ignore not finding matches in an empty directory.

Files: src/fileio.c, src/misc1.c, src/vim.h, src/testdir/test\_delete.vim

Patch 7.4.1121

Problem: test\_expand leaves files behind.

Solution: Edit another file before deleting, otherwise the swap file remains.

Files: src/testdir/test\_expand.vim

Patch 7.4.1122

Problem: Test 92 and 93 fail when using gvim on a system with a non utf-8 locale.

Solution: Avoid using .gvimrc by adding -U NONE. (Yukihiro Nakadaira)

Files: src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak,  
src/testdir/Make\_vms.mms, src/testdir/Makefile

Patch 7.4.1123

Problem: Using ":argadd" when there are no arguments results in the second argument to be the current one. (Yegappan Lakshmanan)

Solution: Correct the w\_arg\_idx value.

Files: src/ex\_cmds2.c, src/testdir/test\_arglist.vim

Patch 7.4.1124

Problem: MS-Windows: dead key behavior is not ideal.

Solution: Handle dead keys differently when not in Insert or Select mode. (John Wellesz, closes #399)

Files: src/gui\_w48.c

Patch 7.4.1125

Problem: There is no perleval().

Solution: Add perleval(). (Damien)

Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/eval.c,  
src/if\_perl.xs, src/proto/if\_perl.pro, src/testdir/Make\_all.mak,  
src/testdir/test\_perl.vim

Patch 7.4.1126

Problem: Can only get the directory of the current window.

Solution: Add window and tab arguments to getcwd() and haslocaldir(). (Thinca, Hirohito Higashi)

Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_getcwd.in, src/testdir/test\_getcwd.ok,  
runtime/doc/eval.txt, patching file src/eval.c

Patch 7.4.1127

Problem: Both old and new style tests for Perl.

Solution: Merge the old tests with the new style tests.

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_perl.in,  
src/testdir/test\_perl.ok, src/testdir/test\_perl.vim

Patch 7.4.1128

Problem: MS-Windows: delete() does not recognize junctions.

Solution: Add mch\_isreaddir() for MS-Windows. Update mch\_is\_symbolic\_link(). (Ken Takata)

Files: src/fileio.c, src/os\_win32.c, src/proto/os\_win32.pro

Patch 7.4.1129

Problem: Python None value can't be converted to a Vim value.

Solution: Just use zero. (Damien)

Files: src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok,

Patch 7.4.1130

Problem: Memory leak in :vimgrep.  
Solution: Call FreeWild(). (Yegappan Lakshmanan)  
Files: src/quickfix.c

Patch 7.4.1131

Problem: New lines in the viminfo file are dropped.  
Solution: Copy lines starting with "|". Fix that when using :rviminfo in a  
function global variables were restored as function-local  
variables.  
Files: src/eval.c, src/structs.h, src/ex\_cmds.c, src/misc2.c,  
src/proto/misc2.pro, src/testdir/test\_viminfo.vim,  
src/testdir/Make\_all.mak, src/testdir/test74.in,  
src/testdir/test74.ok

Patch 7.4.1132

Problem: Old style tests for the argument list.  
Solution: Add more new style tests. (Yegappan Lakshmanan)  
Files: src/testdir/test\_arglist.vim, src/testdir/test\_argument\_0count.in,  
src/testdir/test\_argument\_0count.ok,  
src/testdir/test\_argument\_count.in, src/Makefile,  
src/testdir/test\_argument\_count.ok, src/testdir/Make\_all.mak

Patch 7.4.1133

Problem: Generated function prototypes still have \_\_ARGS().  
Solution: Generate function prototypes without \_\_ARGS().  
Files: src/Makefile, src/if\_ruby.c, src/os\_win32.c,  
src/proto/blowfish.pro, src/proto/buffer.pro,  
src/proto/charset.pro, src/proto/crypt.pro,  
src/proto/crypt\_zip.pro, src/proto/diff.pro,  
src/proto/digraph.pro, src/proto/edit.pro, src/proto/eval.pro,  
src/proto/ex\_cmds2.pro, src/proto/ex\_cmds.pro,  
src/proto/ex\_docmd.pro, src/proto/ex\_eval.pro,  
src/proto/ex\_getln.pro, src/proto/fileio.pro, src/proto/fold.pro,  
src/proto/getchar.pro, src/proto/gui\_athena.pro,  
src/proto/gui\_beval.pro, src/proto/gui\_gtk\_gresources.pro,  
src/proto/gui\_gtk.pro, src/proto/gui\_gtk\_x11.pro,  
src/proto/gui\_mac.pro, src/proto/gui\_motif.pro,  
src/proto/gui\_photon.pro, src/proto/gui.pro,  
src/proto/gui\_wl6.pro, src/proto/gui\_w32.pro,  
src/proto/gui\_x11.pro, src/proto/gui\_xmdlg.pro,  
src/proto/hangulin.pro, src/proto/hardcopy.pro,  
src/proto/hashtab.pro, src/proto/if\_cscope.pro,  
src/proto/if\_lua.pro, src/proto/if\_mzsch.pro,  
src/proto/if\_ole.pro, src/proto/if\_perl.pro,  
src/proto/if\_perlsfio.pro, src/proto/if\_python3.pro,  
src/proto/if\_python.pro, src/proto/if\_ruby.pro,  
src/proto/if\_tcl.pro, src/proto/if\_xcmdsrv.pro,  
src/proto/main.pro, src/proto/mark.pro, src/proto/mbyte.pro,  
src/proto/memfile.pro, src/proto/memline.pro, src/proto/menu.pro,  
src/proto/message.pro, src/proto/misc1.pro, src/proto/misc2.pro,  
src/proto/move.pro, src/proto/netbeans.pro, src/proto/normal.pro,  
src/proto/ops.pro, src/proto/option.pro, src/proto/os\_amiga.pro,  
src/proto/os\_beos.pro, src/proto/os\_mac\_conv.pro,  
src/proto/os\_msdos.pro, src/proto/os\_mswin.pro,  
src/proto/os\_qnx.pro, src/proto/os\_unix.pro, src/proto/os\_vms.pro,  
src/proto/os\_win16.pro, src/proto/os\_win32.pro,  
src/proto/popupmenu.pro, src/proto/pty.pro, src/proto/quickfix.pro,  
src/proto/regexp.pro, src/proto/screen.pro, src/proto/search.pro,

src/proto/sha256.pro, src/proto/spell.pro, src/proto/syntax.pro,  
src/proto/tag.pro, src/proto/termlib.pro, src/proto/term.pro,  
src/proto/ui.pro, src/proto/undo.pro, src/proto/version.pro,  
src/proto/winclip.pro, src/proto/window.pro,  
src/proto/workshop.pro

Patch 7.4.1134

Problem: The arglist test fails on MS-Windows.  
Solution: Only check for failure of argedit on Unix.  
Files: src/testdir/test\_arglist.vim

Patch 7.4.1135

Problem: One more arglist test fails on MS-Windows.  
Solution: Don't edit "Y" after editing "y".  
Files: src/testdir/test\_arglist.vim

Patch 7.4.1136

Problem: Wrong argument to assert\_exception() causes a crash. (reported by Coverity)  
Solution: Check for NULL pointer. Add a test.  
Files: src/eval.c, src/testdir/test\_assert.vim

Patch 7.4.1137

Problem: Illegal memory access when using :copen and :cclose.  
Solution: Avoid that curbuf is invalid. (suggestion by Justin M. Keyes)  
Add a test.  
Files: src/window.c, src/testdir/test\_quickfix.vim

Patch 7.4.1138

Problem: When running gvim in the foreground some icons are missing.  
(Taylor Venable)  
Solution: Move the call to gui\_gtk\_register\_resource(). (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

Patch 7.4.1139

Problem: MS-Windows: getftype() returns "file" for symlink to directory.  
Solution: Make it return "dir". (Ken Takata)  
Files: src/os\_mswin.c

Patch 7.4.1140

Problem: Recognizing <sid> does not work when the language is Turkish.  
(Christian Brabandt)  
Solution: Use MB\_STNICMP() instead of STNICMP().  
Files: src/eval.c

Patch 7.4.1141

Problem: Using searchpair() with a skip expression that uses syntax highlighting sometimes doesn't work. (David Fishburn)  
Solution: Reset next\_match\_idx. (Christian Brabandt)  
Files: src/syntax.c

Patch 7.4.1142

Problem: Cannot define keyword characters for a syntax file.  
Solution: Add the ":syn iskeyword" command. (Christian Brabandt)  
Files: runtime/doc/options.txt, runtime/doc/syntax.txt, src/buffer.c,  
src/option.c, src/structs.h, src/syntax.c,  
src/testdir/Make\_all.mak, src/testdir/test\_syntax.vim

Patch 7.4.1143

Problem: Can't sort on floating point numbers.  
Solution: Add the "f" flag to ":sort". (Alex Jakushev) Also add the "f" flag to sort().

Files: runtime/doc/change.txt, src/ex\_cmds.c, src/testdir/test\_sort.vim,  
src/testdir/test57.in, src/testdir/test57.ok, src/eval.c

Patch 7.4.1144 (after 7.4.1143)

Problem: Can't build on several systems.

Solution: Include float.h. (Christian Robinson, closes #570 #571)

Files: src/ex\_cmds.c

Patch 7.4.1145

Problem: Default features are conservative.

Solution: Make the default feature set for most of today's systems "huge".

Files: src/feature.h, src/configure.in, src/auto/configure

Patch 7.4.1146

Problem: Can't build with Python 3 interface using MingW.

Solution: Update the Makefile. (Yasuhiro Matsumoto, Ken Takata)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1147

Problem: Conflict for "chartab". (Kazunobu Kuriyama)

Solution: Rename the global one to something less obvious. Move it into  
src/chartab.c.

Files: src/macros.h, src/globals.h, src/charset.c, src/main.c,  
src/option.c, src/screen.c, src/vim.h

Patch 7.4.1148

Problem: Default for MingW and Cygwin is still "normal".

Solution: Use "huge" as default. (Ken Takata)

Files: src/Make\_cyg\_ming.mak, src/Make\_mvc.mak

Patch 7.4.1149 (after 7.4.1013)

Problem: Using the local value of 'errorformat' causes more problems than  
it solves.

Solution: Revert 7.4.1013.

Files: runtime/doc/quickfix.txt, src/quickfix.c

Patch 7.4.1150

Problem: 'langmap' applies to the first character typed in Select mode.  
(David Watson)

Solution: Check for SELECTMODE. (Christian Brabandt, closes #572)

Add the 'x' flag to feedkeys().

Files: src/getchar.c, src/normal.c, src/testdir/test\_langmap.vim,  
src/ex\_docmd.c, src/proto/ex\_docmd.pro, src/testdir/Make\_all.mak,  
runtime/doc/eval.txt

Patch 7.4.1151 (after 7.4.1150)

Problem: Missing change to eval.c

Solution: Also change feedkeys().

Files: src/eval.c

Patch 7.4.1152

Problem: Langmap test fails with normal build.

Solution: Check for +langmap feature.

Files: src/testdir/test\_langmap.vim

Patch 7.4.1153

Problem: Autocommands triggered by quickfix cannot always get the current  
title value.

Solution: Call qf\_fill\_buffer() later. (Christian Brabandt)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1154

Problem: No support for JSON.  
Solution: Add jsonencode() and jsondecode(). Also add v:false, v:true, v:null and v:none.  
Files: src/json.c, src/eval.c, src/proto.h, src/structs.h, src/vim.h, src/if\_lua.c, src/if\_mzsch.c, src/if\_ruby.c, src/if\_py\_both.h, src/globals.h, src/Makefile, src/Make\_bc3.mak, src/Make\_bc5.mak, src/Make\_cyg\_ming.mak, src/Make\_dice.mak, src/Make\_ivc.mak, src/Make\_manx.mak, src/Make\_morph.mak, src/Make\_mvc.mak, src/Make\_sas.mak, src/Make\_vms.mms, src/proto/json.pro, src/proto/eval.pro, src/testdir/test\_json.vim, src/testdir/test\_alot.vim, Filelist, runtime/doc/eval.txt

#### Patch 7.4.1155

Problem: Build with normal features fails.  
Solution: Always define dict\_lookup().  
Files: src/eval.c

#### Patch 7.4.1156

Problem: Coverity warns for NULL pointer and ignoring return value.  
Solution: Check for NULL pointer. When dict\_add() returns FAIL free the item.  
Files: src/json.c

#### Patch 7.4.1157

Problem: type() does not work for v:true, v:none, etc.  
Solution: Add new type numbers.  
Files: src/eval.c, src/testdir/test\_json.vim, src/testdir/test\_viml.vim

#### Patch 7.4.1158

Problem: Still using \_\_ARGS().  
Solution: Remove \_\_ARGS() from eval.c  
Files: src/eval.c

#### Patch 7.4.1159

Problem: Automatically generated function prototypes use \_\_ARGS.  
Solution: Remove \_\_ARGS from osdef.sh.  
Files: src/osdef.sh, src/osdef1.h.in, src/osdef2.h.in

#### Patch 7.4.1160

Problem: No error for jsondecode('').  
Solution: Give an error message for missing double quote.  
Files: src/json.c

#### Patch 7.4.1161

Problem: ":argadd" without argument is supposed to add the current buffer name to the arglist.  
Solution: Make it work as documented. (Coot, closes #577)  
Files: src/ex\_cmds.h, src/ex\_cmds2.c, src/testdir/test\_arglist.vim

#### Patch 7.4.1162

Problem: Missing error number in MzScheme. (Dominique Pelle)  
Solution: Add a proper error number.  
Files: src/if\_mzsch.c

#### Patch 7.4.1163

Problem: Expressions "0 + v:true" and "' . v:true" cause an error.  
Solution: Return something sensible when using a special variable as a number or as a string. (suggested by Damien)  
Files: src/eval.c, src/testdir/test\_viml.vim

#### Patch 7.4.1164

Problem: No tests for comparing special variables. Error in jsondecode() not reported. test\_json does not work with Japanese system.

Solution: Set scriptencoding. (Ken Takata) Add a few more tests. Add error.  
Files: src/json.c, src/testdir/test\_viml.vim, src/testdir/test\_json.vim

Patch 7.4.1165

Problem: When defining DYNAMIC\_ICONV\_DLL in the makefile, the build fails.  
Solution: Add #ifdef's. (Taro Muraoka) Try the newer version first.  
Files: src/mbyte.c, src/os\_win32.c

Patch 7.4.1166

Problem: Can't encode a Funcref into JSON. jsonencode() doesn't handle the same list or dict twice properly. (Nikolai Pavlov)  
Solution: Give an error. Reset copyID when the list or dict is finished.  
Files: src/json.c, src/proto/json.pro, src/testdir/test\_json.vim

Patch 7.4.1167

Problem: No tests for "is" and "isnot" with the new variables.  
Solution: Add tests.  
Files: src/testdir/test\_viml.vim

Patch 7.4.1168

Problem: This doesn't give the right result: eval(string(v:true)). (Nikolai Pavlov)  
Solution: Make the string "v:true" instead of "true".  
Files: src/eval.c, src/testdir/test\_viml.vim

Patch 7.4.1169

Problem: The socket I/O is intertwined with the netbeans code.  
Solution: Start refactoring the netbeans communication to split off the socket I/O. Add the +channel feature.  
Files: src/channel.c, src/netbeans.c, src/proto/channel.pro, src/proto/netbeans.pro, src/proto/gui\_w32.pro, src/gui\_w32.c, src/eval.c, src/os\_mswin.c, src/ui.c, src/macros.h, Makefile, src/proto.h, src/feature.h, src/os\_unix.c, src/vim.h, src/configure.in, src/auto/configure, src/config.mk.in, src/config.aap.in, src/config.h.in, src/Make\_bc5.mak, src/Make\_cyg\_ming.mak, src/Make\_mvc.mak

Patch 7.4.1170 (after 7.4.1169)

Problem: Missing changes in src/Makefile, Filelist.  
Solution: Add the missing changes.  
Files: Filelist, src/Makefile

Patch 7.4.1171

Problem: Makefile dependencies are outdated.  
Solution: Run "make depend". Add GTK resource dependencies.  
Files: src/Makefile

Patch 7.4.1172 (after 7.4.1169)

Problem: Configure is overly positive.  
Solution: Insert "test".  
Files: src/configure.in, src/auto/configure

Patch 7.4.1173 (after 7.4.1168)

Problem: No test for new behavior of v:true et al.  
Solution: Add a test.  
Files: src/testdir/test\_viml.vim

Patch 7.4.1174

Problem: Netbeans contains dead code inside #ifndef INIT\_SOCKETS.  
Solution: Remove the dead code.  
Files: src/netbeans.c

Patch 7.4.1175 (after 7.4.1169)

Problem: Can't build with Mingw and Cygwin.  
Solution: Remove extra "endif". (Christian J. Robinson)  
Files: src/Make\_cyg\_ming.mak

Patch 7.4.1176

Problem: Missing change to proto file.  
Solution: Update the proto file. (Charles Cooper)  
Files: src/proto/gui\_w32.pro

Patch 7.4.1177

Problem: The +channel feature is not in :version output. (Tony Mechelynck)  
Solution: Add the feature string.  
Files: src/version.c

Patch 7.4.1178

Problem: empty() doesn't work for the new special variables.  
Solution: Make empty() work. (Damien)  
Files: src/eval.c, src/testdir/test\_viml.vim

Patch 7.4.1179

Problem: test\_writefile and test\_viml do not delete the tempfile.  
Solution: Delete the tempfile. (Charles Cooper) Add DeleteTheScript().  
Files: src/testdir/test\_writefile.in, src/testdir/test\_viml.vim

Patch 7.4.1180

Problem: Crash with invalid argument to glob2regpat().  
Solution: Check for NULL. (Justin M. Keyes, closes #596) Add a test.  
Files: src/eval.c, src/testdir/test\_glob2regpat.vim,  
src/testdir/test\_alot.vim

Patch 7.4.1181

Problem: free\_tv() can't handle special variables. (Damien)  
Solution: Add the variable type.  
Files: src/eval.c, src/testdir/test\_viml.vim

Patch 7.4.1182

Problem: Still socket code intertwined with netbeans.  
Solution: Move code from netbeans.c to channel.c  
Files: src/channel.c, src/netbeans.c, src/proto/channel.pro,  
src/proto/netbeans.pro, src/gui.c, src/gui\_w48.c

Patch 7.4.1183 (after 7.4.1182)

Problem: MS-Windows build is broken.  
Solution: Remove init in wrong place.  
Files: src/channel.c

Patch 7.4.1184 (after 7.4.1182)

Problem: MS-Windows build is still broken.  
Solution: Change nbsock to ch\_fd.  
Files: src/channel.c

Patch 7.4.1185

Problem: Can't build with TCL on some systems.  
Solution: Rename the channel\_ functions.  
Files: src/if\_tcl.c

Patch 7.4.1186

Problem: Error messages for security context are hard to translate.  
Solution: Use one string with %s. (Ken Takata)  
Files: src/os\_unix.c



## Patch 7.4.1187

Problem: MS-Windows channel code only supports one channel. Doesn't build without netbeans support.  
Solution: Get the channel index from the socket in the message. Closes #600.  
Files: src/channel.c, src/netbeans.c, src/gui\_w48.c,  
src/proto/channel.pro, src/proto/netbeans.pro

## Patch 7.4.1188

Problem: Using older JSON standard.  
Solution: Update the link. Adjust the text a bit.  
Files: src/json.c, runtime/doc/eval.txt

## Patch 7.4.1189 (after 7.4.1165)

Problem: Using another language on MS-Windows does not work. (Yongwei Wu)  
Solution: Undo the change to try loading libintl-8.dll first.  
Files: src/os\_win32.c

## Patch 7.4.1190

Problem: On OSX the default flag for dlopen() is different.  
Solution: Add RTLD\_LOCAL in the configure check. (sv99, closes #604)  
Files: src/configure.in, src/auto/configure

## Patch 7.4.1191

Problem: The channel feature isn't working yet.  
Solution: Add the connect(), disconnect(), sendexpr() and sendraw() functions. Add initial documentation. Add a demo server.  
Files: src/channel.c, src/eval.c, src/proto/channel.pro,  
src/proto/eval.pro, runtime/doc/channel.txt, runtime/doc/eval.txt,  
runtime/doc/Makefile, runtime/tools/demoserver.py

## Patch 7.4.1192

Problem: Can't build with FEAT\_EVAL but without FEAT\_MBYTE. (John Marriott)  
Solution: Add #ifdef for FEAT\_MBYTE.  
Files: src/json.c

## Patch 7.4.1193

Problem: Can't build the channel feature on MS-Windows.  
Solution: Add #ifdef HAVE\_POLL.  
Files: src/channel.c

## Patch 7.4.1194

Problem: Compiler warning for not using return value of fwrite().  
Solution: Return OK/FAIL. (Charles Campbell)  
Files: src/channel.c, src/proto/channel.pro

## Patch 7.4.1195

Problem: The channel feature does not work in the MS-Windows console.  
Solution: Add win32 console support. (Yasuhiro Matsumoto)  
Files: src/channel.c, src/gui\_w32.c, src/os\_mswin.c, src/os\_win32.c,  
src/proto/gui\_w32.pro, src/proto/os\_mswin.pro, src/vim.h

## Patch 7.4.1196

Problem: Still using \_\_ARGS.  
Solution: Remove \_\_ARGS in several files. (script by Hirohito Higashi)  
Files: src/arabic.c, src/buffer.c, src/charset.c, src/crypt\_zip.c,  
src/diff.c, src/digraph.c, src/edit.c, src/ex\_cmds.c,  
src/ex\_cmds2.c, src/ex\_docmd.c

## Patch 7.4.1197

Problem: Still using \_\_ARGS.  
Solution: Remove \_\_ARGS in several files. (script by Hirohito Higashi)

Files: src/ex\_eval.c, src/ex\_getln.c, src/farsi.c, src/fileio.c,  
src/fold.c, src/getchar.c, src/gui.c, src/gui\_at\_fs.c,  
gui\_at\_sb.c, src/gui\_athena.c, src/gui\_beval.c, src/gui\_motif.c,  
src/gui\_w32.c, src/gui\_w48.c

#### Patch 7.4.1198

Problem: Still using \_\_ARGS.

Solution: Remove \_\_ARGS in several files. (script by Hirohito Higashi)  
Also remove use of HAVE\_STDARG\_H.

Files: src/gui\_x11.c, src/hangulin.c, src/hardcopy.c, src/hashtab.c,  
src/if\_cscope.c, src/if\_python3.c, src/if\_sniff.c,  
src/if\_xcmdsrv.c, src/main.c, src/mark.c, src/mbyte.c,  
src/memfile.c, src/memfile\_test.c, src/memline.c, src/menu.c,  
src/message.c, src/misc1.c, src/misc2.c, src/move.c,  
src/netbeans.c, src/normal.c

#### Patch 7.4.1199

Problem: Still using \_\_ARGS.

Solution: Remove \_\_ARGS in several files. (script by Hirohito Higashi)

Files: src/ops.c, src/option.c, src/os\_amiga.c, src/os\_mac\_conv.c,  
src/os\_unix.c, src/os\_vms.c, src/os\_w32exe.c, src/popupmenu.c,  
src/pty.c, src/quickfix.c, src/regexp.c, src/regexp\_nfa.c,  
src/screen.c, src/search.c, src/sha256.c, src/spell.c,  
src/syntax.c, src/tag.c, src/term.c, src/termlib.c, src/ui.c,  
src/undo.c, src/version.c, src/window.c

#### Patch 7.4.1200

Problem: Still using \_\_ARGS.

Solution: Remove \_\_ARGS in several files. (script by Hirohito Higashi)

Files: src/blowfish.c, src/ex\_cmds2.c, src/ex\_getln.c, src/fold.c,  
src/gui\_beval.c, src/gui\_w32.c, src/os\_unix.c, src/os\_win16.c,  
src/pty.c, src/regexp.c, src/syntax.c, src/xpm\_w32.c,  
src/ex\_cmds.h, src/globals.h, src/gui\_at\_sb.h, src/gui\_beval.h,  
src/if\_cscope.h, src/if\_sniff.h, src/nbdebug.h, src/os\_unix.h,  
src/proto.h, src/structs.h, src/vim.h, src/xpm\_w32.h,  
src/if\_perl.xs, src/proto/if\_lua.pro, src/proto/pty.pro,  
runtime/tools/xcmdsrv\_client.c,  
src/Makefile

#### Patch 7.4.1201

Problem: One more file still using \_\_ARGS.

Solution: Remove \_\_ARGS in the last file. (script by Hirohito Higashi)

Files: src/gui\_at\_sb.c

#### Patch 7.4.1202

Problem: Still one more file still using \_\_ARGS.

Solution: Remove \_\_ARGS in the last file. (script by Hirohito Higashi)  
(closes #612)

Files: src/proto/os\_mac\_conv.pro, src/os\_mac\_conv.c, src/Makefile

#### Patch 7.4.1203

Problem: Still more files still using \_\_ARGS.

Solution: Remove \_\_ARGS in really the last files.

Files: src/proto/if\_mzsch.pro, src/if\_mzsch.c, src/vim.h,  
src/proto/gui\_gtk\_gresources.pro, src/proto/gui\_mac.pro,  
src/proto/if\_ole.pro, src/proto/os\_qnx.pro, src/Makefile

#### Patch 7.4.1204

Problem: Latin1 characters cause encoding conversion.

Solution: Remove the characters.

Files: src/gui\_motif.c

## Patch 7.4.1205

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/arabic.c, src/blowfish.c, src/buffer.c, src/channel.c,  
src/charset.c, src/crypt.c, src/crypt\_zip.c, src/diff.c,  
src/digraph.c, src/edit.c, src/eval.c

## Patch 7.4.1206

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_eval.c,  
src/ex\_getln.c, src/farsi.c, src/fileio.c

## Patch 7.4.1207

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/fold.c, src/getchar.c, src/gui\_at\_fs.c, src/gui\_athena.c,  
src/gui\_at\_sb.c, src/gui\_beval.c, src/gui.c, src/gui\_gtk.c,  
src/gui\_gtk\_x11.c, src/gui\_mac.c, src/gui\_motif.c

## Patch 7.4.1208

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/gui\_photon.c, src/gui\_w32.c, src/gui\_w48.c, src/gui\_x11.c,  
src/hangulin.c, src/hardcopy.c, src/hashtab.c, src/if\_cscope.c,  
src/if\_mzsch.c, src/if\_perlsfio.c, src/if\_python.c,  
src/if\_python3.c, src/if\_ruby.c, src/if\_sniff.c, src/if\_tcl.c,  
src/if\_xcmdsrv.c, src/integration.c

## Patch 7.4.1209 (after 7.4.1207)

Problem: Can't build with Athena. (Elimar Riesebieter)

Solution: Fix function declarations.

Files: src/gui\_athena.c, src/gui\_x11.c, src/gui\_at\_sb.c, src/gui\_at\_fs.c

## Patch 7.4.1210

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/main.c, src/mark.c, src/mbyte.c, src/memfile.c,  
src/memfile\_test.c, src/memline.c, src/menu.c, src/message.c

## Patch 7.4.1211

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/misc1.c, src/misc2.c, src/move.c, src/netbeans.c,  
src/normal.c, src/ops.c, src/option.c

## Patch 7.4.1212 (after 7.4.1207)

Problem: Can't build with Motif.

Solution: Fix function declaration. (Dominique Pelle)

Files: src/gui\_motif.c

## Patch 7.4.1213

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/os\_amiga.c, src/os\_mac\_conv.c, src/os\_msdos.d, src/os\_mswin.c,

```
src/os_qnx.c, src/os_unix.c, src/os_vms.c, src/os_win16.c,
src/os_win32.c, src/popupmnu.c, src/pty.c, src/quickfix.c,
src/regexp.c, src/regexp_nfa.c, src/screen.c
```

#### Patch 7.4.1214

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/search.c, src/sha256.c, src/spell.c, src/syntax.c, src/tag.c,  
src/term.c, src/termlib.c, src/ui.c, src/undo.c

#### Patch 7.4.1215

Problem: Using old style function declarations.

Solution: Change to new style function declarations. (script by Hirohito Higashi)

Files: src/version.c, src/winclip.c, src/window.c, src/workshop.c,  
src/xpm\_w32.c, runtime/doc/doctags.c,  
runtime/tools/xcmdsrv\_client.c, src/po/sjiscorr.c, src/xxd/xxd.c

#### Patch 7.4.1216

Problem: Still using HAVE\_STDARG\_H.

Solution: Assume it's always defined.

Files: src/eval.c, src/misc2.c, src/vim.h, src/proto.h, src/configure.in,  
src/auto/configure, config.h.in, src/os\_amiga.h, src/os\_msdos.h,  
src/os\_vms\_conf.h, src/os\_win32.h

#### Patch 7.4.1217

Problem: Execution of command on channel doesn't work yet.

Solution: Implement the "ex" and "normal" commands.

Files: src/channel.c, src/proto/channel.pro, src/misc2.c, src/eval.c,  
src/ex\_docmd.c, src/proto/ex\_docmd.pro, src/feature.h

#### Patch 7.4.1218

Problem: Missing change in configure. More changes for function style.

Solution: Avoid the typos.

Files: src/configure.in, src/config.h.in, runtime/tools/ccfilter.c,  
src/os\_msdos.c

#### Patch 7.4.1219

Problem: Build fails with +channel but without +float.

Solution: Add #ifdef.

Files: src/ex\_cmds.c

#### Patch 7.4.1220

Problem: Warnings for unused variables in tiny build. (Tony Mechelynck)

Solution: Move declarations inside #ifdef. (Hirohito Higashi)

Files: src/ex\_cmds.c

#### Patch 7.4.1221

Problem: Including netbeans and channel support in small and tiny builds.  
Build fails with some interfaces.

Solution: Only include these features in small build and above. Let  
configure fail if trying to enable an interface that won't build.

Files: src/configure.in, src/auto/configure

#### Patch 7.4.1222

Problem: ":normal" command and others missing in tiny build.

Solution: Graduate FEAT\_EX\_EXTRA.

Files: src/feature.h, src/charset.c, src/eval.c, src/ex\_cmds.c,  
src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/getchar.c,  
src/normal.c, src/ui.c, src/version.c, src/globals.h

## Patch 7.4.1223

Problem: Crash when setting v:errors to a number.  
Solution: Free the typval without assuming its type. (Yasuhiro Matsumoto)  
Files: src/eval.c, src/testdir/test\_assert.vim

## Patch 7.4.1224

Problem: Build problems with GTK on BSD. (Mike Williams)  
Solution: Don't use "\$<". Skip building gui\_gtk\_gresources.h when it doesn't work. (Kazunobu Kuriyama)  
Files: src/Makefile

## Patch 7.4.1225

Problem: Still a few old style function declarations.  
Solution: Make them new style. (Hirohito Higashi)  
Files: runtime/tools/blink.c, src/eval.c, src/ex\_cmds2.c, src/ex\_getln.c, src/fileio.c, src/gui\_w32.c, src/gui\_x11.c, src/if\_perl.xs, src/os\_unix.c, src/po/sjiscorr.c, src/pty.c

## Patch 7.4.1226

Problem: GRESOURCE\_HDR is unused.  
Solution: Remove it. (Kazunobu Kuriyama)  
Files: src/configure.in, src/auto/configure, src/config.mk.in

## Patch 7.4.1227

Problem: Compiler warnings.  
Solution: Add UNUSED. Add type cast. (Yegappan Lakshmanan)  
Files: src/getchar.c, src/os\_macosx.m

## Patch 7.4.1228

Problem: copy() and deepcopy() fail with special variables. (Nikolai Pavlov)  
Solution: Make it work. Add a test. Closes #614.  
Files: src/eval.c, src/testdir/test\_viml.vim

## Patch 7.4.1229

Problem: "eval" and "expr" channel commands don't work yet.  
Solution: Implement them. Update the error numbers. Also add "redraw".  
Files: src/channel.c, src/eval.c, src/json.c, src/ex\_docmd.c, src/proto/channel.pro, src/proto/json.pro, src/proto/ex\_docmd.pro, runtime/doc/channel.txt

## Patch 7.4.1230

Problem: Win32: opening a channel may hang. Not checking for messages while waiting for characters.  
Solution: Add a zero timeout. Call parse\_queued\_messages(). (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

## Patch 7.4.1231

Problem: JSON messages are not parsed properly.  
Solution: Queue received messages.  
Files: src/eval.c, src/channel.c, src/json.c, src/proto/eval.pro, src/proto/channel.pro, src/proto/json.pro, src/structs.h

## Patch 7.4.1232

Problem: Compiler warnings when the Sniff feature is enabled.  
Solution: Add UNUSED.  
Files: src/gui\_gtk\_x11.c

## Patch 7.4.1233

Problem: Channel command may cause a crash.  
Solution: Check for NULL argument. (Damien)

Files: src/channel.c

Patch 7.4.1234

Problem: Demo server only runs with Python 2.  
Solution: Make it run with Python 3 as well. (Ken Takata)  
Files: runtime/tools/demoserver.py

Patch 7.4.1235 (after 7.4.1231)

Problem: Missing change to eval.c.  
Solution: Include that change.  
Files: src/eval.c

Patch 7.4.1236

Problem: When "syntax manual" was used switching between buffers removes the highlighting.  
Solution: Set the syntax option without changing the value. (Anton Lindqvist)  
Files: runtime/syntax/manual.vim

Patch 7.4.1237

Problem: Can't translate message without adding a line break.  
Solution: Join the two parts of the message.  
Files: src/memline.c

Patch 7.4.1238

Problem: Can't handle two messages right after each other.  
Solution: Find the end of the JSON. Read more when incomplete. Add a C test for the JSON decoding.  
Files: src/channel.c, src/json.c, src/proto/json.pro, src/eval.c, src/Makefile, src/json\_test.c, src/memfile\_test.c, src/structs.h

Patch 7.4.1239

Problem: JSON message after the first one is dropped.  
Solution: Put remainder of message back in the queue.  
Files: src/channel.c

Patch 7.4.1240

Problem: Visual studio tools are noisy.  
Solution: Suppress startup info. (Mike Williams)  
Files: src/GvimExt/Makefile, src/Make\_mvc.mak, src/tee/Make\_mvc.mak

Patch 7.4.1241 (after 7.4.1238)

Problem: Missing change in Makefile due to diff mismatch  
Solution: Update the list of object files.  
Files: src/Makefile

Patch 7.4.1242 (after 7.4.1238)

Problem: json\_test fails without the eval feature.  
Solution: Add #ifdef.  
Files: src/json\_test.c

Patch 7.4.1243

Problem: Compiler warning for uninitialized variable.  
Solution: Initialize it. (Elias Diem)  
Files: src/json.c

Patch 7.4.1244

Problem: The channel functions don't sort together.  
Solution: Use a common "ch\_" prefix.  
Files: src/eval.c, runtime/doc/eval.txt, runtime/tools/demoserver.py

Patch 7.4.1245

Problem: File missing from distribution.  
Solution: Add json\_test.c.  
Files: Filelist

#### Patch 7.4.1246

Problem: The channel functionality isn't tested.  
Solution: Add a test using a Python test server.  
Files: src/channel.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, src/testdir/test\_channel.py,  
src/testdir/Make\_all.mak

#### Patch 7.4.1247

Problem: The channel test doesn't run on MS-Windows.  
Solution: Make it work on the MS-Windows console. (Ken Takata)  
Files: src/testdir/test\_channel.py, src/testdir/test\_channel.vim

#### Patch 7.4.1248

Problem: Can't reliably stop the channel test server. Can't start the server if the python file is not executable.  
Solution: Use "pkill" instead of "killall". Run the python file as an argument instead of as an executable.  
Files: src/testdir/test\_channel.vim

#### Patch 7.4.1249

Problem: Crash when the process a channel is connected to exits.  
Solution: Use the file descriptor properly. Add a test. (Damien)  
Also add a test for eval().  
Files: src/channel.c, src/testdir/test\_channel.py,  
src/testdir/test\_channel.vim

#### Patch 7.4.1250

Problem: Running tests in shadow directory fails.  
Solution: Also link testdir/\*.py  
Files: src/Makefile

#### Patch 7.4.1251

Problem: New test file missing from distribution.  
Solution: Add src/testdir/\*.py.  
Files: Filelist

#### Patch 7.4.1252

Problem: The channel test server may receive two messages concatenated.  
Solution: Split the messages.  
Files: src/testdir/test\_channel.py

#### Patch 7.4.1253

Problem: Python test server not displaying second of two commands. Solaris doesn't have "pkill --full".  
Solution: Also echo the second command. Use "pkill -f".  
Files: src/testdir/test\_channel.py, src/testdir/test\_channel.vim

#### Patch 7.4.1254

Problem: Opening a second channel causes a crash. (Ken Takata)  
Solution: Don't re-allocate the array with channels.  
Files: src/channel.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel.py

#### Patch 7.4.1255

Problem: Crash for channel "eval" command without third argument.  
Solution: Check for missing argument.  
Files: src/channel.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel.py

## Patch 7.4.1256

Problem: On Mac sys.exit(0) doesn't kill the test server.  
Solution: Use self.server.shutdown(). (Jun Takimoto)  
Files: src/testdir/test\_channel.py

## Patch 7.4.1257

Problem: Channel test fails in some configurations.  
Solution: Add check for the +channel feature.  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1258

Problem: The channel test can fail if messages arrive later.  
Solution: Add a short sleep. (Jun Takimoto)  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1259

Problem: No test for what patch 7.3.414 fixed.  
Solution: Add a test. (Elias Diem)  
Files: src/testdir/test\_increment.vim

## Patch 7.4.1260

Problem: The channel feature doesn't work on Win32 GUI.  
Solution: Use WSAGetLastError(). (Ken Takata)  
Files: src/channel.c, src/testdir/test\_channel.vim, src/vim.h

## Patch 7.4.1261

Problem: Pending channel messages are garbage collected. Leaking memory in ch\_sendexpr(). Leaking memory for a decoded JSON string.  
Solution: Mark the message list as used. Free the encoded JSON. Don't save the JSON string.  
Files: src/eval.c, src/channel.c, src/json.c, src/proto/channel.pro

## Patch 7.4.1262

Problem: The channel callback is not invoked.  
Solution: Make a list of pending callbacks.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim

## Patch 7.4.1263

Problem: ch\_open() hangs when the server isn't running.  
Solution: Add a timeout. Use a dict to pass arguments. (Yasuhiro Matsumoto)  
Files: runtime/doc/eval.txt, runtime/doc/channel.txt, src/channel.c, src/eval.c, src/netbeans.c, src/os\_win32.c, src/proto/channel.pro, src/testdir/test\_channel.vim

## Patch 7.4.1264

Problem: Crash when receiving an empty array.  
Solution: Check for array with wrong number of arguments. (Damien)  
Files: src/channel.c, src/eval.c, src/testdir/test\_channel.py, src/testdir.test\_channel.vim

## Patch 7.4.1265

Problem: Not all channel commands are tested.  
Solution: Add a test for "normal", "expr" and "redraw".  
Files: src/testdir/test\_channel.py, src/testdir/test\_channel.vim

## Patch 7.4.1266

Problem: A BufAdd autocommand may cause an ml\_get error (Christian Brabandt)  
Solution: Increment RedrawingDisabled earlier.  
Files: src/ex\_cmds.c



## Patch 7.4.1267

Problem: Easy to miss handling all types of variables.  
Solution: Change the variable type into an enum.  
Files: src/structs.h, src/eval.c

## Patch 7.4.1268

Problem: Waittime is used as seconds instead of milliseconds. (Hirohito Higashi)  
Solution: Divide by 1000.  
Files: src/channel.c

## Patch 7.4.1269

Problem: Encoding {'key':v:none} to JSON doesn't give an error (Tyru)  
Solution: Give an error.  
Files: src/json.c, src/testdir/test\_json.vim

## Patch 7.4.1270

Problem: Warnings for missing values in switch.  
Solution: Change switch to if-else or add values.  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c

## Patch 7.4.1271

Problem: assert\_false(v:false) reports an error. (Nikolai Pavlov)  
Solution: Recognize v:true and v:false. (Closes #625)  
Files: src/eval.c, src/testdir/test\_assert.vim

## Patch 7.4.1272 (after 7.4.1270)

Problem: Using future enum value.  
Solution: Remove it.  
Files: src/if\_python.c, src/if\_python3.c

## Patch 7.4.1273 (after 7.4.1271)

Problem: assert\_false(v:false) still fails.  
Solution: Fix the typo.  
Files: src/eval.c

## Patch 7.4.1274

Problem: Cannot run a job.  
Solution: Add job\_start(), job\_status() and job\_stop(). Currently only works for Unix.  
Files: src/eval.c, src/structs.h, runtime/doc/eval.txt, src/os\_unix.c, src/proto/os\_unix.pro, src/feature.h, src/version.c, src/testdir/test\_channel.vim

## Patch 7.4.1275 (after 7.4.1274)

Problem: Build fails on MS-Windows.  
Solution: Fix wrong #ifdef.  
Files: src/eval.c

## Patch 7.4.1276

Problem: Warning for not using return value of fcntl().  
Solution: Explicitly ignore the return value.  
Files: src/fileio.c, src/channel.c, src/memfile.c, src/memline.c

## Patch 7.4.1277

Problem: Compiler can complain about missing enum value in switch with some combination of features.  
Solution: Remove #ifdefs around case statements.  
Files: src/eval.c

## Patch 7.4.1278

Problem: When jsonencode() fails it still returns something.  
Solution: Return an empty string on failure.  
Files: src/json.c, src/channel.c, src/testdir/test\_json.vim,  
src/testdir/test\_channel.vim, src/testdir/test\_channel.py

#### Patch 7.4.1279

Problem: jsonencode() is not producing strict JSON.  
Solution: Add jsencode() and jsdecode(). Make jsonencode() and jsondecode()  
strict.  
Files: src/json.c, src/json\_test.c, src/proto/json.pro, src/channel.c,  
src/proto/channel.pro, src/eval.c, src/vim.h, src/structs.h,  
runtime/doc/eval.txt, runtime/doc/channel.txt,  
src/testdir/test\_json.vim

#### Patch 7.4.1280

Problem: Missing case value.  
Solution: Add VAR\_JOB.  
Files: src/if\_python.c, src/if\_python3.c

#### Patch 7.4.1281

Problem: No test for skipping over code that isn't evaluated.  
Solution: Add a test with code that would fail when not skipped.  
Files: src/testdir/test\_viml.vim

#### Patch 7.4.1282

Problem: Crash when evaluating the pattern of ":catch" causes an error.  
(Dominique Pelle)  
Solution: Block error messages at this point.  
Files: src/ex\_eval.c

#### Patch 7.4.1283

Problem: The job feature isn't available on MS-Windows.  
Solution: Add the job feature. Fix argument of job\_stop(). (Yasuhiro  
Matsumoto)  
Files: src/eval.c, src/feature.h, src/os\_win32.c, src/proto/os\_win32.pro

#### Patch 7.4.1284 (after 7.4.1282)

Problem: Test 49 fails.  
Solution: Check for a different error message.  
Files: src/testdir/test49.vim

#### Patch 7.4.1285

Problem: Cannot measure elapsed time.  
Solution: Add reltimefloat().  
Files: src/ex\_cmds2.c, src/eval.c, src/proto/ex\_cmds2.pro,  
src/testdir/test\_reltime.vim, src/testdir/test\_alot.vim

#### Patch 7.4.1286

Problem: ch\_open() with a timeout doesn't work correctly.  
Solution: Change how select() is used. Don't give an error on timeout.  
Add a test for ch\_open() failing.  
Files: src/channel.c, src/testdir/test\_channel.vim

#### Patch 7.4.1287 (after 7.4.1286)

Problem: Channel test fails.  
Solution: Use reltimefloat().  
Files: src/testdir/test\_channel.vim

#### Patch 7.4.1288

Problem: ch\_sendexpr() does not use JS encoding.  
Solution: Use the encoding that fits the channel mode. Refuse using  
ch\_sendexpr() on a raw channel.

Files: src/channel.c, src/proto/channel.pro, src/eval.c

Patch 7.4.1289

Problem: Channel test fails on MS-Windows, connect() takes too long.

Solution: Adjust the test for MS-Windows using "waittime".

Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1290

Problem: Coverity complains about unnecessary check for NULL.

Solution: Remove the check.

Files: src/eval.c

Patch 7.4.1291

Problem: On MS-Windows the channel test server doesn't quit.

Solution: Use return instead of break. (Ken Takata)

Files: src/testdir/test\_channel.py

Patch 7.4.1292

Problem: Some compilers complain about uninitialized variable, even though all possible cases are handled. (Dominique Pelle)

Solution: Add a default initialization.

Files: src/eval.c

Patch 7.4.1293

Problem: Sometimes a channel may hang waiting for a message that was already discarded. (Ken Takata)

Solution: Store the ID of the message blocking on in the channel.

Files: src/channel.c

Patch 7.4.1294

Problem: job\_stop() only kills the started process.

Solution: Send the signal to the process group. (Olaf Dabrunz)

Files: src/os\_unix.c

Patch 7.4.1295

Problem: string(job) doesn't work well on MS-Windows.

Solution: Use the process ID. (Yasuhiro Matsumoto)

Files: src/eval.c

Patch 7.4.1296

Problem: Cursor changes column with up motion when the matchparen plugin saves and restores the cursor position. (Martin Kunev)

Solution: Make sure curswant is updated before invoking the autocommand.

Files: src/edit.c

Patch 7.4.1297

Problem: On Mac test\_channel leaves python instances running.

Solution: Use a small waittime to make ch\_open() work. (Ozaki Kiichi)

Files: src/testdir/test\_channel.vim

Patch 7.4.1298

Problem: When the channel test fails in an unexpected way the server keeps running.

Solution: Use try/catch. (Ozaki Kiichi)

Files: src/testdir/test\_channel.vim

Patch 7.4.1299

Problem: When the server sends a message with ID zero the channel handler is not invoked. (Christian J. Robinson)

Solution: Recognize zero value for the request ID. Add a test for invoking the channel handler.

Files: src/channel.c, src/testdir/test\_channel.vim,

src/testdir/test\_channel.py

Patch 7.4.1300

Problem: Cannot test CursorMovedI because there is typeahead.

Solution: Add disable\_char\_avail\_for\_testing().

Files: src/eval.c, src/getchar.c, src/globals.h,  
src/testdir/test\_cursor\_func.vim, src/testdir/README.txt

Patch 7.4.1301

Problem: Missing options in ch\_open().

Solution: Add s:chopt like in the other calls. (Ozaki Kiichi)

Files: src/testdir/test\_channel.vim

Patch 7.4.1302

Problem: Typo in struct field name. (Ken Takata)

Solution: Rename jf\_pi to jv\_pi.

Files: src/eval.c, src/os\_win32.c, src/structs.h

Patch 7.4.1303

Problem: A Funcref is not accepted as a callback.

Solution: Make a Funcref work. (Damien)

Files: src/eval.c, src/testdir/test\_channel.vim

Patch 7.4.1304

Problem: Function names are difficult to read.

Solution: Rename jsonencode to json\_encode, jsondecode to json\_decode,  
jsencode to js\_encode and jsdecode to js\_decode.

Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test\_json.vim

Patch 7.4.1305

Problem: "\%ll^#.\*" does not match on a line starting with "#".

Solution: Do not clear the start-of-line flag. (Christian Brabandt)

Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test36.in,  
src/testdir/test36.ok

Patch 7.4.1306

Problem: Job control doesn't work well on MS-Windows.

Solution: Various fixes. (Ken Takata, Ozaki Kiichi, Yukihiro Nakadaira,  
Yasuhiro Matsumoto)

Files: src/Make\_mvc.mak, src/eval.c, src/os\_unix.c, src/os\_win32.c,  
src/proto/os\_unix.pro, src/proto/os\_win32.pro, src/structs.h

Patch 7.4.1307

Problem: Some channel tests fail on MS-Windows.

Solution: Disable the failing tests temporarily.

Files: src/testdir/test\_channel.vim

Patch 7.4.1308 (after 7.4.1307)

Problem: Typo in test.

Solution: Change endif to endif.

Files: src/testdir/test\_channel.vim

Patch 7.4.1309

Problem: When a test fails not all relevant info is listed.

Solution: Add the errors to the messages.

Files: src/testdir/runtest.vim

Patch 7.4.1310

Problem: Jobs don't open a channel.

Solution: Create pipes and add them to the channel. Add ch\_logfile().  
Only Unix for now.

Files: src/channel.c, src/eval.c, src/os\_unix.c, src/structs.h,

src/gui\_w48.c, src/proto/channel.pro, src/testdir/test\_channel.vim,  
src/testdir/test\_channel\_pipe.py, runtime/doc/eval.txt

Patch 7.4.1311 (after 7.4.1310)

Problem: sock\_T is defined too late.  
Solution: Move it up.  
Files: src/vim.h

Patch 7.4.1312 (after 7.4.1311)

Problem: sock\_T is not defined without the +channel feature.  
Solution: Always define it.  
Files: src/vim.h

Patch 7.4.1313

Problem: MS-Windows: Using socket after it was closed causes an exception.  
Solution: Don't give an error when handling WM\_NETBEANS. Re-enable tests  
for MS-Windows.  
Files: src/gui\_w48.c, src/testdir/test\_channel.vim

Patch 7.4.1314

Problem: Warning for uninitialized variable.  
Solution: Initialize it. (Dominique Pelle)  
Files: src/channel.c

Patch 7.4.1315

Problem: Using a channel handle does not allow for freeing it when unused.  
Solution: Add the Channel variable type.  
Files: src/structs.h, src/channel.c, src/misc2.c, src/eval.c,  
src/if\_python.c, src/if\_python3.c, src/json.c, src/gui\_w48.c,  
src/netbeans.c, src/proto/channel.pro, src/os\_unix.c,  
src/testdir/test\_channel.py, src/testdir/test\_channel.vim

Patch 7.4.1316

Problem: Can't build MS-Windows console version. (Tux)  
Solution: Add #ifdefs.  
Files: src/eval.c

Patch 7.4.1317

Problem: MS-Windows: channel test fails.  
Solution: Temporarily disable Test\_connect\_waittime().  
Files: src/testdir/test\_channel.vim

Patch 7.4.1318

Problem: Channel with pipes doesn't work in GUI.  
Solution: Register input handlers for pipes.  
Files: src/structs.h, src/feature.h, src/channel.c, src/eval.c,  
src/os\_unix.c, src/os\_win32.c, src/gui\_w48.c, src/proto/channel.pro

Patch 7.4.1319 (after 7.4.1318)

Problem: Tests fail on MS-Windows and on Unix with GUI.  
Solution: Fix unregistering.  
Files: src/structs.h, src/channel.c, src/os\_unix.c, src/os\_win32.c,  
src/proto/channel.pro

Patch 7.4.1320

Problem: Building with Cygwin or MingW with channel but without Netbeans  
doesn't work.  
Solution: Set NETBEANS to "no" when not used.  
Files: src/Make\_cyg\_ming.mak

Patch 7.4.1321

Problem: Compiler complains about missing statement.

Solution: Add an empty statement. (Andrei Olsen)  
Files: src/os\_win32.c

Patch 7.4.1322

Problem: Crash when unletting the variable that holds the channel in a callback function. (Christian Robinson)

Solution: Increase the reference count while invoking the callback.

Files: src/eval.c, src/channel.c, src/proto/eval.pro,  
src/testdir/test\_channel.vim

Patch 7.4.1323

Problem: Do not get warnings when building with MingW.

Solution: Remove the -w flag. (Ken Takata)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1324

Problem: Channels with pipes don't work on MS-Windows.

Solution: Add pipe I/O support. (Yasuhiro Matsumoto)

Files: src/channel.c, src/os\_win32.c, src/proto/channel.pro,  
src/structs.h, src/vim.h, src/testdir/test\_channel.vim

Patch 7.4.1325

Problem: Channel test fails on difference between Unix and DOS line endings.

Solution: Strip off CR. Make assert show difference better.

Files: src/eval.c, src/channel.c

Patch 7.4.1326

Problem: Build rules are bit too complicated.

Solution: Remove -lwsock32 from Netbeans, it's already added for the channel feature that it depends on. (Tony Mechelynck)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1327

Problem: Channel test doesn't work if Python executable is python.exe.

Solution: Find py.exe or python.exe. (Ken Takata)

Files: src/testdir/test\_channel.vim

Patch 7.4.1328

Problem: Can't compile with +job but without +channel. (John Marriott)

Solution: Add more #ifdefs.

Files: src/os\_unix.c

Patch 7.4.1329

Problem: Crash when using channel that failed to open.

Solution: Check for NULL. Update messages. (Yukihiro Nakadaira)

Files: src/channel.c, src/eval.c, src/testdir/test\_channel.vim

Patch 7.4.1330

Problem: fd\_read() has an unused argument.

Solution: Remove the timeout. (Yasuhiro Matsumoto)

Files: src/channel.c

Patch 7.4.1331

Problem: Crash when closing the channel in a callback. (Christian J. Robinson)

Solution: Take the callback out of the list before invoking it.

Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1332

Problem: Problem using Python3 when compiled with MingW.

Solution: Define PYTHON3\_HOME as a wide character string. (Yasuhiro Matsumoto)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1333

Problem: Channel test fails on non-darwin builds.

Solution: Add the "osx" feature and test for that. (Kazunobu Kuriyama)

Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test\_channel.vim

Patch 7.4.1334

Problem: Many compiler warnings with MingW.

Solution: Add type casts. (Yasuhiro Matsumoto)

Files: src/channel.c, src/dosinst.h, src/eval.c, src/ex\_cmds2.c,  
src/ex\_getln.c, src/fileio.c, src/if\_cscope.c, src/if\_perl.xs,  
src/if\_python.c, src/if\_python3.c, src/if\_ruby.c, src/main.c,  
src/mbyte.c, src/misc1.c, src/option.c, src/os\_mswin.c,  
src/os\_win32.c

Patch 7.4.1335

Problem: Can't build on MS-Windows with +job but without +channel. (Cesar Romani)

Solution: Add #ifdefs. (Yasuhiro Matsumoto)

Files: src/os\_win32.c

Patch 7.4.1336

Problem: Channel NL mode is not supported yet.

Solution: Add NL mode support to channels.

Files: src/channel.c, src/netbeans.c, src/structs.h, src/os\_unix.d,  
src/os\_win32.c, src/proto/channel.pro, src/proto/os\_unix.pro,  
src/proto/os\_win32.pro, src/testdir/test\_channel.vim,  
src/testdir/test\_channel\_pipe.py

Patch 7.4.1337 (after 7.4.1336)

Problem: Part of the change is missing.

Solution: Add changes to eval.c

Files: src/eval.c

Patch 7.4.1338 (after 7.4.1336)

Problem: Another part of the change is missing.

Solution: Type os\_unix.c right this time.

Files: src/os\_unix.c

Patch 7.4.1339

Problem: Warnings when building the GUI with MingW. (Cesar Romani)

Solution: Add type casts. (Yasuhiro Matsumoto)

Files: src/edit.c, src/gui\_w32.c, src/gui\_w48.c, src/os\_mswin.c,  
src/os\_win32.c

Patch 7.4.1340 (after 7.4.1339)

Problem: Merge left extra #endif behind.

Solution: Remove the #endif

Files: src/os\_win32.c

Patch 7.4.1341

Problem: It's difficult to add more arguments to ch\_senddraw() and  
ch\_sendexpr().

Solution: Make the third option a dictionary.

Files: src/eval.c, src/structs.h, src/channel.c, src/os\_unix.c,  
src/os\_win32.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 7.4.1342

Problem: On Mac OS/X the waittime must be > 0 for connect to work.

Solution: Use select() in a different way. (partly by Kazunobu Kuriyama)  
Always use a waittime of 1 or more.

Files: src/eval.c, src/channel.c, src/testdir/test\_channel.vim

#### Patch 7.4.1343

Problem: Can't compile with +job but without +channel. (Andrei Olsen)

Solution: Move get\_job\_options up and adjust #ifdef.

Files: src/eval.c

#### Patch 7.4.1344

Problem: Can't compile Win32 GUI with tiny features.

Solution: Add #ifdef. (Christian Brabandt)

Files: src/gui\_w32.c

#### Patch 7.4.1345

Problem: A few more compiler warnings. (Axel Bender)

Solution: Add type casts.

Files: src/gui\_w32.c, src/gui\_w48.c

#### Patch 7.4.1346

Problem: Compiler warnings in build with -O2.

Solution: Add initializations.

Files: src/eval.c

#### Patch 7.4.1347

Problem: When there is any error Vim will use a non-zero exit code.

Solution: When using ":silent!" do not set the exit code. (Yasuhiro Matsumoto)

Files: src/message.c

#### Patch 7.4.1348

Problem: More compiler warnings. (John Marriott)

Solution: Add type casts, remove unused variable.

Files: src/gui\_w32.c

#### Patch 7.4.1349

Problem: And some more MingW compiler warnings. (Cesar Romani)

Solution: Add type casts.

Files: src/if\_mzsch.c

#### Patch 7.4.1350

Problem: When the test server fails to start Vim hangs.

Solution: Check that there is actually something to read from the tty fd.

Files: src/os\_unix.c

#### Patch 7.4.1351

Problem: When the port isn't opened yet when ch\_open() is called it may fail instead of waiting for the specified time.

Solution: Loop when select() succeeds but when connect() failed. Also use channel logging for jobs. Add ch\_log().

Files: src/channel.c, src/eval.c, src/netbeans.c, src/proto/channel.pro, src/testdir/test\_channel.vim, src/testdir/test\_channel.py

#### Patch 7.4.1352

Problem: The test script lists all functions before executing them.

Solution: Only list the function currently being executed.

Files: src/testdir/runtest.vim

#### Patch 7.4.1353

Problem: Test\_connect\_waittime is skipped for MS-Windows.

Solution: Add the test back, it works now.

Files: src/testdir/test\_channel.vim



## Patch 7.4.1354

Problem: MS-Windows: Mismatch between default compile options and what the code expects.

Solution: Change the default WINVER from 0x0500 to 0x0501. (Ken Takata)

Files: src/Make\_cyg\_ming.mak, src/Make\_mvc.mak

## Patch 7.4.1355

Problem: Win32 console and GUI handle channels differently.

Solution: Consolidate code between Win32 console and GUI.

Files: src/channel.c, src/eval.c, src/gui\_w48.c, src/os\_win32.c,  
src/proto/channel.pro

## Patch 7.4.1356

Problem: Job and channel options parsing is scattered.

Solution: Move all option value parsing to get\_job\_options();

Files: src/channel.c, src/eval.c, src/structs.h, src/proto/channel.pro,  
src/testdir/test\_channel.vim

## Patch 7.4.1357 (after 7.4.1356)

Problem: Error for returning value from void function.

Solution: Don't do that.

Files: src/eval.c

## Patch 7.4.1358

Problem: Compiler warning when not building with +crypt.

Solution: Add #ifdef. (John Marriott)

Files: src/undo.c

## Patch 7.4.1359 (after 7.4.1356)

Problem: Channel test ch\_sendexpr() times out.

Solution: Increase the timeout

Files: src/testdir/test\_channel.vim

## Patch 7.4.1360

Problem: Can't remove a callback with ch\_setoptions().

Solution: When passing zero or an empty string remove the callback.

Files: src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim

## Patch 7.4.1361

Problem: Channel test fails on Solaris.

Solution: Use the 1 msec waittime for all systems.

Files: src/channel.c

## Patch 7.4.1362 (after 7.4.1356)

Problem: Using uninitialized value.

Solution: Initialize jo\_set.

Files: src/eval.c

## Patch 7.4.1363

Problem: Compiler warnings with tiny build.

Solution: Add #ifdefs.

Files: src/gui\_w48.c, src/gui\_w32.c

## Patch 7.4.1364

Problem: The Win 16 code is not maintained and unused.

Solution: Remove the Win 16 support.

Files: src/gui\_w16.c, src/gui\_w32.c, src/gui\_w48.c, src/Make\_w16.mak,  
src/Makefile, src/Make\_cyg\_ming.mak, src/Make\_mvc.mak,  
src/proto/gui\_w16.pro, src/proto/os\_win16.pro, src/guiw16rc.h,  
src/vim16.rc, src/vim16.def, src/tools16.bmp, src/eval.c,  
src/gui.c, src/misc2.c, src/option.c, src/os\_msdos.c,

src/os\_mswin.c, src/os\_win16.c, src/os\_win16.h, src/version.c,  
src/winclip.c, src/feature.h, src/proto.h, src/vim.h, Filelist

Patch 7.4.1365

Problem: Cannot execute a single test function.  
Solution: Add an argument to filter the functions with. (Yasuhiro Matsumoto)  
Files: src/testdir/runtest.vim

Patch 7.4.1366

Problem: Typo in test and resulting error in test result.  
Solution: Fix the typo and correct the result. (James McCoy, closes #650)  
Files: src/testdir/test\_charsearch.in, src/testdir/test\_charsearch.ok

Patch 7.4.1367

Problem: Compiler warning for unreachable code.  
Solution: Remove a "break". (Daneek Duvall)  
Files: src/json.c

Patch 7.4.1368

Problem: One more Win16 file remains.  
Solution: Delete it.  
Files: src/proto/os\_win16.pro

Patch 7.4.1369

Problem: Channels don't have a queue for stderr.  
Solution: Have a queue for each part of the channel.  
Files: src/channel.c, src/eval.c, src/structs.h, src/netbeans.c,  
src/gui\_w32.c, src/proto/channel.pro

Patch 7.4.1370

Problem: The Python test script may keep on running.  
Solution: Join the threads. (Yasuhiro Matsumoto)  
Files: src/testdir/test\_channel.py

Patch 7.4.1371

Problem: X11 GUI callbacks don't specify the part of the channel.  
Solution: Pass the fd instead of the channel ID.  
Files: src/channel.c

Patch 7.4.1372

Problem: channel read implementation is incomplete.  
Solution: Add ch\_read() and options for ch\_readraw().  
Files: src/channel.c, src/eval.c, src/structs.h, src/proto/channel.pro,  
src/testdir/test\_channel.vim

Patch 7.4.1373

Problem: Calling a Vim function over a channel requires turning the  
arguments into a string.  
Solution: Add the "call" command. (Damien) Also merge "expr" and "eval"  
into one.  
Files: src/channel.c, src/testdir/test\_channel.py,  
src/testdir/test\_channel.vim

Patch 7.4.1374

Problem: Channel test hangs on MS-Windows.  
Solution: Disable the ch\_read() that is supposed to time out.  
Files: src/testdir/test\_channel.vim

Patch 7.4.1375

Problem: Still some Win16 code.  
Solution: Remove FEAT\_GUI\_W16. (Hirohito Higashi)  
Files: src/eval.c, src/ex\_cmds.h, src/feature.h, src/gui.h, src/menu.c,

src/misc1.c, src/option.c, src/proto.h, src/structs.h, src/term.c,  
src/vim.h, runtime/doc/gui\_w16.txt

Patch 7.4.1376

Problem: ch\_setoptions() cannot set all options.

Solution: Support more options.

Files: src/channel.c, src/eval.c, src/structs.h, runtime/doc/channel.txt,  
src/testdir/test\_channel.vim

Patch 7.4.1377

Problem: Test\_connect\_waittime() is flaky.

Solution: Ignore the "Connection reset by peer" error.

Files: src/testdir/test\_channel.vim

Patch 7.4.1378

Problem: Can't change job settings after it started.

Solution: Add job\_setoptions() with the "stoponexit" flag.

Files: src/eval.c, src/main.c, src/structs.h, src/proto/eval.pro,  
src/testdir/test\_channel.vim

Patch 7.4.1379

Problem: Channel test fails on Win32 console.

Solution: Don't sleep when timeout is zero. Call channel\_wait() before  
channel\_read(). Channels are not polled during ":sleep". (Yukihiro  
Nakadaira)

Files: src/channel.c, src/misc2.c, src/gui\_w32.c, src/os\_win32.c

Patch 7.4.1380

Problem: The job exit callback is not implemented.

Solution: Add the "exit-cb" option.

Files: src/structs.h, src/eval.c, src/channel.c, src/proto/eval.pro,  
src/misc2.c, src/macros.h, src/testdir/test\_channel.vim

Patch 7.4.1381 (after 7.4.1380)

Problem: Exit value not available on MS-Windows.

Solution: Set the exit value.

Files: src/structs.h, src/os\_win32.c

Patch 7.4.1382

Problem: Can't get the job of a channel.

Solution: Add ch\_getjob().

Files: src/eval.c, runtime/doc/channel.txt, runtime/doc/eval.txt

Patch 7.4.1383

Problem: GvimExt only loads the old libintl.dll.

Solution: Also try loading libintl-8.dll. (Ken Takata, closes #608)

Files: src/GvimExt/gvimext.cpp, src/GvimExt/gvimext.h

Patch 7.4.1384

Problem: It is not easy to use a set of plugins and their dependencies.

Solution: Add packages, ":loadplugin", 'packpath'.

Files: src/main.c, src/ex\_cmds2.c, src/option.c, src/option.h,  
src/ex\_cmds.h, src/eval.c, src/version.c, src/proto/ex\_cmds2.pro,  
runtime/doc/repeat.txt, runtime/doc/options.txt,  
runtime/optwin.vim

Patch 7.4.1385

Problem: Compiler warning for using array.

Solution: Use the right member name. (Yegappan Lakshmanan)

Files: src/eval.c

Patch 7.4.1386

Problem: When the Job exit callback is invoked, the job may be freed too soon. (Yasuhiro Matsumoto)  
Solution: Increase refcount.  
Files: src/eval.c

Patch 7.4.1387

Problem: Win16 docs still referenced.  
Solution: Remove Win16 files from the docs Makefile. (Kenichi Ito)  
Files: runtime/doc/Makefile

Patch 7.4.1388

Problem: Compiler warning. (Cesar Romani)  
Solution: Initialize variable.  
Files: src/ex\_cmds2.c

Patch 7.4.1389

Problem: Incomplete function declaration.  
Solution: Add "void". (Yasuhiro Matsumoto)  
Files: src/eval.c

Patch 7.4.1390

Problem: When building with GTK and glib-compile-resources cannot be found building Vim fails. (Michael Gehring)  
Solution: Make GLIB\_COMPILE\_RESOURCES empty instead of leaving it at "no". (nuko8, closes #655)  
Files: src/configure.in, src/auto/configure

Patch 7.4.1391

Problem: Warning for uninitialized variable.  
Solution: Set it to zero. (Christian Brabandt)  
Files: src/eval.c

Patch 7.4.1392

Problem: Some tests fail for Win32 console version.  
Solution: Move the tests to SCRIPTS\_MORE2. Pass VIMRUNTIME. (Christian Brabandt)  
Files: src/testdir/Make\_all.mak

Patch 7.4.1393

Problem: Starting a job hangs in the GUI. (Takuya Fujiwara)  
Solution: Don't check if ch\_job is NULL when checking for an error. (Yasuhiro Matsumoto)  
Files: src/channel.c

Patch 7.4.1394

Problem: Can't sort inside a sort function.  
Solution: Use a struct to store the sort parameters. (Jacob Niehus)  
Files: src/eval.c, src/testdir/test\_sort.vim

Patch 7.4.1395

Problem: Using DETACH in quotes is not compatible with the Netbeans interface. (Xavier de Gaye)  
Solution: Remove the quotes, only use them for JSON and JS mode.  
Files: src/netbeans.c, src/channel.c

Patch 7.4.1396

Problem: Compiler warnings for conversions.  
Solution: Add type cast.  
Files: src/ex\_cmds2.c

Patch 7.4.1397

Problem: Sort test fails on MS-Windows.

Solution: Correct the compare function.  
Files: src/testdir/test\_sort.vim

#### Patch 7.4.1398

Problem: The close-cb option is not implemented yet.  
Solution: Implement close-cb. (Yasuhiro Matsumoto)  
Files: src/channel.c, src/eval.c, src/structs.h, src/proto/channel.pro,  
src/testdir/test\_channel.py, src/testdir/test\_channel.vim

#### Patch 7.4.1399

Problem: The MS-DOS code does not build.  
Solution: Remove the old MS-DOS code.  
Files: Filelist, src/Make\_bc3.mak, src/Make\_bc5.mak, src/Make\_djg.mak,  
src/Makefile, src/blowfish.c, src/buffer.c, src/diff.c,  
src/digraph.c, src/dosinst.h, src/eval.c, src/ex\_cmds.c,  
src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/feature.h,  
src/fileio.c, src/getchar.c, src/globals.h, src/macros.h,  
src/main.c, src/mbyte.c, src/memfile.c, src/memline.c,  
src/misc1.c, src/misc2.c, src/netbeans.c, src/option.c,  
src/option.h, src/os\_msdos.c, src/os\_msdos.h, src/proto.h,  
src/proto/os\_msdos.pro, src/regexp.c, src/screen.c, src/structs.h,  
src/syntax.c, src/term.c, src/undo.c, src/uninstal.c,  
src/version.c, src/vim.h, src/window.c, src/xxd/Make\_bc3.mak,  
src/xxd/Make\_djg.mak

#### Patch 7.4.1400

Problem: Perl eval doesn't work properly on 64-bit big-endian machine.  
Solution: Use 32 bit type for the key. (Danek Duvall)  
Files: src/if\_perl.xs

#### Patch 7.4.1401

Problem: Having 'autochdir' set during startup and using diff mode doesn't work. (Axel Bender)  
Solution: Don't use 'autochdir' while still starting up. (Christian Brabandt)  
Files: src/buffer.c

#### Patch 7.4.1402

Problem: GTK 3 is not supported.  
Solution: Add GTK 3 support. (Kazunobu Kuriyama)  
Files: runtime/doc/eval.txt, runtime/doc/gui.txt,  
runtime/doc/gui\_x11.txt, src/auto/configure, src/channel.c,  
src/config.h.in, src/configure.in, src/eval.c, src/gui.h,  
src/gui\_beval.c, src/gui\_beval.h, src/gui\_gtk.c, src/gui\_gtk\_f.c,  
src/gui\_gtk\_f.h, src/gui\_gtk\_x11.c, src/if\_mzsch.c, src/mbyte.c,  
src/netbeans.c, src/structs.h, src/version.c

#### Patch 7.4.1403

Problem: Can't build without the quickfix feature.  
Solution: Add #ifdefs. Call ex\_ni() for unimplemented commands. (Yegappan Lakshmanan)  
Files: src/ex\_cmds2.c, src/popupmnu.c

#### Patch 7.4.1404

Problem: ch\_read() doesn't time out on MS-Windows.  
Solution: Instead of WM\_NETBEANS use select(). (Yukihiro Nakadaira)  
Files: src/channel.c, src/gui\_w32.c, src/os\_win32.c, src/structs.h,  
src/testdir/test\_channel.vim, src/vim.h

#### Patch 7.4.1405

Problem: Completion menu flickers.

Solution: Delay showing the popup menu. (Shougo Matsu, Justin M. Keyes,  
closes #656)  
Files: src/edit.c

Patch 7.4.1406

Problem: Leaking memory in cs\_print\_tags\_priv().  
Solution: Free tbuf. (idea by Forrest Fleming)  
Files: src/if\_cscope.c

Patch 7.4.1407

Problem: json\_encode() does not handle NaN and inf properly. (David  
Barnett)  
Solution: For JSON turn them into "null". For JS use "NaN" and "Infinity".  
Add isnan().  
Files: src/eval.c, src/json.c, src/testdir/test\_json.vim

Patch 7.4.1408

Problem: MS-Windows doesn't have isnan() and isinf().  
Solution: Use \_isnan() and \_isinf().  
Files: src/eval.c, src/json.c

Patch 7.4.1409 (after 7.4.1402)

Problem: Configure includes GUI despite --disable-gui flag.  
Solution: Add SKIP\_GTK3. (Kazunobu Kuriyama)  
Files: src/configure.in, src/auto/configure

Patch 7.4.1410

Problem: Leaking memory in cscope interface.  
Solution: Free memory when no tab is found. (Christian Brabandt)  
Files: src/if\_cscope.c

Patch 7.4.1411

Problem: Compiler warning for indent. (Ajit Thakkar)  
Solution: Indent normally.  
Files: src/ui.c

Patch 7.4.1412

Problem: Compiler warning for indent. (Dominique Pelle)  
Solution: Fix the indent.  
Files: src/farsi.c

Patch 7.4.1413

Problem: When calling ch\_close() the close callback is invoked, even though  
the docs say it isn't. (Christian J. Robinson)  
Solution: Don't call the close callback.  
Files: src/eval.c, src/channel.c, src/netbeans.c, src/proto/channel.pro

Patch 7.4.1414

Problem: Appveyor only builds one feature set.  
Solution: Build a combination of features and GUI/console. (Christian  
Brabandt)  
Files: appveyor.yml, src/appveyor.bat

Patch 7.4.1415 (after 7.4.1414)

Problem: Dropped the skip-tags setting.  
Solution: Put it back.  
Files: appveyor.yml

Patch 7.4.1416

Problem: Using "u\_char" instead of "char\_u", which doesn't work everywhere.  
(Jörg Plate)  
Solution: Use "char\_u" always.

Files: src/integration.c, src/macros.h

Patch 7.4.1417 (after 7.4.1414)

Problem: Missing appveyor.bat from the distribution.

Solution: Add it to the list of files.

Files: Filelist

Patch 7.4.1418

Problem: job\_stop() on MS-Windows does not really stop the job.

Solution: Make the default to stop the job forcefully. (Ken Takata)  
Make MS-Windows and Unix more similar.

Files: src/os\_win32.c, src/os\_unix.c, runtime/doc/eval.txt

Patch 7.4.1419

Problem: Tests slowed down because of the "not a terminal" warning.

Solution: Add the --not-a-term command line argument.

Files: src/main.c, src/testdir/Makefile, src/Make\_all.mak,  
src/Make\_amiga.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Make\_vms.mms,  
runtime/doc/starting.txt

Patch 7.4.1420 (after 7.4.1419)

Problem: Missing makefile.

Solution: Type the path correctly.

Files: src/testdir/Make\_all.mak

Patch 7.4.1421

Problem: May free a channel when a callback may need to be invoked.

Solution: Keep the channel when refcount is zero.

Files: src/eval.c, src/channel.c, src/proto/channel.pro

Patch 7.4.1422

Problem: Error when reading fails uses wrong errno. Keeping channel open  
after job stops results in test failing.

Solution: Move the error up. Add ch\_job\_killed.

Files: src/channel.c, src/eval.c, src/structs.h

Patch 7.4.1423

Problem: Channel test fails on MS-Windows.

Solution: Do not give an error message when reading fails, assume the other  
end exited.

Files: src/channel.c

Patch 7.4.1424

Problem: Not using --not-a-term when running tests on MS-Windows.

Solution: Use NO\_PLUGIN. (Christian Brabandt)

Files: src/testdir/Make\_dos.mak

Patch 7.4.1425

Problem: There are still references to MS-DOS support.

Solution: Remove most of the help txt and install instructions. (Ken Takata)

Files: src/INSTALLpc.txt, runtime/doc/os\_msdos.txt, csdpmi4b.zip,  
Filelist

Patch 7.4.1426

Problem: The "out-io" option for jobs is not implemented yet.

Solution: Implement the "buffer" value: append job output to a buffer.

Files: src/eval.c, src/channel.c, src/structs.h, src/netbeans.c,  
runtime/doc/channel.txt

Patch 7.4.1427

Problem: Trailing comma in enums is not ANSI C.

Solution: Remove the trailing commas.  
Files: src/alloc.h, src/gui\_mac.c

Patch 7.4.1428

Problem: Compiler warning for non-virtual destructor.  
Solution: Make it virtual. (Yasuhiro Matsumoto)  
Files: src/gui\_dwrite.cpp

Patch 7.4.1429

Problem: On MS-Windows, when not use renderoptions=type:directx, drawing emoji will be broken.  
Solution: Fix usage of unicodepy. (Yasuhiro Matsumoto)  
Files: src/gui\_w32.c

Patch 7.4.1430

Problem: When encoding JSON, turning NaN and Infinity into null without giving an error is not useful.  
Solution: Pass NaN and Infinity on. If the receiver can't handle them it will generate the error.  
Files: src/json.c, src/testdir/test\_json.vim, runtime/doc/eval.txt

Patch 7.4.1431

Problem: Including header files twice.  
Solution: Remove the extra includes.  
Files: src/if\_cscope.h

Patch 7.4.1432

Problem: Typo in button text.  
Solution: Fix the typo. (Dominique Pelle)  
Files: src/gui\_gtk.c

Patch 7.4.1433

Problem: The Sniff interface is no longer useful, the tool has not been available for many years.  
Solution: Delete the Sniff interface and related code.  
Files: src/if\_sniff.c, src/if\_sniff.h, src/charset.c, src/edit.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/gui\_gtk\_x11.c, src/gui\_w32.c, src/gui\_x11.c, src/normal.c, src/os\_unix.c, src/os\_win32.c, src/term.c, src/ui.c, src/version.c, src/ex\_cmds.h, src/feature.h, src/keymap.h, src/structs.h, src/vim.h, src/Make\_mvc.mak, src/Make\_vms.mms, src/Makefile, src/configure.in, src/auto/configure, src/config.h.in, src/config.mk.in, runtime/doc/if\_sniff.txt, src/config.aap.in, src/main.aap

Patch 7.4.1434

Problem: JSON encoding doesn't handle surrogate pair.  
Solution: Improve multi-byte handling of JSON. (Yasuhiro Matsumoto)  
Files: src/json.c, src/testdir/test\_json.vim

Patch 7.4.1435

Problem: It is confusing that ch\_sendexpr() and ch\_sendraw() wait for a response.  
Solution: Add ch\_evalexpr() and ch\_evalraw().  
Files: src/eval.c, runtime/doc/channel.txt, runtime/doc/eval.txt, src/testdir/test\_channel.vim

Patch 7.4.1436 (after 7.4.1433)

Problem: Sniff files still referenced in distribution.  
Solution: Remove sniff files from distribution.  
Files: Filelist



## Patch 7.4.1437

Problem: Old system doesn't have isinf() and NAN. (Ben Fritz)  
Solution: Adjust #ifdefs. Detect isnan() and isinf() functions with configure. Use a replacement when missing. (Kazunobu Kuriyama)  
Files: src/eval.c, src/json.c, src/macros.h, src/message.c, src/config.h.in, src/configure.in, src/auto/configure

## Patch 7.4.1438

Problem: Can't get buffer number of a channel.  
Solution: Add ch\_getbufnr().  
Files: src/eval.c, src/channel.c, src/testdir/test\_channel.vim, runtime/doc/channel.txt, runtime/doc/eval.txt

## Patch 7.4.1439 (after 7.4.1434)

Problem: Using uninitialized variable.  
Solution: Initialize vc\_type.  
Files: src/json.c

## Patch 7.4.1440 (after 7.4.1437)

Problem: Can't build on Windows.  
Solution: Change #ifdefs. Only define isnan when used.  
Files: src/macros.h, src/eval.c, src/json.c

## Patch 7.4.1441

Problem: Using empty name instead of no name for channel buffer.  
Solution: Remove the empty name.  
Files: src/channel.c

## Patch 7.4.1442

Problem: MS-Windows: more compilation warnings for destructor.  
Solution: Add "virtual". (Ken Takata)  
Files: src/if\_ole.cpp

## Patch 7.4.1443

Problem: Can't build GTK3 with small features.  
Solution: Use gtk\_widget\_get\_window(). Fix typos. (Dominique Pelle)  
Files: src/gui\_gtk\_x11.c

## Patch 7.4.1444

Problem: Can't build with JSON but without multi-byte.  
Solution: Fix pointer name.  
Files: src/json.c

## Patch 7.4.1445

Problem: Memory corruption when 'encoding' is not utf-8.  
Solution: Convert decoded string later.  
Files: src/json.c

## Patch 7.4.1446

Problem: Crash when using json\_decode().  
Solution: Terminate string with a NUL byte.  
Files: src/json.c

## Patch 7.4.1447

Problem: Memory leak when using ch\_read(). (Dominique Pelle)  
No log message when stopping a job and a few other situations.  
Too many "Nothing to read" messages. Channels are not freed.  
Solution: Free the listtv. Add more log messages. Remove "Nothing to read" message. Remove the channel from the job when its refcount becomes zero.  
Files: src/eval.c, src/channel.c

## Patch 7.4.1448

Problem: JSON tests fail if 'encoding' is not utf-8.  
Solution: Force encoding to utf-8.  
Files: src/testdir/test\_json.vim

## Patch 7.4.1449

Problem: Build fails with job feature but without channel feature.  
Solution: Add #ifdef.  
Files: src/eval.c

## Patch 7.4.1450

Problem: Json encoding still fails when encoding is not utf-8.  
Solution: Set 'encoding' before :scriptencoding. Run the json test separately to avoid affecting other tests.  
Files: src/testdir/test\_json.vim, src/testdir/Make\_all.mak, src/testdir/test\_alot.vim

## Patch 7.4.1451

Problem: Vim hangs when a channel has a callback but isn't referenced.  
Solution: Have channel\_unref() only return TRUE when the channel was actually freed.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro

## Patch 7.4.1452

Problem: When a callback adds a syntax item either the redraw doesn't happen right away or in the GUI the cursor is in the wrong position for a moment. (Jakson Alves de Aquino)  
Solution: Redraw after the callback was invoked.  
Files: src/channel.c

## Patch 7.4.1453

Problem: Missing --not-a-term.  
Solution: Add the argument.  
Files: src/testdir/Make\_amiga.mak

## Patch 7.4.1454

Problem: The exit callback test is flaky.  
Solution: Loop to wait for a short time up to a second.  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1455

Problem: JSON decoding test for surrogate pairs is in the wrong place.  
Solution: Move the test lines. (Ken Takata)  
Files: src/testdir/test\_json.vim

## Patch 7.4.1456

Problem: Test 87 fails with Python 3.5.  
Solution: Work around difference. (Taro Muraoka)  
Files: src/testdir/test87.in

## Patch 7.4.1457

Problem: Opening a channel with select() is not done properly.  
Solution: Also used read-fds. Use getsockopt() to check for errors. (Ozaki Kiichi)  
Files: src/channel.c

## Patch 7.4.1458

Problem: When a JSON channel has a callback it may never be cleared.  
Solution: Do not write "DETACH" into a JS or JSON channel.  
Files: src/channel.c

## Patch 7.4.1459 (after 7.4.1457)

Problem: MS-Windows doesn't know socklen\_t.  
Solution: Use previous method for WIN32.  
Files: src/channel.c

Patch 7.4.1460

Problem: Syntax error in rarely used code.  
Solution: Fix the mch\_rename() declaration. (Ken Takata)  
Files: src/os\_unix.c, src/proto/os\_unix.pro

Patch 7.4.1461

Problem: When starting job on MS-Windows all parts of the command are put in quotes.  
Solution: Only use quotes when needed. (Yasuhiro Matsumoto)  
Files: src/eval.c

Patch 7.4.1462

Problem: Two more rarely used functions with errors.  
Solution: Add proper argument types. (Dominique Pelle)  
Files: src/misc2.c, src/termlib.c

Patch 7.4.1463

Problem: Configure doesn't find isinf() and isnan() on some systems.  
Solution: Use a configure check that includes math.h.  
Files: src/configure.in, src/auto/configure

Patch 7.4.1464

Problem: When the argument of sort() is zero or empty it fails.  
Solution: Make zero work as documented. (suggested by Yasuhiro Matsumoto)  
Files: src/eval.c, src/testdir/test\_sort.vim

Patch 7.4.1465

Problem: Coverity reported possible use of NULL pointer when using buffer output with JSON mode.  
Solution: Make it actually possible to use JSON mode with a buffer.  
Re-encode the JSON to append it to the buffer.  
Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1466

Problem: Coverity reports dead code.  
Solution: Remove the two lines.  
Files: src/channel.c

Patch 7.4.1467

Problem: Can't build without the float feature.  
Solution: Add #ifdefs. (Nick Owens, closes #667)  
Files: src/eval.c, src/json.c

Patch 7.4.1468

Problem: Sort test doesn't test with "l" argument.  
Solution: Also test ignore-case sorting. (Yasuhiro Matsumoto)  
Files: src/testdir/test\_sort.vim

Patch 7.4.1469

Problem: Channel test sometimes fails, especially on OS/X. (Kazunobu Kuriyama)  
Solution: Change the && into ||, call getsockopt() in more situations. (Ozaki Kiichi)  
Files: src/channel.c

Patch 7.4.1470

Problem: Coverity reports missing restore.  
Solution: Move json\_encode() call up.

Files: src/channel.c

Patch 7.4.1471

Problem: Missing out-of-memory check. And Coverity warning.

Solution: Bail out when msg is NULL.

Files: src/channel.c

Patch 7.4.1472

Problem: Coverity warning for not using return value.

Solution: Add "(void)".

Files: src/os\_unix.c

Patch 7.4.1473

Problem: Can't build without the autocommand feature.

Solution: Add #ifdefs. (Yegappan Lakshmanan)

Files: src/edit.c, src/main.c, src/syntax.c

Patch 7.4.1474

Problem: Compiler warnings without the float feature.

Solution: Move #ifdefs. (John Marriott)

Files: src/eval.c

Patch 7.4.1475

Problem: When using hangulinput with utf-8 a CSI character is misinterpreted.

Solution: Convert CSI to K\_CSI. (SungHyun Nam)

Files: src/ui.c

Patch 7.4.1476

Problem: Function arguments marked as unused while they are not.

Solution: Remove UNUSED. (Yegappan Lakshmanan)

Files: src/diff.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/window.c

Patch 7.4.1477

Problem: Test\_reftime is flaky, it depends on timing.

Solution: When it fails run it a second time.

Files: src/testdir/runtest.vim

Patch 7.4.1478

Problem: ":loadplugin" doesn't take care of ftdetect files.

Solution: Also load ftdetect scripts when appropriate.

Files: src/ex\_cmds2.c

Patch 7.4.1479

Problem: No testfor ":loadplugin".

Solution: Add a test. Fix how option is being set.

Files: src/ex\_cmds2.c, src/testdir/test\_loadplugin.vim, src/testdir/Make\_all.mak

Patch 7.4.1480

Problem: Cannot add a pack directory without loading a plugin.

Solution: Add the :packadd command.

Files: src/ex\_cmds.h, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, src/testdir/test\_loadplugin.vim, runtime/doc/repeat.txt

Patch 7.4.1481

Problem: Can't build with small features.

Solution: Add #ifdef.

Files: src/ex\_cmds2.c

Patch 7.4.1482

Problem: "timeout" option not supported on ch\_eval\*().  
Solution: Get and use the timeout option from the argument.  
Files: src/eval.c, src/testdir/test\_channel.vim

Patch 7.4.1483

Problem: A one-time callback is not used for a raw channel.  
Solution: Use a one-time callback when it exists.  
Files: src/channel.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel.py

Patch 7.4.1484

Problem: Channel "err-io" value "out" is not supported.  
Solution: Connect stderr to stdout if wanted.  
Files: src/os\_unix.c, src/os\_win32.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel\_pipe.py

Patch 7.4.1485

Problem: Job input from buffer is not implemented.  
Solution: Implement it. Add "in-top" and "in-bot" options.  
Files: src/structs.h, src/eval.c, src/channel.c, src/proto/channel.pro,  
src/os\_unix.c, src/os\_win32.c, src/testdir/test\_channel.vim

Patch 7.4.1486

Problem: ":loadplugin" is not optimal, some people find it confusing.  
Solution: Only use ":packadd" with an optional "!".  
Files: src/ex\_cmds.h, src/ex\_cmds2.c, src/testdir/test\_loadplugin.vim,  
src/testdir/test\_packadd.vim, src/testdir/Make\_all.mak,  
runtime/doc/repeat.txt

Patch 7.4.1487

Problem: For WIN32 isinf() is defined as a macro.  
Solution: Define it as an inline function. (ZyX)  
Files: src/macros.h

Patch 7.4.1488 (after 7.4.1475)

Problem: Not using key when result from hangul\_string\_convert() is NULL.  
Solution: Fall back to not converted string.  
Files: src/ui.c

Patch 7.4.1489 (after 7.4.1487)

Problem: "inline" is not supported by old MSVC.  
Solution: use "\_\_inline". (Ken Takata)  
Files: src/macros.h

Patch 7.4.1490

Problem: Compiler warning for unused function.  
Solution: Add #ifdef. (Dominique Pelle)  
Files: src/gui\_gtk\_x11.c

Patch 7.4.1491

Problem: Visual-block shift breaks multi-byte characters.  
Solution: Compute column differently. (Yasuhiro Matsumoto) Add a test.  
Files: src/ops.c, src/testdir/test\_visual.vim, src/testdir/Make\_all.mak

Patch 7.4.1492

Problem: No command line completion for ":packadd".  
Solution: Implement completion. (Hirohito Higashi)  
Files: src/ex\_docmd.c, src/ex\_getln.c, src/testdir/test\_packadd.vim,  
src/vim.h

Patch 7.4.1493

Problem: Wrong callback invoked for zero-id messages.

Solution: Don't use the first one-time callback when the sequence number doesn't match.

Files: src/channel.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel.py

#### Patch 7.4.1494

Problem: clr\_history() does not work properly.

Solution: Increment hisptr. Add a test. (Yegappan Lakshmanan)

Files: src/ex\_getln.c, src/testdir/test\_history.vim,  
src/testdir/Make\_all.mak

#### Patch 7.4.1495

Problem: Compiler warnings when building on Unix with the job feature but without the channel feature.

Solution: Move #ifdefs. (Dominique Pelle)

Files: src/os\_unix.c

#### Patch 7.4.1496

Problem: Crash when built with GUI but it's not active. (Dominique Pelle)

Solution: Check gui.in\_use.

Files: src/channel.c

#### Patch 7.4.1497

Problem: Cursor drawing problem with GTK 3.

Solution: Handle blinking differently. (Kazunobu Kuriyama)

Files: src/gui\_gtk\_x11.c

#### Patch 7.4.1498

Problem: Error for locked item when using json\_decode(). (Shougo Matsu)

Solution: Initialize v\_lock.

Files: src/json.c

#### Patch 7.4.1499

Problem: No error message when :packadd does not find anything.

Solution: Add an error message. (Hirohito Higashi)

Files: runtime/doc/repeat.txt, src/ex\_cmds.h, src/ex\_cmds2.c,  
src/globals.h, src/testdir/test\_packadd.vim

#### Patch 7.4.1500

Problem: Should\_free flag set to FALSE.

Solution: Set it to TRUE. (Neovim 4415)

Files: src/ex\_eval.c

#### Patch 7.4.1501

Problem: Garbage collection with an open channel is not tested.

Solution: Call garbagecollect() in the test.

Files: src/testdir/test\_channel.vim

#### Patch 7.4.1502

Problem: Writing last-but-one line of buffer to a channel isn't implemented yet.

Solution: Implement it. Fix leaving a swap file behind.

Files: src/channel.c, src/structs.h, src/memline.c, src/proto/channel.pro

#### Patch 7.4.1503

Problem: Crash when using ch\_getjob(). (Damien)

Solution: Check for a NULL job.

Files: src/eval.c, src/testdir/test\_channel.vim

#### Patch 7.4.1504 (after 7.4.1502)

Problem: No test for reading last-but-one line.

Solution: Add a test.

Files: src/testdir/test\_channel.vim

Patch 7.4.1505

Problem: When channel log is enabled get too many "looking for messages" log entries.

Solution: Only give the message after another message.

Files: src/channel.c

Patch 7.4.1506

Problem: Job cannot read from a file.

Solution: Implement reading from a file for Unix.

Files: src/eval.c, src/os\_unix.c, src/os\_win32.c, src/testdir/test\_channel.vim

Patch 7.4.1507

Problem: Crash when starting a job fails.

Solution: Check for the channel to be NULL. (idea by Yasuhiro Matsumoto)

Files: src/eval.c

Patch 7.4.1508

Problem: Can't build GvimExt with MingW.

Solution: Adjust the makefile. (Ben Fritz)

Files: src/GvimExt/Make\_ming.mak

Patch 7.4.1509

Problem: Keeping both a variable for a job and the channel it refers to is a hassle.

Solution: Allow passing the job where a channel is expected. (Damien)

Files: src/eval.c, src/testdir/test\_channel.vim

Patch 7.4.1510

Problem: Channel test fails on AppVeyor.

Solution: Wait longer than 10 msec if needed.

Files: src/testdir/test\_channel.vim

Patch 7.4.1511

Problem: Statusline highlighting is sometimes wrong.

Solution: Check for Highlight type. (Christian Brabandt)

Files: src/buffer.c

Patch 7.4.1512

Problem: Channel input from file not supported on MS-Windows.

Solution: Implement it. (Yasuhiro Matsumoto)

Files: src/os\_win32.c, src/testdir/test\_channel.vim

Patch 7.4.1513

Problem: "J" fails if there are not enough lines. (Christian Neukirchen)

Solution: Reduce the count, only fail on the last line.

Files: src/normal.c, src/testdir/test\_join.vim, src/testdir/test\_alot.vim

Patch 7.4.1514

Problem: Channel output to file not implemented yet.

Solution: Implement it for Unix.

Files: src/os\_unix.c, src/testdir/test\_channel.vim, src/testdir/test\_channel\_pipe.py

Patch 7.4.1515

Problem: Channel test is a bit flaky.

Solution: Instead of a fixed sleep time wait until an expression evaluates to true.

Files: src/testdir/test\_channel.vim

## Patch 7.4.1516

Problem: Cannot change file permissions.  
Solution: Add setfperm().  
Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test\_alot.vim,  
src/testdir/test\_file\_perm.vim

## Patch 7.4.1517

Problem: Compiler warning with 64bit compiler.  
Solution: Add typecast. (Mike Williams)  
Files: src/channel.c

## Patch 7.4.1518

Problem: Channel with disconnected in/out/err is not supported.  
Solution: Implement it for Unix.  
Files: src/eval.c, src/os\_unix.c, src/structs.h,  
src/testdir/test\_channel.vim, src/testdir/test\_channel\_pipe.py

## Patch 7.4.1519 (after 7.4.1514)

Problem: Channel output to file not implemented for MS-Windows.  
Solution: Implement it. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c, src/testdir/test\_channel.vim

## Patch 7.4.1520

Problem: Channel test: Waiting for a file to appear doesn't work.  
Solution: In waitFor() ignore errors.  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1521 (after 7.4.1516)

Problem: File permission test fails on MS-Windows.  
Solution: Expect a different permission.  
Files: src/testdir/test\_file\_perm.vim

## Patch 7.4.1522

Problem: Cannot write channel err to a buffer.  
Solution: Implement it.  
Files: src/channel.c, src/testdir/test\_channel.vim

## Patch 7.4.1523

Problem: Writing channel to a file fails on MS-Windows.  
Solution: Disable it for now.  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1524

Problem: Channel test fails on BSD.  
Solution: Break out of the loop when connect() succeeds. (Ozaki Kiichi)  
Files: src/channel.c

## Patch 7.4.1525

Problem: On a high resolution screen the toolbar icons are too small.  
Solution: Add "huge" and "giant" to 'toolbariconsizes'. (Brian Gix)  
Files: src/gui\_gtk\_x11.c, src/option.h

## Patch 7.4.1526

Problem: Writing to file and not connecting a channel doesn't work for MS-Windows.  
Solution: Make it work. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c, src/testdir/test\_channel.vim

## Patch 7.4.1527

Problem: Channel test is flaky on MS-Windows.  
Solution: Limit the select() timeout to 50 msec and try with a new socket if it fails.



Files: src/channel.c

Patch 7.4.1528

Problem: Using "ever" for packages is confusing.  
Solution: Use "start", as it's related to startup.  
Files: src/ex\_cmds2.c, runtime/doc/repeat.txt

Patch 7.4.1529

Problem: Specifying buffer number for channel not implemented yet.  
Solution: Implement passing a buffer number.  
Files: src/structs.h, src/channel.c, src/eval.c,  
src/testdir/test\_channel.vim

Patch 7.4.1530

Problem: MS-Windows job\_start() closes wrong handle.  
Solution: Close hThread on the process info. (Ken Takata)  
Files: src/os\_win32.c

Patch 7.4.1531

Problem: Compiler warning for uninitialized variable. (Dominique Pelle)  
Solution: Always give the variable a value.  
Files: src/channel.c

Patch 7.4.1532

Problem: MS-Windows channel leaks file descriptor.  
Solution: Use CreateFile with the right options. (Yasuhiro Matsumoto)  
Files: src/os\_win32.c

Patch 7.4.1533

Problem: Using feedkeys() with an empty string disregards 'x' option.  
Solution: Make 'x' work with an empty string. (Thinca)  
Files: src/eval.c, src/testdir/test\_alot.vim,  
src/testdir/test\_feedkeys.vim

Patch 7.4.1534

Problem: Compiler warning for shadowed variable. (Kazunobu Kuriyama)  
Solution: Rename it.  
Files: src/eval.c

Patch 7.4.1535

Problem: The feedkeys test has a one second delay.  
Solution: Avoid need\_wait\_return() to delay. (Hirohito Higashi)  
Files: src/eval.c

Patch 7.4.1536

Problem: Cannot re-use a channel for another job.  
Solution: Add the "channel" option to job\_start().  
Files: src/channel.c, src/eval.c, src/structs.h, src/os\_unix.c,  
src/os\_win32.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim

Patch 7.4.1537

Problem: Too many feature flags for pipes, jobs and channels.  
Solution: Only use FEAT\_JOB\_CHANNEL.  
Files: src/structs.h, src/feature.h, src/configure.in,  
src/auto/configure, src/config.h.in, src/channel.c, src/eval.c,  
src/gui.c, src/main.c, src/memline.c, src/misc2.c, src/os\_mswin.c,  
src/os\_unix.c, src/os\_win32.c, src/ui.c, src/version.c,  
src/macros.h, src/proto.h, src/vim.h, src/Make\_cyg\_ming.mak,  
src/Make\_bc5.mak, src/Make\_mvc.mak

Patch 7.4.1538

Problem: Selection with the mouse does not work in command line mode.  
Solution: Use cairo functions. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

Patch 7.4.1539

Problem: Too much code in eval.c.  
Solution: Move job and channel code to channel.c.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro,  
src/proto/eval.pro

Patch 7.4.1540

Problem: Channel test is a bit flaky.  
Solution: Increase expected wait time.  
Files: src/testdir/test\_channel.vim

Patch 7.4.1541

Problem: Missing job\_info().  
Solution: Implement it.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 7.4.1542

Problem: job\_start() with a list is not tested.  
Solution: Call job\_start() with a list.  
Files: src/testdir/test\_channel.vim

Patch 7.4.1543

Problem: Channel log methods are not tested.  
Solution: Log job activity and check it.  
Files: src/testdir/test\_channel.vim

Patch 7.4.1544

Problem: On Win32 escaping the command does not work properly.  
Solution: Reset 'ssl' when escaping the command. (Yasuhiro Matsumoto)  
Files: src/channel.c

Patch 7.4.1545

Problem: GTK3: horizontal cursor movement in Visual selection not good.  
Solution: Make it work better. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

Patch 7.4.1546

Problem: Sticky type checking is more annoying than useful.  
Solution: Remove the error for changing a variable type.  
Files: src/eval.c, src/testdir/test\_assign.vim,  
src/testdir/test\_alot.vim, runtime/doc/eval.txt

Patch 7.4.1547

Problem: Getting a cterm highlight attribute that is not set results in the string "-1".  
Solution: Return an empty string. (Taro Muraoka)  
Files: src/syntax.c, src/testdir/test\_alot.vim,  
src/testdir/test\_syn\_attr.vim

Patch 7.4.1548 (after 7.4.1546)

Problem: Two tests fail.  
Solution: Adjust the expected error number. Remove check for type.  
Files: src/testdir/test101.ok, src/testdir/test55.in,  
src/testdir/test55.ok

Patch 7.4.1549 (after 7.4.1547)

Problem: Test for syntax attributes fails in Win32 GUI.

Solution: Use an existing font name.  
Files: src/testdir/test\_syn\_attr.vim

#### Patch 7.4.1550

Problem: Cannot load packages early.  
Solution: Add the ":packloadall" command.  
Files: src/ex\_cmds.h, src/ex\_cmds2.c, src/main.c,  
src/proto/ex\_cmds2.pro, src/testdir/test\_packadd.vim

#### Patch 7.4.1551

Problem: Cannot generate help tags in all doc directories.  
Solution: Make ":helptags ALL" work.  
Files: src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, src/ex\_cmds.c, src/vim.h  
src/testdir/test\_packadd.vim

#### Patch 7.4.1552

Problem: ":colorscheme" does not use 'packpath'.  
Solution: Also use in "start" and "opt" directories in 'packpath'.  
Files: src/ex\_cmds2.c, src/gui.c, src/hardcopy.c, src/os\_mswin.c,  
src/spell.c, src/tag.c, src/if\_py\_both.h, src/vim.h,  
src/digraph.c, src/eval.c, src/ex\_docmd.c, src/main.c,  
src/option.c, src/syntax.c, src/testdir/test\_packadd.vim

#### Patch 7.4.1553

Problem: ":runtime" does not use 'packpath'.  
Solution: Add "what" argument.  
Files: src/ex\_cmds2.c, src/vim.h, runtime/doc/repeat.txt,  
src/testdir/test\_packadd.vim

#### Patch 7.4.1554

Problem: Completion for :colorscheme does not use 'packpath'.  
Solution: Make it work, add a test. (Hirohito Higashi)  
Files: src/ex\_getln.c, src/testdir/test\_packadd.vim

#### Patch 7.4.1555

Problem: List of test targets incomplete.  
Solution: Add newly added tests.  
Files: src/Makefile

#### Patch 7.4.1556

Problem: "make install" changes the help tags file, causing it to differ from the repository.  
Solution: Move it aside and restore it.  
Files: src/Makefile

#### Patch 7.4.1557

Problem: Windows cannot be identified.  
Solution: Add a unique window number to each window and functions to use it.  
Files: src/structs.h, src/window.c, src/eval.c, src/proto/eval.pro,  
src/proto/window.pro, src/testdir/test\_window\_id.vim,  
src/testdir/Make\_all.mak, runtime/doc/eval.txt

#### Patch 7.4.1558

Problem: It is not easy to find out what windows display a buffer.  
Solution: Add win\_findbuf().  
Files: src/eval.c, src/window.c, src/proto/window.pro,  
src/testdir/test\_window\_id.vim, runtime/doc/eval.txt

#### Patch 7.4.1559

Problem: Passing cookie to a callback is clumsy.  
Solution: Change function() to take arguments and return a partial.  
Files: src/structs.h, src/channel.c, src/eval.c, src/if\_python.c,

```
src/if_python3.c, src/if_py_both.h, src/json.c,
src/proto/eval.pro, src/testdir/test_partial.vim,
src/testdir/test_alot.vim, runtime/doc/eval.txt
```

## Patch 7.4.1560

Problem: Dict options with a dash are more difficult to use.  
Solution: Use an underscore, so that dict.err\_io can be used.  
Files: src/channel.c, src/structs.h, src/testdir/test\_channel.vim,  
runtime/doc/channel.txt

## Patch 7.4.1561 (after 7.4.1559)

Problem: Missing update to proto file.  
Solution: Change the proto file.  
Files: src/proto/channel.pro

## Patch 7.4.1562

Problem: ":helptags ALL" crashes. (Lcd)  
Solution: Don't free twice.  
Files: src/ex\_cmds.c

## Patch 7.4.1563

Problem: Partial test fails on windows.  
Solution: Return 1 or -1 from compare function.  
Files: src/testdir/test\_partial.vim

## Patch 7.4.1564

Problem: An empty list in function() causes an error.  
Solution: Handle an empty list like there is no list of arguments.  
Files: src/eval.c, src/testdir/test\_partial.vim

## Patch 7.4.1565

Problem: Crash when assert\_equal() runs into a NULL string.  
Solution: Check for NULL. (Dominique) Add a test.  
Files: src/eval.c, src/testdir/test\_assert.vim

## Patch 7.4.1566

Problem: Compiler warning for shadowed variable. (Kazunobu Kuriyama)  
Solution: Remove the inner one.  
Files: src/eval.c

## Patch 7.4.1567

Problem: Crash in assert\_fails().  
Solution: Check for NULL. (Dominique Pelle) Add a test.  
Files: src/eval.c, src/testdir/test\_assert.vim

## Patch 7.4.1568

Problem: Using CTRL-] in help on option in parentheses doesn't work.  
Solution: Skip the "(" in "(". (Hirohito Higashi)  
Files: src/ex\_cmds.c

## Patch 7.4.1569

Problem: Using old style tests for quickfix.  
Solution: Change them to new style tests. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_all.mak, src/testdir/testl06.in,  
src/testdir/testl06.ok, src/testdir/test\_qf\_title.in,  
src/testdir/test\_qf\_title.ok, src/testdir/test\_quickfix.vim

## Patch 7.4.1570

Problem: There is no way to avoid the message when editing a file.  
Solution: Add the "F" flag to 'shortmess'. (Shougo Matsu, closes #686)  
Files: runtime/doc/options.txt, src/buffer.c, src/ex\_cmds.c,  
src/option.h

## Patch 7.4.1571

Problem: No test for ":help".  
Solution: Add a test for what 7.4.1568 fixed. (Hirohito Higashi)  
Files: src/testdir/test\_alot.vim, src/testdir/test\_help\_tagjump.vim

## Patch 7.4.1572

Problem: Setting 'compatible' in test influences following tests.  
Solution: Turn 'compatible' off again.  
Files: src/testdir/test\_backspace\_opt.vim

## Patch 7.4.1573

Problem: Tests get stuck at the more prompt.  
Solution: Move the backspace test out of test\_alot.  
Files: src/testdir/test\_alot.vim, src/testdir/Make\_all.mak

## Patch 7.4.1574

Problem: ":undo 0" does not work. (Florent Fayolle)  
Solution: Make it undo all the way. (closes #688)  
Files: src/undo.c, src/testdir/test\_undolevels.vim,  
src/testdir/test\_ex\_undo.vim, src/testdir/test\_alot.vim

## Patch 7.4.1575

Problem: Using wrong size for struct.  
Solution: Use the size for wide API. (Ken Takata)  
Files: src/gui\_w32.c

## Patch 7.4.1576

Problem: Write error of viminfo file is not handled properly. (Christian Neukirchen)  
Solution: Check the return value of fclose(). (closes #682)  
Files: src/ex\_cmds.c

## Patch 7.4.1577

Problem: Cannot pass "dict.Myfunc" around as a partial.  
Solution: Create a partial when expected.  
Files: src/eval.c, src/testdir/test\_partial.vim

## Patch 7.4.1578

Problem: There is no way to invoke a function later or periodically.  
Solution: Add timer support.  
Files: src/eval.c, src/ex\_cmds2.c, src/screen.c, src/ex\_docmd.c,  
src/feature.h, src/gui.c, src/proto/eval.pro,  
src/proto/ex\_cmds2.pro, src/proto/screen.pro, src/structs.h,  
src/version.c, src/testdir/test\_alot.vim,  
src/testdir/test\_timers.vim, runtime/doc/eval.txt

## Patch 7.4.1579 (after 7.4.1578)

Problem: Missing changes in channel.c  
Solution: Include the changes.  
Files: src/channel.c

## Patch 7.4.1580

Problem: Crash when using function reference. (Luchr)  
Solution: Set initial refcount. (Ken Takata, closes #690)  
Files: src/eval.c, src/testdir/test\_partial.vim

## Patch 7.4.1581

Problem: Using ":call dict.func()" where the function is a partial does not work. Using "dict.func()" where the function does not take a Dictionary does not work.  
Solution: Handle partial properly in ":call". (Yasuhiro Matsumoto)

Files: src/eval.c, src/testdir/test\_partial.vim, src/testdir/test55.ok

Patch 7.4.1582

Problem: Get E923 when using function(dict.func, [], dict). (Kent Sibilev)  
Storing a function with a dict in a variable drops the dict if the  
function is script-local.

Solution: Translate the function name. Use dict arg if present.

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1583

Problem: Warning for uninitialized variable.

Solution: Initialize it. (Dominique)

Files: src/ex\_cmds2.c

Patch 7.4.1584

Problem: Timers don't work for Win32 console.

Solution: Add check\_due\_timer() in WaitForChar().

Files: src/os\_win32.c

Patch 7.4.1585

Problem: Partial is not recognized everywhere.

Solution: Check for partial in trans\_function\_name(). (Yasuhiro Matsumoto)  
Add a test.

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1586

Problem: Nesting partials doesn't work.

Solution: Append arguments. (Ken Takata)

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1587

Problem: Compiler warnings with 64 bit compiler.

Solution: Add type casts. (Mike Williams)

Files: src/ex\_cmds2.c

Patch 7.4.1588

Problem: Old style test for quickfix.

Solution: Turn test 96 into a new style test.

Files: src/testdir/Make\_all.mak, src/testdir/test96.in,  
src/testdir/test96.ok, src/testdir/test\_quickfix.vim

Patch 7.4.1589

Problem: Combining dict and args with partial doesn't always work.

Solution: Use the arguments from the partial.

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1590

Problem: Warning for shadowed variable. (Christian Brabandt)

Solution: Move the variable into a local block.

Files: src/eval.c

Patch 7.4.1591

Problem: The quickfix title is truncated.

Solution: Save the command before it is truncated. (Anton Lindqvist)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1592

Problem: Quickfix code using memory after being freed. (Dominique Pelle)

Solution: Detect that the window was closed. (Hirohito Higashi)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1593

Problem: Using channel timeout instead of request timeout. (Coverity)  
Solution: Remove the extra assignment.  
Files: src/channel.c

#### Patch 7.4.1594

Problem: Timers don't work on Unix.  
Solution: Add missing code.  
Files: src/os\_unix.c

#### Patch 7.4.1595

Problem: Not checking for failed open(). (Coverity)  
Solution: Check file descriptor not being negative.  
Files: src/os\_unix.c

#### Patch 7.4.1596

Problem: Memory leak. (Coverity)  
Solution: Free the pattern.  
Files: src/ex\_cmds2.c

#### Patch 7.4.1597

Problem: Memory leak when out of memory. (Coverity)  
Solution: Free the name.  
Files: src/eval.c

#### Patch 7.4.1598

Problem: When starting the GUI fails a swap file is left behind. (Joerg Plate)  
Solution: Preserve files before exiting. (closes #692)  
Files: src/main.c, src/gui.c

#### Patch 7.4.1599

Problem: No link to Coverity.  
Solution: Add Coverity badge in README.  
Files: README.md

#### Patch 7.4.1600

Problem: libs directory is not useful.  
Solution: Remove arp.library, it was only for very old Amiga versions.  
Files: libs/arp.library, Filelist

#### Patch 7.4.1601

Problem: README files take a lot of space in the top directory.  
Solution: Move most of them to "READMEdir".  
Files: Filelist, Makefile, README.txt.info, README\_ami.txt, README\_ami.txt.info, README\_amibin.txt, README\_amibin.txt.info, README\_amisrc.txt, README\_amisrc.txt.info, README\_bindos.txt, README\_dos.txt, README\_extra.txt, README\_mac.txt, README\_ole.txt, README\_os2.txt, README\_os390.txt, README\_src.txt, README\_srcdos.txt, README\_unix.txt, README\_vms.txt, README\_w32s.txt, READMEdir/README.txt.info, READMEdir/README\_ami.txt, READMEdir/README\_ami.txt.info, READMEdir/README\_amibin.txt, READMEdir/README\_amibin.txt.info, READMEdir/README\_amisrc.txt, READMEdir/README\_amisrc.txt.info, READMEdir/README\_bindos.txt, READMEdir/README\_dos.txt, READMEdir/README\_extra.txt, READMEdir/README\_mac.txt, READMEdir/README\_ole.txt, READMEdir/README\_os2.txt, READMEdir/README\_os390.txt, READMEdir/README\_src.txt, READMEdir/README\_srcdos.txt, READMEdir/README\_unix.txt, READMEdir/README\_vms.txt, READMEdir/README\_w32s.txt,

#### Patch 7.4.1602

Problem: Info files take space in the top directory.

Solution: Move them to "READMEdir".  
Files: Filelist, src.info, Contents.info, runtime.info, vimdir.info,  
Vim.info, Xxd.info, READMEdir/src.info, READMEdir/Contents.info,  
READMEdir/runtime.info, READMEdir/vimdir.info, READMEdir/Vim.info,  
READMEdir/Xxd.info

#### Patch 7.4.1603

Problem: Timer with an ":echo" command messes up display.  
Solution: Redraw depending on the mode. (Hirohito Higashi) Avoid the more  
prompt being used recursively.  
Files: src/screen.c, src/message.c

#### Patch 7.4.1604

Problem: Although emoji characters are ambiguous width, best is to treat  
them as full width.  
Solution: Update the Unicode character tables. Add the 'emoji' options.  
(Yasuhiro Matsumoto)  
Files: runtime/doc/options.txt, runtime/optwin.vim,  
runtime/tools/unicode.vim, src/mbyte.c, src/option.c, src/option.h

#### Patch 7.4.1605

Problem: Catching exception that won't be thrown.  
Solution: Remove try/catch.  
Files: src/testdir/test55.in

#### Patch 7.4.1606

Problem: Having type() handle a Funcref that is or isn't a partial  
differently causes problems for existing scripts.  
Solution: Make type() return the same value. (Thinca)  
Files: src/eval.c, src/testdir/test\_viml.vim

#### Patch 7.4.1607

Problem: Comparing a function that exists on two dicts is not backwards  
compatible. (Thinca)  
Solution: Only compare the function, not what the partial adds.  
Files: src/eval.c, src/testdir/test\_alot.vim, src/testdir/test\_expr.vim

#### Patch 7.4.1608

Problem: string() doesn't handle a partial.  
Solution: Make a string from a partial.  
Files: src/eval.c, src/testdir/test\_partial.vim

#### Patch 7.4.1609

Problem: Contents file is only for Amiga distro.  
Solution: Move it to "READMEdir". Update some info.  
Files: Filelist, Contents, READMEdir/Contents

#### Patch 7.4.1610

Problem: Compiler warnings for non-virtual destructor.  
Solution: Mark the classes final. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak, src/gui\_dwrite.cpp, src/if\_ole.cpp

#### Patch 7.4.1611

Problem: The versplit feature makes the code unnecessary complicated.  
Solution: Remove FEAT\_VERTSPLIT, always support vertical splits when  
FEAT\_WINDOWS is defined.  
Files: src/buffer.c, src/charset.c, src/eval.c, src/ex\_cmds.c,  
src/ex\_docmd.c, src/ex\_getln.c, src/gui.c, src/if\_lua.c,  
src/if\_mzsch.c, src/if\_ruby.c, src/main.c, src/misc1.c,  
src/misc2.c, src/move.c, src/normal.c, src/option.c,  
src/quickfix.c, src/screen.c, src/syntax.c, src/term.c, src/ui.c,  
src/window.c, src/globals.h, src/gui.h, src/if\_py\_both.h,



src/option.h, src/structs.h, src/term.h  
src/feature.h, src/vim.h, src/version.c

Patch 7.4.1612 (after 7.4.1611)

Problem: Can't build with small features.  
Solution: Move code and #ifdefs.  
Files: src/ex\_getln.c

Patch 7.4.1613 (after 7.4.1612)

Problem: Still can't build with small features.  
Solution: Adjust #ifdefs.  
Files: src/ex\_getln.c

Patch 7.4.1614

Problem: Still quickfix test in old style.  
Solution: Turn test 10 into a new style test.  
Files: src/testdir/Make\_all.mak, src/testdir/Make\_vms.mms,  
src/testdir/main.aap, src/testdir/test10.in,  
src/testdir/test10.ok, src/testdir/test\_quickfix.vim,  
src/testdir/test10a.in, src/testdir/test10a.ok

Patch 7.4.1615

Problem: Build fails with tiny features.  
Solution: Adjust #ifdefs.  
Files: src/normal.c, src/window.c

Patch 7.4.1616

Problem: Malformed channel request causes a hang.  
Solution: Drop malformed message. (Damien)  
Files: src/channel.c, src/testdir/test\_channel.vim,  
src/testdir/test\_channel.py

Patch 7.4.1617

Problem: When a JSON message is split it isn't decoded.  
Solution: Wait a short time for the rest of the message to arrive.  
Files: src/channel.c, src/json.c, src/structs.h,  
src/testdir/test\_channel.vim, src/testdir/test\_channel.py

Patch 7.4.1618

Problem: Starting job with output to buffer changes options in the current  
buffer.  
Solution: Set "curbuf" earlier. (Yasuhiro Matsumoto)  
Files: src/channel.c

Patch 7.4.1619

Problem: When 'fileformats' is set in the vimrc it applies to new buffers  
but not the initial buffer.  
Solution: Set 'fileformat' when starting up. (Mike Williams)  
Files: src/option.c

Patch 7.4.1620

Problem: Emoji characters are not considered as a kind of word character.  
Solution: Give emoji characters a word class number. (Yasuhiro Matsumoto)  
Files: src/mbyte.c

Patch 7.4.1621

Problem: Channel test doesn't work with Python 2.6.  
Solution: Add number in formatting placeholder. (Wiredool)  
Files: src/testdir/test\_channel.py

Patch 7.4.1622

Problem: Channel demo doesn't work with Python 2.6.

Solution: Add number in formatting placeholder  
Files: runtime/tools/demoserver.py

Patch 7.4.1623

Problem: All Channels share the message ID, it keeps getting bigger.  
Solution: Use a message ID per channel.  
Files: src/channel.c, src/proto/channel.pro, src/structs.h

Patch 7.4.1624

Problem: Can't get info about a channel.  
Solution: Add ch\_info().  
Files: src/eval.c, src/channel.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 7.4.1625

Problem: Trying to close file descriptor that isn't open.  
Solution: Check for negative number.  
Files: src/os\_unix.c

Patch 7.4.1626 (after 7.4.1624)

Problem: Missing changes to structs.  
Solution: Include the changes.  
Files: src/structs.h

Patch 7.4.1627

Problem: Channel out\_cb and err\_cb are not tested.  
Solution: Add a test.  
Files: src/testdir/test\_channel.vim

Patch 7.4.1628

Problem: 64-bit Compiler warning.  
Solution: Change type of variable. (Mike Williams)  
Files: src/channel.c

Patch 7.4.1629

Problem: Handling emoji characters as full width has problems with  
backwards compatibility.  
Solution: Remove ambiguous and double width characters from the emoji table.  
Use a separate table for the character class.  
(partly by Yasuhiro Matsumoto)  
Files: runtime/tools/unicode.vim, src/mbyte.c

Patch 7.4.1630

Problem: Unicode table for double width is outdated.  
Solution: Update to the latest Unicode standard.  
Files: src/mbyte.c

Patch 7.4.1631

Problem: Compiler doesn't understand switch on all enum values. (Tony  
Mechelynck)  
Solution: Initialize variable.  
Files: src/channel.c

Patch 7.4.1632

Problem: List of test targets is outdated.  
Solution: Update to current list of test targets.  
Files: src/Makefile

Patch 7.4.1633

Problem: If the help tags file was removed "make install" fails. (Tony  
Mechelynck)  
Solution: Only try moving the file if it exists.

Files: src/Makefile

Patch 7.4.1634

Problem: Vertical movement after CTRL-A ends up in the wrong column.  
(Urtica Dioica)

Solution: Set curswant when appropriate. (Hirohito Higashi)

Files: src/ops.c, src/testdir/test\_increment.vim

Patch 7.4.1635

Problem: Channel test is a bit flaky.

Solution: Remove 'DETACH' if it's there.

Files: src/testdir/test\_channel.vim

Patch 7.4.1636

Problem: When 'F' is in 'shortmess' the prompt for the encryption key isn't displayed. (Toothpik)

Solution: Reset msg\_silent.

Files: src/ex\_getln.c

Patch 7.4.1637

Problem: Can't build with older MinGW compiler.

Solution: Change option from c++11 to gnu++11. (Ken Takata)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1638

Problem: When binding a function to a dict the reference count is wrong.

Solution: Decrement dict reference count, only reference the function when actually making a copy. (Ken Takata)

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1639

Problem: Invoking garbage collection may cause a double free.

Solution: Don't free the dict in a partial when recursive is FALSE.

Files: src/eval.c

Patch 7.4.1640

Problem: Crash when an autocommand changes a quickfix list. (Dominique)

Solution: Check whether an entry is still valid. (Yegappan Lakshmanan, Hirohito Higashi)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1641

Problem: Using unterminated string.

Solution: Add NUL before calling vim\_strsave\_shellescape(). (James McCoy)

Files: src/eval.c, src/testdir/test105.in, src/testdir/test105.ok

Patch 7.4.1642

Problem: Handling emoji characters as full width has problems with backwards compatibility.

Solution: Only put characters in the 1f000 range in the emoji table.

Files: runtime/tools/unicode.vim, src/mbyte.c

Patch 7.4.1643 (after 7.4.1641)

Problem: Terminating file name has side effects.

Solution: Restore the character. (mostly by James McCoy, closes #713)

Files: src/eval.c, src/testdir/test105.in, src/testdir/test105.ok

Patch 7.4.1644

Problem: Using string() on a partial that exists in the dictionary it binds results in an error. (Nikolai Pavlov)

Solution: Make string() not fail on a recursively nested structure. (Ken Takata)

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1645

Problem: When a dict contains a partial it can't be redefined as a function. (Nikolai Pavlov)

Solution: Remove the partial when overwriting with a function.

Files: src/eval.c, src/testdir/test\_partial.vim

Patch 7.4.1646

Problem: Using Python vim.bindeval() on a partial doesn't work. (Nikolai Pavlov)

Solution: Add VAR\_PARTIAL support in Python.

Files: src/if\_py\_both.h, src/testdir/test\_partial.vim

Patch 7.4.1647

Problem: Using freed memory after setqflist() and ":caddbuffer". (Dominique)

Solution: Set qf\_ptr when adding the first item to the quickfix list.

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1648

Problem: Compiler has a problem copying a string into di\_key[]. (Yegappan Lakshmanan)

Solution: Add dictitem16\_T.

Files: src/structs.h, src/eval.c

Patch 7.4.1649

Problem: The matchit plugin needs to be copied to be used.

Solution: Put the matchit plugin in an optional package.

Files: Filelist, runtime/macros/matchit.vim, runtime/macros/matchit.txt, runtime/macros/README.txt, src/Makefile, runtime/pack/dist/opt/matchit/plugin/matchit.vim, runtime/pack/dist/opt/matchit/doc/matchit.txt, runtime/pack/dist/opt/matchit/doc/tags, runtime/doc/usr\_05.txt, runtime/doc/usr\_toc.txt

Patch 7.4.1650

Problem: Quickfix test fails.

Solution: Accept any number of matches.

Files: src/testdir/test\_quickfix.vim

Patch 7.4.1651

Problem: Some dead (MSDOS) code remains.

Solution: Remove the unused lines. (Ken Takata)

Files: src/misc1.c

Patch 7.4.1652

Problem: Old style test for fnamemodify().

Solution: Turn it into a new style test.

Files: src/testdir/test105.in, src/testdir/test105.ok, src/testdir/test\_fnamemodify.vim, src/testdir/test\_alot.vim, src/testdir/Make\_all.mak

Patch 7.4.1653 (after 7.4.1649)

Problem: Users who loaded matchit.vim manually have to change their startup. (Gary Johnson)

Solution: Add a file in the old location that loads the package.

Files: runtime/macros/matchit.vim, Filelist

Patch 7.4.1654

Problem: Crash when using expand('%:S') in a buffer without a name.

Solution: Don't set a NUL. (James McCoy, closes #714)

Files: src/eval.c, src/testdir/test\_fnamemodify.vim

## Patch 7.4.1655

Problem: remote\_expr() hangs. (Ramel)  
Solution: Check for messages in the waiting loop.  
Files: src/if\_xcmdsrv.c

## Patch 7.4.1656

Problem: Crash when using partial with a timer.  
Solution: Increment partial reference count. (Hirohito Higashi)  
Files: src/eval.c, src/testdir/test\_timers.vim

## Patch 7.4.1657

Problem: On Unix in a terminal: channel messages are not handled right away.  
(Jackson Alves de Aquino)  
Solution: Break the loop for timers when something was received.  
Files: src/os\_unix.c

## Patch 7.4.1658

Problem: A plugin does not know when VimEnter autocommands were already triggered.  
Solution: Add the v:vim\_did\_enter variable.  
Files: src/eval.c, src/main.c, src/vim.h, src/testdir/test\_autocmd.vim, src/testdir/test\_alot.vim, runtime/doc/autocmd.txt, runtime/doc/eval.txt

## Patch 7.4.1659 (after 7.4.1657)

Problem: Compiler warning for argument type. (Manuel Ortega)  
Solution: Remove "&".  
Files: src/os\_unix.c

## Patch 7.4.1660

Problem: has('patch-7.4.1') doesn't work.  
Solution: Fix off-by-one error. (Thinca)  
Files: src/eval.c, src/testdir/test\_expr.vim, src/testdir/test60.in, src/testdir/test60.ok

## Patch 7.4.1661

Problem: No test for special characters in channel eval command.  
Solution: Testing sending and receiving text with special characters.  
Files: src/testdir/test\_channel.vim, src/testdir/test\_channel.py

## Patch 7.4.1662

Problem: No test for an invalid Ex command on a channel.  
Solution: Test handling an invalid command gracefully. Avoid getting an error message, do write it to the channel log.  
Files: src/channel.c, src/testdir/test\_channel.vim, src/testdir/test\_channel.py

## Patch 7.4.1663

Problem: In tests it's often useful to check if a pattern matches.  
Solution: Add assert\_match().  
Files: src/eval.c, src/testdir/test\_assert.vim, src/testdir/test\_channel.vim, runtime/doc/eval.txt

## Patch 7.4.1664

Problem: Crash in :cgetexpr.  
Solution: Check for NULL pointer. (Dominique) Add a test.  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 7.4.1665

Problem: Crash when calling job\_start() with a NULL string. (Dominique)  
Solution: Check for an invalid argument.

Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1666

Problem: When reading JSON from a channel all readahead is used.

Solution: Use the fill function to reduce overhead.

Files: src/channel.c, src/json.c, src/structs.h

Patch 7.4.1667

Problem: Win32: waiting on a pipe with fixed sleep time.

Solution: Start with a short delay and increase it when looping.

Files: src/channel.c

Patch 7.4.1668

Problem: channel\_get\_all() does multiple allocations.

Solution: Compute the size and allocate once.

Files: src/channel.c

Patch 7.4.1669

Problem: When writing buffer lines to a pipe Vim may block.

Solution: Avoid blocking, write more lines later.

Files: src/channel.c, src/misc2.c, src/os\_unix.c, src/structs.h,  
src/vim.h, src/proto/channel.pro, src/testdir/test\_channel.vim

Patch 7.4.1670

Problem: Completion doesn't work well for a variable containing "#".

Solution: Recognize the "#". (Watiko)

Files: src/eval.c

Patch 7.4.1671

Problem: When help exists in multiple languages, adding @ab while "ab" is  
the default help language is unnecessary.

Solution: Leave out "@ab" when not needed. (Ken Takata)

Files: src/ex\_getln.c

Patch 7.4.1672

Problem: The Dvorak support is a bit difficult to install.

Solution: Turn it into an optional package.

Files: runtime/macros/dvorak, runtime/macros/README.txt,  
runtime/pack/dist/opt/dvorak/plugin/dvorak.vim,  
runtime/pack/dist/opt/dvorak/dvorak/enable.vim,  
runtime/pack/dist/opt/dvorak/dvorak/disable.vim

Patch 7.4.1673

Problem: The justify plugin has to be copied or sourced to be used.

Solution: Turn it into a package.

Files: runtime/macros/justify.vim, runtime/macros/README.txt,  
runtime/pack/dist/opt/justify/plugin/justify.vim, Filelist

Patch 7.4.1674

Problem: The editexisting plugin has to be copied or sourced to be used.

Solution: Turn it into a package.

Files: runtime/macros/editexisting.vim, runtime/macros/README.txt,  
runtime/pack/dist/opt/editexisting/plugin/editexisting.vim,  
Filelist

Patch 7.4.1675

Problem: The swapmous plugin has to be copied or sourced to be used.

Solution: Turn it into the swapmouse package.

Files: runtime/macros/swapmous.vim, runtime/macros/README.txt,  
runtime/pack/dist/opt/swapmouse/plugin/swapmouse.vim, Filelist

Patch 7.4.1676

Problem: The shellmenu plugin has to be copied or sourced to be used.  
Solution: Turn it into a package.  
Files: runtime/macros/shellmenu.vim, runtime/macros/README.txt,  
runtime/pack/dist/opt/shellmenu/plugin/shellmenu.vim, Filelist

Patch 7.4.1677

Problem: A reference to the removed file\_select plugin remains.  
Solution: Remove it.  
Files: runtime/macros/README.txt

Patch 7.4.1678

Problem: Warning for unused argument.  
Solution: Add UNUSED. (Dominique Pelle)  
Files: src/if\_mzsch.c

Patch 7.4.1679

Problem: Coverity: copying value of v\_lock without initializing it.  
Solution: Init v\_lock in rettv\_list\_alloc() and rettv\_dict\_alloc().  
Files: src/eval.c

Patch 7.4.1680

Problem: Coverity warns for not checking name length (false positive).  
Solution: Only copy the characters we know are there.  
Files: src/channel.c

Patch 7.4.1681

Problem: Coverity warns for fixed size buffer length (false positive).  
Solution: Add a check for the name length.  
Files: src/eval.c

Patch 7.4.1682

Problem: Coverity: no check for NULL.  
Solution: Add check for invalid argument to assert\_match().  
Files: src/eval.c

Patch 7.4.1683

Problem: Generated .bat files do not support --nofork.  
Solution: Add check for --nofork. Also add "setlocal". (Kevin Cantú,  
closes #659)  
Files: src/dosinst.c

Patch 7.4.1684

Problem: README text is slightly outdated.  
Solution: Mention the READMEdir directory.  
Files: README.md, README.txt

Patch 7.4.1685

Problem: There is no easy way to get all the information about a match.  
Solution: Add matchstrpos(). (Ozaki Kiichi)  
Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/eval.c,  
src/testdir/test\_alot.vim, src/testdir/test\_matchstrpos.vim

Patch 7.4.1686

Problem: When running tests \$HOME/.viminfo is written. (James McCoy)  
Solution: Add 'nviminfo' to the 'viminfo' option. (closes #722)  
Files: src/testdir/test\_backspace\_opt.vim, src/testdir/test\_viminfo.vim,  
src/testdir/runtest.vim.

Patch 7.4.1687

Problem: The channel close\_cb option does not work.  
Solution: Use jo\_close\_partial instead of jo\_err\_partial. (Damien)  
Files: src/channel.c, src/testdir/test\_channel.vim

## Patch 7.4.1688

Problem: MzScheme does not support partial.  
Solution: Add minimal partial support. (Ken Takata)  
Files: src/if\_mzsch.c

## Patch 7.4.1689

Problem: Ruby interface has inconsistent coding style.  
Solution: Fix the coding style. (Ken Takata)  
Files: src/if\_ruby.c

## Patch 7.4.1690

Problem: Can't compile with the conceal feature but without multi-byte.  
Solution: Adjust #ifdef. (Owen Leibman)  
Files: src/eval.c, src/window.c

## Patch 7.4.1691

Problem: When switching to a new buffer and an autocommand applies syntax highlighting an ml\_get error may occur.  
Solution: Check "syn\_buf" against the buffer in the window. (Alexander von Buddenbrock, closes #676)  
Files: src/syntax.c

## Patch 7.4.1692

Problem: feedkeys('i', 'x') gets stuck, waits for a character to be typed.  
Solution: Behave like ":normal". (Yasuhiro Matsumoto)  
Files: src/eval.c, src/testdir/test\_feedkeys.vim

## Patch 7.4.1693

Problem: Building the Perl interface gives compiler warnings.  
Solution: Remove a pragma. Add noreturn attributes. (Damien)  
Files: src/if\_perl.xs

## Patch 7.4.1694

Problem: Win32 gvim doesn't work with "dvorakj" input method.  
Solution: Wait for QS\_ALLINPUT instead of QS\_ALLEVENTS. (Yukihiro Nakadaira)  
Files: src/gui\_w32.c

## Patch 7.4.1695

Problem: ":syn reset" clears the effect ":syn iskeyword". (James McCoy)  
Solution: Remove clearing the syntax keywords.  
Files: src/syntax.c

## Patch 7.4.1696

Problem: When using :stopinsert in a silent mapping the "INSERT" message isn't cleared. (Coacher)  
Solution: Always clear the message. (Christian Brabandt, closes #718)  
Files: src/ex\_docmd.c, src/proto/screen.pro, src/screen.c

## Patch 7.4.1697

Problem: Display problems when the 'ambiwidth' and 'emoji' options are not set properly or the terminal doesn't behave as expected.  
Solution: After drawing an ambiguous width character always position the cursor.  
Files: src/mbyte.c, src/screen.c, src/proto/mbyte.pro

## Patch 7.4.1698

Problem: Two tests fail when running tests with MinGW. (Michael Soyka)  
Solution: Convert test\_getcwd.ok test\_wordcount.ok to unix fileformat.  
Files: src/testdir/Make\_ming.mak

## Patch 7.4.1699



Problem: :packadd does not work the same when used early or late.  
Solution: Always load plugins matching "plugin/\*\*/\*.vim".  
Files: src/ex\_cmds2.c, src/testdir/test\_packadd.vim

#### Patch 7.4.1700

Problem: Equivalence classes are not properly tested.  
Solution: Add tests for multi-byte and latin1. Fix an error. (Owen Leibman)  
Files: src/regexp.c, src/testdir/Make\_all.mak,  
src/testdir/test\_alot\_latin.vim, src/testdir/test\_alot\_utf8.vim,  
src/testdir/test\_regexp\_latin.vim,  
src/testdir/test\_regexp\_utf8.vim

#### Patch 7.4.1701

Problem: Equivalence classes still tested in old style tests.  
Solution: Remove the duplicate.  
Files: src/testdir/test44.in, src/testdir/test44.ok,  
src/testdir/test99.in, src/testdir/test99.ok

#### Patch 7.4.1702

Problem: Using freed memory when parsing 'prntoptions' fails.  
Solution: Save the old options and restore them in case of an error.  
(Dominique)  
Files: src/hardcopy.c, src/testdir/test\_hardcopy.vim

#### Patch 7.4.1703

Problem: Can't assert for not equal and not matching.  
Solution: Add assert\_notmatch() and assert\_notequal().  
Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test\_assert.vim

#### Patch 7.4.1704

Problem: Using freed memory with "wincmd p". (Dominique Pelle)  
Solution: Also clear "prevwin" in other tab pages.  
Files: src/window.c

#### Patch 7.4.1705

Problem: The 'guifont' option does not allow for a quality setting.  
Solution: Add the "q" item, supported on MS-Windows. (Yasuhiro Matsumoto)  
Files: runtime/doc/options.txt, src/gui\_w32.c, src/os\_mswin.c,  
src/proto/os\_mswin.pro

#### Patch 7.4.1706

Problem: Old style function declaration breaks build.  
Solution: Remove \_\_ARGS().  
Files: src/proto/os\_mswin.pro

#### Patch 7.4.1707

Problem: Cannot use empty dictionary key, even though it can be useful.  
Solution: Allow using an empty dictionary key.  
Files: src/hashtab.c, src/eval.c, src/testdir/test\_expr.vim

#### Patch 7.4.1708

Problem: New regexp engine does not work properly with EBCDIC.  
Solution: Define equivalence class characters. (Owen Leibman)  
Files: src/regexp\_nfa.c

#### Patch 7.4.1709

Problem: Mistake in #ifdef.  
Solution: Change PROOF\_QUALITY to DRAFT\_QUALITY. (Ken Takata)  
Files: src/os\_mswin.c

#### Patch 7.4.1710

Problem: Not all output of an external command is read.

Solution: Avoid timing out when the process has exited. (closes #681)  
Files: src/os\_unix.c

#### Patch 7.4.1711

Problem: When using try/catch in 'statusline' it is still considered an error and the status line will be disabled.  
Solution: Check did\_emsg instead of called\_emsg. (hayal4busa, closes #729)  
Files: src/screen.c, src/testdir/test\_statusline.vim, src/testdir/test\_alot.vim

#### Patch 7.4.1712

Problem: For plugins in packages, plugin authors need to take care of all dependencies.  
Solution: When loading "start" packages and for :packloadall, first add all directories to 'runtimepath' before sourcing plugins.  
Files: src/ex\_cmds2.c, src/testdir/test\_packadd.vim

#### Patch 7.4.1713

Problem: GTK GUI doesn't work on Wayland.  
Solution: Specify that only the X11 backend is allowed. (Simon McVittie)  
Files: src/gui\_gtk\_x11.c

#### Patch 7.4.1714

Problem: Non-GUI specific settings in the gvimrc\_example file.  
Solution: Move some settings to the vimrc\_example file. Remove setting 'hlsearch' again. (suggested by Hirohito Higashi)  
Files: runtime/vimrc\_example.vim, runtime/gvimrc\_example.vim

#### Patch 7.4.1715

Problem: Double free when a partial is in a cycle with a list or dict. (Nikolai Pavlov)  
Solution: Do not free a nested list or dict used by the partial.  
Files: src/eval.c, src/testdir/test\_partial.vim

#### Patch 7.4.1716

Problem: 'autochdir' doesn't work for the first file. (Rob Hoelz)  
Solution: Call DO\_AUTOCHDIR after startup. (Christian Brabandt, closes #704)  
Files: src/main.c

#### Patch 7.4.1717

Problem: Leaking memory when opening a channel fails.  
Solution: Unreference partials in job options.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim

#### Patch 7.4.1718

Problem: Coverity: not using return value of set\_ref\_in\_item().  
Solution: Use the return value.  
Files: src/eval.c

#### Patch 7.4.1719

Problem: Leaking memory when there is a cycle involving a job and a partial.  
Solution: Add a copyID to job and channel. Set references in items referred by them. Go through all jobs and channels to find unreferenced items. Also, decrement reference counts when garbage collecting.  
Files: src/eval.c, src/channel.c, src/netbeans.c, src/globals.h, src/ops.c, src/regexp.c, src/tag.c, src/proto/channel.pro, src/proto/eval.pro, src/testdir/test\_partial.vim, src/structs.h

#### Patch 7.4.1720

Problem: Tests fail without the job feature.

Solution: Skip tests when the job feature is not present.  
Files: src/testdir/test\_partial.vim

Patch 7.4.1721

Problem: The vimtbar files are unused.  
Solution: Remove them. (Ken Takata)  
Files: src/vimtbar.dll, src/vimtbar.h, src/vimtbar.lib, Filelist

Patch 7.4.1722

Problem: Crash when calling garbagecollect() after starting a job.  
Solution: Set the copyID on job and channel. (Hirohito Higashi, Ozaki Kiichi)  
Files: src/eval.c

Patch 7.4.1723

Problem: When using try/catch in 'tabline' it is still considered an error and the tabline will be disabled.  
Solution: Check did\_emsg instead of called\_emsg. (hayal4busa, closes #746)  
Files: src/screen.c, src/testdir/test\_tabline.vim, src/testdir/test\_alot.vim

Patch 7.4.1724 (after 7.4.1723)

Problem: Tabline test fails in GUI.  
Solution: Remove 'e' from 'guioptions'.  
Files: src/testdir/test\_tabline.vim

Patch 7.4.1725

Problem: Compiler errors for non-ANSI compilers.  
Solution: Remove // comment. Remove comma at end of enum. (Michael Jarvis)  
Files: src/eval.c

Patch 7.4.1726

Problem: ANSI compiler complains about string length.  
Solution: Split long string in two parts. (Michael Jarvis)  
Files: src/ex\_cmds.c

Patch 7.4.1727

Problem: Cannot detect a crash in tests when caused by garbagecollect().  
Solution: Add garbagecollect\_for\_testing(). Do not free a job if is still useful.  
Files: src/channel.c, src/eval.c, src/getchar.c, src/main.c, src/vim.h, src/proto/eval.pro, src/testdir/runtest.vim, src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 7.4.1728

Problem: The help for functions require a space after the "(".  
Solution: Make CTRL-] on a function name ignore the arguments. (Hirohito Higashi)  
Files: src/ex\_cmds.c, src/testdir/test\_help\_tagjump.vim, runtime/doc/eval.txt

Patch 7.4.1729

Problem: The Perl interface cannot use 'print' operator for writing directly in standard IO.  
Solution: Add a minimal implementation of PerlIO Layer feature and try to use it for STDOUT/STDERR. (Damien)  
Files: src/if\_perl.xs, src/testdir/test\_perl.vim

Patch 7.4.1730

Problem: It is not easy to get a character out of a string.  
Solution: Add strgetchar() and strcharpart().  
Files: src/eval.c, src/testdir/test\_expr.vim

## Patch 7.4.1731

Problem: Python: turns partial into simple funcref.  
Solution: Use partials like partials. (Nikolai Pavlov, closes #734)  
Files: runtime/doc/if\_pyth.txt, src/eval.c, src/if\_py\_both.h,  
src/if\_python.c, src/if\_python3.c, src/proto/eval.pro,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.4.1732

Problem: Folds may close when using autocomplete. (Anmol Sethi)  
Solution: Increment/decrement disable\_fold. (Christian Brabandt, closes #643)  
Files: src/edit.c, src/fold.c, src/globals.h

## Patch 7.4.1733

Problem: "make install" doesn't know about cross-compiling. (Christian Neukirchen)  
Solution: Add CROSS\_COMPILING. (closes #740)  
Files: src/configure.in, src/auto/configure, src/config.mk.in,  
src/Makefile

## Patch 7.4.1734 (after 7.4.1730)

Problem: Test fails when not using utf-8.  
Solution: Split test in regular and utf-8 part.  
Files: src/testdir/test\_expr.vim, src/testdir/test\_expr\_utf8.vim,  
src/testdir/test\_alot\_utf8.vim

## Patch 7.4.1735

Problem: It is not possible to only see part of the message history. It is not possible to clear messages.  
Solution: Add a count to ":messages" and a clear argument. (Yasuhiro Matsumoto)  
Files: runtime/doc/message.txt, src/ex\_cmds.h, src/message.c,  
src/testdir/test\_messages.vim, src/testdir/test\_alot.vim

## Patch 7.4.1736 (after 7.4.1731)

Problem: Unused variable.  
Solution: Remove it. (Yasuhiro Matsumoto)  
Files: src/if\_py\_both.h

## Patch 7.4.1737

Problem: Argument marked as unused is used.  
Solution: Remove UNUSED.  
Files: src/message.c

## Patch 7.4.1738

Problem: Count for ":messages" depends on number of lines.  
Solution: Add ADDR\_OTHER address type.  
Files: src/ex\_cmds.h

## Patch 7.4.1739

Problem: Messages test fails on MS-Windows.  
Solution: Adjust the asserts. Skip the "messages maintainer" line if not showing all messages.  
Files: src/message.c, src/testdir/test\_messages.vim

## Patch 7.4.1740

Problem: syn-cchar defined with matchadd() does not appear if there are no other syntax definitions which matches buffer text.  
Solution: Check for startcol. (Ozaki Kiichi, hayal4busa, closes #757)  
Files: src/screen.c, src/testdir/Make\_all.mak,

```
src/testdir/test_alot_utf8.vim, src/testdir/test_match_conceal.in,
src/testdir/test_match_conceal.ok,
src/testdir/test_matchadd_conceal.vim,
src/testdir/test_matchadd_conceal_utf8.vim,
src/testdir/test_undolevels.vim
```

## Patch 7.4.1741

Problem: Not testing utf-8 characters.  
Solution: Move the right asserts to the test\_expr\_utf8 test.  
Files: src/testdir/test\_expr.vim, src/testdir/test\_expr\_utf8.vim

## Patch 7.4.1742

Problem: strgetchar() does not work correctly.  
Solution: use mb\_cptr2len(). Add a test. (Naruhiko Nishino)  
Files: src/eval.c, src/testdir/test\_expr\_utf8.vim

## Patch 7.4.1743

Problem: Clang warns for uninitialized variable. (Michael Jarvis)  
Solution: Initialize it.  
Files: src/if\_py\_both.h

## Patch 7.4.1744

Problem: Python: Converting a sequence may leak memory.  
Solution: Decrement a reference. (Nikolai Pavlov)  
Files: src/if\_py\_both.h

## Patch 7.4.1745

Problem: README file is not clear about where to get Vim.  
Solution: Add links to github, releases and the Windows installer.  
(Suggested by Christian Brabandt)  
Files: README.md, README.txt

## Patch 7.4.1746

Problem: Memory leak in Perl.  
Solution: Decrement the reference count. Add a test. (Damien)  
Files: src/if\_perl.xs, src/testdir/test\_perl.vim

## Patch 7.4.1747

Problem: Coverity: missing check for NULL pointer.  
Solution: Check for out of memory.  
Files: src/if\_py\_both.h

## Patch 7.4.1748

Problem: "gD" does not find match in first column of first line. (Gary Johnson)  
Solution: Accept match at the cursor.  
Files: src/normal.c, src/testdir/test\_goto.vim, src/testdir/test\_alot.vim

## Patch 7.4.1749

Problem: When using GTK 3.20 there are a few warnings.  
Solution: Use new functions when available. (Kazunobu Kuriyama)  
Files: src/gui\_beval.c src/gui\_gtk\_x11.c

## Patch 7.4.1750

Problem: When a buffer gets updated while in command line mode, the screen may be messed up.  
Solution: Postpone the redraw when the screen is scrolled.  
Files: src/channel.c

## Patch 7.4.1751

Problem: Crash when 'tagstack' is off. (Dominique Pelle)  
Solution: Fix it. (Hirohito Higashi)

Files: src/tag.c, src/testdir/test\_alot.vim, src/testdir/test\_tagjump.vim

Patch 7.4.1752

Problem: When adding to the quickfix list the current position is reset.  
Solution: Do not reset the position when not needed. (Yegappan Lakshmanan)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1753

Problem: "noininsert" in 'completeopt' is sometimes ignored.  
Solution: Set the variables when the 'completeopt' was set. (Ozaki Kiichi)  
Files: src/edit.c, src/option.c, src/proto/edit.pro

Patch 7.4.1754

Problem: When 'filetype' was set and reloading a buffer which does not cause it to be set, the syntax isn't loaded. (KillTheMule)  
Solution: Remember whether the FileType event was fired and fire it if not. (Anton Lindqvist, closes #747)  
Files: src/fileio.c, src/testdir/test\_syntax.vim

Patch 7.4.1755

Problem: When using getreg() on a non-existing register a NULL list is returned. (Bjorn Linse)  
Solution: Allocate an empty list. Add a test.  
Files: src/eval.c, src/testdir/test\_expr.vim

Patch 7.4.1756

Problem: "dll" options are not expanded.  
Solution: Expand environment variables. (Ozaki Kiichi)  
Files: src/option.c, src/testdir/test\_alot.vim, src/testdir/test\_expand\_dllpath.vim

Patch 7.4.1757

Problem: When using complete() it may set 'modified' even though nothing was inserted.  
Solution: Use Down/Up instead of Next/Previous match. (Shougo Matsu, closes #745)  
Files: src/edit.c

Patch 7.4.1758

Problem: Triggering CursorHoldI when in CTRL-X mode causes problems.  
Solution: Do not trigger CursorHoldI in CTRL-X mode. Add "!" flag to feedkeys() (test with that didn't work though).  
Files: src/edit.c, src/eval.c

Patch 7.4.1759

Problem: When using feedkeys() in a timer the inserted characters are not used right away.  
Solution: Break the wait loop when characters have been added to typebuf. use this for testing CursorHoldI.  
Files: src/gui.c, src/os\_win32.c, src/os\_unix.c, src/testdir/test\_autocmd.vim

Patch 7.4.1760 (after 7.4.1759)

Problem: Compiler warning for unused variable.  
Solution: Add #ifdef. (John Marriott)  
Files: src/os\_win32.c

Patch 7.4.1761

Problem: Coverity complains about ignoring return value.  
Solution: Add "(void)" to get rid of the warning.  
Files: src/eval.c

## Patch 7.4.1762

Problem: Coverity: useless assignments.  
Solution: Remove them.  
Files: src/search.c

## Patch 7.4.1763

Problem: Coverity: useless assignment.  
Solution: Add #if 0.  
Files: src/spell.c

## Patch 7.4.1764

Problem: C++ style comment. (Ken Takata)  
Solution: Finish the work started here: don't call perror() when stderr  
isn't working.  
Files: src/os\_unix.c

## Patch 7.4.1765

Problem: Undo options are not together in the options window.  
Solution: Put them together. (Gary Johnson)  
Files: runtime/optwin.vim

## Patch 7.4.1766

Problem: Building instructions for MS-Windows are outdated.  
Solution: Mention setting SDK\_INCLUDE\_DIR. (Ben Franklin, closes #771) Move  
outdated instructions further down.  
Files: src/INSTALLpc.txt

## Patch 7.4.1767

Problem: When installing Vim on a GTK system the icon cache is not updated.  
Solution: Update the GTK icon cache when possible. (Kazunobu Kuriyama)  
Files: src/Makefile, src/configure.in, src/config.mk.in,  
src/auto/configure

## Patch 7.4.1768

Problem: Arguments of setqflist() are not checked properly.  
Solution: Add better checks, add a test. (Nikolai Pavlov, Hirohito Higashi,  
closes #661)  
Files: src/eval.c, src/testdir/test\_quickfix.vim

## Patch 7.4.1769

Problem: No "closed", "errors" and "encoding" attribute on Python output.  
Solution: Add attributes and more tests. (Roland Puntaier, closes #622)  
Files: src/if\_py\_both.h, src/if\_python.c, src/if\_python3.c,  
src/testdir/test86.in, src/testdir/test86.ok,  
src/testdir/test87.in, src/testdir/test87.ok

## Patch 7.4.1770

Problem: Cannot use true color in the terminal.  
Solution: Add the 'guicolors' option. (Nikolai Pavlov)  
Files: runtime/doc/options.txt, runtime/doc/term.txt,  
runtime/doc/vars.txt, src/auto/configure, src/config.h.in,  
src/configure.in, src/eval.c, src/globals.h, src/hardcopy.c,  
src/option.c, src/option.h, src/proto/term.pro, src/screen.c,  
src/structs.h, src/syntax.c, src/term.c, src/term.h,  
src/version.c, src/vim.h

## Patch 7.4.1771 (after 7.4.1768)

Problem: Warning for unused variable.  
Solution: Add #ifdef. (John Marriott)  
Files: src/eval.c

## Patch 7.4.1772 (after 7.4.1767)

Problem: Installation fails when \$GTK\_UPDATE\_ICON\_CACHE is empty.  
Solution: Add quotes. (Kazunobu Kuriyama)  
Files: src/Makefile

Patch 7.4.1773 (after 7.4.1770)

Problem: Compiler warnings. (Dominique Pelle)  
Solution: Add UNUSED. Add type cast. Avoid a buffer overflow.  
Files: src/syntax.c, src/term.c

Patch 7.4.1774 (after 7.4.1770)

Problem: Cterm true color feature has warnings.  
Solution: Add type casts.  
Files: src/screen.c, src/syntax.c, src/term.c

Patch 7.4.1775

Problem: The rgb.txt file is not installed.  
Solution: Install the file. (Christian Brabandt)  
Files: src/Makefile

Patch 7.4.1776

Problem: Using wrong buffer length.  
Solution: use the right name. (Kazunobu Kuriyama)  
Files: src/term.c

Patch 7.4.1777

Problem: Newly added features can escape the sandbox.  
Solution: Add checks for restricted and secure. (Yasuhiro Matsumoto)  
Files: src/eval.c

Patch 7.4.1778

Problem: When using the term truecolor feature, the t\_8f and t\_8b termcap options are not set by default.  
Solution: Move the values to before BT\_EXTRA\_KEYS. (Christian Brabandt)  
Files: src/term.c

Patch 7.4.1779

Problem: Using negative index in strchrpart(). (Yegappan Lakshmanan)  
Solution: Assume single byte when using a negative index.  
Files: src/eval.c

Patch 7.4.1780

Problem: Warnings reported by cppcheck.  
Solution: Fix the warnings. (Dominique Pelle)  
Files: src/ex\_cmds2.c, src/json.c, src/misc1.c, src/ops.c, src/regexp\_nfa.c

Patch 7.4.1781

Problem: synIDattr() does not respect 'guicolors'.  
Solution: Change the condition for the mode. (Christian Brabandt)  
Files: src/eval.c

Patch 7.4.1782

Problem: strchrpart() does not work properly with some multi-byte characters.  
Solution: Use mb\_cptr2len() instead of mb\_char2len(). (Hirohito Higashi)  
Files: src/eval.c, src/testdir/test\_expr\_utf8.vim

Patch 7.4.1783

Problem: The old regexp engine doesn't handle character classes correctly. (Manuel Ortega)  
Solution: Use regmbc() instead of regc(). Add a test.  
Files: src/regexp.c, src/testdir/test\_regexp\_utf8.vim



## Patch 7.4.1784

Problem: The termtruecolor feature is enabled differently from many other features.

Solution: Enable the termtruecolor feature for the big build, not through configure.

Files: src/configure.in, src/config.h.in, src/auto/configure, src/feature.h

## Patch 7.4.1785 (after 7.4.1783)

Problem: Regexp test fails on windows.

Solution: set 'isprint' to the right value for testing.

Files: src/testdir/test\_regexp\_utf8.vim

## Patch 7.4.1786

Problem: Compiled-in colors do not match rgb.txt.

Solution: Use the rgb.txt colors. (Kazunobu Kuriyama)

Files: src/term.c

## Patch 7.4.1787

Problem: When a job ends the close callback is invoked before other callbacks. On Windows the close callback is not called.

Solution: First invoke out/err callbacks before the close callback. Make the close callback work on Windows.

Files: src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim, src/testdir/test\_channel\_pipe.py

## Patch 7.4.1788

Problem: NSIS script is missing packages.

Solution: Add the missing directories. (Ken Takata)

Files: nsis/gvim.nsi

## Patch 7.4.1789

Problem: Cannot use ch\_read() in the close callback.

Solution: Do not discard the channel if there is readahead. Do not discard readahead if there is a close callback.

Files: src/eval.c, src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim

## Patch 7.4.1790

Problem: Leading white space in a job command matters. (Andrew Stewart)

Solution: Skip leading white space.

Files: src/os\_unix.c

## Patch 7.4.1791

Problem: Channel could be garbage collected too early.

Solution: Don't free a channel or remove it from a job when it is still useful.

Files: src/channel.c

## Patch 7.4.1792

Problem: Color name decoding is implemented several times.

Solution: Move it to term.c. (Christian Brabandt)

Files: src/gui\_mac.c, src/gui\_photon.c, src/gui\_w32.c, src/proto/term.pro, src/term.c

## Patch 7.4.1793

Problem: Some character classes may differ between systems. On OS/X the regexp test fails.

Solution: Make this less dependent on the system. (idea by Kazunobu Kuriyama)

Files: src/regexp.c, src/regexp\_nfa.c

Patch 7.4.1794 (after 7.4.1792)

Problem: Can't build on MS-Windows.  
Solution: Add missing declaration.  
Files: src/gui\_w32.c

Patch 7.4.1795

Problem: Compiler warning for redefining RGB. (John Marriott)  
Solution: Rename it to TORGB.  
Files: src/term.c

Patch 7.4.1796 (after 7.4.1795)

Problem: Colors are wrong on MS-Windows. (Christian Robinson)  
Solution: Use existing RGB macro if it exists. (Ken Takata)  
Files: src/term.c

Patch 7.4.1797

Problem: Warning from Windows 64 bit compiler.  
Solution: Change int to size\_t. (Mike Williams)  
Files: src/term.c

Patch 7.4.1798

Problem: Still compiler warning for unused return value. (Charles Campbell)  
Solution: Assign to ignoredp.  
Files: src/term.c

Patch 7.4.1799

Problem: 'guicolors' is a confusing option name.  
Solution: Use 'termguicolors' instead. (Hirohito Higashi, Ken Takata)  
Files: runtime/doc/options.txt, runtime/doc/term.txt,  
runtime/doc/variables.txt, runtime/syntax/dircolors.vim, src/eval.c,  
src/feature.h, src/globals.h, src/hardcopy.c, src/option.c,  
src/option.h, src/proto/term.pro, src/screen.c, src/structs.h,  
src/syntax.c, src/term.c, src/version.c, src/vim.h

Patch 7.4.1800 (after 7.4.1799)

Problem: Unnecessary #ifdef.  
Solution: Just use USE\_24BIT. (Ken Takata)  
Files: src/syntax.c

Patch 7.4.1801

Problem: Make uninstall leaves file behind.  
Solution: Delete rgb.txt. (Kazunobu Kuriyama)  
Files: src/Makefile

Patch 7.4.1802

Problem: Quickfix doesn't handle long lines well, they are split.  
Solution: Drop characters after a limit. (Anton Lindqvist)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim,  
src/testdir/samples/quickfix.txt

Patch 7.4.1803

Problem: GTK3 doesn't handle menu separators properly.  
Solution: Use gtk\_separator\_menu\_item\_new(). (Kazunobu Kuriyama)  
Files: src/gui\_gtk.c

Patch 7.4.1804

Problem: Can't use Vim as MANPAGER.  
Solution: Add manpager.vim. (Enno Nagel, closes #491)  
Files: runtime/doc/filetype.txt, runtime/plugin/manpager.vim

Patch 7.4.1805

Problem: Running tests in shadow dir fails.

Solution: Link the samples directory  
Files: src/Makefile

Patch 7.4.1806

Problem: 'termguicolors' option missing from the options window.  
Solution: Add the entry.  
Files: runtime/optwin.vim

Patch 7.4.1807

Problem: Test\_out\_close\_cb sometimes fails.  
Solution: Always write DETACH to out, not err.  
Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1808 (after 7.4.1806)

Problem: Using wrong feature name to check for 'termguicolors'.  
Solution: Use the right feature name. (Ken Takata)  
Files: runtime/optwin.vim

Patch 7.4.1809 (after 7.4.1808)

Problem: Using wrong short option name for 'termguicolors'.  
Solution: Use the option name.  
Files: runtime/optwin.vim

Patch 7.4.1810

Problem: Sending DETACH after a channel was closed isn't useful.  
Solution: Only add DETACH for a netbeans channel.  
Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.1811

Problem: Netbeans channel gets garbage collected.  
Solution: Set reference in nb\_channel.  
Files: src/eval.c, src/netbeans.c, src/proto/netbeans.pro

Patch 7.4.1812

Problem: Failure on startup with Athena and Motif.  
Solution: Check for INVALCOLOR. (Kazunobu Kuriyama)  
Files: src/syntax.c, src/vim.h

Patch 7.4.1813

Problem: Memory access error when running test\_quickfix.  
Solution: Allocate one more byte. (Yegappan Lakshmanan)  
Files: src/quickfix.c

Patch 7.4.1814

Problem: A channel may be garbage collected while it's still being used by a job. (James McCoy)  
Solution: Mark the channel as used if the job is still used. Do the same for channels that are still used.  
Files: src/eval.c, src/channel.c, src/proto/channel.pro

Patch 7.4.1815

Problem: Compiler warnings for unused variables. (Ajit Thakkar)  
Solution: Add a dummy initialization. (Yasuhiro Matsumoto)  
Files: src/quickfix.c

Patch 7.4.1816

Problem: Looping over a null list throws an error.  
Solution: Skip over the for loop.  
Files: src/eval.c, src/testdir/test\_expr.vim

Patch 7.4.1817

Problem: The screen is not updated if a callback is invoked when closing a

channel.  
Solution: Invoke redraw\_after\_callback().  
Files: src/channel.c

#### Patch 7.4.1818

Problem: Help completion adds @en to all matches except the first one.  
Solution: Remove "break", go over all items.  
Files: src/ex\_getln.c

#### Patch 7.4.1819

Problem: Compiler warnings when sprintf() is a macro.  
Solution: Don't interrupt sprintf() with an #ifdef. (Michael Jarvis, closes #788)  
Files: src/fileio.c, src/tag.c, src/term.c

#### Patch 7.4.1820

Problem: Removing language from help tags too often.  
Solution: Only remove @en when not needed. (Hirohito Higashi)  
Files: src/ex\_getln.c, src/testdir/test\_help\_tagjump.vim

#### Patch 7.4.1821 (after 7.4.1820)

Problem: Test fails on MS-Windows.  
Solution: Sort the completion results.  
Files: src/testdir/test\_help\_tagjump.vim

#### Patch 7.4.1822

Problem: Redirecting stdout of a channel to "null" doesn't work. (Nicola)  
Solution: Correct the file descriptor number.  
Files: src/os\_unix.c

#### Patch 7.4.1823

Problem: Warning from 64 bit compiler.  
Solution: Add type cast. (Mike Williams)  
Files: src/quickfix.c

#### Patch 7.4.1824

Problem: When a job is no longer referenced and does not have an exit callback the process may hang around in defunct state. (Nicola)  
Solution: Call job\_status() if the job is running and won't get freed because it might still be useful.  
Files: src/channel.c

#### Patch 7.4.1825

Problem: When job writes to buffer nothing is written. (Nicola)  
Solution: Do not discard a channel before writing is done.  
Files: src/channel.c

#### Patch 7.4.1826

Problem: Callbacks are invoked when it's not safe. (Andrew Stewart)  
Solution: When a channel is to be closed don't invoke callbacks right away, wait for a safe moment.  
Files: src/structs.h, src/channel.c

#### Patch 7.4.1827

Problem: No error when invoking a callback when it's not safe.  
Solution: Add an error message. Avoid the error when freeing a channel.  
Files: src/structs.h, src/channel.c

#### Patch 7.4.1828

Problem: May try to access buffer that's already freed.  
Solution: When freeing a buffer remove it from any channel.  
Files: src/buffer.c, src/channel.c, src/proto/channel.pro

Patch 7.4.1829 (after 7.4.1828)

Problem: No message on channel log when buffer was freed.  
Solution: Log a message.  
Files: src/channel.c

Patch 7.4.1830

Problem: non-antialiased misnamed.  
Solution: Use NONANTIALIASED and NONANTIALIASED\_QUALITY. (Kim Brouer, closes #793)  
Files: src/os\_mswin.c, runtime/doc/options.txt

Patch 7.4.1831

Problem: When timer\_stop() is called with a string there is no proper error message.  
Solution: Require getting a number. (Bjorn Linse)  
Files: src/eval.c

Patch 7.4.1832

Problem: Memory leak in debug commands.  
Solution: Free memory before overwriting the pointer. (hint by Justin Keyes)  
Files: src/ex\_cmds2.c

Patch 7.4.1833

Problem: Cannot use an Ex command for 'keywordprg'.  
Solution: Accept an Ex command. (Nelo-Thara Wallus)  
Files: src/normal.c, runtime/doc/options.txt

Patch 7.4.1834

Problem: Possible crash when conceal is active.  
Solution: Check for the screen to be valid when redrawing a line.  
Files: src/screen.c

Patch 7.4.1835

Problem: When splitting and closing a window the status height changes.  
Solution: Compute the frame height correctly. (Hirohito Higashi)  
Files: src/window.c, src/testdir/test\_alot.vim, src/testdir/test\_window\_cmd.vim

Patch 7.4.1836

Problem: When using a partial on a dictionary it always gets bound to that dictionary.  
Solution: Make a difference between binding a function to a dictionary explicitly or automatically.  
Files: src/structs.h, src/eval.c, src/testdir/test\_partial.vim, runtime/doc/eval.txt

Patch 7.4.1837

Problem: The BufUnload event is triggered twice, when :bunload is used with `bufhidden` set to `unload` or `delete`.  
Solution: Do not trigger the event when ml\_mfp is NULL. (Hirohito Higashi)  
Files: src/buffer.c, src/testdir/test\_autocmd.vim

Patch 7.4.1838

Problem: Functions specifically for testing do not sort together.  
Solution: Rename garbagecollect\_for\_testing() to test\_garbagecollect\_now(). Add test\_null\_list(), test\_null\_dict(), etc.  
Files: src/eval.c, src/testdir/test\_expr.vim, src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 7.4.1839

Problem: Cannot get the items stored in a partial.

Solution: Support using get() on a partial.  
Files: src/eval.c, src/testdir/test\_partial.vim, runtime/doc/eval.txt

Patch 7.4.1840

Problem: When using packages an "after" directory cannot be used.  
Solution: Add the "after" directory of the package to 'runtimepath' if it exists.  
Files: src/ex\_cmds2.c, src/testdir/test\_packadd.vim

Patch 7.4.1841

Problem: The code to reallocate the buffer used for quickfix is repeated.  
Solution: Move the code to a function. (Yegappan Lakshmanan, closes #831)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1842 (after 7.4.1839)

Problem: get() works for Partial but not for Funcref.  
Solution: Accept Funcref. Also return the function itself. (Nikolai Pavlov)  
Files: src/eval.c, src/testdir/test\_partial.vim, runtime/doc/eval.txt

Patch 7.4.1843

Problem: Tests involving Python are flaky.  
Solution: Set the pt\_auto field. Add tests. (Nikolai Pavlov)  
Files: runtime/doc/if\_pyth.txt, src/if\_py\_both.h, src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

Patch 7.4.1844

Problem: Using old function name in comment. More functions should start with test\_.  
Solution: Rename function in comment. (Hirohito Higashi) Rename disable\_char\_avail\_for\_testing() to test\_disable\_char\_avail(). And alloc\_fail() to test\_alloc\_fail().  
Files: src/eval.c, src/getchar.c, src/testdir/runtest.vim, src/testdir/test\_cursor\_func.vim, src/testdir/test\_quickfix.vim, runtime/doc/eval.txt

Patch 7.4.1845

Problem: Mentioning NetBeans when reading from channel. (Ramel Eshed)  
Solution: Make the text more generic.  
Files: src/channel.c

Patch 7.4.1846

Problem: Ubsan detects a multiplication overflow.  
Solution: Don't use orig\_mouse\_time when it's zero. (Dominique Pelle)  
Files: src/term.c

Patch 7.4.1847

Problem: Getting an item from a NULL dict crashes. Setting a register to a NULL list crashes. (Nikolai Pavlov, issue #768) Comparing a NULL dict with a NULL dict fails.  
Solution: Properly check for NULL.  
Files: src/eval.c, src/testdir/test\_expr.vim

Patch 7.4.1848

Problem: Can't build with Strawberry Perl 5.24.  
Solution: Define S\_SvREFCNT\_dec() if needed. (Damien, Ken Takata)  
Files: src/if\_perl.xs

Patch 7.4.1849

Problem: Still trying to read from channel that is going to be closed. (Ramel Eshed)  
Solution: Check if ch\_to\_be\_closed is set.

Files: src/channel.c

Patch 7.4.1850

Problem: GUI freezes when using a job. (Shougo Matsu)  
Solution: Unregister the channel when there is an input error.  
Files: src/channel.c

Patch 7.4.1851

Problem: test\_syn\_attr fails when using the GUI. (Dominique Pelle)  
Solution: Escape the font name properly.  
Files: src/testdir/test\_syn\_attr.vim

Patch 7.4.1852

Problem: Unix: Cannot run all tests with the GUI.  
Solution: Add the "testgui" target.  
Files: src/Makefile, src/testdir/Makefile

Patch 7.4.1853

Problem: Crash when job and channel are in the same dict while using  
partials. (Luc Hermitte)  
Solution: Do not decrement the channel reference count too early.  
Files: src/channel.c

Patch 7.4.1854

Problem: When setting 'termguicolors' the Ignore highlighting doesn't work.  
(Charles Campbell)  
Solution: Handle the color names "fg" and "bg" when the GUI isn't running  
and no colors are specified, fall back to black and white.  
Files: src/syntax.c

Patch 7.4.1855

Problem: Valgrind reports memory leak for job that is not freed.  
Solution: Free all jobs on exit. Add test for failing job.  
Files: src/channel.c, src/misc2.c, src/proto/channel.pro,  
src/testdir/test\_partial.vim

Patch 7.4.1856 (after 7.4.1855)

Problem: failing job test fails on MS-Windows.  
Solution: Expect "fail" status instead of "dead".  
Files: src/testdir/test\_partial.vim

Patch 7.4.1857

Problem: When a channel appends to a buffer that is 'nomodifiable' there is  
an error but appending is done anyway.  
Solution: Add the 'modifiable' option. Refuse to write to a 'nomodifiable'  
when the value is 1.  
Files: src/structs.h, src/channel.c, src/testdir/test\_channel.vim,  
runtime/doc/channel.txt

Patch 7.4.1858

Problem: When a channel writes to a buffer it doesn't find a buffer by the  
short name but re-uses it anyway.  
Solution: Find buffer also by the short name.  
Files: src/channel.c, src/buffer.c, src/vim.h

Patch 7.4.1859

Problem: Cannot use a function reference for "exit\_cb".  
Solution: Use get\_callback(). (Yegappan Lakshmanan)  
Files: src/channel.c, src/structs.h

Patch 7.4.1860

Problem: Using a partial for timer\_start() may cause a crash.

Solution: Set the copyID in timer objects. (Ozaki Kiichi)  
Files: src/testdir/test\_timers.vim, src/eval.c, src/ex\_cmds2.c,  
src/proto/ex\_cmds2.pro

Patch 7.4.1861

Problem: Compiler warnings with 64 bit compiler.  
Solution: Change int to size\_t. (Mike Williams)  
Files: src/ex\_cmds2.c

Patch 7.4.1862

Problem: string() with repeated argument does not give a result usable by  
eval().  
Solution: Refactor echo\_string and tv2string(), moving the common part to  
echo\_string\_core(). (Ken Takata)  
Files: src/eval.c, src/testdir/test\_viml.vim, src/testdir/test86.ok,  
src/testdir/test87.ok

Patch 7.4.1863

Problem: Compiler warnings on Win64.  
Solution: Adjust types, add type casts. (Ken Takata)  
Files: src/if\_mzsch.c, src/if\_perl.xs, src/if\_ruby.c, src/version.c

Patch 7.4.1864

Problem: Python: encoding error with Python 2.  
Solution: Use "getcwdu" instead of "getcwd". (Ken Takata)  
Files: src/if\_py\_both.h

Patch 7.4.1865

Problem: Memory leaks in test49. (Dominique Pelle)  
Solution: Use NULL instead of an empty string.  
Files: src/eval.c

Patch 7.4.1866

Problem: Invalid memory access when exiting with EXITFREE defined.  
(Dominique Pelle)  
Solution: Set "really\_exiting" and skip error messages.  
Files: src/misc2.c, src/eval.c

Patch 7.4.1867

Problem: Memory leak in test\_matchstrpos.  
Solution: Free the string before overwriting. (Yegappan Lakshmanan)  
Files: src/eval.c

Patch 7.4.1868

Problem: Setting really\_exiting causes memory leaks to be reported.  
Solution: Add the in\_free\_all\_mem flag.  
Files: src/globals.h, src/misc2.c, src/eval.c

Patch 7.4.1869

Problem: Can't build with old version of Perl.  
Solution: Define PERLIO\_FUNCS\_DECL. (Tom G. Christensen)  
Files: src/if\_perl.xs

Patch 7.4.1870 (after 7.4.1863)

Problem: One more Win64 compiler warning.  
Solution: Change declared argument type. (Ken Takata)  
Files: src/if\_mzsch.c

Patch 7.4.1871

Problem: Appending to the quickfix list while the quickfix window is open  
is very slow.  
Solution: Do not delete all the lines, only append the new ones. Avoid



using a window while updating the list. (closes #841)  
Files: src/quickfix.c

#### Patch 7.4.1872

Problem: Still build problem with old version of Perl.  
Solution: Also define SvREFCNT\_inc\_void\_NN if needed. (Tom G. Christensen)  
Files: src/if\_perl.xs

#### Patch 7.4.1873

Problem: When a callback adds a timer the GUI doesn't use it until later.  
(Ramel Eshed)  
Solution: Return early if a callback adds a timer.  
Files: src/ex\_cmds2.c, src/gui\_gtk\_x11.c, src/gui\_w32.c, src/gui\_x11.c,  
src/globals.h

#### Patch 7.4.1874

Problem: Unused variable in Win32 code.  
Solution: Remove it. (Mike Williams)  
Files: src/gui\_w32.c

#### Patch 7.4.1875

Problem: Comparing functions and partials doesn't work well.  
Solution: Add tests. (Nikolai Pavlov) Compare the dict and arguments in the  
partial. (closes #813)  
Files: src/eval.c, src/testdir/test\_partial.vim

#### Patch 7.4.1876

Problem: Typing "k" at the hit-enter prompt has no effect.  
Solution: Don't assume recursive use of the prompt if a character was typed.  
(Hirohito Higashi)  
Files: src/message.c

#### Patch 7.4.1877

Problem: No test for invoking "close\_cb" when writing to a buffer.  
Solution: Add using close\_cb to a test case.  
Files: src/testdir/test\_channel.vim

#### Patch 7.4.1878

Problem: Whether a job has exited isn't detected until a character is  
typed. After calling exit\_cb the cursor is in the wrong place.  
Solution: Don't wait forever for a character to be typed when there is a  
pending job. Update the screen if needed after calling exit\_cb.  
Files: src/os\_unix.c, src/channel.c, src/proto/channel.pro

#### Patch 7.4.1879 (after 7.4.1877)

Problem: Channel test is flaky.  
Solution: Wait for close\_cb to be invoked.  
Files: src/testdir/test\_channel.vim

#### Patch 7.4.1880

Problem: MS-Windows console build defaults to not having +channel.  
Solution: Include the channel feature if building with huge features.  
Files: src/Make\_mvc.mak

#### Patch 7.4.1881

Problem: Appending to a long quickfix list is slow.  
Solution: Add qf\_last.  
Files: src/quickfix.c

#### Patch 7.4.1882

Problem: Check for line break at end of line wrong. (Dominique Pelle)  
Solution: Correct the logic.

Files: src/quickfix.c

Patch 7.4.1883

Problem: Cppcheck found 2 incorrect printf formats.

Solution: Use %ld and %lx. (Dominique Pelle)

Files: src/VisVim/Commands.cpp, src/gui\_mac.c

Patch 7.4.1884

Problem: Updating marks in a quickfix list is very slow when the list is long.

Solution: Only update marks if the buffer has a quickfix entry.

Files: src/structs.h, src/quickfix.c

Patch 7.4.1885

Problem: MinGW console build defaults to not having +channel.

Solution: Include the channel feature if building with huge features. (Ken Takata)

Files: src/Make\_cyg\_ming.mak

Patch 7.4.1886

Problem: When waiting for a character is interrupted by receiving channel data and the first character of a mapping was typed, the mapping times out. (Ramel Eshed)

Solution: When dealing with channel data don't return from mch\_inchar().

Files: src/getchar.c, src/proto/getchar.pro, src/os\_unix.c

Patch 7.4.1887

Problem: When receiving channel data 'updatetime' is not respected.

Solution: Recompute the waiting time after being interrupted.

Files: src/os\_unix.c

Patch 7.4.1888

Problem: Wrong computation of remaining wait time in RealWaitForChar()

Solution: Remember the original waiting time.

Files: src/os\_unix.c

Patch 7.4.1889

Problem: When umask is set to 0177 Vim can't create temp files. (Lcd)

Solution: Also correct umask when using mkdtemp().

Files: src/fileio.c

Patch 7.4.1890

Problem: GUI: When channel data is received the cursor blinking is interrupted. (Ramel Eshed)

Solution: Don't update the cursor when it is blinking.

Files: src/screen.c, src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro, src/gui\_mac.c, src/proto/gui\_mac.pro, src/gui\_photon.c, src/proto/gui\_photon.pro, src/gui\_w32.c, src/proto/gui\_w32.pro, src/gui\_x11.c, src/proto/gui\_x11.pro

Patch 7.4.1891

Problem: Channel reading very long lines is slow.

Solution: Collapse multiple buffers until a NL is found.

Files: src/channel.c, src/netbeans.c, src/proto/channel.pro, src/structs.h

Patch 7.4.1892

Problem: balloon eval only gets the window number, not the ID.

Solution: Add v:beval\_winid.

Files: src/eval.c, src/gui\_beval.c, src/vim.h

Patch 7.4.1893

Problem: Cannot easily get the window ID for a buffer.  
Solution: Add bufwinid().  
Files: src/eval.c, runtime/doc/eval.txt

#### Patch 7.4.1894

Problem: Cannot get the window ID for a mouse click.  
Solution: Add v:mouse\_winid.  
Files: src/eval.c, src/vim.h, runtime/doc/eval.txt

#### Patch 7.4.1895

Problem: Cannot use a window ID where a window number is expected.  
Solution: Add LOWEST\_WIN\_ID, so that the window ID can be used where a number is expected.  
Files: src/window.c, src/eval.c, src/vim.h, runtime/doc/eval.txt, src/testdir/test\_window\_id.vim

#### Patch 7.4.1896

Problem: Invoking mark\_adjust() when adding a new line below the last line is pointless.  
Solution: Skip calling mark\_adjust() when appending below the last line.  
Files: src/misc1.c, src/ops.c

#### Patch 7.4.1897

Problem: Various typos, long lines and style mistakes.  
Solution: Fix the typos, wrap lines, improve style.  
Files: src/buffer.c, src/ex\_docmd.c, src/getchar.c, src/option.c, src/main.aap, src/testdir/README.txt, src/testdir/test\_reftime.vim, src/testdir/test\_tagjump.vim, src/INSTALL, src/config.aap.in, src/if\_mzsch.c

#### Patch 7.4.1898

Problem: User commands don't support modifiers.  
Solution: Add the <mods> item. (Yegappan Lakshmanan, closes #829)  
Files: runtime/doc/map.txt, src/ex\_docmd.c, src/testdir/Make\_all.mak, src/testdir/test\_usercommands.vim

#### Patch 7.4.1899

Problem: GTK 3: cursor blinking doesn't work well.  
Solution: Instead of gui\_gtk\_window\_clear() use gui\_mch\_clear\_block(). (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

#### Patch 7.4.1900

Problem: Using CTRL-] in the help on "{address}." doesn't work.  
Solution: Recognize an item in {}. (Hirohito Higashi, closes #814)  
Files: src/ex\_cmds.c, src/testdir/test\_help\_tagjump.vim

#### Patch 7.4.1901

Problem: Win32: the "Disabled" menu items would appear enabled.  
Solution: Use submenu\_id if there is a parent. (Shane Harper, closes #834)  
Files: src/gui\_w32.c

#### Patch 7.4.1902

Problem: No test for collapsing buffers for a channel. Some text is lost.  
Solution: Add a simple test. Set rq\_bufllen correctly.  
Files: src/channel.c, src/testdir/test\_channel.vim, src/testdir/test\_channel\_pipe.py

#### Patch 7.4.1903

Problem: When writing viminfo merging current history with history in viminfo may drop recent history entries.  
Solution: Add new format for viminfo lines, use it for history entries. Use

a timestamp for ordering the entries. Add test\_settime().  
Add the viminfo version. Does not do merging on timestamp yet.  
Files: src/eval.c, src/ex\_getln.c, src/ex\_cmds.c, src/structs.h,  
src/globals.h, src/proto/ex\_cmds.pro, src/proto/ex\_getln.pro,  
src/testdir/test\_viminfo.vim

Patch 7.4.1904 (after 7.4.1903)

Problem: Build fails.  
Solution: Add missing changes.  
Files: src/vim.h

Patch 7.4.1905 (after 7.4.1903)

Problem: Some compilers can't handle a double semicolon.  
Solution: Remove one semicolon.  
Files: src/ex\_cmds.c

Patch 7.4.1906

Problem: Collapsing channel buffers and searching for NL does not work properly. (Xavier de Gaye, Ramel Eshed)  
Solution: Do not assume the buffer contains a NUL or not. Change NUL bytes to NL to avoid the string is truncated.  
Files: src/channel.c, src/netbeans.c, src/proto/channel.pro

Patch 7.4.1907

Problem: Warnings from 64 bit compiler.  
Solution: Change type to size\_t. (Mike Williams)  
Files: src/ex\_cmds.c

Patch 7.4.1908

Problem: Netbeans uses uninitialized pointer and freed memory.  
Solution: Set "buffer" at the right place (hint by Ken Takata)  
Files: src/netbeans.c

Patch 7.4.1909

Problem: Doubled semicolons.  
Solution: Reduce to one. (Dominique Pelle)  
Files: src/dosinst.c, src/fold.c, src/gui\_gtk\_x11.c, src/gui\_w32.c,  
src/main.c, src/misc2.c

Patch 7.4.1910

Problem: Tests using external command to delete directory.  
Solution: Use delete().  
Files: src/testdir/test17.in, src/testdir/test73.in,  
src/testdir/test\_getcwd.in

Patch 7.4.1911

Problem: Recent history lines may be lost when exiting Vim.  
Solution: Merge history using the timestamp.  
Files: src/ex\_getln.c, src/ex\_cmds.c, src/vim.h, src/proto/ex\_getln.pro,  
src/testdir/test\_viminfo.vim

Patch 7.4.1912

Problem: No test for using setqflist() on an older quickfix list.  
Solution: Add a couple of tests.  
Files: src/testdir/test\_quickfix.vim

Patch 7.4.1913

Problem: When ":doautocmd" is used modelines are used even when no autocommands were executed. (Daniel Hahler)  
Solution: Skip processing modelines. (closes #854)  
Files: src/fileio.c, src/ex\_cmds.c, src/ex\_docmd.c, src/proto/fileio.pro

## Patch 7.4.1914

Problem: Executing autocommands while using the signal stack has a high chance of crashing Vim.  
Solution: Don't invoke autocommands when on the signal stack.  
Files: src/os\_unix.c

## Patch 7.4.1915

Problem: The effect of the PopupMenu autocommand isn't directly visible.  
Solution: Call gui\_update\_menus() before displaying the popup menu. (Shane Harper, closs #855)  
Files: src/menu.c

## Patch 7.4.1916 (after 7.4.1906)

Problem: No proper test for what 7.4.1906 fixes.  
Solution: Add a test for reading many lines.  
Files: src/testdir/test\_channel.vim

## Patch 7.4.1917

Problem: History lines read from viminfo in different encoding than when writing are not converted.  
Solution: Convert the history lines.  
Files: src/ex\_cmds.c, src/testdir/test\_viminfo.vim

## Patch 7.4.1918

Problem: Not enough testing for parsing viminfo lines.  
Solution: Add test with viminfo lines in bad syntax. Fix memory leak.  
Files: src/ex\_cmds.c, src/ex\_getln.c, src/testdir/test\_viminfo.vim

## Patch 7.4.1919

Problem: Register contents is not merged when writing viminfo.  
Solution: Use timestamps for register contents.  
Files: src/ops.c, src/ex\_getln.c, src/ex\_cmds.c, src/proto/ex\_cmds.pro, src/proto/ex\_getln.pro, src/proto/ops.pro, src/vim.h

## Patch 7.4.1920 (after 7.4.1919)

Problem: Missing test changes.  
Solution: Update viminfo test.  
Files: src/testdir/test\_viminfo.vim

## Patch 7.4.1921 (after 7.4.1919)

Problem: vim\_time() not included when needed.  
Solution: Adjust #ifdef.  
Files: src/ex\_cmds.c

## Patch 7.4.1922

Problem: Ruby 2.4.0 unifies Fixnum and Bignum into Integer.  
Solution: Use rb\_cInteger. (Weiyong Mao)  
Files: src/if\_ruby.c

## Patch 7.4.1923

Problem: Command line editing is not tested much.  
Solution: Add tests for expanding the file name and 'wildmenu'.  
Files: src/testdir/test\_cmdline.vim, src/testdir/Make\_all.mak

## Patch 7.4.1924

Problem: Missing "void" for functions without argument.  
Solution: Add "void". (Hirohito Higashi)  
Files: src/channel.c, src/edit.c, src/ex\_cmds2.c, src/ops.c, src/screen.c

## Patch 7.4.1925

Problem: Viminfo does not merge file marks properly.  
Solution: Use a timestamp. Add the :clearjumps command.

Files: src/mark.c, src/ex\_cmds.c, src/ex\_docmd.c, src/proto/mark.pro,  
src/structs.h, src/vim.h, src/ex\_cmds.h,  
src/testdir/test\_viminfo.vim

Patch 7.4.1926

Problem: Possible crash with many history items.  
Solution: Avoid the index going past the last item.  
Files: src/ex\_getln.c

Patch 7.4.1927

Problem: Compiler warning for signed/unsigned.  
Solution: Add type cast.  
Files: src/if\_mzsch.c

Patch 7.4.1928

Problem: Overwriting pointer argument.  
Solution: Assign to what it points to. (Dominique Pelle)  
Files: src/fileio.c

Patch 7.4.1929

Problem: Inconsistent indenting and weird name.  
Solution: Fix indent, make name all upper case. (Ken Takata)  
Files: src/if\_ruby.c

Patch 7.4.1930

Problem: Can't build without +spell but with +quickfix. (Charles)  
Solution: Add better #ifdef around ml\_append\_buf(). (closes #864)  
Files: src/memline.c

Patch 7.4.1931

Problem: Using both old and new style file mark lines from viminfo.  
Solution: Skip the old style lines if the viminfo file was written with a  
Vim version that supports the new style.  
Files: src/ex\_cmds.c

Patch 7.4.1932

Problem: When writing viminfo the jumplist is not merged with the one in  
the viminfo file.  
Solution: Merge based on timestamp.  
Files: src/mark.c, src/testdir/test\_viminfo.vim

Patch 7.4.1933

Problem: Compiler warning about uninitialized variable. (Yegappan)  
Solution: Give it a dummy value.  
Files: src/ex\_getln.c

Patch 7.4.1934

Problem: New style tests not executed with MinGW compiler.  
Solution: Add new style test support. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_ming.mak

Patch 7.4.1935

Problem: When using the GUI search/replace a second match right after the  
replacement is skipped.  
Solution: Add the SEARCH\_START flag. (Mleddy)  
Files: src/gui.c

Patch 7.4.1936

Problem: Off-by-one error in bounds check. (Coverity)  
Solution: Check register number properly.  
Files: src/ops.c

## Patch 7.4.1937

Problem: No test for directory stack in quickfix.  
Solution: Add a test. (Yegappan Lakshmanan)  
Files: src/testdir/test\_quickfix.vim

## Patch 7.4.1938

Problem: When writing viminfo numbered marks were duplicated.  
Solution: Check for duplicates between current numbered marks and the ones read from viminfo.  
Files: src/mark.c

## Patch 7.4.1939

Problem: Memory access error when reading viminfo. (Dominique Pelle)  
Solution: Correct index in jumplist when at the end.  
Files: src/mark.c, src/testdir/test\_viminfo.vim

## Patch 7.4.1940

Problem: "gd" hangs in some situations. (Eric Biggers)  
Solution: Remove the SEARCH\_START flag when looping. Add a test.  
Files: src/normal.c, src/testdir/test\_goto.vim

## Patch 7.4.1941

Problem: Not all quickfix tests are also done with the location lists.  
Solution: Test more quickfix code. Use user commands instead of "exe". (Yegappan Lakshmanan)  
Files: src/testdir/test\_quickfix.vim

## Patch 7.4.1942

Problem: Background is not drawn properly when 'termguicolors' is set.  
Solution: Check cterm\_normal\_bg\_color. (Jacob Niehus, closes #805)  
Files: src/screen.c

## Patch 7.4.1943

Problem: Coverity warns for unreachable code.  
Solution: Remove the code that won't do anything.  
Files: src/mark.c

## Patch 7.4.1944

Problem: Win32: Cannot compile with XPM feature using VC2015  
Solution: Add XPM libraries compiled with VC2015, and enable to build gvim.exe which supports XPM using VC2015. (Ken Takata)  
Files: src/Make\_mvc.mak, src/xpm/x64/lib-vc14/libXpm.lib, src/xpm/x86/lib-vc14/libXpm.lib

## Patch 7.4.1945

Problem: The Man plugin doesn't work that well.  
Solution: Use "g:ft\_man\_open\_mode" to be able open man pages in vert split or separate tab. Set nomodifiable for buffer with man content. Add a test. (Andrey Starodubtsev, closes #873)  
Files: runtime/ftplugin/man.vim, src/testdir/test\_man.vim, src/testdir/Make\_all.mak

## Patch 7.4.1946 (after 7.4.1944)

Problem: File list does not include new XPM libraries.  
Solution: Add the file list entries.  
Files: Filelist

## Patch 7.4.1947

Problem: Viminfo continuation line with wrong length isn't skipped. (Marius Gedminas)  
Solution: Skip a line when encountering an error, but not two lines.  
Files: src/ex\_cmds.c

## Patch 7.4.1948

Problem: Using Ctrl-A with double-byte encoding may result in garbled text.  
Solution: Skip to the start of a character. (Hirohito Higashi)  
Files: src/ops.c

## Patch 7.4.1949

Problem: Minor problems with the quickfix code.  
Solution: Fix the problems. (Yegappan Lakshmanan)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 7.4.1950

Problem: Quickfix long lines test not executed for buffer.  
Solution: Call the function to test long lines. (Yegappan Lakshmanan)  
Files: src/testdir/test\_quickfix.vim

## Patch 7.4.1951

Problem: Ruby test is old style.  
Solution: Convert to a new style test. (Ken Takata)  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_ruby.in,  
src/testdir/test\_ruby.ok, src/testdir/test\_ruby.vim

## Patch 7.4.1952

Problem: Cscope interface does not support finding assignments.  
Solution: Add the "a" command. (psettina, closes #882)  
Files: runtime/doc/if\_cscop.txt, src/if\_cscope.c

## Patch 7.4.1953

Problem: Not all parts of the quickfix code are tested.  
Solution: Add more tests. (Yegappan Lakshmanan)  
Files: src/testdir/samples/quickfix.txt,  
src/testdir/test\_quickfix.vim

## Patch 7.4.1954 (after 7.4.1948)

Problem: No test for what 7.4.1948 fixes.  
Solution: Add a test. (Hirohito Higashi, closes #880)  
Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_increment\_dbcs.vim

## Patch 7.4.1955

Problem: Using 32-bit Perl with 64-bit time\_t causes memory corruption.  
(Christian Brabandt)  
Solution: Use time\_T instead of time\_t for global variables. (Ken Takata)  
Files: src/ex\_cmds.c, src/globals.h, src/misc2.c, src/proto/ex\_cmds.pro,  
src/proto/misc2.pro, src/structs.h, src/vim.h

## Patch 7.4.1956

Problem: When using CTRL-W f and pressing "q" at the ATTENTION dialog the  
newly opened window is not closed.  
Solution: Close the window and go back to the original one. (Norio Takagi,  
Hirohito Higashi)  
Files: src/window.c, src/testdir/test\_window\_cmd.vim

## Patch 7.4.1957

Problem: Perl interface has obsolete workaround.  
Solution: Remove the workaround added by 7.3.623. (Ken Takata)  
Files: src/if\_perl.xs

## Patch 7.4.1958

Problem: Perl interface preprocessor statements not nicely indented.  
Solution: Improve the indenting. (Ken Takata)  
Files: src/if\_perl.xs



## Patch 7.4.1959

Problem: Crash when running test\_channel.vim on Windows.

Solution: Check for NULL pointer result from FormatMessage(). (Christian Brabandt)

Files: src/channel.c

## Patch 7.4.1960

Problem: Unicode standard 9 was released.

Solution: Update the character property tables. (Christian Brabandt)

Files: src/mbyte.c

## Patch 7.4.1961

Problem: When 'insertmode' is reset while doing completion the popup menu remains even though Vim is in Normal mode.

Solution: Ignore stop\_insert\_mode when the popup menu is visible. Don't set stop\_insert\_mode when 'insertmode' was already off. (Christian Brabandt)

Files: src/edit.c, src/option.c, src/Makefile, src/testdir/test\_alot.vim, src/testdir/test\_popup.vim

## Patch 7.4.1962

Problem: Two test files for increment/decrement.

Solution: Move the old style test into the new style test. (Hirohito Higashi, closes #881)

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/main.aap, src/testdir/test35.in, src/testdir/test35.ok, src/testdir/test\_increment.vim

## Patch 7.4.1963

Problem: Running Win32 Vim in mintty does not work.

Solution: Detect mintty and give a helpful error message. (Ken Takata)

Files: src/Make\_cyg\_ming.mak, src/Make\_mvc.mak, src/iscygpty.c, src/iscygpty.h, src/main.c, Filelist

## Patch 7.4.1964

Problem: The quickfix init function is too big.

Solution: Factor out parsing 'errorformat' to a separate function. (Yegappan Lakshmanan)

Files: src/quickfix.c

## Patch 7.4.1965

Problem: When using a job in raw mode to append to a buffer garbage characters are added.

Solution: Do not replace the trailing NUL with a NL. (Ozaki Kiichi)

Files: src/channel.c, src/testdir/test\_channel.vim

## Patch 7.4.1966

Problem: Coverity reports a resource leak.

Solution: Close "fd" also when bailing out.

Files: src/quickfix.c

## Patch 7.4.1967

Problem: Falling back from NFA to old regexp engine does not work properly. (fritzophrenic)

Solution: Do not restore nfa\_match. (Christian Brabandt, closes #867)

Files: src/regexp\_nfa.c, src/testdir/test64.in, src/testdir/test64.ok

## Patch 7.4.1968

Problem: Invalid memory access with "<C-".

Solution: Do not recognize this as a special character. (Dominique Pelle)

Files: src/misc2.c, src/testdir/test\_expr.vim

## Patch 7.4.1969

Problem: When the netbeans channel is closed consuming the buffer may cause a crash.

Solution: Check for nb\_channel not to be NULL. (Xavier de Gaye)

Files: src/netbeans.c

## Patch 7.4.1970

Problem: Using ":insert" in an empty buffer sets the jump mark. (Ingo Karkat)

Solution: Don't adjust marks when replacing the empty line in an empty buffer. (closes #892)

Files: src/ex\_cmds.c, src/testdir/test\_jumps.vim,  
src/testdir/test\_alot.vim

## Patch 7.4.1971

Problem: It is not easy to see unrecognized error lines below the current error position.

Solution: Add ":clist +count".

Files: src/quickfix.c, runtime/doc/quickfix.txt

## Patch 7.4.1972

Problem: On Solaris select() does not work as expected when there is typeahead.

Solution: Add ICANON when sleeping. (Ozaki Kiichi)

Files: src/os\_unix.c

## Patch 7.4.1973

Problem: On MS-Windows the package directory may be added at the end because of forward/backward slash differences. (Matthew Desjardins)

Solution: Ignore slash differences.

Files: src/ex\_cmds2.c

## Patch 7.4.1974

Problem: GUI has a problem with some termcodes.

Solution: Handle negative numbers. (Kazunobu Kuriyama)

Files: src/gui.c

## Patch 7.4.1975

Problem: On MS-Windows large files (> 2Gbyte) cause problems.

Solution: Use "off\_T" instead of "off\_t". Use "stat\_T" instead of "struct stat". Use 64 bit system functions if available. (Ken Takata)

Files: src/Makefile, src/buffer.c, src/diff.c, src/eval.c, src/ex\_cmds.c,  
src/ex\_cmds2.c, src/fileio.c, src/gui.c, src/gui\_at\_fs.c,  
src/if\_cscope.c, src/main.c, src/memfile.c, src/memline.c,  
src/misc1.c, src/misc2.c, src/netbeans.c, src/os\_mswin.c,  
src/os\_win32.c, src/proto/fileio.pro, src/proto/memline.pro,  
src/proto/os\_mswin.pro, src/pty.c, src/quickfix.c, src/spell.c,  
src/structs.h, src/tag.c, src/testdir/Make\_all.mak,  
src/testdir/test\_largefile.vim, src/testdir/test\_stat.vim,  
src/undo.c, src/vim.h

## Patch 7.4.1976

Problem: Number variables are not 64 bits while they could be.

Solution: Add the num64 feature. (Ken Takata, Yasuhiro Matsumoto)

Files: runtime/doc/eval.txt, runtime/doc/variables.txt,  
src/Make\_cyg\_ming.mak, src/Make\_mvc.mak, src/charset.c,  
src/eval.c, src/ex\_cmds.c, src/ex\_getln.c, src/feature.h,  
src/fileio.c, src/fold.c, src/json.c, src/message.c, src/misc1.c,  
src/misc2.c, src/ops.c, src/option.c, src/proto/charset.pro,  
src/proto/eval.pro, src/quickfix.c, src/structs.h,

src/testdir/test\_viml.vim, src/version.c

Patch 7.4.1977

Problem: With 64 bit changes don't need three calls to sprintf().

Solution: Simplify the code, use vim\_snprintf(). (Ken Takata)

Files: src/fileio.c

Patch 7.4.1978 (after 7.4.1975)

Problem: Large file test does not delete its output.

Solution: Delete the output. Check size properly when possible. (Ken Takata)

Files: src/testdir/test\_largefile.vim

Patch 7.4.1979 (after 7.4.1976)

Problem: Getting value of binary option is wrong. (Kent Sibilev)

Solution: Fix type cast. Add a test.

Files: src/option.c, src/testdir/test\_expr.vim

Patch 7.4.1980

Problem: 'errorformat' is parsed for every call to ":caddexpr". Can't add to two location lists asynchronously.

Solution: Keep the previously parsed data when appropriate. (mostly by Yegappan Lakshmanan)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.1981

Problem: No testing for Farsi code.

Solution: Add a minimal test. Clean up Farsi code.

Files: src/farsi.c, src/Makefile, src/charset.c, src/normal.c,  
src/proto/main.pro, src/testdir/Make\_all.mak,  
src/testdir/test\_farsi.vim

Patch 7.4.1982

Problem: Viminfo file contains duplicate change marks.

Solution: Drop duplicate marks.

Files: src/mark.c

Patch 7.4.1983

Problem: farsi.c and arabic.c are included in a strange way.

Solution: Build them like other files.

Files: src/main.c, src/farsi.c, src/arabic.c, src/proto.h,  
src/proto/main.pro, src/proto/farsi.pro, src/proto/arabic.pro,  
src/Makefile, src/Make\_bc5.mak, src/Make\_cyg\_ming.mak,  
src/Make\_dice.mak, src/Make\_ivc.mak, src/Make\_manx.mak,  
src/Make\_morph.mak, src/Make\_mvc.mak, src/Make\_sas.mak,  
Filelist

Patch 7.4.1984

Problem: Not all quickfix features are tested.

Solution: Add a few more tests. (Yegappan Lakshmanan)

Files: src/testdir/test\_quickfix.vim

Patch 7.4.1985 (after 7.4.1983)

Problem: Missing changes in VMS build file.

Solution: Use the right file name.

Files: src/Make\_vms.mms

Patch 7.4.1986

Problem: Compiler warns for loss of data.

Solution: Use size\_t instead of int. (Christian Brabandt)

Files: src/ex\_cmds2.c

Patch 7.4.1987

Problem: When copying unrecognized lines for viminfo, end up with useless continuation lines.  
Solution: Skip continuation lines.  
Files: src/ex\_cmds.c

#### Patch 7.4.1988

Problem: When updating viminfo with file marks there is no time order.  
Solution: Remember the time when a buffer was last used, store marks for the most recently used buffers.  
Files: src/buffer.c, src/structs.h, src/mark.c, src/main.c, src/ex\_cmds.c, src/proto/mark.pro, src/testdir/test\_viminfo.vim

#### Patch 7.4.1989

Problem: filter() and map() only accept a string argument.  
Solution: Implement using a Funcref argument (Yasuhiro Matsumoto, Ken Takata)  
Files: runtime/doc/eval.txt, src/Makefile, src/eval.c, src/testdir/test\_alot.vim, src/testdir/test\_filter\_map.vim, src/testdir/test\_partial.vim

#### Patch 7.4.1990 (after 7.4.1952)

Problem: Cscope items are not sorted.  
Solution: Put the new "a" command first. (Ken Takata)  
Files: src/if\_cscope.c

#### Patch 7.4.1991

Problem: glob() does not add a symbolic link when there are no wildcards.  
Solution: Remove the call to mch\_getperm().  
Files: src/misc1.c

#### Patch 7.4.1992

Problem: Values for true and false can be confusing.  
Solution: Update the documentation. Add a test. Make v:true evaluate to TRUE for a non-zero-arg.  
Files: runtime/doc/eval.txt, src/eval.c, src/Makefile, src/testdir/test\_true\_false.vim, src/testdir/test\_alot.vim

#### Patch 7.4.1993

Problem: Not all TRUE and FALSE arguments are tested.  
Solution: Add a few more tests.  
Files: src/testdir/test\_true\_false.vim

#### Patch 7.4.1994 (after 7.4.1993)

Problem: True-false test fails.  
Solution: Filter the dict to only keep the value that matters.  
Files: src/testdir/test\_true\_false.vim

#### Patch 7.4.1995

Problem: GUI: cursor drawn in wrong place if a timer callback causes a screen update. (David Samvelyan)  
Solution: Also redraw the cursor when it's blinking and on.  
Files: src/gui\_gtk\_x11.c, src/gui\_mac.c, src/gui\_photon.c, src/gui\_w32.c, src/gui\_x11.c, src/screen.c, src/proto/gui\_gtk\_x11.pro, src/proto/gui\_mac.pro, src/proto/gui\_photon.pro, src/proto/gui\_w32.pro, src/proto/gui\_x11.pro

#### Patch 7.4.1996

Problem: Capturing the output of a command takes a few commands.  
Solution: Add evalcmd().  
Files: src/eval.c, runtime/doc/eval.txt, src/testdir/test\_alot.vim, src/Makefile, src/testdir/test\_evalcmd.vim

## Patch 7.4.1997

Problem: Cannot easily scroll the quickfix window.  
Solution: Add ":cbottom".  
Files: src/ex\_cmds.h, src/quickfix.c, src/proto/quickfix.pro,  
src/ex\_docmd.c, src/testdir/test\_quickfix.vim,  
runtime/doc/quickfix.txt

## Patch 7.4.1998

Problem: When writing buffer lines to a job there is no NL to NUL  
conversion.  
Solution: Make it work symmetrical with writing lines from a job into a  
buffer.  
Files: src/channel.c, src/proto/channel.pro, src/netbeans.c

## Patch 7.4.1999

Problem: evalcmd() doesn't work recursively.  
Solution: Use redir\_evalcmd instead of redir\_vname.  
Files: src/message.c, src/eval.c, src/globals.h, src/proto/eval.pro,  
src/testdir/test\_evalcmd.vim

## Patch 7.4.2000 (after 7.4.1999)

Problem: Evalcmd test fails.  
Solution: Add missing piece.  
Files: src/ex\_docmd.c

## Patch 7.4.2001 (after 7.4.2000)

Problem: Tiny build fails. (Tony Mechelynck)  
Solution: Add #ifdef.  
Files: src/ex\_docmd.c

## Patch 7.4.2002

Problem: Crash when passing number to filter() or map().  
Solution: Convert to a string. (Ozaki Kiichi)  
Files: src/eval.c, src/testdir/test\_filter\_map.vim

## Patch 7.4.2003

Problem: Still cursor flickering when a callback updates the screen. (David  
Samvelyan)  
Solution: Put the cursor in the right position after updating the screen.  
Files: src/screen.c

## Patch 7.4.2004

Problem: GUI: cursor displayed in the wrong position.  
Solution: Correct screen\_cur\_col and screen\_cur\_row.  
Files: src/screen.c

## Patch 7.4.2005

Problem: After using evalcmd() message output is in the wrong position.  
(Christian Brabandt)  
Solution: Reset msg\_col.  
Files: src/eval.c

## Patch 7.4.2006

Problem: Crash when using tabnext in BufUnload autocmd. (Norio Takagi)  
Solution: First check that the current buffer is the right one. (Hirohito  
Higashi)  
Files: src/buffer.c, src/testdir/test\_autocmd.vim

## Patch 7.4.2007

Problem: Running the tests leaves a viminfo file behind.  
Solution: Make the viminfo option empty.  
Files: src/testdir/runtest.vim

## Patch 7.4.2008

Problem: evalcmd() has a confusing name.

Solution: Rename to execute(). Make silent optional. Support a list of commands.

Files: src/eval.c, src/ex\_docmd.c, src/message.c, src/globals.h,  
src/proto/eval.pro, src/Makefile, src/testdir/test\_evalcmd.vim,  
src/testdir/test\_execute\_func.vim, src/testdir/test\_alot.vim,  
runtime/doc/eval.txt

## Patch 7.4.2009 (after 7.4.2008)

Problem: Messages test fails.

Solution: Don't set redir\_execute before returning. Add missing version number.

Files: src/eval.c

## Patch 7.4.2010

Problem: There is a :cbottom command but no :lbottom command.

Solution: Add :lbottom. (Yegappan Lakshmanan)

Files: runtime/doc/index.txt, runtime/doc/quickfix.txt, src/ex\_cmds.h,  
src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 7.4.2011

Problem: It is not easy to get a list of command arguments.

Solution: Add getcompletion(). (Yegappan Lakshmanan)

Files: runtime/doc/eval.txt, src/eval.c, src/ex\_docmd.c,  
src/proto/ex\_docmd.pro, src/testdir/test\_cmdline.vim

## Patch 7.4.2012 (after 7.4.2011)

Problem: Test for getcompletion() does not pass on all systems.

Solution: Only test what is supported.

Files: src/testdir/test\_cmdline.vim

## Patch 7.4.2013

Problem: Using "noininsert" in 'completeopt' breaks redo.

Solution: Set compl\_curr\_match. (Shougo Matsu, closes #874)

Files: src/edit.c, src/testdir/test\_popup.vim

## Patch 7.4.2014

Problem: Using "noininsert" in 'completeopt' does not insert match.

Solution: Set compl\_enter\_selects. (Shougo Matsu, closes #875)

Files: src/edit.c, src/testdir/test\_popup.vim

## Patch 7.4.2015

Problem: When a file gets a name when writing it 'acd' is not effective. (Dan Church)

Solution: Invoke DO\_AUTOCHDIR after writing the file. (Allen Haim, closes #777, closes #803) Add test\_autochdir() to enable 'acd' before "starting" is reset.

Files: src/ex\_cmds.c, src/buffer.c, src/eval.c, src/globals.h,  
src/Makefile, src/testdir/test\_autochdir.vim,  
src/testdir/Make\_all.mak

## Patch 7.4.2016

Problem: Warning from MinGW about \_WIN32\_WINNT redefined. (John Marriott)

Solution: First undefine it. (Ken Takata)

Files: src/Make\_cyg\_ming.mak

## Patch 7.4.2017

Problem: When there are many errors adding them to the quickfix list takes a long time.

Solution: Add BLN\_NOOPT. Don't call buf\_valid() in buf\_copy\_options().

Remember the last file name used. When going through the buffer list start from the end of the list. Only call buf\_valid() when autocommands were executed.

Files: src/buffer.c, src/option.c, src/quickfix.c, src/vim.h

#### Patch 7.4.2018

Problem: buf\_valid() can be slow when there are many buffers.

Solution: Add bufref\_valid(), only go through the buffer list when a buffer was freed.

Files: src/structs.h, src/buffer.c, src/quickfix.c, src/proto/buffer.pro

#### Patch 7.4.2019

Problem: When ignoring case utf\_fold() may consume a lot of time.

Solution: Optimize for ASCII.

Files: src/mbyte.c

#### Patch 7.4.2020

Problem: Can't build without +autocmd feature.

Solution: Adjust #ifdefs.

Files: src/buffer.c

#### Patch 7.4.2021

Problem: Still too many buf\_valid() calls.

Solution: Make au\_new\_curbuf a bufref. Use bufref\_valid() in more places.

Files: src/ex\_cmds.c, src/buffer.c, src/globals.h

#### Patch 7.4.2022

Problem: Warnings from 64 bit compiler.

Solution: Add type casts. (Mike Williams)

Files: src/eval.c

#### Patch 7.4.2023

Problem: buflist\_findname\_stat() may find a dummy buffer.

Solution: Set the BF\_DUMMY flag after loading a dummy buffer. Start finding buffers from the end of the list.

Files: src/quickfix.c, src/buffer.c

#### Patch 7.4.2024

Problem: More buf\_valid() calls can be optimized.

Solution: Use bufref\_valid() instead.

Files: src/buffer.c, src/ex\_cmds.c, src/structs.h, src/channel.c, src/diff.c, src/eval.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/main.c, src/misc2.c, src/netbeans.c, src/quickfix.c, src/spell.c, src/term.c, src/if\_py\_both.h, src/window.c, src/proto/buffer.pro, src/proto/window.pro

#### Patch 7.4.2025

Problem: The cursor blinking stops or is irregular when receiving data over a channel and writing it in a buffer, and when updating the status line. (Ramel Eshed)

Solution: Make it a bit better by flushing GUI output. Don't redraw the cursor after updating the screen if the blink state is off.

Files: src/gui\_gtk\_x11.c, src/screen.c

#### Patch 7.4.2026

Problem: Reference counting for callbacks isn't right.

Solution: Add free\_callback(). (Ken Takata) Fix reference count.

Files: src/channel.c, src/eval.c, src/ex\_cmds2.c, src/proto/eval.pro

#### Patch 7.4.2027

Problem: Can't build with +eval but without +menu.

Solution: Add #ifdef. (John Marriott)  
Files: src/eval.c

Patch 7.4.2028

Problem: cppcheck warns for using index before limits check.  
Solution: Swap the expressions. (Dominique Pelle)  
Files: src/mbyte.c

Patch 7.4.2029

Problem: printf() does not work with 64 bit numbers.  
Solution: use the "L" length modifier. (Ken Takata)  
Files: src/message.c, src/testdir/test\_expr.vim

Patch 7.4.2030

Problem: ARCH must be set properly when using MinGW.  
Solution: Detect the default value of ARCH from the current compiler. (Ken Takata)  
Files: src/Make\_cyg\_ming.mak

Patch 7.4.2031

Problem: The list\_lbr\_utf8 test fails if ~/.vim/syntax/c.vim sets 'textwidth' to a non-zero value. (Oyvind A. Holm)  
Solution: Add a setup.vim file that sets 'runtimepath' and \$HOME to a safe value. (partly by Christian Brabandt, closes #912)  
Files: src/testdir/setup.vim, src/testdir/amiga.vim, src/testdir/dos.vim, src/testdir/unix.vim, src/testdir/vms.vim, src/testdir/runtest.vim

Patch 7.4.2032 (after 7.4.2030)

Problem: Build fails with 64 bit MinGW. (Axel Bender)  
Solution: Handle dash vs. underscore. (Ken Takata, Hirohito Higashi)  
Files: src/Make\_cyg\_ming.mak

Patch 7.4.2033

Problem: 'cscopequickfix' option does not accept new value "a".  
Solution: Adjust list of command characters. (Ken Takata)  
Files: src/option.h, src/Makefile, src/testdir/test\_cscope.vim, src/testdir/Make\_all.mak

Patch 7.4.2034 (after 7.4.2032)

Problem: Build fails with some version of MinGW. (illusorypan)  
Solution: Recognize mingw32. (Ken Takata, closes #921)  
Files: src/Make\_cyg\_ming.mak

Patch 7.4.2035

Problem: On Solaris with ZFS the ACL may get removed.  
Solution: Always restore the ACL for Solaris ZFS. (Danek Duvall)  
Files: src/fileio.c

Patch 7.4.2036

Problem: Looking up a buffer by number is slow if there are many.  
Solution: Use a hashtable.  
Files: src/structs.h, src/buffer.c

Patch 7.4.2037 (after 7.4.2036)

Problem: Small build fails.  
Solution: Adjust #ifdefs.  
Files: src/hashtab.c

Patch 7.4.2038 (after 7.4.2036)

Problem: Small build still fails.  
Solution: Adjust more #ifdefs.  
Files: src/globals.h, src/buffer.c



## Patch 7.4.2039

Problem: The Netbeans integration is not tested.

Solution: Add a first Netbeans test.

Files: src/testdir/test\_netbeans.vim, src/testdir/test\_netbeans.py,  
src/testdir/Make\_all.mak, src/Makefile,  
src/testdir/test\_channel.vim, src/testdir/shared.vim

## Patch 7.4.2040

Problem: New files missing from distribution.

Solution: Add new test scripts.

Files: Filelist

## Patch 7.4.2041

Problem: Netbeans file authentication not tested.

Solution: Add a test.

Files: src/testdir/test\_netbeans.vim

## Patch 7.4.2042

Problem: GTK: display updating is not done properly and can be slow.

Solution: Use gdk\_display\_flush() instead of gdk\_display\_sync(). Don't call  
gdk\_window\_process\_updates(). (Kazunobu Kuriyama)

Files: src/gui\_gtk\_x11.c

## Patch 7.4.2043

Problem: setbuufar() causes a screen redraw.

Solution: Only use aucmd\_prebuf() for options.

Files: src/eval.c

## Patch 7.4.2044

Problem: filter() and map() either require a string or defining a function.

Solution: Support lambda, a short way to define a function that evaluates an  
expression. (Yasuhiro Matsumoto, Ken Takata)

Files: runtime/doc/eval.txt, src/eval.c, src/testdir/test\_alot.vim,  
src/Makefile, src/testdir/test\_channel.vim,  
src/testdir/test\_lambda.vim

## Patch 7.4.2045

Problem: Memory leak when using a function callback.

Solution: Don't save the function name when it's in the partial.

Files: src/channel.c

## Patch 7.4.2046

Problem: The qf\_init\_ext() function is too big.

Solution: Refactor it. (Yegappan Lakshmanan)

Files: src/quickfix.c

## Patch 7.4.2047

Problem: Compiler warning for initializing a struct.

Solution: Initialize in another way. (Anton Lindqvist)

Files: src/quickfix.c

## Patch 7.4.2048

Problem: There is still code and help for unsupported systems.

Solution: Remove the code and text. (Hirohito Higashi)

Files: runtime/doc/eval.txt, runtime/lang/menu\_sk\_sk.vim,  
runtime/menu.vim, runtime/optwin.vim, src/Make\_bc5.mak,  
src/ex\_docmd.c, src/feature.h, src/fileio.c, src/globals.h,  
src/main.c, src/memfile.c, src/memline.c, src/misc1.c,  
src/misc2.c, src/option.c, src/option.h, src/os\_unix.c,  
src/os\_unix.h, src/proto.h, src/term.c, src/undo.c, src/version.c,  
src/vim.h, src/xxd/xxd.c

## Patch 7.4.2049

Problem: There is no way to get a list of the error lists.

Solution: Add ":chistory" and ":lhistory".

Files: src/ex\_cmds.h, src/quickfix.c, src/ex\_docmd.c, src/message.c,  
src/proto/quickfix.pro, src/testdir/test\_quickfix.vim

## Patch 7.4.2050

Problem: When using ":vimgrep" may end up with duplicate buffers.

Solution: When adding an error list entry pass the buffer number if possible.

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 7.4.2051

Problem: No proper testing of trunc\_string().

Solution: Add a unittest for message.c.

Files: src/Makefile, src/message.c, src/message\_test.c, src/main.c,  
src/proto/main.pro, src/structs.h

## Patch 7.4.2052

Problem: Coverage report is messed up by the unittests.

Solution: Add a separate test target for script tests. Use that when  
collecting coverage information.

Files: src/Makefile

## Patch 7.4.2053

Problem: Can't run scripttests in the top directory.

Solution: Add targets to the top Makefile.

Files: Makefile

## Patch 7.4.2054 (after 7.4.2048)

Problem: Wrong part of #ifdef removed.

Solution: Use the right part. (Hirohito Higashi)

Files: src/os\_unix.c

## Patch 7.4.2055

Problem: eval.c is too big

Solution: Move Dictionary functions to dict.c

Files: src/eval.c, src/dict.c, src/vim.h, src/globals.h,  
src/proto/eval.pro, src/proto/dict.pro, src/Makefile, Filelist

## Patch 7.4.2056 (after 7.4.2055)

Problem: Build fails.

Solution: Add missing changes.

Files: src/proto.h

## Patch 7.4.2057

Problem: eval.c is too big.

Solution: Move List functions to list.c

Files: src/eval.c, src/dict.c, src/list.c, src/proto.h, src/Makefile,  
src/globals.h, src/proto/eval.pro, src/proto/list.pro, Filelist

## Patch 7.4.2058

Problem: eval.c is too big.

Solution: Move user functions to userfunc.c

Files: src/userfunc.c, src/eval.c, src/vim.h, src/globals.h,  
src/structs.h, src/proto.h, src/Makefile, src/proto/eval.pro,  
src/proto/userfunc.pro, Filelist

## Patch 7.4.2059

Problem: Non-Unix builds fail.

Solution: Update Makefiles for new files.

Files: src/Make\_bc5.mak, src/Make\_cyg\_ming.mak, src/Make\_dice.mak,

src/Make\_ivc.mak, src/Make\_manx.mak, src/Make\_morph.mak,  
src/Make\_mvc.mak, src/Make\_sas.mak

Patch 7.4.2060 (after 7.4.2059)

Problem: Wrong file name.

Solution: Fix typo.

Files: src/Make\_mvc.mak

Patch 7.4.2061

Problem: qf\_init\_ext() is too big.

Solution: Move code to qf\_parse\_line() (Yegappan Lakshmanan)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.2062

Problem: Using dummy variable to compute struct member offset.

Solution: Use offsetof().

Files: src/globals.h, src/macros.h, src/vim.h, src/spell.c

Patch 7.4.2063

Problem: eval.c is still too big.

Solution: Split off internal functions to evalfunc.c.

Files: src/eval.c, src/evalfunc.c, src/list.c, src/proto.h,  
src/globals.h, src/vim.h, src/proto/eval.pro,  
src/proto/evalfunc.pro, src/proto/list.pro, src/Makefile, Filelist,  
src/Make\_bc5.mak, src/Make\_cyg\_ming.mak, src/Make\_dice.mak,  
src/Make\_ivc.mak, src/Make\_manx.mak, src/Make\_morph.mak,  
src/Make\_mvc.mak, src/Make\_sas.mak

Patch 7.4.2064

Problem: Coverity warns for possible buffer overflow.

Solution: Use vim\_strcat() instead of strcat().

Files: src/quickfix.c

Patch 7.4.2065

Problem: Compiler warns for uninitialized variable. (John Marriott)

Solution: Set lnum to the right value.

Files: src/evalfunc.c

Patch 7.4.2066

Problem: getcompletion() not well tested.

Solution: Add more testing.

Files: src/testdir/test\_cmdline.vim

Patch 7.4.2067

Problem: Compiler warning for char/char\_u conversion. (Tony Mechelynck)  
Inefficient code.

Solution: Use more lines to fill with spaces. (Nikolai Pavlov) Add type cast.

Files: src/quickfix.c

Patch 7.4.2068

Problem: Not all arguments of trunc\_string() are tested. Memory access  
error when running the message tests.

Solution: Add another test case. (Yegappan Lakshmanan) Make it easy to run  
unittests with valgrind. Fix the access error.

Files: src/message.c, src/message\_test.c, src/Makefile

Patch 7.4.2069

Problem: spell.c is too big.

Solution: Split it in spell file handling and spell checking.

Files: src/spell.c, src/spellfile.c, src/spell.h, src/Makefile,  
src/proto/spell.pro, src/proto/spellfile.pro, src/proto.h  
Filelist, src/Make\_bc5.mak, src/Make\_cyg\_ming.mak,

src/Make\_dice.mak, src/Make\_ivc.mak, src/Make\_manx.mak,  
src/Make\_morph.mak, src/Make\_mvc.mak, src/Make\_sas.mak

Patch 7.4.2070 (after 7.4.2069)

Problem: Missing change to include file.  
Solution: Include the spell header file.  
Files: src/vim.h

Patch 7.4.2071

Problem: The return value of type() is difficult to use.  
Solution: Define v:t\_constants. (Ken Takata)  
Files: runtime/doc/eval.txt, src/eval.c, src/evalfunc.c,  
src/testdir/test\_channel.vim, src/testdir/test\_viml.vim, src/vim.h

Patch 7.4.2072

Problem: substitute() does not support a Funcref argument.  
Solution: Support a Funcref like it supports a string starting with "\=".  
Files: src/evalfunc.c, src/regexp.c, src/eval.c, src/proto/eval.pro,  
src/proto/regexp.pro, src/testdir/test\_expr.vim

Patch 7.4.2073

Problem: rgb.txt is read for every color name.  
Solution: Load rgb.txt once. (Christian Brabandt) Add a test.  
Files: runtime/rgb.txt, src/term.c, src/testdir/test\_syn\_attr.vim

Patch 7.4.2074

Problem: One more place using a dummy variable.  
Solution: Use offsetof(). (Ken Takata)  
Files: src/userfunc.c

Patch 7.4.2075

Problem: No autocommand event to initialize a window or tab page.  
Solution: Add WinNew and TabNew events. (partly by Felipe Morales)  
Files: src/fileio.c, src/window.c, src/vim.h,  
src/testdir/test\_autocmd.vim, runtime/doc/autocmd.txt

Patch 7.4.2076

Problem: Syntax error when dict has '>' key.  
Solution: Check for endchar. (Ken Takata)  
Files: src/userfunc.c, src/testdir/test\_lambda.vim

Patch 7.4.2077

Problem: Cannot update 'tabline' when a tab was closed.  
Solution: Add the TabClosed autocmd event. (partly by Felipe Morales)  
Files: src/fileio.c, src/window.c, src/vim.h,  
src/testdir/test\_autocmd.vim, runtime/doc/autocmd.txt

Patch 7.4.2078

Problem: Running checks in po directory fails.  
Solution: Add colors used in syntax.c to the builtin color table.  
Files: src/term.c

Patch 7.4.2079

Problem: Netbeans test fails on non-Unix systems.  
Solution: Only do the permission check on Unix systems.  
Files: src/testdir/test\_netbeans.vim

Patch 7.4.2080

Problem: When using PERROR() on some systems assert\_fails() does not see  
the error.  
Solution: Make PERROR() always report the error.  
Files: src/vim.h, src/message.c, src/proto/message.pro

## Patch 7.4.2081

Problem: Line numbers in the error list are not always adjusted.  
Solution: Set b\_has\_qf\_entry properly. (Yegappan Lakshmanan)  
Files: src/quickfix.c, src/structs.h, src/testdir/test\_quickfix.vim

## Patch 7.4.2082

Problem: Not much test coverage for digraphs.  
Solution: Add a new style digraph test. (Christian Brabandt)  
Files: src/Makefile, src/testdir/test\_alot.vim,  
src/testdir/test\_digraph.vim

## Patch 7.4.2083

Problem: Coverity complains about not restoring a value.  
Solution: Restore the value, although it's not really needed. Change return  
to jump to cleanup, might leak memory.  
Files: src/userfunc.c

## Patch 7.4.2084

Problem: New digraph test makes testing hang.  
Solution: Don't set "nocp".  
Files: src/testdir/test\_digraph.vim

## Patch 7.4.2085

Problem: Digraph tests fails on some systems.  
Solution: Run it separately and set 'encoding' early.  
Files: src/testdir/Make\_all.mak, src/testdir/test\_alot.vim,  
src/testdir/test\_digraph.vim

## Patch 7.4.2086

Problem: Using the system default encoding makes tests unpredictable.  
Solution: Always use utf-8 or latin1 in the new style tests. Remove setting  
encoding and scriptencoding where it is not needed.  
Files: src/testdir/runtest.vim, src/testdir/test\_channel.vim,  
src/testdir/test\_digraph.vim, src/testdir/test\_expand\_dllpath.vim,  
src/testdir/test\_expr\_utf8.vim, src/testdir/test\_json.vim,  
src/testdir/test\_matchadd\_conceal\_utf8.vim,  
src/testdir/test\_regexp\_utf8.vim, src/testdir/test\_visual.vim,  
src/testdir/test\_alot\_utf8.vim,

## Patch 7.4.2087

Problem: Digraph code test coverage is still low.  
Solution: Add more tests. (Christian Brabandt)  
Files: src/testdir/test\_digraph.vim

## Patch 7.4.2088 (after 7.4.2087)

Problem: Keymap test fails with normal features.  
Solution: Bail out if the keymap feature is not supported.  
Files: src/testdir/test\_digraph.vim

## Patch 7.4.2089

Problem: Color handling of X11 GUIs is too complicated.  
Solution: Simplify the code. Use RGBA where appropriate. (Kazunobu  
Kuriyama)  
Files: src/gui.h, src/gui\_beval.c, src/gui\_gtk\_x11.c, src/netbeans.c

## Patch 7.4.2090

Problem: Using submatch() in a lambda passed to substitute() is verbose.  
Solution: Use a static list and pass it as an optional argument to the  
function. Fix memory leak.  
Files: src/structs.h, src/list.c, src/userfunc.c, src/channel.c,  
src/eval.c, src/evalfunc.c, src/ex\_cmds2.c, src/regexp.c,

```
src/proto/list.pro, src/proto/userfunc.pro,
src/testdir/test_expr.vim, runtime/doc/eval.txt
```

**Patch 7.4.2091**

Problem: Coverity reports a resource leak when out of memory.  
Solution: Close the file before returning.  
Files: src/term.c

**Patch 7.4.2092**

Problem: GTK 3 build fails with older GTK version.  
Solution: Check the pango version. (Kazunobu Kuriyama)  
Files: src/gui\_beval.c

**Patch 7.4.2093**

Problem: Netbeans test fails once in a while. Leaving log file behind.  
Solution: Add it to the list of flaky tests. Disable logfile.  
Files: src/testdir/runtest.vim, src/testdir/test\_channel.vim

**Patch 7.4.2094**

Problem: The color allocation in X11 is overly complicated.  
Solution: Remove find\_closest\_color(), XAllocColor() already does this.  
(Kazunobu Kuriyama)  
Files: src/gui\_x11.c

**Patch 7.4.2095**

Problem: Man test fails when run with the GUI.  
Solution: Adjust for different behavior of GUI. Add assert\_inrange().  
Files: src/eval.c, src/evalfunc.c, src/proto/eval.pro,  
src/testdir/test\_assert.vim, src/testdir/test\_man.vim,  
runtime/doc/eval.txt

**Patch 7.4.2096**

Problem: Lambda functions show up with completion.  
Solution: Don't show lambda functions. (Ken Takata)  
Files: src/userfunc.c, src/testdir/test\_cmdline.vim

**Patch 7.4.2097**

Problem: Warning from 64 bit compiler.  
Solution: use size\_t instead of int. (Mike Williams)  
Files: src/message.c

**Patch 7.4.2098**

Problem: Text object tests are old style.  
Solution: Turn them into new style tests. (James McCoy, closes #941)  
Files: src/testdir/Make\_all.mak, src/testdir/test\_textobjects.in,  
src/testdir/test\_textobjects.ok, src/testdir/test\_textobjects.vim,  
src/Makefile

**Patch 7.4.2099**

Problem: When a keymap is active only "(lang)" is displayed. (Ilya Dogolazky)  
Solution: Show the keymap name. (Dmitri Vereshchagin, closes #933)  
Files: src/buffer.c, src/proto/screen.pro, src/screen.c

**Patch 7.4.2100**

Problem: "cgn" and "dgn" do not work correctly with a single character match and the replacement includes the searched pattern. (John Beckett)  
Solution: If the match is found in the wrong column try in the next column. Turn the test into new style. (Christian Brabandt)  
Files: src/search.c, src/testdir/Make\_all.mak, src/Makefile,  
src/testdir/test53.in, src/testdir/test53.ok,

src/testdir/test\_gn.vim

Patch 7.4.2101

Problem: Looping over windows, buffers and tab pages is inconsistent.  
Solution: Use FOR\_ALL\_ macros everywhere. (Yegappan Lakshmanan)  
Files: src/buffer.c, src/diff.c, src/edit.c, src/eval.c, src/evalfunc.c,  
src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/fileio.c,  
src/globals.h, src/gui.c, src/gui\_mac.c, src/if\_lua.c,  
src/if\_mzsch.c, src/if\_perl.xs, src/if\_ruby.c, src/if\_tcl.c,  
src/main.c, src/mark.c, src/memfile.c, src/memline.c, src/misc1.c,  
src/move.c, src/netbeans.c, src/normal.c, src/option.c,  
src/quickfix.c, src/screen.c, src/spell.c, src/term.c,  
src/window.c, src/workshop.c

Patch 7.4.2102 (after 7.4.2101)

Problem: Tiny build with GUI fails.  
Solution: Revert one FOR\_ALL\_ change.  
Files: src/gui.c

Patch 7.4.2103

Problem: Can't have "augroup END" right after ":au!".  
Solution: Check for the bar character before the command argument.  
Files: src/fileio.c, src/testdir/test\_autocmd.vim,  
runtime/doc/autocmd.txt

Patch 7.4.2104

Problem: Code duplication when unreferencing a function.  
Solution: De-duplicate.  
Files: src/userfunc.c

Patch 7.4.2105

Problem: Configure reports default features to be "normal" while it is  
"huge".  
Solution: Change the default text. Build with newer autoconf.  
Files: src/configure.in, src/auto/configure

Patch 7.4.2106

Problem: Clang warns about missing field in initializer.  
Solution: Define COMMA and use it. (Kazunobu Kuriyama)  
Files: src/ex\_cmds.c, src/globals.h, src/vim.h

Patch 7.4.2107 (after 7.4.2106)

Problem: Misplaced equal sign.  
Solution: Remove it.  
Files: src/globals.h

Patch 7.4.2108

Problem: Netbeans test is flaky.  
Solution: Wait for the cursor to be positioned.  
Files: src/testdir/test\_netbeans.vim

Patch 7.4.2109

Problem: Setting 'display' to "lastline" is a drastic change, while  
omitting it results in lots of "@" lines.  
Solution: Add "truncate" to show "@@@" for a truncated line.  
Files: src/option.h, src/screen.c, runtime/doc/options.txt

Patch 7.4.2110

Problem: When there is an CmdUndefined autocmd then the error for a missing  
command is E464 instead of E492. (Manuel Ortega)  
Solution: Don't let the pointer be NULL.  
Files: src/ex\_docmd.c, src/testdir/test\_usercommands.vim

## Patch 7.4.2111

Problem: Defaults are very conservative.

Solution: Move settings from vimrc\_example.vim to defaults.vim. Load defaults.vim if no .vimrc was found.

Files: src/main.c, src/version.c, src/os\_amiga.h, src/os\_dos.h, src/os\_mac.h, src/os\_unix.h, src/feature.h, src/Makefile, runtime/vimrc\_example.vim, runtime/defaults.vim, runtime/evim.vim, Filelist, runtime/doc/starting.txt

## Patch 7.4.2112

Problem: getcompletion(.., 'dir') returns a match with trailing "\*" when there are no matches. (Chdiza)

Solution: Return an empty list when there are no matches. Add a trailing slash to directories. (Yegappan Lakshmanan) Add tests for no matches. (closes #947)

Files: src/evalfunc.c, src/testdir/test\_cmdline.vim

## Patch 7.4.2113

Problem: Test for undo is flaky.

Solution: Turn it into a new style test. Use test\_settime() to avoid flakyness.

Files: src/Makefile, src/undo.c, src/testdir/test61.in, src/testdir/test61.ok, src/testdir/test\_undo.vim, src/testdir/test\_undolevels.vim, src/testdir/Make\_all.mak, src/testdir/test\_alot.vim

## Patch 7.4.2114

Problem: Tiny build fails.

Solution: Always include vim\_time().

Files: src/ex\_cmds.c

## Patch 7.4.2115

Problem: Loading defaults.vim with -C argument.

Solution: Don't load the defaults script with -C argument. Test sourcing the defaults script. Set 'display' to "truncate".

Files: src/main.c, src/Makefile, runtime/defaults.vim, src/testdir/test\_startup.vim, src/testdir/Make\_all.mak

## Patch 7.4.2116

Problem: The default vimrc for Windows is very conservative.

Solution: Use the defaults.vim in the Windows installer.

Files: src/dosinst.c

## Patch 7.4.2117

Problem: Deleting an augroup that still has autocmds does not give a warning. The next defined augroup takes its place.

Solution: Give a warning and prevent the index being used for another group name.

Files: src/fileio.c, src/testdir/test\_autocmd.vim

## Patch 7.4.2118

Problem: Mac: can't build with tiny features.

Solution: Don't define FEAT\_CLIPBOARD unconditionally. (Kazunobu Kuriyama)

Files: src/vim.h

## Patch 7.4.2119

Problem: Closures are not supported.

Solution: Capture variables in lambdas from the outer scope. (Yasuhiro Matsumoto, Ken Takata)

Files: runtime/doc/eval.txt, src/eval.c, src/ex\_cmds2.c, src/globals.h, src/proto/eval.pro, src/proto/userfunc.pro,



src/testdir/test\_lambda.vim, src/userfunc.c

Patch 7.4.2120

Problem: User defined functions can't be a closure.

Solution: Add the "closure" argument. Allow using :unlet on a bound variable. (Yasuhiro Matsumoto, Ken Takata)

Files: runtime/doc/eval.txt, src/testdir/test\_lambda.vim, src/userfunc.c, src/eval.c src/proto/userfunc.pro

Patch 7.4.2121

Problem: No easy way to check if lambda and closure are supported.

Solution: Add the +lambda feature.

Files: src/evalfunc.c, src/version.c, src/testdir/test\_lambda.vim

Patch 7.4.2122 (after 7.4.2118)

Problem: Mac: don't get +clipboard in huge build.

Solution: Move #define down below including feature.h

Files: src/vim.h

Patch 7.4.2123

Problem: No new style test for diff mode.

Solution: Add a test. Check that folds are in sync.

Files: src/Makefile, src/testdir/test\_diffmode.vim, src/testdir/Make\_all.mak, src/testdir/test47.in, src/testdir/test47.ok

Patch 7.4.2124

Problem: diffmode test leaves files behind, breaking another test.

Solution: Delete the files.

Files: src/testdir/test\_diffmode.vim

Patch 7.4.2125

Problem: Compiler warning for loss of data.

Solution: Add a type cast. (Christian Brabandt)

Files: src/message.c

Patch 7.4.2126

Problem: No tests for :diffget and :diffput

Solution: Add tests.

Files: src/testdir/test\_diffmode.vim

Patch 7.4.2127

Problem: The short form of ":noswapfile" is ":noswap" instead of ":nos". (Kent Sibilev)

Solution: Only require three characters. Add a test for the short forms.

Files: src/ex\_docmd.c, src/testdir/test\_usercommands.vim

Patch 7.4.2128

Problem: Memory leak when saving for undo fails.

Solution: Free allocated memory. (Hirohito Higashi)

Files: src/ex\_cmds.c

Patch 7.4.2129

Problem: Memory leak when using timer\_start(). (Dominique Pelle)

Solution: Don't copy the callback when using a partial.

Files: src/evalfunc.c

Patch 7.4.2130

Problem: Pending timers cause false memory leak reports.

Solution: Free all timers on exit.

Files: src/ex\_cmds2.c, src/proto/ex\_cmds2.pro, src/misc2.c

## Patch 7.4.2131

Problem: More memory leaks when using partial, e.g. for "exit-cb".  
Solution: Don't copy the callback when using a partial.  
Files: src/channel.c

## Patch 7.4.2132

Problem: test\_partial has memory leaks reported.  
Solution: Add a note about why this happens.  
Files: src/testdir/test\_partial.vim

## Patch 7.4.2133 (after 7.4.2128)

Problem: Can't build with tiny features.  
Solution: Add #ifdef.  
Files: src/ex\_cmds.c

## Patch 7.4.2134

Problem: No error for using function() badly.  
Solution: Check for passing wrong function name. (Ken Takata)  
Files: src/eval.c, src/evalfunc.c, src/proto/userfunc.pro,  
src/testdir/test\_expr.vim, src/userfunc.c, src/vim.h

## Patch 7.4.2135

Problem: Various tiny issues.  
Solution: Update comments, white space, etc.  
Files: src/diff.c, src/digraph.c, src/testdir/test80.in,  
src/testdir/test\_channel.vim, src/testdir/Makefile,  
runtime/menu.vim, src/INSTALLpc.txt, src/xpm/README.txt

## Patch 7.4.2136

Problem: Closure function fails.  
Solution: Don't reset uf\_scoped when it points to another funccal.  
Files: src/userfunc.c, src/testdir/test\_lambda.vim

## Patch 7.4.2137

Problem: Using function() with a name will find another function when it is redefined.  
Solution: Add funcref(). Refer to lambda using a partial. Fix several reference counting issues.  
Files: src/vim.h, src/structs.h, src/userfunc.c, src/eval.c,  
src/evalfunc.c, src/channel.c, src/proto/eval.pro,  
src/proto/userfunc.pro, src/if\_mzsch.c, src/regexp.c, src/misc2.c,  
src/if\_py\_both.h, src/testdir/test\_expr.vim, runtime/doc/eval.txt

## Patch 7.4.2138

Problem: Test 86 and 87 fail.  
Solution: Call func\_ref() also for regular functions.  
Files: src/if\_py\_both.h

## Patch 7.4.2139

Problem: :delfunction causes illegal memory access.  
Solution: Correct logic when deciding to free a function.  
Files: src/userfunc.c, src/testdir/test\_lambda.vim

## Patch 7.4.2140

Problem: Tiny build fails.  
Solution: Add dummy typedefs.  
Files: src/structs.h

## Patch 7.4.2141

Problem: Coverity reports bogus NULL check.  
Solution: When checking for a variable in the funccal scope don't pass the varname.

Files: src/userfunc.c, src/proto/userfunc.pro, src/eval.c

Patch 7.4.2142

Problem: Leaking memory when redefining a function.

Solution: Don't increment the function reference count when it's found by name. Don't remove the wrong function from the hashtable. More reference counting fixes.

Files: src/structs.h, src/userfunc.c

Patch 7.4.2143

Problem: A funccal is garbage collected while it can still be used.

Solution: Set copyID in all referenced functions. Do not list lambda functions with ":function".

Files: src/userfunc.c, src/proto/userfunc.pro, src/eval.c, src/testdir/test\_lambda.vim

Patch 7.4.2144

Problem: On MS-Windows quickfix does not handle a line with 1023 bytes ending in CR-LF properly.

Solution: Don't consider CR a line break. (Ken Takata)

Files: src/quickfix.c

Patch 7.4.2145

Problem: Win32: Using CreateThread/ExitThread is not safe.

Solution: Use \_beginthreadex and return from the thread. (Ken Takata)

Files: src/os\_win32.c

Patch 7.4.2146

Problem: Not enough testing for popup menu. CTRL-E does not always work properly.

Solution: Add more tests. When using CTRL-E check if the popup menu is visible. (Christian Brabandt)

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 7.4.2147 (after 7.4.2146)

Problem: test\_alot fails.

Solution: Close window.

Files: src/testdir/test\_popup.vim

Patch 7.4.2148

Problem: Not much testing for cscope.

Solution: Add a test that uses the cscope program. (Christian Brabandt)

Files: src/testdir/test\_cscope.vim

Patch 7.4.2149

Problem: If a test leaves a window open a following test may fail.

Solution: Always close extra windows after running a test.

Files: src/testdir/runtest.vim, src/testdir/test\_popup.vim

Patch 7.4.2150

Problem: Warning with MinGW 64. (John Marriott)

Solution: Change return type. (Ken Takata)

Files: src/os\_win32.c

Patch 7.4.2151

Problem: Quickfix test fails on MS-Windows.

Solution: Close the help window. (Christian Brabandt)

Files: src/testdir/test\_quickfix.vim

Patch 7.4.2152

Problem: No proper translation of messages with a count.

Solution: Use ngettext(). (Sergey Alyoshin)

Files: src/evalfunc.c, src/fold.c, src/os\_win32.c, src/screen.c, src/vim.h

Patch 7.4.2153

Problem: GUI test isn't testing much.

Solution: Turn into a new style test. Execute a shell command.

Files: src/testdir/test\_gui.vim, src/testdir/testl6.in,  
src/testdir/testl6.ok, src/testdir/Make\_all.mak, src/Makefile,  
src/testdir/Make\_vms.mms

Patch 7.4.2154

Problem: Test\_communicate() fails sometimes.

Solution: Add it to the flaky tests.

Files: src/testdir/runtest.vim

Patch 7.4.2155

Problem: Quotes make GUI test fail on MS-Windows.

Solution: Remove quotes, strip white space.

Files: src/testdir/test\_gui.vim

Patch 7.4.2156

Problem: Compiler warning.

Solution: Add type cast. (Ken Takata, Mike Williams)

Files: src/os\_win32.c

Patch 7.4.2157

Problem: Test\_job\_start\_fails() is expected to report memory leaks, making it hard to see other leaks in test\_partial.

Solution: Move Test\_job\_start\_fails() to a separate test file.

Files: src/testdir/test\_partial.vim, src/testdir/test\_job\_fails.vim,  
src/Makefile, src/testdir/Make\_all.mak

Patch 7.4.2158

Problem: Result of getcompletion('', 'cscope') depends on previous completion. (Christian Brabandt)

Solution: Call set\_context\_in\_cscope\_cmd().

Files: src/evalfunc.c, src/testdir/test\_cmdline.vim

Patch 7.4.2159

Problem: Insufficient testing for cscope.

Solution: Add more tests. (Dominique Pelle)

Files: src/testdir/test\_cscope.vim

Patch 7.4.2160

Problem: setmatches() mixes up values. (Nikolai Pavlov)

Solution: Save the string instead of reusing a shared buffer.

Files: src/dict.c, src/evalfunc.c, src/testdir/test\_expr.vim,

Patch 7.4.2161 (after 7.4.2160)

Problem: Expression test fails without conceal feature.

Solution: Only check "conceal" with the conceal feature.

Files: src/testdir/test\_expr.vim

Patch 7.4.2162

Problem: Result of getcompletion('', 'sign') depends on previous completion.

Solution: Call set\_context\_in\_sign\_cmd(). (Dominique Pelle)

Files: src/evalfunc.c, src/testdir/test\_cmdline.vim

Patch 7.4.2163

Problem: match() and related functions tested with old style test.

Solution: Convert to new style test. (Hirohito Higashi)

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test63.in,

src/testdir/test63.ok, src/testdir/test\_alot.vim,  
src/testdir/test\_match.vim, src/testdir/test\_matchstrpos.vim

Patch 7.4.2164

Problem: It is not possible to use plugins in an "after" directory to tune the behavior of a package.

Solution: First load plugins from non-after directories, then packages and finally plugins in after directories.  
Reset 'loadplugins' before executing --cmd arguments.

Files: src/main.c, src/vim.h, src/ex\_cmds2.c, src/testdir/Makefile,  
src/testdir/shared.vim, src/testdir/test\_startup.vim,  
src/testdir/setup.vim, runtime/doc/startng.txt

Patch 7.4.2165 (after 7.4.2164)

Problem: Startup test fails on MS-Windows.

Solution: Don't check output if RunVim() returns zero.

Files: src/testdir/test\_startup.vim

Patch 7.4.2166 (after 7.4.2164)

Problem: Small build can't run startup test.

Solution: Skip the test.

Files: src/testdir/test\_startup.vim

Patch 7.4.2167 (after 7.4.2164)

Problem: Small build can't run tests.

Solution: Don't try setting 'packpath'.

Files: src/testdir/setup.vim

Patch 7.4.2168

Problem: Not running the startup test on MS-Windows.

Solution: Write vimcmd.

Files: src/testdir/Make\_ming.mak, src/testdir/Make\_dos.mak

Patch 7.4.2169 (after 7.4.2168)

Problem: Startup test gets stuck on MS-Windows.

Solution: Use double quotes.

Files: src/testdir/shared.vim, src/testdir/test\_startup.vim

Patch 7.4.2170

Problem: Cannot get information about timers.

Solution: Add timer\_info().

Files: src/evalfunc.c, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro,  
runtime/doc/eval.txt

Patch 7.4.2171 (after 7.4.2170)

Problem: MS-Windows build fails.

Solution: Add QueryPerformanceCounter().

Files: src/ex\_cmds2.c

Patch 7.4.2172

Problem: No test for "vim --help".

Solution: Add a test.

Files: src/testdir/test\_startup.vim, src/testdir/shared.vim

Patch 7.4.2173 (after 7.4.2172)

Problem: Can't test help on MS-Windows.

Solution: Skip the test.

Files: src/testdir/test\_startup.vim

Patch 7.4.2174

Problem: Adding duplicate flags to 'whichwrap' leaves commas behind.

Solution: Also remove the commas. (Naruhiko Nishino)

Files: src/Makefile, src/option.c, src/testdir/Make\_all.mak,  
src/testdir/test\_alot.vim, src/testdir/test\_options.in,  
src/testdir/test\_options.ok, src/testdir/test\_options.vim

Patch 7.4.2175

Problem: Insufficient testing of cscope.  
Solution: Add more tests. (Dominique Pelle)  
Files: src/testdir/test\_cscope.vim

Patch 7.4.2176

Problem: #ifdefs in main() are complicated.  
Solution: Always define vim\_main2(). Move params to the file level.  
(suggested by Ken Takata)  
Files: src/main.c, src/structs.h, src/vim.h, src/if\_mzsch.c,  
src/proto/if\_mzsch.pro

Patch 7.4.2177

Problem: No testing for -C and -N command line flags, file arguments,  
starttime.  
Solution: Add tests.  
Files: src/testdir/test\_startup.vim, src/testdir/shared.vim

Patch 7.4.2178

Problem: No test for reading from stdin.  
Solution: Add a test.  
Files: src/testdir/test\_startup.vim, src/testdir/shared.vim

Patch 7.4.2179 (after 7.4.2178)

Problem: Reading from stdin test fails on MS-Windows.  
Solution: Strip the extra space.  
Files: src/testdir/test\_startup.vim

Patch 7.4.2180

Problem: There is no easy way to stop all timers. There is no way to  
temporary pause a timer.  
Solution: Add timer\_stopall() and timer\_pause().  
Files: src/evalfunc.c, src/ex\_cmds2.c, src/proto/ex\_cmds2.pro,  
src/structs.h, src/testdir/test\_timers.vim,  
src/testdir/shared.vim, runtime/doc/eval.txt

Patch 7.4.2181

Problem: Compiler warning for unused variable.  
Solution: Remove it. (Dominique Pelle)  
Files: src/ex\_cmds2.c

Patch 7.4.2182

Problem: Color Grey40 used in startup but not in the short list.  
Solution: Add Grey40 to the builtin colors.  
Files: src/term.c

Patch 7.4.2183

Problem: Sign tests are old style.  
Solution: Turn them into new style tests. (Dominique Pelle)  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_signs.in,  
src/testdir/test\_signs.ok, src/testdir/test\_signs.vim,

Patch 7.4.2184

Problem: Tests that use RunVim() do not actually perform the test.  
Solution: Use "return" instead of "call". (Ken Takata)  
Files: src/testdir/shared.vim

Patch 7.4.2185

Problem: Test glob2regpat does not test much.  
Solution: Add a few more test cases. (Dominique Pelle)  
Files: src/testdir/test\_glob2regpat.vim

Patch 7.4.2186

Problem: Timers test is flaky.  
Solution: Relax the sleep time check.  
Files: src/testdir/test\_timers.vim

Patch 7.4.2187 (after 7.4.2185)

Problem: glob2regpat test fails on Windows.  
Solution: Remove the checks that use backslashes.  
Files: src/testdir/test\_glob2regpat.vim

Patch 7.4.2188 (after 7.4.2146)

Problem: Completion does not work properly with some plugins.  
Solution: Revert the part related to typing CTRL-E. (closes #972)  
Files: src/edit.c, src/testdir/test\_popup.vim

Patch 7.4.2189

Problem: Cannot detect encoding in a fifo.  
Solution: Extend the stdin way of detecting encoding to fifo. Add a test for detecting encoding on stdin and fifo. (Ken Takata)  
Files: src/buffer.c, src/fileio.c, src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_startup\_utf8.vim, src/vim.h

Patch 7.4.2190

Problem: When startup test fails it's not easy to find out why. GUI test fails with Gnome.  
Solution: Add the help entry matches to a list and assert that. Set \$HOME for Gnome to create .gnome2 directory.  
Files: src/testdir/test\_startup.vim, src/testdir/test\_gui.vim

Patch 7.4.2191

Problem: No automatic prototype for vim\_main2().  
Solution: Move the #endif. (Ken Takata)  
Files: src/main.c, src/vim.h, src/proto/main.pro

Patch 7.4.2192

Problem: Generating prototypes with Cygwin doesn't work well.  
Solution: Change #ifdefs. (Ken Takata)  
Files: src/gui.h, src/gui\_w32.c, src/ops.c, src/proto/fileio.pro, src/proto/message.pro, src/proto/normal.pro, src/proto/ops.pro, src/vim.h

Patch 7.4.2193

Problem: With Gnome when the GUI can't start test\_startup hangs.  
Solution: Call gui\_mch\_early\_init\_check(). (Hirohito Higashi)  
Files: src/gui.c, src/gui\_gtk\_x11.c, src/proto/gui\_gtk\_x11.pro

Patch 7.4.2194

Problem: Sign tests don't cover enough.  
Solution: Add more test cases. (Dominique Pelle)  
Files: src/testdir/test\_signs.vim

Patch 7.4.2195

Problem: MS-Windows: The vimrun program does not support Unicode.  
Solution: Use GetCommandLineW(). Cleanup old #ifdefs. (Ken Takata)  
Files: src/vimrun.c

Patch 7.4.2196

Problem: glob2regpat test doesn't test everything on MS-Windows.  
Solution: Add patterns with backslash handling.  
Files: src/testdir/test\_glob2regpat.vim

Patch 7.4.2197

Problem: All functions are freed on exit, which may hide leaks.  
Solution: Only free named functions, not reference counted ones.  
Files: src/userfunc.c

Patch 7.4.2198

Problem: Test alot sometimes fails under valgrind. (Dominique Pelle)  
Solution: Avoid passing a callback with the wrong number of arguments.  
Files: src/testdir/test\_partial.vim

Patch 7.4.2199

Problem: In the GUI the cursor is hidden when redrawing any window,  
causing flicker.  
Solution: Only undraw the cursor when updating the window it's in.  
Files: src/screen.c, src/gui.c, src/proto/gui.pro, src/gui\_gtk\_x11.c

Patch 7.4.2200

Problem: Cannot get all information about a quickfix list.  
Solution: Add an optional argument to get/set loc/qf list(). (Yegappan  
Lakshmanan)  
Files: runtime/doc/eval.txt, src/evalfunc.c, src/proto/quickfix.pro,  
src/quickfix.c, src/tag.c, src/testdir/test\_quickfix.vim

Patch 7.4.2201

Problem: The sign column disappears when the last sign is deleted.  
Solution: Add the 'signcolumn' option. (Christian Brabandt)  
Files: runtime/doc/options.txt, runtime/optwin.vim, src/edit.c,  
src/move.c, src/option.c, src/option.h, src/proto/option.pro,  
src/screen.c, src/structs.h, src/testdir/test\_options.vim

Patch 7.4.2202

Problem: Build fails with small features.  
Solution: Correct option initialization.  
Files: src/option.c

Patch 7.4.2203

Problem: Test fails with normal features.  
Solution: Check is signs are supported.  
Files: src/testdir/test\_options.vim

Patch 7.4.2204

Problem: It is not easy to get information about buffers, windows and  
tabpages.  
Solution: Add getbufinfo(), getwininfo() and gettabinfo(). (Yegappan  
Lakshmanan)  
Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/dict.c,  
src/evalfunc.c, src/option.c, src/proto/dict.pro,  
src/proto/option.pro, src/proto/window.pro,  
src/testdir/Make\_all.mak, src/testdir/test\_bufwintabinfo.vim,  
src/window.c, src/Makefile

Patch 7.4.2205

Problem: 'wildignore' always applies to getcompletion().  
Solution: Add an option to use 'wildignore' or not. (Yegappan Lakshmanan)  
Files: runtime/doc/eval.txt, src/evalfunc.c, src/testdir/test\_cmdline.vim

Patch 7.4.2206

Problem: Warning for unused function.



Solution: Put the function inside #ifdef. (John Marriott)  
Files: src/evalfunc.c

Patch 7.4.2207

Problem: The +xpm feature is not sorted properly in :version output.  
Solution: Move it up. (Tony Mechelynck)  
Files: src/version.c

Patch 7.4.2208

Problem: Test for mappings is old style.  
Solution: Convert the test to new style.  
Files: src/testdir/test\_mapping.vim, src/testdir/test\_mapping.in,  
src/testdir/test\_mapping.ok, src/Makefile,  
src/testdir/test\_alot.vim, src/testdir/Make\_all.mak

Patch 7.4.2209

Problem: Cannot map <M->. (Stephen Riehm)  
Solution: Solve the memory access problem in another way. (Dominique Pelle)  
Allow for using <M-\> in a string.  
Files: src/eval.c, src/gui\_mac.c, src/misc2.c, src/option.c,  
src/proto/misc2.pro, src/syntax.c, src/term.c,  
src/testdir/test\_mapping.vim

Patch 7.4.2210

Problem: On OSX configure mixes up a Python framework and the Unix layout.  
Solution: Make configure check properly. (Tim D. Smith, closes #980)  
Files: src/configure.in, src/auto/configure

Patch 7.4.2211

Problem: Mouse support is not automatically enabled with simple term.  
Solution: Recognize "st" and other names. (Manuel Schiller, closes #963)  
Files: src/os\_unix.c

Patch 7.4.2212

Problem: Mark " is not set when closing a window in another tab. (Guraga)  
Solution: Check all tabs for the window to be valid. (based on patch by  
Hirohito Higashi, closes #974)  
Files: src/window.c, src/proto/window.pro, src/buffer.c,  
src/testdir/test\_viminfo.vim

Patch 7.4.2213

Problem: Cannot highlight the "~" lines at the end of a window differently.  
Solution: Add the EndOfBuffer highlighting. (Marco Hinz, James McCoy)  
Files: runtime/doc/options.txt, runtime/doc/syntax.txt, src/option.c,  
src/screen.c, src/syntax.c, src/vim.h

Patch 7.4.2214

Problem: A font that uses ligatures messes up the screen display.  
Solution: Put spaces between characters when building the glyph table.  
(based on a patch from Manuel Schiller)  
Files: src/gui\_gtk\_x11.c

Patch 7.4.2215

Problem: It's not easy to find out if a window is a quickfix or location  
list window.  
Solution: Add "loclist" and "quickfix" entries to the dict returned by  
getwininfo(). (Yegappan Lakshmanan)  
Files: runtime/doc/eval.txt, src/evalfunc.c,  
src/testdir/test\_bufwintabinfo.vim

Patch 7.4.2216 (after 7.4.2215)

Problem: Test fails without the +sign feature.

Solution: Only check for signcolumn with the +sign feature.  
Files: src/testdir/test\_bufwintabinfo.vim

#### Patch 7.4.2217

Problem: When using matchaddpos() a character after the end of the line can be highlighted.

Solution: Only highlight existing characters. (Hirohito Higashi)  
Files: src/screen.c, src/structs.h, src/testdir/test\_match.vim

#### Patch 7.4.2218

Problem: Can't build with +timers when +digraph is not included.

Solution: Change #ifdef for e\_number\_exp. (Damien)  
Files: src/globals.h

#### Patch 7.4.2219

Problem: Recursive call to substitute gets stuck in sandbox. (Nikolai Pavlov)

Solution: Handle the recursive call. (Christian Brabandt, closes #950)  
Add a test.

Files: src/ex\_cmds.c, src/testdir/test\_regexp\_latin.vim

#### Patch 7.4.2220

Problem: printf() gives an error when the argument for %s is not a string. (Ozaki Kiichi)

Solution: Behave like invoking string() on the argument. (Ken Takata)  
Files: runtime/doc/eval.txt, src/message.c, src/testdir/test\_expr.vim

#### Patch 7.4.2221

Problem: printf() does not support binary format.

Solution: Add %b and %B. (Ozaki Kiichi)  
Files: runtime/doc/eval.txt, src/message.c, src/testdir/test\_expr.vim

#### Patch 7.4.2222

Problem: Sourcing a script where a character has 0x80 as a second byte does not work. (Filipe L B Correia)

Solution: Turn 0x80 into K\_SPECIAL KS\_SPECIAL KE\_FILLER. (Christian Brabandt, closes #728) Add a test case.

Files: src/getchar.c, src/proto/getchar.pro, src/misc1.c, src/testdir/test\_regexp\_utf8.vim

#### Patch 7.4.2223

Problem: Buffer overflow when using latin1 character with feedkeys().

Solution: Check for an illegal character. Add a test.  
Files: src/testdir/test\_regexp\_utf8.vim, src/testdir/test\_source\_utf8.vim, src/testdir/test\_alot\_utf8.vim, src/Makefile, src/getchar.c, src/macros.h, src/evalfunc.c, src/os\_unix.c, src/os\_win32.c, src/spell.c,

#### Patch 7.4.2224

Problem: Compiler warnings with older compiler and 64 bit numbers.

Solution: Add "LL" to large values. (Mike Williams)  
Files: src/eval.c, src/evalfunc.c

#### Patch 7.4.2225

Problem: Crash when placing a sign in a deleted buffer.

Solution: Check for missing buffer name. (Dominique Pelle). Add a test.  
Files: src/ex\_cmds.c, src/testdir/test\_signs.vim

#### Patch 7.4.2226

Problem: The field names used by getbufinfo(), gettabinfo() and getwininfo() are not consistent.

Solution: Use bufnr, winnr and tabnr. (Yegappan Lakshmanan)

Files: runtime/doc/eval.txt, src/evalfunc.c,  
src/testdir/test\_bufwintabinfo.vim

#### Patch 7.4.2227

Problem: Tab page tests are old style.  
Solution: Change into new style tests. (Hirohito Higashi)  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test62.in,  
src/testdir/test62.ok, src/testdir/test\_alot.vim,  
src/testdir/test\_tabpage.vim

#### Patch 7.4.2228

Problem: Test files have inconsistent modelines.  
Solution: Don't set 'tabstop' to 2, use 'sts' and 'sw'.  
Files: src/testdir/README.txt, src/testdir/test\_backspace\_opt.vim,  
src/testdir/test\_digraph.vim, src/testdir/test\_gn.vim  
src/testdir/test\_help\_tagjump.vim,  
src/testdir/test\_increment\_dbcs.vim,  
src/testdir/test\_increment.vim, src/testdir/test\_match.vim,  
src/testdir/test\_tagjump.vim, src/testdir/test\_window\_cmd.vim,  
src/testdir/test\_regexp\_latin.vim, src/testdir/test\_timers.vim

#### Patch 7.4.2229

Problem: Startup test fails on Solaris.  
Solution: Recognize a character device. (Danek Duvall)  
Files: src/buffer.c, src/fileio.c, src/proto/fileio.pro, src/vim.h

#### Patch 7.4.2230

Problem: There is no equivalent of 'smartcase' for a tag search.  
Solution: Add value "followscs" and "smart" to 'tagcase'. (Christian Brabandt, closes #712) Turn tagcase test into new style.  
Files: runtime/doc/options.txt, runtime/doc/tagsrch.txt, src/option.h,  
src/tag.c, src/search.c, src/proto/search.pro,  
src/testdir/test\_tagcase.in, src/testdir/test\_tagcase.ok,  
src/testdir/test\_tagcase.vim, src/Makefile,  
src/testdir/Make\_all.mak, src/testdir/test\_alot.vim

#### Patch 7.4.2231

Problem: ":oldfiles" output is a very long list.  
Solution: Add a pattern argument. (Coot, closes #575)  
Files: runtime/doc/starting.txt, src/ex\_cmds.h, src/eval.c,  
src/ex\_cmds.c, src/proto/eval.pro, src/proto/ex\_cmds.pro,  
src/testdir/test\_viminfo.vim

#### Patch 7.4.2232

Problem: The default ttimeoutlen is very long.  
Solution: Use "100". (Hirohito Higashi)  
Files: runtime/defaults.vim

#### Patch 7.4.2233

Problem: Crash when using funcref() with invalid name. (Dominique Pelle)  
Solution: Check for NULL translated name.  
Files: src/evalfunc.c, src/testdir/test\_expr.vim

#### Patch 7.4.2234

Problem: Can't build with +eval but without +quickfix. (John Marriott)  
Solution: Move skip\_vimgrep\_pat() to separate #ifdef block.  
Files: src/quickfix.c

#### Patch 7.4.2235

Problem: submatch() does not check for a valid argument.  
Solution: Give an error if the argument is out of range. (Dominique Pelle)  
Files: src/evalfunc.c, src/testdir/test\_expr.vim

## Patch 7.4.2236

Problem: The 'langnoremap' option leads to double negatives. And it does not work for the last character of a mapping.

Solution: Add 'langremap' with the opposite value. Keep 'langnoremap' for backwards compatibility. Make it work for the last character of a mapping. Make the test work.

Files: runtime/doc/options.txt, runtime/defaults.vim, src/option.c, src/option.h, src/macros.h, src/testdir/test\_mapping.vim

## Patch 7.4.2237

Problem: Can't use "." and "\$" with ":tab".

Solution: Support a range for ":tab". (Hirohito Higashi)

Files: runtime/doc/tabpage.txt, src/ex\_docmd.c, src/testdir/test\_tabpage.vim

## Patch 7.4.2238

Problem: With SGR mouse reporting (suckless terminal) the mouse release and scroll up/down is confused.

Solution: Don't see a release as a scroll up/down. (Ralph Eastwood)

Files: src/term.c

## Patch 7.4.2239

Problem: Warning for missing declaration of skip\_vimgrep\_pat(). (John Marriott)

Solution: Move it to another file.

Files: src/quickfix.c, src/proto/quickfix.pro, src/ex\_cmds.c, src/proto/ex\_cmds.pro

## Patch 7.4.2240

Problem: Tests using the sleep time can be flaky.

Solution: Use reltime() if available. (Partly by Shane Harper)

Files: src/testdir/shared.vim, src/testdir/test\_timers.vim

## Patch 7.4.2241 (after 7.4.2240)

Problem: Timer test sometimes fails.

Solution: Increase the maximum time for repeating timer.

Files: src/testdir/test\_timers.vim

## Patch 7.4.2242 (after 7.4.2240)

Problem: Timer test sometimes fails.

Solution: Increase the maximum time for callback timer test.

Files: src/testdir/test\_timers.vim

## Patch 7.4.2243

Problem: Warning for assigning negative value to unsigned. (Danek Duvall)

Solution: Make cterm\_normal\_fg\_gui\_color and \_bg\_gui\_color\_T, cast to long\_u only when an unsigned is needed.

Files: src/structs.h, src/globals.h, src/screen.c, src/term.c, src/syntax.c, src/gui\_gtk\_x11.c, src/gui.c, src/gui\_mac.c, src/gui\_photon.c, src/gui\_w32.c, src/gui\_x11.c, src/proto/term.pro, src/proto/gui\_gtk\_x11.pro, src/proto/gui\_mac.pro, src/proto/gui\_photon.pro, src/proto/gui\_w32.pro, src/proto/gui\_x11.pro

## Patch 7.4.2244

Problem: Adding pattern to ":oldfiles" is not a generic solution.

Solution: Add the ":filter /pat/ cmd" command modifier. Only works for some commands right now.

Files: src/structs.h, src/ex\_docmd.c, src/ex\_cmds.h, src/message.c, src/proto/message.pro, runtime/doc/starting.txt, runtime/doc/variables.txt, src/testdir/test\_viminfo.vim,

src/testdir/test\_alot.vim, src/testdir/test\_filter\_cmd.vim,  
src/Makefile

Patch 7.4.2245 (after 7.4.2244)

Problem: Filter test fails.  
Solution: Include missing changes.  
Files: src/buffer.c

Patch 7.4.2246 (after 7.4.2244)

Problem: Oldfiles test fails.  
Solution: Include missing changes.  
Files: src/ex\_cmds.c

Patch 7.4.2247 (after 7.4.2244)

Problem: Tiny build fails. (Tony Mechelynck)  
Solution: Remove #ifdef.  
Files: src/ex\_cmds.c

Patch 7.4.2248

Problem: When cancelling the :ptjump prompt a preview window is opened for  
a following command.  
Solution: Reset g\_do\_tagpreview. (Hirohito Higashi) Add a test. Avoid that  
the test runner gets stuck in trying to close a window.  
Files: src/tag.c, src/testdir/test\_tagjump.vim, src/testdir/runtest.vim

Patch 7.4.2249

Problem: Missing colon in error message.  
Solution: Add the colon. (Dominique Pelle)  
Files: src/userfunc.c

Patch 7.4.2250

Problem: Some error messages cannot be translated.  
Solution: Enclose them in \_() and N(). (Dominique Pelle)  
Files: src/channel.c, src/evalfunc.c, src/ex\_cmds.c, src/spell.c,  
src/window.c

Patch 7.4.2251

Problem: In rare cases diffing 4 buffers is not enough.  
Solution: Raise the limit to 8. (closes #1000)  
Files: src/structs.h, runtime/doc/diff.txt

Patch 7.4.2252

Problem: Compiler warnings for signed/unsigned in expression.  
Solution: Remove type cast. (Dominique Pelle)  
Files: src/vim.h

Patch 7.4.2253

Problem: Check for Windows 3.1 will always return false. (Christian  
Brabandt)  
Solution: Remove the dead code.  
Files: src/gui\_w32.c, src/evalfunc.c, src/ex\_cmds.c, src/option.c,  
src/os\_win32.c, src/version.c, src/proto/gui\_w32.pro

Patch 7.4.2254

Problem: Compiler warnings in MzScheme code.  
Solution: Add UNUSED. Remove unreachable code.  
Files: src/if\_mzsch.c

Patch 7.4.2255

Problem: The script that checks translations can't handle plurals.  
Solution: Check for plural msgid and msgstr entries. Leave the cursor on  
the first error.

Files: src/po/check.vim

Patch 7.4.2256

Problem: Coverity complains about null pointer check.

Solution: Remove wrong and superfluous error check.

Files: src/eval.c

Patch 7.4.2257

Problem: Coverity complains about not checking for NULL.

Solution: Check for out of memory.

Files: src/if\_py\_both.h

Patch 7.4.2258

Problem: Two JSON messages are sent without a separator.

Solution: Separate messages with a NL. (closes #1001)

Files: src/json.c, src/channel.c, src/vim.h, src/testdir/test\_channel.py,  
src/testdir/test\_channel.vim, runtime/doc/channel.txt

Patch 7.4.2259

Problem: With 'incsearch' can only see the next match.

Solution: Make CTRL-N/CTRL-P move to the previous/next match. (Christian Brabandt)

Files: runtime/doc/cmdline.txt, src/ex\_getln.c, src/testdir/Make\_all.mak,  
src/testdir/test\_search.vim, src/Makefile

Patch 7.4.2260 (after 7.4.2258)

Problem: Channel test is flaky.

Solution: Add a newline to separate JSON messages.

Files: src/testdir/test\_channel.vim

Patch 7.4.2261 (after 7.4.2259)

Problem: Build fails with small features.

Solution: Move "else" inside the #ifdef.

Files: src/ex\_getln.c

Patch 7.4.2262

Problem: Fail to read register content from viminfo if it is 438 characters long. (John Chen)

Solution: Adjust the check for line wrapping. (closes #1010)

Files: src/testdir/test\_viminfo.vim, src/ex\_cmds.c

Patch 7.4.2263

Problem: :filter does not work for many commands. Can only get matching messages.

Solution: Make :filter work for :command, :map, :list, :number and :print. Make ":filter!" show non-matching lines.

Files: src/getchar.c, src/ex\_cmds.c, src/ex\_cmds.h, src/ex\_docmd.c,  
src/message.c, src/structs.h, src/testdir/test\_filter\_cmd.vim

Patch 7.4.2264

Problem: When adding entries to an empty quickfix list the title is reset.

Solution: Improve handling of the title. (Yegappan Lakshmanan)

Files: src/testdir/test\_quickfix.vim, src/quickfix.c

Patch 7.4.2265

Problem: printf() isn't tested much.

Solution: Add more tests for printf(). (Dominique Pelle)

Files: src/testdir/test\_expr.vim

Patch 7.4.2266 (after 7.4.2265)

Problem: printf() test fails on Windows. "-inf" is not used.

Solution: Check for Windows-specific values for "nan". Add sign to "inf"

when appropriate.  
Files: src/message.c, src/testdir/test\_expr.vim

Patch 7.4.2267 (after 7.4.2266)  
Problem: Build fails on MS-Windows.  
Solution: Add define to get isinf().  
Files: src/message.c

Patch 7.4.2268 (after 7.4.2259)  
Problem: Using CTRL-N and CTRL-P for incsearch shadows completion keys.  
Solution: Use CTRL-T and CTRL-G instead.  
Files: runtime/doc/cmdline.txt, src/ex\_getln.c,  
src/testdir/test\_search.vim

Patch 7.4.2269  
Problem: Using 'hlsearch' highlighting instead of matchpos if there is no search match.  
Solution: Pass NULL as last item to next\_search\_hl() when searching for 'hlsearch' match. (Shane Harper, closes #1013)  
Files: src/screen.c, src/testdir/test\_match.vim.

Patch 7.4.2270  
Problem: Insufficient testing for NUL bytes on a raw channel.  
Solution: Add a test for writing and reading.  
Files: src/testdir/test\_channel.vim

Patch 7.4.2271  
Problem: Netbeans test doesn't read settings from file.  
Solution: Use "-Xnbauth".  
Files: src/testdir/test\_netbeans.vim

Patch 7.4.2272  
Problem: getbufinfo(), getwininfo() and gettabinfo() are inefficient.  
Solution: Instead of making a copy of the variables dictionary, use a reference.  
Files: src/evalfunc.c

Patch 7.4.2273  
Problem: getwininfo() and getbufinfo() are inefficient.  
Solution: Do not make a copy of all window/buffer-local options. Make it possible to get them with gettabwinvar() or getbufvar().  
Files: src/evalfunc.c, src/eval.c, src/testdir/test\_bufwintabinfo.vim,  
runtime/doc/eval.txt

Patch 7.4.2274  
Problem: Command line completion on "find \*\*/filename" drops sub-directory.  
Solution: Handle this case separately. (Harm te Hennepe, closes #932, closes #939)  
Files: src/misc1.c, src/testdir/test\_cmdline.vim

Patch 7.4.2275  
Problem: ":diffoff!" does not remove filler lines.  
Solution: Force a redraw and invalidate the cursor. (closes #1014)  
Files: src/diff.c, src/testdir/test\_diffmode.vim

Patch 7.4.2276  
Problem: Command line test fails on Windows when run twice.  
Solution: Wipe the buffer so that the directory can be deleted.  
Files: src/testdir/test\_cmdline.vim

Patch 7.4.2277  
Problem: Memory leak in getbufinfo() when there is a sign. (Dominique

Pelle)  
Solution: Remove extra vim\_strsave().  
Files: src/evalfunc.c

#### Patch 7.4.2278

Problem: New users have no idea of the 'scrolloff' option.  
Solution: Set 'scrolloff' in defaults.vim.  
Files: runtime/defaults.vim

#### Patch 7.4.2279

Problem: Starting diff mode with the cursor in the last line might end up only showing one closed fold. (John Beckett)  
Solution: Scroll the window to show the same relative cursor position.  
Files: src/diff.c, src/window.c, src/proto/window.pro

#### Patch 7.4.2280

Problem: printf() doesn't handle infinity float values correctly.  
Solution: Add a table with possible infinity values. (Dominique Pelle)  
Files: src/message.c, src/testdir/test\_expr.vim

#### Patch 7.4.2281

Problem: Timer test fails sometimes.  
Solution: Reduce minimum time by 1 msec.  
Files: src/testdir/test\_timers.vim

#### Patch 7.4.2282

Problem: When a child process is very fast waiting 10 msec for it is noticeable. (Ramel Eshed)  
Solution: Start waiting for 1 msec and gradually increase.  
Files: src/os\_unix.c

#### Patch 7.4.2283

Problem: Part of ":oldfiles" command isn't cleared. (Lifepillar)  
Solution: Clear the rest of the line. (closes 1018)  
Files: src/ex\_cmds.c

#### Patch 7.4.2284

Problem: Comment in scope header file is outdated. (KillTheMule)  
Solution: Point to the help instead. (closes #1017)  
Files: src/if\_cscope.h

#### Patch 7.4.2285

Problem: Generated files are outdated.  
Solution: Generate the files. Avoid errors when generating prototypes.  
Files: src/if\_mzsch.h, src/Makefile, src/option.h, src/os\_mac\_conv.c, src/os\_amiga.c, src/vim.h, src/structs.h, src/os\_win32.c, src/if\_lua.c, src/proto/mbyte.pro

#### Patch 7.4.2286

Problem: The tee program isn't included. Makefile contains build instructions that don't work.  
Solution: Update the Filelist and build instructions. Remove build instructions for DOS and old Windows. Add the tee program.  
Files: Filelist, Makefile, nsis/gvim.nsi

#### Patch 7.4.2287

Problem: The callback passed to ch\_sendraw() is not used.  
Solution: Pass the read part, not the send part. (hayal4busa, closes #1019)  
Files: src/channel.c, src/testdir/test\_channel.vim

#### Patch 7.4.2288

Problem: MS-Windows build instructions are clumsy. "dosbin" doesn't build.



Solution: Add rename.bat. Fix building "dosbin".  
Files: Makefile, Filelist, rename.bat

## Patch 7.4.2289

Problem: When installing and \$DESTDIR is set the icons probably won't be installed.

Solution: Create the icon directories if \$DESTDIR is not empty. (Danek Duvall)

Files: src/Makefile

## Patch 7.4.2290

Problem: Compiler warning in tiny build. (Tony Mechelynck)

Solution: Add #ifdef around infinity\_str().

Files: src/message.c

## Patch 7.4.2291

Problem: printf() handles floats wrong when there is a sign.

Solution: Fix placing the sign. Add tests. (Dominique Pelle)

Files: src/testdir/test\_expr.vim, runtime/doc/eval.txt, src/message.c

## Patch 7.4.2292 (after 7.4.2291)

Problem: Not all systems understand %F in printf().

Solution: Use %f.

Files: src/message.c

## Patch 7.4.2293

Problem: Modelines in source code are inconsistent.

Solution: Use the same line in most files. Add 'noet'. (Naruhiko Nishino)

Files: src/alloc.h, src/arabic.c, src/arabic.h, src/ascii.h, src/blowfish.c, src/buffer.c, src/channel.c, src/charset.c, src/crypt.c, src/crypt\_zip.c, src/dict.c, src/diff.c, src/digraph.c, src/dosinst.c, src/dosinst.h, src/edit.c, src/eval.c, src/evalfunc.c, src/ex\_cmds.c, src/ex\_cmds.h, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_eval.c, src/ex\_getln.c, src/farsi.c, src/farsi.h, src/feature.h, src/fileio.c, src/fold.c, src/getchar.c, src/glbl\_ime.cpp, src/glbl\_ime.h, src/globals.h, src/gui.c, src/gui.h, src/gui\_at\_fs.c, src/gui\_at\_sb.c, src/gui\_at\_sb.h, src/gui\_athena.c, src/gui\_beval.c, src/gui\_beval.h, src/gui\_gtk.c, src/gui\_gtk\_f.c, src/gui\_gtk\_f.h, src/gui\_gtk\_vms.h, src/gui\_gtk\_x11.c, src/gui\_mac.c, src/gui\_motif.c, src/gui\_photon.c, src/gui\_w32.c, src/gui\_x11.c, src/gui\_x11\_pm.h, src/gui\_xmdl.c, src/gui\_xmew.c, src/gui\_xmew.h, src/gui\_xmewp.h, src/hangulin.c, src/hardcopy.c, src/hashtab.c, src/if\_cscope.c, src/if\_cscope.h, src/if\_mzsch.c, src/if\_mzsch.h, src/if\_ole.cpp, src/if\_perl.xs, src/if\_perlsfio.c, src/if\_python3.c, src/if\_ruby.c, src/if\_tcl.c, src/if\_xcmdsrv.c, src/integration.c, src/integration.h, src/iscygpty.c, src/json.c, src/json\_test.c, src/keymap.h, src/list.c, src/macros.h, src/main.c, src/mark.c, src/mbyte.c, src/memfile.c, src/memfile\_test.c, src/memline.c, src/menu.c, src/message.c, src/message\_test.c, src/misc1.c, src/misc2.c, src/move.c, src/nbdebug.c, src/nbdebug.h, src/netbeans.c, src/normal.c, src/ops.c, src/option.c, src/option.h, src/os\_amiga.c, src/os\_amiga.h, src/os\_beos.c, src/os\_beos.h, src/os\_dos.h, src/os\_mac.h, src/os\_mac\_conv.c, src/os\_macosx.m, src/os\_mint.h, src/os\_mswin.c, src/os\_qnx.c, src/os\_qnx.h, src/os\_unix.c, src/os\_unix.h, src/os\_unixx.h, src/os\_vms.c, src/os\_w32dll.c, src/os\_w32exe.c, src/os\_win32.c, src/os\_win32.h, src/popupmnu.c, src/proto.h, src/pty.c, src/quickfix.c, src/regexp.c, src/regexp.h, src/regexp\_nfa.c, src/screen.c, src/search.c, src/sha256.c, src/spell.c, src/spell.h, src/spellfile.c, src/structs.h, src/syntax.c, src/tag.c, src/term.c, src/term.h,

```
src/termlib.c, src/ui.c, src/undo.c, src/uninstal.c,
src/userfunc.c, src/version.c, src/version.h, src/vim.h,
src/vim.rc, src/vimio.h, src/vimrun.c, src/winclip.c,
src/window.c, src/workshop.c, src/workshop.h, src/wsdebug.c,
src/wsdebug.h, src/xpm_w32.c
```

Patch 7.4.2294

Problem: Sign test fails on MS-Windows when using the distributed zip archives.

Solution: Create dummy files instead of relying on files in the pixmaps directory.

Files: src/testdir/test\_signs.vim

Patch 7.4.2295 (after 7.4.2293)

Problem: Cscope test fails.

Solution: Avoid checking for specific line and column numbers.

Files: src/testdir/test\_cscope.vim

Patch 7.4.2296

Problem: No tests for :undolist and "U" command.

Solution: Add tests. (Dominique Pelle)

Files: src/testdir/test\_undo.vim

Patch 7.4.2297

Problem: When starting a job that reads from a buffer and reaching the end, the job hangs.

Solution: Close the pipe or socket when all lines were read.

Files: src/channel.c, src/testdir/test\_channel.vim

Patch 7.4.2298

Problem: It is not possible to close the "in" part of a channel.

Solution: Add ch\_close\_in().

Files: src/evalfunc.c, src/channel.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, runtime/doc/eval.txt,  
runtime/doc/channel.txt

Patch 7.4.2299

Problem: QuickFixCmdPre and QuickFixCmdPost autocommands are not always triggered.

Solution: Also trigger on ":cexpr", ":cbuffer", etc. (Yegappan Lakshmanan)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 7.4.2300

Problem: Get warning for deleting autocommand group when the autocommand using the group is scheduled for deletion. (Pavol Juhas)

Solution: Check for deleted autocommand.

Files: src/fileio.c, src/testdir/test\_autocmd.vim

Patch 7.4.2301

Problem: MS-Windows: some files remain after testing.

Solution: Close the channel output file. Wait for the file handle to be closed before deleting the file.

Files: src/os\_win32.c, src/testdir/test\_channel.vim

Patch 7.4.2302

Problem: Default interface versions for MS-Windows are outdated.

Solution: Use Active Perl 5.24, Python 3.5.2. Could only make it work with Ruby 1.9.2.

Files: src/bigvim.bat, src/bigvim64.bat, src/Make\_mvc.mak

Patch 7.4.2303

Problem: When using "is" the mode isn't always updated.

Solution: Redraw the command line. (Christian Brabandt)  
Files: src/search.c

#### Patch 7.4.2304

Problem: In a timer callback the timer itself can't be found or stopped.  
(Thinca)  
Solution: Do not remove the timer from the list, remember whether it was  
freed.  
Files: src/ex\_cmds2.c, src/testdir/test\_timers.vim

#### Patch 7.4.2305

Problem: Marks, writefile and nested function tests are old style.  
Solution: Turn them into new style tests. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_all.mak, src/testdir/test\_marks.in,  
src/testdir/test\_marks.ok, src/testdir/test\_marks.vim,  
src/testdir/test\_nested\_function.in,  
src/testdir/test\_nested\_function.ok,  
src/testdir/test\_nested\_function.vim,  
src/testdir/test\_writefile.in, src/testdir/test\_writefile.ok,  
src/testdir/test\_writefile.vim, src/Makefile

#### Patch 7.4.2306

Problem: Default value for 'langremap' is wrong.  
Solution: Set the right value. (Jürgen Krämer) Add a test.  
Files: src/option.c, src/testdir/test\_mapping.vim

#### Patch 7.4.2307

Problem: Several tests are old style.  
Solution: Turn them into new style tests. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_all.mak, src/testdir/testl02.in,  
src/testdir/testl02.ok, src/testdir/test46.in,  
src/testdir/test46.ok, src/testdir/test81.in,  
src/testdir/test81.ok, src/testdir/test\_charsearch.in,  
src/testdir/test\_charsearch.ok, src/testdir/test\_charsearch.vim,  
src/testdir/test\_fnameescape.vim, src/testdir/test\_substitute.vim,  
src/Makefile

#### Patch 7.4.2308 (after 7.4.2307)

Problem: Old charsearch test still listed in Makefile.  
Solution: Remove the line.  
Files: src/testdir/Make\_all.mak

#### Patch 7.4.2309

Problem: Crash when doing tabnext in a BufUnload autocmd. (Dominique Pelle)  
Solution: When detecting that the tab page changed, don't just abort but  
delete the window where w\_buffer is NULL.  
Files: src/window.c, src/testdir/test\_tabpage.vim

#### Patch 7.4.2310 (after 7.4.2304)

Problem: Accessing freed memory when a timer does not repeat.  
Solution: Free after removing it. (Dominique Pelle)  
Files: src/ex\_cmds2.c

#### Patch 7.4.2311

Problem: Appveyor 64 bit build still using Python 3.4  
Solution: Switch to Python 3.5. (Ken Takata, closes #1032)  
Files: appveyor.yml, src/appveyor.bat

#### Patch 7.4.2312

Problem: Crash when autocommand moves to another tab. (Dominique Pelle)  
Solution: When navigating to another window halfway the :edit command go  
back to the right window.

Files: src/buffer.c, src/ex\_cmds.c, src/ex\_getln.c, src/ex\_docmd.c,  
src/window.c, src/proto/ex\_getln.pro, src/testdir/test\_tabpage.vim

Patch 7.4.2313

Problem: Crash when deleting an augroup and listing an autocommand.  
(Dominique Pelle)

Solution: Make sure deleted\_augroup is valid.

Files: src/fileio.c, src/testdir/test\_autocmd.vim

Patch 7.4.2314

Problem: No error when deleting an augroup while it's the current one.

Solution: Disallow deleting an augroup when it's the current one.

Files: src/fileio.c, src/testdir/test\_autocmd.vim

Patch 7.4.2315

Problem: Insufficient testing for Normal mode commands.

Solution: Add a big test. (Christian Brabandt, closes #1029)

Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_normal.vim

Patch 7.4.2316

Problem: Channel sort test is flaky.

Solution: Add a check the output has been read.

Files: src/testdir/test\_channel.vim

Patch 7.4.2317 (after 7.4.2315)

Problem: Normal mode tests fail on MS-Windows.

Solution: Do some tests only on Unix. Set 'fileformat' to "unix".

Files: src/testdir/test\_normal.vim

Patch 7.4.2318

Problem: When 'incsearch' is not set CTRL-T and CTRL-G are not inserted as  
before.

Solution: Move #ifdef and don't use goto.

Files: src/ex\_getln.c

Patch 7.4.2319

Problem: No way for a system wide vimrc to stop loading defaults.vim.  
(Christian Hesse)

Solution: Bail out of defaults.vim if skip\_defaults\_vim was set.

Files: runtime/defaults.vim

Patch 7.4.2320

Problem: Redraw problem when using 'incsearch'.

Solution: Save the current view when deleting characters. (Christian  
Brabandt) Fix that the '"' mark is set in the wrong position. Don't  
change the search start when using BS.

Files: src/ex\_getln.c, src/normal.c, src/testdir/test\_search.vim

Patch 7.4.2321

Problem: When a test is commented out we forget about it.

Solution: Let a test throw an exception with "Skipped" and list skipped test  
functions. (Christian Brabandt)

Files: src/testdir/Makefile, src/testdir/runtest.vim,  
src/testdir/test\_popup.vim, src/testdir/README.txt

Patch 7.4.2322

Problem: Access memory beyond the end of the line. (Dominique Pelle)

Solution: Adjust the cursor column.

Files: src/move.c, src/testdir/test\_normal.vim

Patch 7.4.2323

Problem: Using freed memory when using 'formatexpr'. (Dominique Pelle)  
Solution: Make a copy of 'formatexpr' before evaluating it.  
Files: src/ops.c, src/testdir/test\_normal.vim

#### Patch 7.4.2324

Problem: Crash when editing a new buffer and BufUnload autocommand wipes out the new buffer. (Norio Takagi)  
Solution: Don't allow wiping out this buffer. (partly by Hirohito Higashi)  
Move old style testl3 into test\_autocmd. Avoid ml\_get error when editing a file.  
Files: src/structs.h, src/buffer.c, src/ex\_cmds.c, src/ex\_docmd.c, src/window.c, src/testdir/testl3.in, src/testdir/testl3.ok, src/testdir/test\_autocmd.vim, src/testdir/Make\_all.mak, src/Makefile

#### Patch 7.4.2325 (after 7.4.2324)

Problem: Tiny build fails.  
Solution: Add #ifdef.  
Files: src/buffer.c

#### Patch 7.4.2326

Problem: Illegal memory access when Visual selection starts in invalid position. (Dominique Pelle)  
Solution: Correct position when needed.  
Files: src/normal.c, src/misc2.c, src/proto/misc2.pro

#### Patch 7.4.2327

Problem: Freeing a variable that is on the stack.  
Solution: Don't free res\_tv or err\_tv. (Ozaki Kiichi)  
Files: src/channel.c

#### Patch 7.4.2328

Problem: Crash when BufWinLeave autocmd goes to another tab page. (Hirohito Higashi)  
Solution: Make close\_buffer() go back to the right window.  
Files: src/buffer.c, src/testdir/test\_autocmd.vim

#### Patch 7.4.2329

Problem: Error for min() and max() contains %s. (Nikolai Pavlov)  
Solution: Pass the function name. (closes #1040)  
Files: src/evalfunc.c, src/testdir/test\_expr.vim

#### Patch 7.4.2330

Problem: Coverity complains about not checking curwin to be NULL.  
Solution: Use firstwin to avoid the warning.  
Files: src/buffer.c

#### Patch 7.4.2331

Problem: Using CTRL-X CTRL-V to complete a command line from Insert mode does not work after entering an expression on the command line.  
Solution: Don't use "ccline" when not actually using a command line. (test by Hirohito Higashi)  
Files: src/edit.c, src/ex\_getln.c, src/proto/ex\_getln.pro, src/testdir/test\_popup.vim

#### Patch 7.4.2332

Problem: Crash when stop\_timer() is called in a callback of a callback. Vim hangs when the timer callback uses too much time.  
Solution: Set tr\_id to -1 when a timer is to be deleted. Don't keep calling callbacks forever. (Ozaki Kiichi)  
Files: src/evalfunc.c, src/ex\_cmds2.c, src/structs.h, src/proto/ex\_cmds2.pro, src/testdir/test\_timers.vim

## Patch 7.4.2333

Problem: Outdated comments in test.  
Solution: Cleanup normal mode test. (Christian Brabandt)  
Files: src/testdir/test\_normal.vim

## Patch 7.4.2334

Problem: On MS-Windows test\_getcwd leaves Xtopdir behind.  
Solution: Set 'noswapfile'. (Michael Soyka)  
Files: src/testdir/test\_getcwd.in

## Patch 7.4.2335

Problem: taglist() is slow. (Luc Hermitte)  
Solution: Check for CTRL-C less often when doing a linear search. (closes #1044)  
Files: src/tag.c

## Patch 7.4.2336

Problem: Running normal mode tests leave a couple of files behind.  
(Yegappan Lakshmanan)  
Solution: Delete the files. (Christian Brabandt)  
Files: src/testdir/test\_normal.vim

## Patch 7.4.2337

Problem: taglist() is still slow. (Luc Hermitte)  
Solution: Check for CTRL-C less often when finding duplicates.  
Files: src/tag.c

## Patch 7.4.2338

Problem: Can't build with small features. (John Marriott)  
Solution: Nearly always define FEAT\_TAG\_BINS.  
Files: src/feature.h, src/tag.c

## Patch 7.4.2339

Problem: Tab page test fails when run as fake root.  
Solution: Check 'buftype' instead of 'filetype'. (James McCoy, closes #1042)  
Files: src/testdir/test\_tabpage.vim

## Patch 7.4.2340

Problem: MS-Windows: Building with Ruby uses old version.  
Solution: Update to 2.2.X. Use clearer name for the API version. (Ken Takata)  
Files: Makefile, src/INSTALLpc.txt, src/Make\_cyg\_ming.mak, src/Make\_mvc.mak, src/bigvim.bat

## Patch 7.4.2341

Problem: Tiny things. Test doesn't clean up properly.  
Solution: Adjust comment and white space. Restore option value.  
Files: src/ex\_cmds.c, src/message.c, src/testdir/test\_autocmd.vim

## Patch 7.4.2342

Problem: Typo in MS-Windows build script.  
Solution: change "w2" to "22".  
Files: src/bigvim.bat

## Patch 7.4.2343

Problem: Too many old style tests.  
Solution: Turn several into new style tests. (Yegappan Lakshmanan)  
Files: src/testdir/Make\_all.mak, src/testdir/test101.in, src/testdir/test101.ok, src/testdir/test18.in, src/testdir/test18.ok, src/testdir/test2.in, src/testdir/test2.ok, src/testdir/test21.in, src/testdir/test21.ok,

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src/testdir/test6.in, src/testdir/test6.ok,
src/testdir/test_arglist.vim, src/testdir/test_charsearch.vim,
src/testdir/test_fnameescape.vim, src/testdir/test_gf.vim,
src/testdir/test_hlsearch.vim, src/testdir/test_smartindent.vim,
src/testdir/test_tagjump.vim, src/Makefile
```

**Patch 7.4.2344**

**Problem:** The "Reading from channel output..." message can be unwanted. Appending to a buffer leaves an empty first line behind.

**Solution:** Add the "out\_msg" and "err\_msg" options. Writing the first line overwrites the first, empty line.

**Files:** src/structs.h, src/channel.c, src/testdir/test\_channel.vim, runtime/doc/channel.txt

**Patch 7.4.2345 (after 7.4.2340)**

**Problem:** For MinGW RUBY\_API\_VER\_LONG isn't set correctly. Many default version numbers are outdated.

**Solution:** Set RUBY\_API\_VER\_LONG to RUBY\_VER\_LONG. Use latest stable releases for defaults. (Ken Takata)

**Files:** src/Make\_cyg\_ming.mak, src/Make\_mvc.mak

**Patch 7.4.2346**

**Problem:** Autocommand test fails when run directly, passes when run as part of test\_alot.

**Solution:** Add command to make the cursor move. Close a tab page.

**Files:** src/testdir/test\_autocmd.vim

**Patch 7.4.2347**

**Problem:** Crash when closing a buffer while Visual mode is active. (Dominique Pelle)

**Solution:** Adjust the position before computing the number of lines. When closing the current buffer stop Visual mode.

**Files:** src/buffer.c, src/normal.c, src/testdir/test\_normal.vim

**Patch 7.4.2348**

**Problem:** Crash on exit when EXITFREE is defined. (Dominique Pelle)

**Solution:** Don't access curwin when exiting.

**Files:** src/buffer.c

**Patch 7.4.2349**

**Problem:** Valgrind reports using uninitialized memory. (Dominique Pelle)

**Solution:** Check the length before checking for a NUL.

**Files:** src/message.c

**Patch 7.4.2350**

**Problem:** Test 86 and 87 fail with some version of Python.

**Solution:** Unify "can't" and "cannot". Unify quotes.

**Files:** src/testdir/test86.in, src/testdir/test86.ok, src/testdir/test87.in, src/testdir/test87.ok

**Patch 7.4.2351**

**Problem:** Netbeans test fails when run from unpacked MS-Windows sources.

**Solution:** Open README.txt instead of Makefile.

**Files:** src/testdir/test\_netbeans.py, src/testdir/test\_netbeans.vim

**Patch 7.4.2352**

**Problem:** Netbeans test fails in shadow directory.

**Solution:** Also copy README.txt to the shadow directory.

**Files:** src/Makefile

**Patch 7.4.2353**

**Problem:** Not enough test coverage for Normal mode commands.

Solution: Add more tests. (Christian Brabandt)  
Files: src/testdir/test\_normal.vim

Patch 7.4.2354

Problem: The example that explains nested backreferences does not work properly with the new regexp engine. (Harm te Hennepe)  
Solution: Also save the end position when adding a state. (closes #990)  
Files: src/regexp\_nfa.c, src/testdir/test\_regexp\_latin.vim

Patch 7.4.2355

Problem: Regexp fails to match when using "\>\)\?". (Ramel)  
Solution: When a state is already in the list, but addstate\_here() is used and the existing state comes later, add the new state anyway.  
Files: src/regexp\_nfa.c, src/testdir/test\_regexp\_latin.vim

Patch 7.4.2356

Problem: Reading past end of line when using previous substitute pattern. (Dominique Pelle)  
Solution: Don't set "pat" only set "searchstr".  
Files: src/search.c, src/testdir/test\_search.vim

Patch 7.4.2357

Problem: Attempt to read history entry while not initialized.  
Solution: Skip when the index is negative.  
Files: src/ex\_getln.c

Patch 7.4.2358

Problem: Compiler warnings with Solaris Studio when using GTK3. (Danek Duvall)  
Solution: Define FUNC2GENERIC depending on the system. (Kazunobu Kuriyama)  
Files: src/gui.h, src/gui\_beval.c, src/gui\_gtk\_f.c

Patch 7.4.2359

Problem: Memory leak in timer\_start().  
Solution: Check the right field to be NULL.  
Files: src/evalfunc.c, src/testdir/test\_timers.vim

Patch 7.4.2360

Problem: Invalid memory access when formatting. (Dominique Pelle)  
Solution: Make sure cursor line and column are associated.  
Files: src/misc1.c

Patch 7.4.2361

Problem: Checking for last\_timer\_id to overflow is not reliable. (Ozaki Kiichi)  
Solution: Check for the number not going up.  
Files: src/ex\_cmds2.c

Patch 7.4.2362

Problem: Illegal memory access with ":l@". (Dominique Pelle)  
Solution: Correct cursor column after setting the line number. Also avoid calling end\_visual\_mode() when not in Visual mode.  
Files: src/ex\_docmd.c, src/buffer.c

Patch 7.4.2363

Problem: Superfluous function prototypes.  
Solution: Remove them.  
Files: src/regexp.c

Patch 7.4.2364

Problem: Sort test sometimes fails.  
Solution: Add it to the list of flaky tests.



Files: src/testdir/runtest.vim

Patch 7.4.2365

Problem: Needless line break. Confusing directory name.

Solution: Remove line break. Prepend "../" to "tools".

Files: Makefile, src/normal.c

Patch 7.4.2366

Problem: MS-Windows gvim.exe does not have DirectX support.

Solution: Add the DIRECTX to the script.

Files: src/bigvim.bat

Patch 7.4.2367 (after 7.4.2364)

Problem: Test runner misses a comma.

Solution: Add the comma.

Files: src/testdir/runtest.vim

Patch 8.0.0001

Problem: Intro screen still mentions version7. (Paul)

Solution: Change it to version8.

Files: src/version.c

Patch 8.0.0002

Problem: The netrw plugin does not work.

Solution: Make it accept version 8.0.

Files: runtime/autoload/netrw.vim

Patch 8.0.0003

Problem: getwinvar() returns wrong Value of boolean and number options, especially non big endian systems. (James McCoy)

Solution: Cast the pointer to long or int. (closes #1060)

Files: src/option.c, src/testdir/test\_bufwintabinfo.vim

Patch 8.0.0004

Problem: A string argument for function() that is not a function name results in an error message with NULL. (Christian Brabandt)

Solution: Use the argument for the error message.

Files: src/evalfunc.c, src/testdir/test\_expr.vim

Patch 8.0.0005

Problem: Netbeans test fails with Python 3. (Jonathonf)

Solution: Encode the string before sending it. (closes #1070)

Files: src/testdir/test\_netbeans.py

Patch 8.0.0006

Problem: ":lb" is interpreted as ":lbottom" while the documentation says it means ":lbuffer".

Solution: Adjust the order of the commands. (hayal4busa, closes #1093)

Files: src/ex\_cmds.h

Patch 8.0.0007

Problem: Vim 7.4 is still mentioned in a few places.

Solution: Update to Vim 8. (Uncle Bill, closes #1094)

Files: src/INSTALLpc.txt, src/vimtutor, uninstal.txt

Patch 8.0.0008

Problem: Popup complete test is disabled.

Solution: Enable the test and change the assert. (Hirohito Higashi)

Files: src/testdir/test\_popup.vim

Patch 8.0.0009

Problem: Unnecessary workaround for AppVeyor.

Solution: Revert patch 7.4.990. (Christian Brabandt)  
Files: appveyor.yml

Patch 8.0.0010

Problem: Crash when editing file that starts with crypt header. (igor2x)  
Solution: Check for length of text. (Christian Brabandt) Add a test.  
Files: src/fileio.c, src/testdir/test\_crypt.vim, src/Makefile,  
src/testdir/Make\_all.mak

Patch 8.0.0011

Problem: On OSX Test\_pipe\_through\_sort\_all() sometimes fails.  
Solution: Add the test to the list of flaky tests.  
Files: src/testdir/runtest.vim

Patch 8.0.0012

Problem: Typos in comments.  
Solution: Change "its" to "it's". (Matthew Brener, closes #1088)  
Files: src/evalfunc.c, src/main.aap, src/nbdebug.c, src/netbeans.c,  
src/quickfix.c, src/workshop.c, src/wsdebug.c

Patch 8.0.0013 (after 8.0.0011)

Problem: Missing comma in list.  
Solution: Add the comma.  
Files: src/testdir/runtest.vim

Patch 8.0.0014

Problem: Crypt tests are old style.  
Solution: Convert to new style.  
Files: src/testdir/test71.in, src/testdir/test71.ok,  
src/testdir/test71a.in, src/testdir/test\_crypt.vim, src/Makefile,  
src/testdir/Make\_all.mak

Patch 8.0.0015

Problem: Can't tell which part of a channel has "buffered" status.  
Solution: Add an optional argument to ch\_status(). Let ch\_info() also  
return "buffered" for out\_status and err\_status.  
Files: src/evalfunc.c, src/channel.c, src/proto/channel.pro,  
src/testdir/test\_channel.vim, runtime/doc/eval.txt

Patch 8.0.0016 (after 8.0.0015)

Problem: Build fails.  
Solution: Include missing change.  
Files: src/eval.c

Patch 8.0.0017

Problem: Cannot get the number of the current quickfix or location list.  
Solution: Use the current list if "nr" in "what" is zero. (Yegappan  
Lakshmanan) Remove debug command from test.  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim,  
runtime/doc/eval.txt

Patch 8.0.0018

Problem: When using ":sleep" channel input is not handled.  
Solution: When there is a channel check for input also when not in raw mode.  
Check every 100 msec.  
Files: src/channel.c, src/proto/channel.pro, src/ui.c, src/proto/ui.pro,  
src/ex\_docmd.c, src/os\_amiga.c, src/proto/os\_amiga.pro,  
src/os\_unix.c, src/proto/os\_unix.pro, src/os\_win32.c,  
src/proto/os\_win32.pro

Patch 8.0.0019

Problem: Test\_command\_count is old style.

Solution: Turn it into a new style test. (Naruhiko Nishino)  
Use more assert functions.

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_alot.vim,  
src/testdir/test\_autocmd.vim, src/testdir/test\_command\_count.in,  
src/testdir/test\_command\_count.ok,  
src/testdir/test\_command\_count.vim

#### Patch 8.0.0020

Problem: The regexp engines are not reentrant.

Solution: Add regexec\_T and save/restore the state when needed.

Files: src/regexp.c, src/regexp\_nfa.c, src/testdir/test\_expr.vim,  
runtime/doc/eval.txt, runtime/doc/change.txt

#### Patch 8.0.0021

Problem: In the GUI when redrawing the cursor it may be on the second half  
of a double byte character.

Solution: Correct the cursor column. (Yasuhiro Matsumoto)

Files: src/screen.c

#### Patch 8.0.0022

Problem: If a channel in NL mode is missing the NL at the end the remaining  
characters are dropped.

Solution: When the channel is closed use the remaining text. (Ozaki Kiichi)

Files: src/channel.c, src/testdir/test\_channel.vim

#### Patch 8.0.0023

Problem: "gd" and "gD" may find a match in a comment or string.

Solution: Ignore matches in comments and strings. (Anton Lindqvist)

Files: src/normal.c, src/testdir/test\_goto.vim

#### Patch 8.0.0024

Problem: When the netbeans channel closes, "DETACH" is put in the output  
part. (Ozaki Kiichi)

Solution: Write "DETACH" in the socket part.

Files: src/channel.c, src/testdir/test\_netbeans.vim

#### Patch 8.0.0025

Problem: Inconsistent use of spaces vs tabs in gd test.

Solution: Use tabs. (Anton Lindqvist)

Files: src/testdir/test\_goto.vim

#### Patch 8.0.0026

Problem: Error format with %W, %C and %Z does not work. (Gerd Wachsmuth)

Solution: Skip code when qf\_multiignore is set. (Lcd)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

#### Patch 8.0.0027

Problem: A channel is closed when reading on stderr or stdout fails, but  
there may still be something to read on another part.

Solution: Turn ch\_to\_be\_closed into a bitfield. (Ozaki Kiichi)

Files: src/channel.c, src/eval.c, src/structs.h, src/proto/channel.pro,  
src/testdir/test\_channel.vim

#### Patch 8.0.0028

Problem: Superfluous semicolons.

Solution: Remove them. (Ozaki Kiichi)

Files: src/ex\_cmds2.c

#### Patch 8.0.0029

Problem: Code for MS-Windows is complicated because of the exceptions for  
old systems.

Solution: Drop support for MS-Windows older than Windows XP. (Ken Takata)

Files: runtime/doc/gui\_w32.txt, runtime/doc/os\_win32.txt,  
runtime/doc/todo.txt, src/GvimExt/Makefile, src/Make\_mvc.mak,  
src/evalfunc.c, src/ex\_cmds.c, src/ex\_docmd.c, src/gui\_w32.c,  
src/if\_cscope.c, src/misc1.c, src/misc2.c, src/option.c,  
src/os\_mswin.c, src/os\_win32.c, src/os\_win32.h,  
src/proto/os\_mswin.pro, src/proto/os\_win32.pro, src/version.c

Patch 8.0.0030

Problem: Mouse mode is not automatically detected for tmux.  
Solution: Check for 'term' to be "tmux". (Michael Henry)  
Files: src/os\_unix.c

Patch 8.0.0031

Problem: After ":bwipeout" 'fileformat' is not set to the right default.  
Solution: Get the default from 'fileformats'. (Mike Williams)  
Files: src/option.c, src/Makefile, src/testdir/test\_fileformat.vim,  
src/testdir/test\_alot.vim

Patch 8.0.0032

Problem: Tests may change the input file when something goes wrong.  
Solution: Avoid writing the input file.  
Files: src/testdir/test51.in, src/testdir/test67.in,  
src/testdir/test97.in, src/testdir/test\_tabpage.vim

Patch 8.0.0033

Problem: Cannot use overlapping positions with matchaddpos().  
Solution: Check end of match. (Ozaki Kiichi) Add a test (Hirohito Higashi)  
Files: src/screen.c, src/testdir/test\_match.vim

Patch 8.0.0034

Problem: No completion for ":messages".  
Solution: Complete "clear" argument. (Hirohito Higashi)  
Files: src/ex\_docmd.c, src/ex\_getln.c, src/proto/ex\_docmd.pro,  
src/testdir/test\_cmdline.vim, src/vim.h,  
runtime/doc/eval.txt, runtime/doc/map.txt

Patch 8.0.0035 (after 7.4.2013)

Problem: Order of matches for 'omnifunc' is messed up. (Danny Su)  
Solution: Do not set compl\_curr\_match when called from complete\_check().  
(closes #1168)  
Files: src/edit.c, src/evalfunc.c, src/proto/edit.pro, src/search.c,  
src/spell.c, src/tag.c, src/testdir/test76.in,  
src/testdir/test76.ok, src/testdir/test\_popup.vim, src/Makefile,  
src/testdir/Make\_all.mak

Patch 8.0.0036

Problem: Detecting that a job has finished may take a while.  
Solution: Check for a finished job more often (Ozaki Kiichi)  
Files: src/channel.c, src/os\_unix.c, src/os\_win32.c,  
src/proto/os\_unix.pro, src/proto/os\_win32.pro,  
src/testdir/test\_channel.vim

Patch 8.0.0037

Problem: Get E924 when switching tabs. ()  
Solution: Use win\_valid\_any\_tab() instead of win\_valid(). (Martin Vuille,  
closes #1167, closes #1171)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0038

Problem: OPEN\_CHR\_FILES not defined for FreeBSD using Debian userland  
files.  
Solution: Check for \_\_FreeBSD\_kernel\_\_. (James McCoy, closes #1166)

Files: src/vim.h

Patch 8.0.0039

Problem: When Vim 8 reads an old viminfo and exits, the next time marks are not read from viminfo. (Ned Batchelder)

Solution: Set a mark when it wasn't set before, even when the timestamp is zero. (closes #1170)

Files: src/mark.c, src/testdir/test\_viminfo.vim

Patch 8.0.0040 (after 8.0.0033)

Problem: Whole line highlighting with matchaddpos() does not work.

Solution: Check for zero length. (Hirohito Higashi)

Files: src/screen.c, src/testdir/test\_match.vim

Patch 8.0.0041

Problem: When using Insert mode completion but not actually inserting anything an undo item is still created. (Tommy Allen)

Solution: Do not call stop\_arrow() when not inserting anything.

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 8.0.0042 (after 8.0.0041)

Problem: When using Insert mode completion with 'completeopt' containing "noinsert" change is not saved for undo. (Tommy Allen)

Solution: Call stop\_arrow() before inserting for pressing Enter.

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 8.0.0043 (after 8.0.0041)

Problem: When using Insert mode completion with 'completeopt' containing "noinsert" with CTRL-N the change is not saved for undo. (Tommy Allen)

Solution: Call stop\_arrow() before inserting for any key.

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 8.0.0044

Problem: In diff mode the cursor may end up below the last line, resulting in an ml\_get error.

Solution: Check the line to be valid.

Files: src/move.c, src/diff.c, src/proto/diff.pro,  
src/testdir/test\_diffmode.vim

Patch 8.0.0045

Problem: Calling job\_stop() right after job\_start() does not work.

Solution: Block signals while fork is still busy. (Ozaki Kiichi, closes #1155)

Files: src/auto/configure, src/config.h.in, src/configure.in,  
src/os\_unix.c, src/testdir/test\_channel.vim

Patch 8.0.0046

Problem: Using NUL instead of NULL.

Solution: Change to NULL. (Dominique Pelle)

Files: src/ex\_cmds.c, src/json.c

Patch 8.0.0047

Problem: Crash when using the preview window from an unnamed buffer. (lifepillar)

Solution: Do not clear the wrong buffer. (closes #1200)

Files: src/popupmnu.c

Patch 8.0.0048

Problem: On Windows job\_stop() stops cmd.exe, not the processes it runs. (Linwei)

Solution: Iterate over all processes and terminate the one where the parent

is the job process. (Yasuhiro Matsumoto, closes #1184)  
Files: src/os\_win32.c, src/structs.h

Patch 8.0.0049

Problem: When a match ends in part of concealed text highlighting, it might mess up concealing by resetting prev\_syntax\_id.

Solution: Do not reset prev\_syntax\_id and add a test to verify. (Christian Brabandt, closes #1092)

Files: src/screen.c, src/testdir/test\_matchadd\_conceal.vim

Patch 8.0.0050

Problem: An exiting job is detected with a large latency.

Solution: Check for pending job more often. (Ozaki Kiichi) Change the double loop in mch\_inchar() into one.

Files: src/channel.c, src/os\_unix.c, src/testdir/shared.vim, src/testdir/test\_channel.vim

Patch 8.0.0051 (after 8.0.0048)

Problem: New code for job\_stop() breaks channel test on AppVeyor.

Solution: Revert the change.

Files: src/os\_win32.c, src/structs.h

Patch 8.0.0052 (after 8.0.0049)

Problem: Conceal test passes even without the bug fix.

Solution: Add a redraw command. (Christian Brabandt)

Files: src/testdir/test\_matchadd\_conceal.vim

Patch 8.0.0053 (after 8.0.0047)

Problem: No test for what 8.0.0047 fixes.

Solution: Add a test. (Hirohito Higashi)

Files: src/testdir/test\_popup.vim

Patch 8.0.0054 (after 8.0.0051)

Problem: On Windows job\_stop() stops cmd.exe, not the processes it runs. (Linwei)

Solution: Iterate over all processes and terminate the one where the parent is the job process. Now only when there is no job object. (Yasuhiro Matsumoto, closes #1203)

Files: src/os\_win32.c

Patch 8.0.0055

Problem: Minor comment and style deficiencies.

Solution: Update comments and fix style.

Files: src/buffer.c, src/misc2.c, src/os\_unix.c

Patch 8.0.0056

Problem: When setting 'filetype' there is no check for a valid name.

Solution: Only allow valid characters in 'filetype', 'syntax' and 'keymap'.

Files: src/option.c, src/testdir/test\_options.vim

Patch 8.0.0057 (after 8.0.0056)

Problem: Tests fail without the 'keymap' features.

Solution: Check for feature in test.

Files: src/testdir/test\_options.vim

Patch 8.0.0058

Problem: Positioning of the popup menu is not good.

Solution: Position it better. (Hirohito Higashi)

Files: src/popupmenu.c

Patch 8.0.0059

Problem: Vim does not build on VMS systems.

Solution: Various changes for VMS. (Zoltan Arpadffy)  
Files: src/json.c, src/macros.h, src/Make\_vms.mms, src/os\_unix.c,  
src/os\_unix.h, src/os\_vms.c, src/os\_vms\_conf.h,  
src/proto/os\_vms.pro, src/testdir/Make\_vms.mms

Patch 8.0.0060

Problem: When using an Ex command for 'keywordprg' it is escaped as with a  
shell command. (Romain Lafourcade)  
Solution: Escape for an Ex command. (closes #1175)  
Files: src/normal.c, src/testdir/test\_normal.vim

Patch 8.0.0061 (after 8.0.0058)

Problem: Compiler warning for unused variable.  
Solution: Add #ifdef. (John Marriott)  
Files: src/popupmnu.c

Patch 8.0.0062

Problem: No digraph for HORIZONTAL ELLIPSIS.  
Solution: Use ",.". (Hans Ginzler, closes #1226)  
Files: src/digraph.c, runtime/doc/digraph.txt

Patch 8.0.0063

Problem: Compiler warning for comparing with unsigned. (Zoltan Arpadffy)  
Solution: Change <= to ==.  
Files: src/undo.c

Patch 8.0.0064 (after 8.0.0060)

Problem: Normal test fails on MS-Windows.  
Solution: Don't try using an illegal file name.  
Files: src/testdir/test\_normal.vim

Patch 8.0.0065 (after 8.0.0056)

Problem: Compiler warning for unused function in tiny build. (Tony  
Mechelynck)  
Solution: Add #ifdef.  
Files: src/option.c

Patch 8.0.0066

Problem: when calling an operator function when 'linebreak' is set, it is  
internally reset before calling the operator function.  
Solution: Restore 'linebreak' before calling op\_function(). (Christian  
Brabandt)  
Files: src/normal.c, src/testdir/test\_normal.vim

Patch 8.0.0067

Problem: VMS has a problem with infinity.  
Solution: Avoid an overflow. (Zoltan Arpadffy)  
Files: src/json.c, src/macros.h

Patch 8.0.0068

Problem: Checking did\_throw after executing autocommands is wrong. (Daniel  
Hahler)  
Solution: Call aborting() instead, and only when autocommands were executed.  
Files: src/quickfix.c, src/if\_cscope.c, src/testdir/test\_quickfix.vim

Patch 8.0.0069

Problem: Compiler warning for self-comparison.  
Solution: Define ONE\_WINDOW and add #ifdef.  
Files: src/globals.h, src/buffer.c, src/ex\_docmd.c, src/move.c,  
src/screen.c, src/quickfix.c, src/window.c

Patch 8.0.0070

Problem: Tests referred in Makefile that no longer exist.  
Solution: Remove test71 and test74 entries. (Michael Soyka)  
Files: src/testdir/Mak\_ming.mak

Patch 8.0.0071

Problem: Exit value from a shell command is wrong. (Hexchain Tong)  
Solution: Do not check for ended jobs while waiting for a shell command.  
(ichizok, closes #1196)  
Files: src/os\_unix.c

Patch 8.0.0072

Problem: MS-Windows: Crash with long font name. (Henry Hu)  
Solution: Fix comparing with LF\_FACESIZE. (Ken Takata, closes #1243)  
Files: src/os\_mswin.c

Patch 8.0.0073 (after 8.0.0069)

Problem: More comparisons between firstwin and lastwin.  
Solution: Use ONE\_WINDOW for consistency. (Hirohito Higashi)  
Files: src/buffer.c, src/ex\_cmds.c, src/ex\_docmd.c, src/option.c,  
src/window.c

Patch 8.0.0074

Problem: Cannot make Vim fail on an internal error.  
Solution: Add IEMSG() and IEMSG2(). (Dominique Pelle) Avoid reporting an  
internal error without mentioning where.  
Files: src/globals.h, src/blowfish.c, src/dict.c, src/edit.c, src/eval.c,  
src/evalfunc.c, src/ex\_eval.c, src/getchar.c, src/gui\_beval.c,  
src/gui\_w32.c, src/hangulin.c, src/hashtab.c, src/if\_cscope.c,  
src/json.c, src/memfile.c, src/memline.c, src/message.c,  
src/misc2.c, src/option.c, src/quickfix.c, src/regexp.c,  
src/spell.c, src/undo.c, src/userfunc.c, src/vim.h, src/window.c,  
src/proto/misc2.pro, src/proto/message.pro, src/Makefile

Patch 8.0.0075

Problem: Using number for exception type lacks type checking.  
Solution: Use an enum.  
Files: src/structs.h, src/ex\_docmd.c, src/ex\_eval.c,  
src/proto/ex\_eval.pro

Patch 8.0.0076

Problem: Channel log has double parens ()().  
Solution: Remove () for write\_buf\_line. (Yasuhiro Matsumoto)  
Files: src/channel.c

Patch 8.0.0077

Problem: The GUI code is not tested by Travis.  
Solution: Install the virtual framebuffer.  
Files: .travis.yml

Patch 8.0.0078

Problem: Accessing freed memory in quickfix.  
Solution: Reset pointer when freeing 'errorformat'. (Dominique Pelle)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0079

Problem: Accessing freed memory in quickfix. (Dominique Pelle)  
Solution: Do not free the current list when adding to it.  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0080

Problem: The OS X build fails on Travis.  
Solution: Skip the virtual framebuffer on OS X.



Files: .travis.yml

Patch 8.0.0081

Problem: Inconsistent function names.

Solution: Rename do\_cscope to ex\_cscope. Clean up comments.

Files: src/ex\_cmds.h, src/if\_cscope.c, src/ex\_docmd.c,  
src/proto/if\_cscope.pro

Patch 8.0.0082

Problem: Extension for configure should be ".ac".

Solution: Rename configure.in to configure.ac. (James McCoy, closes #1173)

Files: src/configure.in, src/configure.ac, Filelist, src/Makefile,  
src/blowfish.c, src/channel.c, src/config.h.in, src/main.aap,  
src/os\_unix.c, src/INSTALL, src/mysign

Patch 8.0.0083

Problem: Using freed memory with win\_getid(). (Dominique Pelle)

Solution: For the current tab use curwin.

Files: src/window.c, src/testdir/test\_window\_id.vim

Patch 8.0.0084

Problem: Using freed memory when adding to a quickfix list. (Dominique Pelle)

Solution: Clear the directory name.

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0085

Problem: Using freed memory with recursive function call. (Dominique Pelle)

Solution: Make a copy of the function name.

Files: src/eval.c, src/testdir/test\_nested\_function.vim

Patch 8.0.0086

Problem: Cannot add a comment after ":hide". (Norio Takagi)

Solution: Make it work, add a test. (Hirohito Higashi)

Files: src/Makefile, src/ex\_cmds.h, src/ex\_docmd.c,  
src/testdir/Make\_all.mak, src/testdir/test\_hide.vim

Patch 8.0.0087

Problem: When the channel callback gets job info the job may already have been deleted. (lifepillar)

Solution: Do not delete the job when the channel is still useful. (ichizok, closes #1242, closes #1245)

Files: src/channel.c, src/eval.c, src/os\_unix.c, src/os\_win32.c,  
src/structs.h, src/testdir/test\_channel.vim

Patch 8.0.0088

Problem: When a test fails in Setup or Teardown the problem is not reported.

Solution: Add a try/catch. (Hirohito Higashi)

Files: src/testdir/runtest.vim

Patch 8.0.0089

Problem: Various problems with GTK 3.22.2.

Solution: Fix the problems, add #ifdefs. (Kazunobu Kuriyama)

Files: src/gui\_beval.c, src/gui\_gtk.c, src/gui\_gtk\_x11.c

Patch 8.0.0090

Problem: Cursor moved after last character when using 'breakindent'.

Solution: Fix the cursor positioning. Turn the breakindent test into new style. (Christian Brabandt)

Files: src/screen.c, src/testdir/Make\_all.mak,  
src/testdir/test\_breakindent.in, src/testdir/test\_breakindent.ok,  
src/testdir/test\_breakindent.vim, src/Makefile

## Patch 8.0.0091

Problem: Test\_help\_complete sometimes fails in MS-Windows console.  
Solution: Use getcompletion() instead of feedkeys() and command line completion. (Hirohito Higashi)  
Files: src/testdir/test\_help\_tagjump.vim

## Patch 8.0.0092

Problem: C indenting does not support nested namespaces that C++ 17 has.  
Solution: Add check that passes double colon inside a name. (Pauli, closes #1214)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

## Patch 8.0.0093

Problem: Not using multiprocess build feature.  
Solution: Enable multiprocess build with MSVC 10. (Ken Takata)  
Files: src/Make\_mvc.mak

## Patch 8.0.0094

Problem: When vimrun.exe is not found the error message is not properly encoded.  
Solution: Use utf-16 and MessageBoxW(). (Ken Takata)  
Files: src/os\_win32.c

## Patch 8.0.0095

Problem: Problems with GTK 3.22.2 fixed in 3.22.4.  
Solution: Adjust the #ifdefs. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

## Patch 8.0.0096

Problem: When the input or output is not a tty Vim appears to hang.  
Solution: Add the --ttyfail argument. Also add the "ttyin" and "ttyout" features to be able to check in Vim script.  
Files: src/globals.h, src/structs.h, src/main.c, src/evalfunc.c, runtime/doc/starting.txt, runtime/doc/eval.txt

## Patch 8.0.0097

Problem: When a channel callback consumes a lot of time Vim becomes unresponsive. (skywind)  
Solution: Bail out of checking channel readahead after 100 msec.  
Files: src/os\_unix.c, src/misc2.c, src/vim.h, src/os\_win32.c, src/channel.c

## Patch 8.0.0098 (after 8.0.0097)

Problem: Can't build on MS-Windows.  
Solution: Add missing parenthesis.  
Files: src/vim.h

## Patch 8.0.0099

Problem: Popup menu always appears above the cursor when it is in the lower half of the screen. (Matt Gardner)  
Solution: Compute the available space better. (Hirohito Higashi, closes #1241)  
Files: src/popupmnu.c

## Patch 8.0.0100

Problem: Options that are a file name may contain non-filename characters.  
Solution: Check for more invalid characters.  
Files: src/option.c

## Patch 8.0.0101

Problem: Some options are not strictly checked.

Solution: Add flags for stricter checks.  
Files: src/option.c

Patch 8.0.0102 (after 8.0.0101)

Problem: Cannot set 'dictionary' to a path.  
Solution: Allow for slash and backslash. Add a test (partly by Daisuke Suzuki, closes #1279, closes #1284)  
Files: src/option.c, src/testdir/test\_options.vim

Patch 8.0.0103

Problem: May not process channel readahead. (skywind)  
Solution: If there is readahead don't block on input.  
Files: src/channel.c, src/proto/channel.pro, src/os\_unix.c, src/os\_win32.c, src/misc2.c

Patch 8.0.0104

Problem: Value of 'thesaurus' option not checked properly.  
Solution: Add P\_NDNAME flag. (Daisuke Suzuki)  
Files: src/option.c, src/testdir/test\_options.vim

Patch 8.0.0105

Problem: When using ch\_read() with zero timeout, can't tell the difference between reading an empty line and nothing available.  
Solution: Add ch\_canread().  
Files: src/evalfunc.c, src/channel.c, src/proto/channel.pro, src/testdir/test\_channel.vim, src/testdir/shared.vim, runtime/doc/eval.txt, runtime/doc/channel.txt

Patch 8.0.0106 (after 8.0.0100)

Problem: Cannot use a semicolon in 'backupext'. (Jeff)  
Solution: Allow for a few more characters when "secure" isn't set.  
Files: src/option.c

Patch 8.0.0107

Problem: When reading channel output in a timer, messages may go missing. (Skywind)  
Solution: Add the "drop" option. Write error messages in the channel log. Don't have ch\_canread() check for the channel being open.  
Files: src/structs.h, src/channel.c, src/message.c, src/evalfunc.c, src/proto/channel.pro, runtime/doc/channel.txt

Patch 8.0.0108 (after 8.0.0107)

Problem: The channel "drop" option is not tested.  
Solution: Add a test.  
Files: src/testdir/test\_channel.vim

Patch 8.0.0109

Problem: Still checking if memcmp() exists while every system should have it now.  
Solution: Remove vim\_memcmp(). (James McCoy, closes #1295)  
Files: src/config.h.in, src/configure.ac, src/misc2.c, src/os\_vms\_conf.h, src/osdefl.h.in, src/search.c, src/tag.c, src/vim.h

Patch 8.0.0110

Problem: Drop command doesn't use existing window.  
Solution: Check the window width properly. (Hirohito Higashi)  
Files: src/buffer.c, src/testdir/test\_tabpage.vim

Patch 8.0.0111

Problem: The :history command is not tested.  
Solution: Add tests. (Dominique Pelle)  
Files: runtime/doc/cmdline.txt, src/testdir/test\_history.vim

## Patch 8.0.0112

Problem: Tests 92 and 93 are old style.

Solution: Make test92 and test93 new style. (Hirohito Higashi, closes #1289)

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/Make\_vms.mms,  
src/testdir/test92.in, src/testdir/test92.ok,  
src/testdir/test93.in, src/testdir/test93.ok,  
src/testdir/test\_mksession.vim,  
src/testdir/test\_mksession\_utf8.vim

## Patch 8.0.0113

Problem: MS-Windows: message box to prompt for saving changes may appear on  
the wrong monitor.

Solution: Adjust the CenterWindow function. (Ken Takata)

Files: src/gui\_w32.c

## Patch 8.0.0114

Problem: Coding style not optimal.

Solution: Add spaces. (Ken Takata)

Files: src/gui\_w32.c, src/os\_mswin.c

## Patch 8.0.0115

Problem: When building with Cygwin libwinpthread isn't found.

Solution: Link winpthread statically. (jmmerz, closes #1255, closes #1256)

Files: src/Make\_cyg\_ming.mak

## Patch 8.0.0116

Problem: When reading English help and using CTRL-J the language from  
'helplang' is used.

Solution: Make help tag jumps keep the language. (Tatsuki, test by Hirohito  
Higashi, closes #1249)

Files: src/tag.c, src/testdir/test\_help\_tagjump.vim

## Patch 8.0.0117

Problem: Parallel make fails. (J. Lewis Muir)

Solution: Make sure the objects directory exists. (closes #1259)

Files: src/Makefile

## Patch 8.0.0118

Problem: "make proto" adds extra function prototype.

Solution: Add #ifdef.

Files: src/misc2.c

## Patch 8.0.0119

Problem: No test for using CTRL-R on the command line.

Solution: Add a test. (Dominique Pelle) And some more.

Files: src/testdir/test\_cmdline.vim

## Patch 8.0.0120

Problem: Channel test is still flaky on OS X.

Solution: Set the drop argument to "never".

Files: src/testdir/test\_channel.vim

## Patch 8.0.0121

Problem: Setting 'cursorline' changes the curswant column. (Daniel Hahler)

Solution: Add the P\_RWINONLY flag. (closes #1297)

Files: src/option.c, src/testdir/test\_goto.vim

## Patch 8.0.0122

Problem: Channel test is still flaky on OS X.

Solution: Add a short sleep.

Files: src/testdir/test\_channel.py

## Patch 8.0.0123

Problem: Modern Sun compilers define "\_\_sun" instead of "sun".  
Solution: Use \_\_sun. (closes #1296)  
Files: src/mbyte.c, src/pty.c, src/os\_unixx.h, src/vim.h

## Patch 8.0.0124

Problem: Internal error for assert\_inrange(1, 1).  
Solution: Adjust number of allowed arguments. (Dominique Pelle)  
Files: src/evalfunc.c, src/testdir/test\_assert.vim

## Patch 8.0.0125

Problem: Not enough testing for entering Ex commands.  
Solution: Add test for CTRL-\ e {expr}. (Dominique Pelle)  
Files: src/testdir/test\_cmdline.vim

## Patch 8.0.0126

Problem: Display problem with 'foldcolumn' and a wide character.  
(esiegerman)  
Solution: Don't use "extra" but an allocated buffer. (Christian Brabandt,  
closes #1310)  
Files: src/screen.c, src/testdir/Make\_all.mak, src/Makefile,  
src/testdir/test\_display.vim

## Patch 8.0.0127

Problem: Cancelling completion still inserts text when formatting is done  
for 'textwidth'. (lacygoill)  
Solution: Don't format when CTRL-E was typed. (Hirohito Higashi,  
closes #1312)  
Files: src/edit.c, src/testdir/test\_popup.vim

## Patch 8.0.0128 (after 8.0.0126)

Problem: Display test fails on MS-Windows.  
Solution: Set 'isprint' to "@".  
Files: src/testdir/test\_display.vim

## Patch 8.0.0129

Problem: Parallel make still doesn't work. (Lewis Muir)  
Solution: Define OBJ\_MAIN.  
Files: src/Makefile

## Patch 8.0.0130

Problem: Configure uses "ushort" while the Vim code doesn't.  
Solution: Use "unsigned short" instead. (Fredrik Fornwall, closes #1314)  
Files: src/configure.ac, src/auto/configure

## Patch 8.0.0131

Problem: Not enough test coverage for syntax commands.  
Solution: Add more tests. (Dominique Pelle)  
Files: src/testdir/test\_syntax.vim

## Patch 8.0.0132 (after 8.0.0131)

Problem: Test fails because of using :finish.  
Solution: Change to return.  
Files: src/testdir/test\_syntax.vim

## Patch 8.0.0133

Problem: "2;'" causes ml\_get errors in an empty buffer. (Dominique Pelle)  
Solution: Check the cursor line earlier.  
Files: src/ex\_docmd.c, src/testdir/test\_cmdline.vim

## Patch 8.0.0134

Problem: Null pointer access reported by UBSan.  
Solution: Check curwin->w\_buffer is not NULL. (Yegappan Lakshmanan)  
Files: src/ex\_cmds.c

#### Patch 8.0.0135

Problem: An address relative to the current line, ":+3y", does not work properly on a closed fold. (Efraim Yawitz)  
Solution: Correct for including the closed fold. (Christian Brabandt)  
Files: src/ex\_docmd.c, src/testdir/test\_fold.vim, src/testdir/Make\_all.mak, src/Makefile

#### Patch 8.0.0136

Problem: When using indent folding and changing indent the wrong fold is opened. (Jonathan Fudger)  
Solution: Open the fold under the cursor a bit later. (Christian Brabandt)  
Files: src/ops.c, src/testdir/test\_fold.vim

#### Patch 8.0.0137

Problem: When 'maxfuncdepth' is set above 200 the nesting is limited to 200. (Brett Stahlman)  
Solution: Allow for Ex command recursion depending on 'maxfuncdepth'.  
Files: src/ex\_docmd.c, src/testdir/test\_nested\_function.vim

#### Patch 8.0.0138 (after 8.0.0137)

Problem: Small build fails.  
Solution: Add #ifdef.  
Files: src/ex\_docmd.c

#### Patch 8.0.0139 (after 8.0.0135)

Problem: Warning for unused argument.  
Solution: Add UNUSED.  
Files: src/ex\_docmd.c

#### Patch 8.0.0140

Problem: Pasting inserted text in Visual mode does not work properly. (Matthew Malcomson)  
Solution: Stop Visual mode before stuffing the inserted text. (Christian Brabandt, from neovim #5709)  
Files: src/ops.c, src/testdir/test\_visual.vim

#### Patch 8.0.0141 (after 8.0.0137)

Problem: Nested function test fails on AppVeyor.  
Solution: Disable the test on Windows for now.  
Files: src/testdir/test\_nested\_function.vim

#### Patch 8.0.0142

Problem: Normal colors are wrong with 'termguicolors'.  
Solution: Initialize to INVALIDCOLOR instead of zero. (Ben Jackson, closes #1344)  
Files: src/syntax.c

#### Patch 8.0.0143

Problem: Line number of current buffer in getbufinfo() is wrong.  
Solution: For the current buffer use the current line number. (Ken Takata)  
Files: src/evalfunc.c

#### Patch 8.0.0144

Problem: When using MSVC the GvimExt directory is cleaned twice.  
Solution: Remove the lines. (Ken Takata)  
Files: src/Make\_mvc.mak

#### Patch 8.0.0145

Problem: Running tests on MS-Windows is a little bit noisy.  
Solution: Redirect some output to "nul". (Ken Takata)  
Files: src/testdir/Make\_dos.mak

Patch 8.0.0146

Problem: When using 'termguicolors' on MS-Windows the RGB definition causes the colors to be wrong.  
Solution: Undefined RGB and use our own. (Gabriel Barta)  
Files: src/term.c

Patch 8.0.0147

Problem: searchpair() does not work when 'magic' is off. (Chris Paul)  
Solution: Add \m in the pattern. (Christian Brabandt, closes #1341)  
Files: src/evalfunc.c, src/testdir/test\_search.vim

Patch 8.0.0148

Problem: When a C preprocessor statement has two line continuations the following line does not have the right indent. (Ken Takata)  
Solution: Add the indent of the previous continuation line. (Hirohito Higashi)  
Files: src/misc1.c, src/testdir/test3.in, src/testdir/test3.ok

Patch 8.0.0149

Problem: ":earlier" and ":later" do not work after startup or reading the undo file.  
Solution: Use absolute time stamps instead of relative to the Vim start time. (Christian Brabandt, Pavel Juhas, closes #1300, closes #1254)  
Files: src/testdir/test\_undo.vim, src/undo.c

Patch 8.0.0150

Problem: When the pattern of :filter does not have a separator then completion of the command fails.  
Solution: Skip over the pattern. (Ozaki Kiichi, closes #1299)  
Files: src/ex\_docmd.c, src/testdir/test\_filter\_cmd.vim

Patch 8.0.0151

Problem: To pass buffer content to system() and systemlist() one has to first create a string or list.  
Solution: Allow passing a buffer number. (LemonBoy, closes #1240)  
Files: runtime/doc/eval.txt, src/Makefile, src/evalfunc.c, src/testdir/Make\_all.mak, src/testdir/test\_system.vim

Patch 8.0.0152

Problem: Running the channel test creates channellog.  
Solution: Delete the debug line.  
Files: src/testdir/test\_channel.vim

Patch 8.0.0153 (after 8.0.0151)

Problem: system() test fails on MS-Windows.  
Solution: Deal with extra space and CR.  
Files: src/testdir/test\_system.vim

Patch 8.0.0154 (after 8.0.0151)

Problem: system() test fails on OS/X.  
Solution: Deal with leading spaces.  
Files: src/testdir/test\_system.vim

Patch 8.0.0155

Problem: When sorting zero elements a NULL pointer is passed to qsort(), which ubsan warns for.  
Solution: Don't call qsort() if there are no elements. (Dominique Pelle)

Files: src/syntax.c

Patch 8.0.0156

Problem: Several float functions are not covered by tests.

Solution: Add float tests. (Dominique Pelle)

Files: src/Makefile, src/testdir/test\_alot.vim,  
src/testdir/test\_float\_func.vim

Patch 8.0.0157

Problem: No command line completion for ":syntax spell" and ":syntax sync".

Solution: Implement the completion. (Dominique Pelle)

Files: src/syntax.c, src/testdir/test\_syntax.vim

Patch 8.0.0158 (after 8.0.0156)

Problem: On MS-Windows some float functions return a different value when passed unusual values. strtod() doesn't work for "inf" and "nan".

Solution: Accept both results. Fix str2float() for MS-Windows. Also reorder assert function arguments.

Files: src/testdir/test\_float\_func.vim, src/eval.c

Patch 8.0.0159

Problem: Using a NULL pointer when using feedkeys() to trigger drawing a tabline.

Solution: Skip drawing a tabline if TabPageIdxs is NULL. (Dominique Pelle)  
Also fix recursing into getcmdline() from the cmd window.

Files: src/screen.c, src/ex\_getln.c

Patch 8.0.0160

Problem: EMSG() is sometimes used for internal errors.

Solution: Change them to IEMSG(). (Dominique Pelle) And a few more.

Files: src/regexp\_nfa.c, src/channel.c, src/eval.c

Patch 8.0.0161 (after 8.0.0159)

Problem: Build fails when using small features.

Solution: Update #ifdef for using save\_ccline. (Hirohito Higashi)

Files: src/ex\_getln.c

Patch 8.0.0162

Problem: Build error on Fedora 23 with small features and gnome2.

Solution: Undefine ngettext(). (Hirohito Higashi)

Files: src/gui\_gtk.c, src/gui\_gtk\_x11.c

Patch 8.0.0163

Problem: Ruby 2.4 no longer supports rb\_cFixnum.

Solution: move rb\_cFixnum into an #ifdef. (Kazuki Sakamoto, closes #1365)

Files: src/if\_ruby.c

Patch 8.0.0164

Problem: Outdated and misplaced comments.

Solution: Fix the comments.

Files: src/charset.c, src/getchar.c, src/list.c, src/misc2.c,  
src/testdir/README.txt

Patch 8.0.0165

Problem: Ubsan warns for integer overflow.

Solution: Swap two conditions. (Dominique Pelle)

Files: src/regexp\_nfa.c

Patch 8.0.0166

Problem: JSON with a duplicate key gives an internal error. (Lcd)

Solution: Give a normal error. Avoid an error when parsing JSON from a remote client fails.



Files: src/evalfunc.c, src/json.c, src/channel.c,  
src/testdir/test\_json.vim

Patch 8.0.0167

Problem: str2nr() and str2float() do not always work with negative values.

Solution: Be more flexible about handling signs. (LemonBoy, closes #1332)  
Add more tests.

Files: src/evalfunc.c, src/testdir/test\_float\_func.vim,  
src/testdir/test\_functions.vim, src/testdir/test\_alot.vim,  
src/Makefile

Patch 8.0.0168

Problem: Still some float functionality is not covered by tests.

Solution: Add more tests. (Dominique Pelle, closes #1364)

Files: src/testdir/test\_float\_func.vim

Patch 8.0.0169

Problem: For complicated string json\_decode() may run out of stack space.

Solution: Change the recursive solution into an iterative solution.

Files: src/json.c

Patch 8.0.0170 (after 8.0.0169)

Problem: Channel test fails for using freed memory.

Solution: Fix memory use in json\_decode().

Files: src/json.c

Patch 8.0.0171

Problem: JS style JSON does not support single quotes.

Solution: Allow for single quotes. (Yasuhiro Matsumoto, closes #1371)

Files: src/json.c, src/testdir/test\_json.vim, src/json\_test.c,  
runtime/doc/eval.txt

Patch 8.0.0172 (after 8.0.0159)

Problem: The command selected in the command line window is not executed.  
(Andrey Starodubtsev)

Solution: Save and restore the command line at a lower level. (closes #1370)

Files: src/ex\_getln.c, src/testdir/test\_history.vim

Patch 8.0.0173

Problem: When compiling with EBCDIC defined the build fails. (Yaroslav  
Kuzmin)

Solution: Move sortFunctions() to the right file. Avoid warning for  
redefining \_\_SUSV3.

Files: src/eval.c, src/evalfunc.c, src/os\_unixx.h

Patch 8.0.0174

Problem: For completion "locale -a" is executed on MS-Windows, even though  
it most likely won't work.

Solution: Skip executing "locale -a" on MS-Windows. (Ken Takata)

Files: src/ex\_cmds2.c

Patch 8.0.0175

Problem: Setting language in gvim on MS-Windows does not work when  
libintl.dll is dynamically linked with msvcrt.dll.

Solution: Use putenv() from libintl as well. (Ken Takata, closes #1082)

Files: src/mbyte.c, src/misc1.c, src/os\_win32.c, src/proto/os\_win32.pro,  
src/vim.h

Patch 8.0.0176

Problem: Using :change in between :function and :endfunction fails.

Solution: Recognize :change inside a function. (ichizok, closes #1374)

Files: src/userfunc.c, src/testdir/test\_viml.vim

## Patch 8.0.0177

Problem: When opening a buffer on a directory and inside a try/catch then the BufEnter event is not triggered.

Solution: Return NOTDONE from readfile() for a directory and deal with the three possible return values. (Justin M. Keyes, closes #1375, closes #1353)

Files: src/buffer.c, src/ex\_cmds.c, src/ex\_docmd.c, src/fileio.c, src/memline.c

## Patch 8.0.0178

Problem: test\_command\_count may fail when a previous test interferes, seen on MS-Windows.

Solution: Run it separately.

Files: src/testdir/test\_alot.vim, src/testdir/Make\_all.mak

## Patch 8.0.0179

Problem: 'formatprg' is a global option but the value may depend on the type of buffer. (Sung Pae)

Solution: Make 'formatprg' global-local. (closes #1380)

Files: src/structs.h, src/option.h, src/option.c, src/normal.c, runtime/doc/options.txt, src/testdir/test\_normal.vim

## Patch 8.0.0180

Problem: Error E937 is used both for duplicate key in JSON and for trying to delete a buffer that is in use.

Solution: Rename the JSON error to E938. (Norio Takagi, closes #1376)

Files: src/json.c, src/testdir/test\_json.vim

## Patch 8.0.0181

Problem: When 'cursorbind' and 'cursorcolumn' are both on, the column highlight in non-current windows is wrong.

Solution: Add validate\_cursor(). (Masanori Misono, closes #1372)

Files: src/move.c

## Patch 8.0.0182

Problem: When 'cursorbind' and 'cursorline' are set, but 'cursorcolumn' is not, then the cursor line highlighting is not updated. (Hirohito Higashi)

Solution: Call redraw\_later() with NOT\_VALID.

Files: src/move.c

## Patch 8.0.0183

Problem: Ubsan warns for using a pointer that is not aligned.

Solution: First copy the address. (Yegappan Lakshmanan)

Files: src/channel.c

## Patch 8.0.0184

Problem: When in Ex mode and an error is caught by try-catch, Vim still exits with a non-zero exit code.

Solution: Don't set ex\_exitval when inside a try-catch. (partly by Christian Brabandt)

Files: src/message.c, src/testdir/test\_system.vim

## Patch 8.0.0185 (after 8.0.0184)

Problem: The system() test fails on MS-Windows.

Solution: Skip the test on MS-Windows.

Files: src/testdir/test\_system.vim

## Patch 8.0.0186

Problem: The error message from assert\_notequal() is confusing.

Solution: Only mention the expected value.

Files: src/eval.c, src/testdir/test\_assert.vim

Patch 8.0.0187

Problem: Building with a new Ruby version fails.

Solution: Use ruby\_sysinit() instead of NtInitialize(). (Tomas Volf, closes #1382)

Files: src/if\_ruby.c

Patch 8.0.0188 (after 8.0.0182)

Problem: Using NOT\_VALID for redraw\_later() to update the cursor line/column highlighting is not efficient.

Solution: Call validate\_cursor() when 'cul' or 'cuc' is set.

Files: src/move.c

Patch 8.0.0189

Problem: There are no tests for the :profile command.

Solution: Add tests. (Dominique Pelle, closes #1383)

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_profile.vim

Patch 8.0.0190

Problem: Detecting duplicate tags uses a slow linear search.

Solution: Use a much faster hash table solution. (James McCoy, closes #1046)  
But don't add hi\_keylen, it makes hash tables 50% bigger.

Files: src/tag.c

Patch 8.0.0191 (after 8.0.0187)

Problem: Some systems do not have ruby\_sysinit(), causing the build to fail.

Solution: Clean up how ruby\_sysinit() and NtInitialize() are used. (Taro Muraoka)

Files: src/if\_ruby.c

Patch 8.0.0192 (after 8.0.0190)

Problem: Build fails with tiny features.

Solution: Change #ifdef for hash\_clear(). Avoid warning for unused argument.

Files: src/hashtab.c, src/if\_cscope.c

Patch 8.0.0193 (after 8.0.0188)

Problem: Accidentally removed #ifdef.

Solution: Put it back. (Masanori Misono)

Files: src/move.c

Patch 8.0.0194 (after 8.0.0189)

Problem: Profile tests fails if total and self time are equal.

Solution: Make one time optional.

Files: src/testdir/test\_profile.vim

Patch 8.0.0195 (after 8.0.0190)

Problem: Jumping to a tag that is a static item in the current file fails. (Kazunobu Kuriyama)

Solution: Make sure the first byte of the tag key is not NUL. (Suggested by James McCoy, closes #1387)

Files: src/tag.c, src/testdir/test\_tagjump.vim

Patch 8.0.0196 (after 8.0.0194)

Problem: The test for :profile is slow and does not work on MS-Windows.

Solution: Use the "-es" argument. (Dominique Pelle) Swap single and double quotes for system()

Files: src/testdir/test\_profile.vim

## Patch 8.0.0197

Problem: On MS-Windows the system() test skips a few parts.  
Solution: Swap single and double quotes for the command.  
Files: src/testdir/test\_system.vim

## Patch 8.0.0198

Problem: Some syntax arguments take effect even after "if 0". (Taylor Venable)  
Solution: Properly skip the syntax statements. Make "syn case" and "syn conceal" report the current state. Fix that "syn clear" didn't reset the conceal flag. Add tests for :syntax skipping properly.  
Files: src/syntax.c, src/testdir/test\_syntax.vim

## Patch 8.0.0199

Problem: Warning for an unused parameter when the libcall feature is disabled. Warning for a function type cast when compiling with -pedantic.  
Solution: Add UNUSED. Use a different type cast. (Damien Molinier)  
Files: src/evalfunc.c, src/os\_unix.c

## Patch 8.0.0200

Problem: Some syntax arguments are not tested.  
Solution: Add more syntax command tests.  
Files: src/testdir/test\_syntax.vim

## Patch 8.0.0201

Problem: When completing a group name for a highlight or syntax command cleared groups are included.  
Solution: Skip groups that have been cleared.  
Files: src/syntax.c, src/testdir/test\_syntax.vim

## Patch 8.0.0202

Problem: No test for invalid syntax group name.  
Solution: Add a test for group name error and warning.  
Files: src/testdir/test\_syntax.vim

## Patch 8.0.0203

Problem: Order of complication flags is sometimes wrong.  
Solution: Put interface-specific flags before ALL\_CFLAGS. (idea by Yousong Zhou, closes #1100)  
Files: src/Makefile

## Patch 8.0.0204

Problem: Compiler warns for uninitialized variable. (Tony Mechelynck)  
Solution: When skipping set "id" to -1.  
Files: src/syntax.c

## Patch 8.0.0205

Problem: After :undojoin some commands don't work properly, such as :redo. (Matthew Malcomson)  
Solution: Don't set curbuf->b\_u\_curhead. (closes #1390)  
Files: src/undo.c, src/testdir/test\_undo.vim

## Patch 8.0.0206

Problem: Test coverage for :retab insufficient.  
Solution: Add test for :retab. (Dominique Pelle, closes #1391)  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_retab.vim

## Patch 8.0.0207

Problem: Leaking file descriptor when system() cannot find the buffer. (Coverity)  
Solution: Close the file descriptor. (Dominique Pelle, closes #1398)

Files: src/evalfunc.c

Patch 8.0.0208

Problem: Internally used commands for CTRL-Z and mouse click end up in history. (Matthew Malcomson)

Solution: Use do\_cmdline\_cmd() instead of stuffing them in the readahead buffer. (James McCoy, closes #1395)

Files: src/edit.c, src/normal.c

Patch 8.0.0209

Problem: When using :substitute with the "c" flag and 'cursorbind' is set the cursor is not updated in other windows.

Solution: Call do\_check\_cursorbind(). (Masanori Misono)

Files: src/ex\_cmds.c

Patch 8.0.0210

Problem: Vim does not support bracketed paste, as implemented by xterm and other terminals.

Solution: Add t\_BE, t\_BD, t\_PS and t\_PE.

Files: src/term.c, src/term.h, src/option.c, src/misc2.c, src/keymap.h, src/edit.c, src/normal.c, src/evalfunc.c, src/getchar.c, src/vim.h, src/proto/edit.pro, runtime/doc/term.txt

Patch 8.0.0211 (after 8.0.0210)

Problem: Build fails if the multi-byte feature is disabled.

Solution: Change #ifdef around ins\_char\_bytes.

Files: src/misc1.c

Patch 8.0.0212

Problem: The buffer used to store a key name theoretically could be too small. (Coverity)

Solution: Count all possible modifier characters. Add a check for the length just in case.

Files: src/keymap.h, src/misc2.c

Patch 8.0.0213

Problem: The Netbeans "specialKeys" command does not check if the argument fits in the buffer. (Coverity)

Solution: Add a length check.

Files: src/netbeans.c

Patch 8.0.0214

Problem: Leaking memory when syntax cluster id is unknown. (Coverity)

Solution: Free the memory.

Files: src/syntax.c

Patch 8.0.0215

Problem: When a Cscope line contains CTRL-L a NULL pointer may be used. (Coverity)

Solution: Don't check for an emacs tag in a cscope line.

Files: src/tag.c

Patch 8.0.0216

Problem: When decoding JSON with a JS style object the JSON test may use a NULL pointer. (Coverity)

Solution: Check for a NULL pointer.

Files: src/json.c, src/json\_test.c

Patch 8.0.0217 (after 8.0.0215)

Problem: Build fails without the cscope feature.

Solution: Add #ifdef.

Files: src/tag.c

## Patch 8.0.0218

Problem: No command line completion for :cexpr, :cgetexpr, :caddexpr, etc.  
Solution: Make completion work. (Yegappan Lakshmanan) Add a test.  
Files: src/ex\_docmd.c, src/testdir/test\_cmdline.vim

## Patch 8.0.0219

Problem: Ubsan reports errors for integer overflow.  
Solution: Define macros for minimum and maximum values. Select an expression based on the value. (Mike Williams)  
Files: src/charset.c, src/eval.c, src/evalfunc.c, src/structs.h, src/testdir/test\_viml.vim

## Patch 8.0.0220

Problem: Completion for :match does not show "none" and other missing highlight names.  
Solution: Skip over cleared entries before checking the index to be at the end.  
Files: src/syntax.c, src/testdir/test\_cmdline.vim

## Patch 8.0.0221

Problem: Checking if PROTO is defined inside a function has no effect.  
Solution: Remove the check for PROTO. (Hirohito Higashi)  
Files: src/miscl.c

## Patch 8.0.0222

Problem: When a multi-byte character ends in a zero byte, putting blockwise text puts it before the character instead of after it.  
Solution: Use int instead of char for the character under the cursor. (Luchr, closes #1403) Add a test.  
Files: src/ops.c, src/testdir/test\_put.vim, src/Makefile, src/testdir/test\_alot.vim

## Patch 8.0.0223

Problem: Coverity gets confused by the flags passed to find\_tags() and warns about uninitialized variable.  
Solution: Disallow using cscope and help tags at the same time.  
Files: src/tag.c

## Patch 8.0.0224

Problem: When 'fileformats' is changed in a BufReadPre auto command, it does not take effect in readfile(). (Gary Johnson)  
Solution: Check the value of 'fileformats' after executing auto commands. (Christian Brabandt)  
Files: src/fileio.c, src/testdir/test\_fileformat.vim

## Patch 8.0.0225

Problem: When a block is visually selected and put is used on the end of the selection only one line is changed.  
Solution: Check for the end properly. (Christian Brabandt, neovim issue 5781)  
Files: src/ops.c, src/testdir/test\_put.vim

## Patch 8.0.0226

Problem: The test for patch 8.0.0224 misses the CR characters and passes even without the fix. (Christian Brabandt)  
Solution: Use double quotes and \<CR>.  
Files: src/testdir/test\_fileformat.vim

## Patch 8.0.0227

Problem: Crash when 'fileformat' is forced to "dos" and the first line in the file is empty and does not have a CR character.

Solution: Don't check for CR before the start of the buffer.  
Files: src/fileio.c, src/testdir/test\_fileformat.vim

Patch 8.0.0228 (after 8.0.0210)

Problem: When pasting test in an xterm on the command line it is surrounded by <PasteStart> and <PasteEnd>. (Johannes Kaltenbach)

Solution: Add missing changes.  
Files: src/ex\_getln.c, src/term.c

Patch 8.0.0229 (after 8.0.0179)

Problem: When freeing a buffer the local value of the 'formatprg' option is not cleared.

Solution: Add missing change.  
Files: src/buffer.c

Patch 8.0.0230 (after 8.0.0210)

Problem: When using bracketed paste line breaks are not respected.

Solution: Turn CR characters into a line break if the text is being inserted. (closes #1404)  
Files: src/edit.c

Patch 8.0.0231

Problem: There are no tests for bracketed paste mode.

Solution: Add a test. Fix repeating with "normal .".  
Files: src/edit.c, src/testdir/test\_paste.vim, src/Makefile, src/testdir/Make\_all.mak

Patch 8.0.0232

Problem: Pasting in Insert mode does not work when bracketed paste is used and 'esckeys' is off.

Solution: When 'esckeys' is off disable bracketed paste in Insert mode.  
Files: src/edit.c

Patch 8.0.0233 (after 8.0.0231)

Problem: The paste test fails if the GUI is being used.

Solution: Skip the test in the GUI.  
Files: src/testdir/test\_paste.vim

Patch 8.0.0234 (after 8.0.0225)

Problem: When several lines are visually selected and one of them is short, using put may cause a crash. (Axel Bender)

Solution: Check for a short line. (Christian Brabandt)  
Files: src/ops.c, src/testdir/test\_put.vim

Patch 8.0.0235

Problem: Memory leak detected when running tests for diff mode.

Solution: Free p\_extra\_free.  
Files: src/screen.c

Patch 8.0.0236 (after 8.0.0234)

Problem: Gcc complains that a variable may be used uninitialized. Confusion between variable and label name. (John Marriott)

Solution: Initialize it. Rename end to end\_lnum.  
Files: src/ops.c

Patch 8.0.0237

Problem: When setting wildoptions=tagfile the completion context is not set correctly. (desjardins)

Solution: Check for EXPAND\_TAGS\_LISTFILES. (Christian Brabandt, closes #1399)  
Files: src/ex\_getln.c, src/testdir/test\_cmdline.vim

Patch 8.0.0238

Problem: When using bracketed paste autoindent causes indent to be increased.

Solution: Disable 'ai' and set 'paste' temporarily. (Ken Takata)

Files: src/edit.c, src/testdir/test\_paste.vim

#### Patch 8.0.0239

Problem: The address sanitizer sometimes finds errors, but it needs to be run manually.

Solution: Add an environment to Travis with clang and the address sanitizer. (Christian Brabandt) Also include changes only on github.

Files: .travis.yml

#### Patch 8.0.0240 (after 8.0.0239)

Problem: The clang build on CI fails with one configuration.

Solution: Redo a previous patch that was accidentally reverted.

Files: .travis.yml

#### Patch 8.0.0241

Problem: Vim defines a mch\_memmove() function but it doesn't work, thus is always unused.

Solution: Remove the mch\_memmove implementation. (suggested by Dominique Pelle)

Files: src/os\_unix.h, src/misc2.c, src/vim.h

#### Patch 8.0.0242

Problem: Completion of user defined functions is not covered by tests.

Solution: Add tests. Also test various errors of user-defined commands. (Dominique Pelle, closes #1413)

Files: src/testdir/test\_usercommands.vim

#### Patch 8.0.0243

Problem: When making a character lower case with tolower() changes the byte count, it is not made lower case.

Solution: Add strlow\_save(). (Dominique Pelle, closes #1406)

Files: src/evalfunc.c, src/misc2.c, src/proto/misc2.pro, src/testdir/test\_functions.vim

#### Patch 8.0.0244

Problem: When the user sets t\_BE empty after startup to disable bracketed paste, this has no direct effect.

Solution: When t\_BE is made empty write t\_BD. When t\_BE is made non-empty write the new value.

Files: src/option.c

#### Patch 8.0.0245

Problem: The generated zh\_CN.cp936.po message file is not encoded properly.

Solution: Instead of using zh\_CN.po as input, use zh\_CN.UTF-8.po.

Files: src/po/Makefile

#### Patch 8.0.0246

Problem: Compiler warnings for int to pointer conversion.

Solution: Fix macro for mch\_memmove(). (John Marriott)

Files: src/vim.h

#### Patch 8.0.0247

Problem: Under some circumstances, one needs to type Ctrl-N or Ctrl-P twice to have a menu entry selected. (Lifepillar)

Solution: call ins\_compl\_free(). (Christian Brabandt, closes #1411)

Files: src/edit.c, src/testdir/test\_popup.vim

#### Patch 8.0.0248

Problem: vim\_strcat() cannot handle overlapping arguments.



Solution: Use `mch_memmove()` instead of `strcpy()`. (Justin M Keyes, closes #1415)  
Files: `src/misc2.c`

#### Patch 8.0.0249

Problem: When two submits happen quick after each other, the tests for the first one may error out.  
Solution: Use a git depth of 10 instead of 1. (Christian Brabandt)  
Files: `.travis.yml`

#### Patch 8.0.0250

Problem: When `virtcol()` gets a column that is not the first byte of a multi-byte character the result is unpredictable. (Christian Ludwig)  
Solution: Correct the column to the first byte of a multi-byte character. Change the utf-8 test to new style.  
Files: `src/charset.c`, `src/testdir/test_utf8.in`, `src/testdir/test_utf8.ok`, `src/testdir/test_utf8.vim`, `src/Makefile`, `src/testdir/Make_all.mak`, `src/testdir/test_alot_utf8.vim`

#### Patch 8.0.0251

Problem: It is not so easy to write a script that works with both Python 2 and Python 3, even when the Python code works with both.  
Solution: Add `'pyxversion'`, `:pyx`, etc. (Marc Weber, Ken Takata)  
Files: `Filelist`, `runtime/doc/eval.txt`, `runtime/doc/if_pyth.txt`, `runtime/doc/index.txt`, `runtime/doc/options.txt`, `runtime/optwin.vim`, `runtime/doc/quickref.txt`, `runtime/doc/usr_41.txt`, `src/Makefile`, `src/evalfunc.c`, `src/ex_cmds.h`, `src/ex_cmds2.c`, `src/ex_docmd.c`, `src/if_python.c`, `src/if_python3.c`, `src/option.c`, `src/option.h`, `src/proto/ex_cmds2.pro`, `src/testdir/Make_all.mak`, `src/testdir/pyxfile/py2_magic.py`, `src/testdir/pyxfile/py2_shebang.py`, `src/testdir/pyxfile/py3_magic.py`, `src/testdir/pyxfile/py3_shebang.py`, `src/testdir/pyxfile/pyx.py`, `src/testdir/test_pyx2.vim`, `src/testdir/test_pyx3.vim`, `src/userfunc.c`

#### Patch 8.0.0252

Problem: Characters below 256 that are not one byte are not always recognized as word characters.  
Solution: Make `vim_iswordc()` and `vim_iswordp()` work the same way. Add a test for this. (Ozaki Kiichi)  
Files: `src/Makefile`, `src/charset.c`, `src/kword_test.c`, `src/mbyte.c`, `src/proto/mbyte.pro`

#### Patch 8.0.0253

Problem: When creating a session when `'winminheight'` is 2 or larger and loading that session gives an error.  
Solution: Also set `'winminheight'` before setting `'winheight'` to 1. (Rafael Bodill, neovim #5717)  
Files: `src/ex_docmd.c`, `src/testdir/test_mksession.vim`

#### Patch 8.0.0254

Problem: When using an assert function one can either specify a message or get a message about what failed, not both.  
Solution: Concatenate the error with the message.  
Files: `src/eval.c`, `src/testdir/test_assert.vim`

#### Patch 8.0.0255

Problem: When calling `setpos()` with a buffer argument it often is ignored. (Matthew Malcomson)

Solution: Make the buffer argument work for all marks local to a buffer.  
(neovim #5713) Add more tests.

Files: src/mark.c, src/testdir/test\_marks.vim, runtime/doc/eval.txt

Patch 8.0.0256 (after 8.0.0255)

Problem: Tests fail because some changes were not included.

Solution: Add changes to evalfunc.c

Files: src/evalfunc.c

Patch 8.0.0257 (after 8.0.0252)

Problem: The keyword test file is not included in the archive.

Solution: Update the list of files.

Files: Filelist

Patch 8.0.0258 (after 8.0.0253)

Problem: mksession test leaves file behind.

Solution: Delete the file. Rename files to start with "X".

Files: src/testdir/test\_mksession.vim

Patch 8.0.0259

Problem: Tab commands do not handle count correctly. (Ken Hamada)

Solution: Add ADDR\_TABS\_RELATIVE. (Hirohito Higashi)

Files: runtime/doc/tabpage.txt, src/ex\_cmds.h, src/ex\_docmd.c,  
src/testdir/test\_tabpage.vim

Patch 8.0.0260

Problem: Build fails with tiny features.

Solution: Move get\_tabpage\_arg() inside #ifdef.

Files: src/ex\_docmd.c

Patch 8.0.0261

Problem: Not enough test coverage for eval functions.

Solution: Add more tests. (Dominique Pelle, closes #1420)

Files: src/testdir/test\_functions.vim

Patch 8.0.0262

Problem: Farsi support is barely tested.

Solution: Add more tests for Farsi. Clean up the code.

Files: src/edit.c, src/farsi.c, src/testdir/test\_farsi.vim

Patch 8.0.0263

Problem: Farsi support is not tested enough.

Solution: Add more tests for Farsi. Clean up the code.

Files: src/farsi.c, src/testdir/test\_farsi.vim

Patch 8.0.0264

Problem: Memory error reported by ubsan, probably for using the string  
returned by execute().

Solution: NUL terminate the result of execute().

Files: src/evalfunc.c

Patch 8.0.0265

Problem: May get ml\_get error when :pydo deletes lines or switches to  
another buffer. (Nikolai Pavlov, issue #1421)

Solution: Check the buffer and line every time.

Files: src/if\_py\_both.h, src/testdir/test\_python2.vim,  
src/testdir/test\_python3.vim, src/Makefile,  
src/testdir/Make\_all.mak

Patch 8.0.0266

Problem: Compiler warning for using uninitialized variable.

Solution: Set tab\_number also when there is an error.

Files: src/ex\_docmd.c

Patch 8.0.0267

Problem: A channel test sometimes fails on Mac.  
Solution: Add the test to the list of flaky tests.  
Files: src/testdir/runtest.vim

Patch 8.0.0268

Problem: May get ml\_get error when :luado deletes lines or switches to another buffer. (Nikolai Pavlov, issue #1421)  
Solution: Check the buffer and line every time.  
Files: src/if\_lua.c, src/testdir/test\_lua.vim, src/Makefile, src/testdir/Make\_all.mak

Patch 8.0.0269

Problem: May get ml\_get error when :perlundo deletes lines or switches to another buffer. (Nikolai Pavlov, issue #1421)  
Solution: Check the buffer and line every time.  
Files: src/if\_perl.xs, src/testdir/test\_perl.vim

Patch 8.0.0270

Problem: May get ml\_get error when :rubydo deletes lines or switches to another buffer. (Nikolai Pavlov, issue #1421)  
Solution: Check the buffer and line every time.  
Files: src/if\_ruby.c, src/testdir/test\_ruby.vim

Patch 8.0.0271

Problem: May get ml\_get error when :tclundo deletes lines or switches to another buffer. (Nikolai Pavlov, closes #1421)  
Solution: Check the buffer and line every time.  
Files: src/if\_tcl.c, src/testdir/test\_tcl.vim, src/Makefile, src/testdir/Make\_all.mak

Patch 8.0.0272

Problem: Crash on exit is not detected when running tests.  
Solution: Remove the dash before the command. (Dominique Pelle, closes #1425)  
Files: src/testdir/Makefile

Patch 8.0.0273

Problem: Dead code detected by Coverity when not using gnome.  
Solution: Rearrange the #ifdefs to avoid dead code.  
Files: src/gui\_gtk\_x11.c

Patch 8.0.0274

Problem: When update\_single\_line() is called recursively, or another screen update happens while it is busy, errors may occur.  
Solution: Check and update updating\_screen. (Christian Brabandt)  
Files: src/screen.c

Patch 8.0.0275

Problem: When checking for CTRL-C typed the GUI may detect a screen resize and redraw the screen, causing trouble.  
Solution: Set updating\_screen in ui\_breakcheck().  
Files: src/ui.c

Patch 8.0.0276

Problem: Checking for FEAT\_GUI\_GNOME inside GTK 3 code is unnecessary.  
Solution: Remove the #ifdef. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_x11.c

Patch 8.0.0277

Problem: The GUI test may trigger fontconfig and take a long time.  
Solution: Set \$XDG\_CACHE\_HOME. (Kazunobu Kuriyama)  
Files: src/testdir/unix.vim, src/testdir/test\_gui.vim

Patch 8.0.0278 (after 8.0.0277)

Problem: GUI test fails on MS-Windows.  
Solution: Check that tester\_HOME exists.  
Files: src/testdir/test\_gui.vim

Patch 8.0.0279

Problem: With MSVC 2015 the dll name is vcruntime140.dll.  
Solution: Check the MSVC version and use the right dll name. (Ken Takata)  
Files: src/Make\_mvc.mak

Patch 8.0.0280

Problem: On MS-Windows setting an environment variable with multi-byte strings does not work well.  
Solution: Use wputenv when possible. (Taro Muraoka, Ken Takata)  
Files: src/misc1.c, src/os\_win32.c, src/os\_win32.h, src/proto/os\_win32.pro, src/vim.h

Patch 8.0.0281

Problem: MS-Windows files are still using ARGSUSED while most other files have UNUSED.  
Solution: Change ARGSUSED to UNUSED or delete it.  
Files: src/os\_win32.c, src/gui\_w32.c, src/os\_mswin.c, src/os\_w32exe.c, src/winclip.c

Patch 8.0.0282

Problem: When doing a Visual selection and using "I" to go to insert mode, CTRL-O needs to be used twice to go to Normal mode. (Coacher)  
Solution: Check for the return value of edit(). (Christian Brabandt, closes #1290)  
Files: src/normal.c, src/ops.c

Patch 8.0.0283

Problem: The return value of mode() does not indicate that completion is active in Replace and Insert mode. (Zhen-Huan (Kenny) Hu)  
Solution: Add "c" or "x" for two kinds of completion. (Yegappan Lakshmanan, closes #1397) Test some more modes.  
Files: runtime/doc/eval.txt, src/evalfunc.c, src/testdir/test\_functions.vim, src/testdir/test\_mapping.vim

Patch 8.0.0284

Problem: The Test\_collapse\_buffers() test failed once, looks like it is flaky.  
Solution: Add it to the list of flaky tests.  
Files: src/testdir/runtest.vim

Patch 8.0.0285 (after 8.0.0277)

Problem: Tests fail with tiny build on Unix.  
Solution: Only set g:tester\_HOME when build with the +eval feature.  
Files: src/testdir/unix.vim

Patch 8.0.0286

Problem: When concealing is active and the screen is resized in the GUI it is not immediately redrawn.  
Solution: Use update\_prepare() and update\_finish() from update\_single\_line().  
Files: src/screen.c

Patch 8.0.0287

Problem: Cannot access the arguments of the current function in debug mode.  
(Luc Hermitte)  
Solution: use get\_funcall(). (Lemonboy, closes #1432, closes #1352)  
Files: src/userfunc.c

Patch 8.0.0288 (after 8.0.0284)

Problem: Errors reported while running tests.  
Solution: Put comma in the right place.  
Files: src/testdir/runtest.vim

Patch 8.0.0289

Problem: No test for "ga" and :ascii.  
Solution: Add a test. (Dominique Pelle, closes #1429)  
Files: src/Makefile, src/testdir/test\_alot.vim, src/testdir/test\_ga.vim

Patch 8.0.0290

Problem: If a wide character doesn't fit at the end of the screen line, and  
the line doesn't fit on the screen, then the cursor position may  
be wrong. (anliting)  
Solution: Don't skip over wide character. (Christian Brabandt, closes #1408)  
Files: src/screen.c

Patch 8.0.0291 (after 8.0.0282)

Problem: Visual block insertion does not insert in all lines.  
Solution: Don't bail out of insert too early. Add a test. (Christian  
Brabandt, closes #1290)  
Files: src/ops.c, src/testdir/test\_visual.vim

Patch 8.0.0292

Problem: The stat test is a bit slow.  
Solution: Remove a couple of sleep comments and reduce another.  
Files: src/testdir/test\_stat.vim

Patch 8.0.0293

Problem: Some tests have a one or three second wait.  
Solution: Reset the 'showmode' option. Use a test time of one to disable  
sleep after an error or warning message.  
Files: src/misc1.c, src/testdir/runtest.vim, src/testdir/test\_normal.vim

Patch 8.0.0294

Problem: Argument list is not stored correctly in a session file.  
(lgasquale)  
Solution: Use "\$argadd" instead of "argadd". (closes #1434)  
Files: src/ex\_docmd.c, src/testdir/test\_mksession.vim

Patch 8.0.0295 (after 8.0.0293)

Problem: test\_viml hangs.  
Solution: Put resetting 'more' before sourcing the script.  
Files: src/testdir/runtest.vim

Patch 8.0.0296

Problem: Bracketed paste can only append, not insert.  
Solution: When the cursor is in the first column insert the text.  
Files: src/normal.c, src/testdir/test\_paste.vim, runtime/doc/term.txt

Patch 8.0.0297

Problem: Double free on exit when using a closure. (James McCoy)  
Solution: Split free\_all\_functions in two parts. (closes #1428)  
Files: src/userfunc.c, src/structs.h

Patch 8.0.0298

Problem: Ex command range with repeated search does not work. (Bruce

DeVisser)  
Solution: Skip over \/, \? and \&.  
Files: src/ex\_docmd.c, src/testdir/test\_cmdline.vim

#### Patch 8.0.0299

Problem: When the GUI window is resized Vim does not always take over the new size. (Luchr)  
Solution: Reset new\_p\_guiFont in gui\_resize\_shell(). Call gui\_may\_resize\_shell() in the main loop.  
Files: src/main.c, src/gui.c

#### Patch 8.0.0300

Problem: Cannot stop diffing hidden buffers. (Daniel Hahler)  
Solution: When using :diffoff! make the whole list if diffed buffers empty. (closes #736)  
Files: src/diff.c, src/testdir/test\_diffmode.vim

#### Patch 8.0.0301

Problem: No tests for ":set completion" and various errors of the :set command.  
Solution: Add more :set tests. (Dominique Pelle, closes #1440)  
Files: src/testdir/test\_options.vim

#### Patch 8.0.0302

Problem: Cannot set terminal key codes with :let.  
Solution: Make it work.  
Files: src/option.c, src/testdir/test\_assign.vim

#### Patch 8.0.0303

Problem: Bracketed paste does not work in Visual mode.  
Solution: Delete the text before pasting  
Files: src/normal.c, src/ops.c, src/proto/ops.pro, src/testdir/test\_paste.vim

#### Patch 8.0.0304 (after 8.0.0302)

Problem: Assign test fails in the GUI.  
Solution: Skip the test for setting t\_kl.  
Files: src/testdir/test\_assign.vim

#### Patch 8.0.0305

Problem: Invalid memory access when option has duplicate flag.  
Solution: Correct pointer computation. (Dominique Pelle, closes #1442)  
Files: src/option.c, src/testdir/test\_options.vim

#### Patch 8.0.0306

Problem: mode() not sufficiently tested.  
Solution: Add more tests. (Yegappan Lakshmanan)  
Files: src/testdir/test\_functions.vim

#### Patch 8.0.0307

Problem: Asan detects a memory error when EXITFREE is defined. (Dominique Pelle)  
Solution: In getvcol() check for ml\_get\_buf() returning an empty string. Also skip adjusting the scroll position. Set "exiting" in mch\_exit() for all systems.  
Files: src/charset.c, src/window.c, src/os\_mswin.c, src/os\_win32.c, src/os\_amiga.c

#### Patch 8.0.0308

Problem: When using a symbolic link, the package path will not be inserted at the right position in 'runtimepath'. (Dugan Chen, Norio Takagi)  
Solution: Resolve symbolic links when finding the right position in

'runtimepath'. (Hirohito Higashi)  
Files: src/ex\_cmds2.c, src/testdir/test\_packadd.vim

Patch 8.0.0309

Problem: Cannot use an empty key in json.  
Solution: Allow for using an empty key.  
Files: src/json.c, src/testdir/test\_json.vim

Patch 8.0.0310

Problem: Not enough testing for GUI functionality.  
Solution: Add tests for v:windowid and getwinpos[xy](). (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

Patch 8.0.0311

Problem: Linebreak tests are old style.  
Solution: Turn the tests into new style. Share utility functions. (Ozaki Kiichi, closes #1444)  
Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_breakindent.vim, src/testdir/test\_listlbr.in,  
src/testdir/test\_listlbr.ok, src/testdir/test\_listlbr.vim,  
src/testdir/test\_listlbr\_utf8.in,  
src/testdir/test\_listlbr\_utf8.ok,  
src/testdir/test\_listlbr\_utf8.vim, src/testdir/view\_util.vim

Patch 8.0.0312

Problem: When a json message arrives in pieces, the start is dropped and the decoding fails.  
Solution: Do not drop the start when it is still needed. (Kay Zheng) Add a test. Reset the timeout when something is received.  
Files: src/channel.c, src/testdir/test\_channel.vim, src/structs.h,  
src/testdir/test\_channel\_pipe.py

Patch 8.0.0313 (after 8.0.0310)

Problem: Not enough testing for GUI functionality.  
Solution: Add tests for the GUI font. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

Patch 8.0.0314

Problem: getcmdtype(), getcmdpos() and getcmdline() are not tested.  
Solution: Add tests. (Yegappan Lakshmanan)  
Files: src/testdir/test\_cmdline.vim

Patch 8.0.0315

Problem: ":help [range]" does not work. (Tony Mechelynck)  
Solution: Translate to insert a backslash.  
Files: src/ex\_cmds.c

Patch 8.0.0316

Problem: ":help z?" does not work. (Pavol Juhas)  
Solution: Remove exception for z?.  
Files: src/ex\_cmds.c

Patch 8.0.0317

Problem: No test for setting 'guifont'.  
Solution: Add a test for X11 GUIs. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

Patch 8.0.0318

Problem: Small mistake in 7x13 font name.  
Solution: Use ISO 8859-1 name instead of 10646-1. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

## Patch 8.0.0319

Problem: Insert mode completion does not respect "start" in 'backspace'.  
Solution: Check whether backspace can go before where insert started.  
(Hirohito Higashi)  
Files: src/edit.c, src/testdir/test\_popup.vim

## Patch 8.0.0320

Problem: Warning for unused variable with small build.  
Solution: Change #ifdef to exclude FEAT\_CMDWIN. (Kazunobu Kuriyama)  
Files: src/ex\_getln.c

## Patch 8.0.0321

Problem: When using the tiny version trying to load the matchit plugin  
gives an error. On MS-Windows some default mappings fail.  
Solution: Add a check if the command used is available. (Christian Brabandt)  
Files: runtime/mswin.vim, runtime/macros/matchit.vim

## Patch 8.0.0322

Problem: Possible overflow with spell file where the tree length is  
corrupted.  
Solution: Check for an invalid length (suggested by shqking)  
Files: src/spellfile.c

## Patch 8.0.0323

Problem: When running the command line tests there is a one second wait.  
Solution: Change an Esc to Ctrl-C. (Yegappan Lakshmanan)  
Files: src/testdir/test\_cmdline.vim

## Patch 8.0.0324

Problem: Illegal memory access with "l;y".  
Solution: Call check\_cursor() instead of check\_cursor\_lnum(). (Dominique  
Pelle, closes #1455)  
Files: src/ex\_docmd.c, src/testdir/test\_cmdline.vim

## Patch 8.0.0325

Problem: Packadd test does not clean up symlink.  
Solution: Delete the link. (Hirohito Higashi)  
Files: src/testdir/test\_packadd.vim

## Patch 8.0.0326 (after 8.0.0325)

Problem: Packadd test uses wrong directory name.  
Solution: Use the variable name value. (Hirohito Higashi)  
Files: src/testdir/test\_packadd.vim

## Patch 8.0.0327

Problem: The E11 error message in the command line window is not  
translated.  
Solution: use \_(). (Hirohito Higashi)  
Files: src/ex\_docmd.c

## Patch 8.0.0328

Problem: The "zero count" error doesn't have a number. (Hirohito Higashi)  
Solution: Give it a number and be more specific about the error.  
Files: src/globals.h

## Patch 8.0.0329

Problem: Xfontset and guifontwide are not tested.  
Solution: Add tests. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

## Patch 8.0.0330

Problem: Illegal memory access after "vapo". (Dominique Pelle)



Solution: Fix the cursor column.  
Files: src/search.c, src/testdir/test\_visual.vim

Patch 8.0.0331

Problem: Restoring help snapshot accesses freed memory. (Dominique Pelle)  
Solution: Don't restore a snapshot when the window closes.  
Files: src/window.c, src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_help.vim

Patch 8.0.0332

Problem: GUI test fails on some systems.  
Solution: Try different language settings. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

Patch 8.0.0333

Problem: Illegal memory access when 'complete' ends in a backslash.  
Solution: Check for trailing backslash. (Dominique Pelle, closes #1478)  
Files: src/option.c, src/testdir/test\_options.vim

Patch 8.0.0334

Problem: Can't access b:changedtick from a dict reference.  
Solution: Make changedtick a member of the b: dict. (inspired by neovim #6112)  
Files: src/structs.h, src/buffer.c, src/edit.c, src/eval.c,  
src/evalfunc.c, src/ex\_docmd.c, src/main.c, src/globals.h,  
src/fileio.c, src/getline.c, src/misc1.c, src/syntax.c,  
src/proto/eval.pro, src/testdir/test\_changedtick.vim,  
src/Makefile, src/testdir/test\_alot.vim, src/testdir/test91.in,  
src/testdir/test91.ok, src/testdir/test\_functions.vim

Patch 8.0.0335 (after 8.0.0335)

Problem: Functions test fails.  
Solution: Use the right buffer number.  
Files: src/testdir/test\_functions.vim

Patch 8.0.0336

Problem: Flags of :substitute not sufficiently tested.  
Solution: Test up to two letter flag combinations. (James McCoy, closes #1479)  
Files: src/testdir/test\_substitute.vim

Patch 8.0.0337

Problem: Invalid memory access in :recover command.  
Solution: Avoid access before directory name. (Dominique Pelle, closes #1488)  
Files: src/Makefile, src/getline.c, src/testdir/test\_alot.vim,  
src/testdir/test\_recover.vim

Patch 8.0.0338 (after 8.0.0337)

Problem: :recover test fails on MS-Windows.  
Solution: Use non-existing directory on MS-Windows.  
Files: src/testdir/test\_recover.vim

Patch 8.0.0339

Problem: Illegal memory access with vi'  
Solution: For quoted text objects bail out if the Visual area spans more than one line.  
Files: src/search.c, src/testdir/test\_visual.vim

Patch 8.0.0340

Problem: Not checking return value of dict\_add(). (Coverity)  
Solution: Handle a failure.

Files: src/buffer.c

Patch 8.0.0341

Problem: When using complete() and typing a character undo is saved after the character was inserted. (Shougo)

Solution: Save for undo before inserting the character.

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 8.0.0342

Problem: Double free when compiled with EXITFREE and setting 'ttytype'.

Solution: Avoid setting P\_ALLOCED on 'ttytype'. (Dominique Pelle, closes #1461)

Files: src/option.c, src/testdir/test\_options.vim

Patch 8.0.0343

Problem: b:changedtick can be unlocked, even though it has no effect. (Nikolai Pavlov)

Solution: Add a check and error E940. (closes #1496)

Files: src/eval.c, src/testdir/test\_changedtick.vim, runtime/doc/eval.txt

Patch 8.0.0344

Problem: Unlet command leaks memory. (Nikolai Pavlov)

Solution: Free the memory on error. (closes #1497)

Files: src/eval.c, src/testdir/test\_unlet.vim

Patch 8.0.0345

Problem: islocked('d.changedtick') does not work.

Solution: Make it work.

Files: src/buffer.c, src/eval.c, src/evalfunc.c, src/vim.h, src/testdir/test\_changedtick.vim,

Patch 8.0.0346

Problem: Vim relies on limits.h to be included indirectly, but on Solaris 9 it may not be. (Ben Fritz)

Solution: Always include limits.h.

Files: src/os\_unixx.h, src/vim.h

Patch 8.0.0347

Problem: When using CTRL-X CTRL-U inside a comment, the use of the comment leader may not work. (Klement)

Solution: Save and restore did\_ai. (Christian Brabandt, closes #1494)

Files: src/edit.c, src/testdir/test\_popup.vim

Patch 8.0.0348

Problem: When building with a shadow directory on macOS lacks the +clipboard feature.

Solution: Link \*.m files, specifically os\_macosx.m. (Kazunobu Kuriyama)

Files: src/Makefile

Patch 8.0.0349

Problem: Redrawing errors with GTK 3.

Solution: When updating, first clear all rectangles and then draw them. (Kazunobu Kuriyama, Christian Ludwig, closes #848)

Files: src/gui\_gtk\_x11.c

Patch 8.0.0350

Problem: Not enough test coverage for Perl.

Solution: Add more Perl tests. (Dominique Perl, closes #1500)

Files: src/testdir/test\_perl.vim

Patch 8.0.0351

Problem: No test for concatenating an empty string that results from out of

bounds indexing.  
Solution: Add a simple test.  
Files: src/testdir/test\_expr.vim

Patch 8.0.0352

Problem: The condition for when a typval needs to be cleared is too complicated.  
Solution: Init the type to VAR\_UNKNOWN and always clear it.  
Files: src/eval.c

Patch 8.0.0353

Problem: If [R0] in the status line is translated to a longer string, it is truncated to 4 bytes.  
Solution: Skip over the resulting string. (Jente Hidskes, closes #1499)  
Files: src/screen.c

Patch 8.0.0354

Problem: Test to check that setting termcap key fails sometimes.  
Solution: Check for "t\_k1" to exist. (Christian Brabandt, closes #1459)  
Files: src/testdir/test\_assign.vim

Patch 8.0.0355

Problem: Using uninitialized memory when 'isfname' is empty.  
Solution: Don't call getpwnam() without an argument. (Dominique Pelle, closes #1464)  
Files: src/misc1.c, src/testdir/test\_options.vim

Patch 8.0.0356 (after 8.0.0342)

Problem: Leaking memory when setting 'ttytype'.  
Solution: Get free\_oldval from the right option entry.  
Files: src/option.c

Patch 8.0.0357

Problem: Crash when setting 'guicursor' to weird value.  
Solution: Avoid negative size. (Dominique Pelle, closes #1465)  
Files: src/misc2.c, src/testdir/test\_options.vim

Patch 8.0.0358

Problem: Invalid memory access in C-indent code.  
Solution: Don't go over end of empty line. (Dominique Pelle, closes #1492)  
Files: src/edit.c, src/testdir/test\_options.vim

Patch 8.0.0359

Problem: 'number' and 'relativenumber' are not properly tested.  
Solution: Add tests, change old style to new style tests. (Ozaki Kiichi, closes #1447)  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/Make\_vms.mms, src/testdir/test89.in, src/testdir/test89.ok, src/testdir/test\_alot.vim, src/testdir/test\_findfile.vim, src/testdir/test\_number.vim

Patch 8.0.0360

Problem: Sometimes VimL is used, which is confusing.  
Solution: Consistently use "Vim script". (Hirohito Higashi)  
Files: runtime/doc/if\_mzsch.txt, runtime/doc/if\_pyth.txt, runtime/doc/syntax.txt, runtime/doc/usr\_02.txt, runtime/doc/version7.txt, src/Makefile, src/eval.c, src/ex\_getln.c, src/if\_py\_both.h, src/if\_xcmdsrv.c, src/testdir/Make\_all.mak, src/testdir/runtest.vim, src/testdir/test49.vim, src/testdir/test\_vimscript.vim, src/testdir/test\_viml.vim

## Patch 8.0.0361

Problem: GUI initialisation is not sufficiently tested.

Solution: Add the gui\_init test. (Kazunobu Kuriyama)

Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Makefile,  
src/testdir/gui\_init.vim, src/testdir/setup\_gui.vim,  
src/testdir/test\_gui.vim, src/testdir/test\_gui\_init.vim, Filelist

## Patch 8.0.0362 (after 8.0.0361)

Problem: Tests fail on MS-Windows.

Solution: Use \$\*.vim instead of \$<.

Files: src/testdir/Make\_dos.mak

## Patch 8.0.0363

Problem: Travis is too slow to keep up with patches.

Solution: Increase git depth to 20

Files: .travis.yml

## Patch 8.0.0364

Problem: |s does not move cursor with two spell errors in one line. (Manuel Ortega)

Solution: Don't stop search immediately when wrapped, search the line first. (Ken Takata) Add a test.

Files: src/spell.c, src/Makefile, src/testdir/test\_spell.vim,  
src/testdir/Make\_all.mak

## Patch 8.0.0365

Problem: Might free a dict item that wasn't allocated.

Solution: Call dictitem\_free(). (Nikolai Pavlov) Use this for  
b:changedtick.

Files: src/dict.c, src/structs.h, src/buffer.c, src/edit.c,  
src/evalfunc.c, src/ex\_docmd.c, src/fileio.c, src/main.c,  
src/memline.c, src/misc1.c, src/syntax.c

## Patch 8.0.0366 (after 8.0.0365)

Problem: Build fails with tiny features.

Solution: Add #ifdef.

Files: src/buffer.c

## Patch 8.0.0367

Problem: If configure defines \_LARGE\_FILES some include files are included before it is defined.

Solution: Include vim.h first. (Sam Thursfield, closes #1508)

Files: src/gui\_at\_sb.c, src/gui\_athena.c, src/gui\_motif.c, src/gui\_x11.c,  
src/gui\_xmdlg.c

## Patch 8.0.0368

Problem: Not all options are tested with a range of values.

Solution: Generate a test script from the source code.

Files: Filelist, src/gen\_opt\_test.vim, src/testdir/test\_options.vim,  
src/Makefile

## Patch 8.0.0369 (after 8.0.0368)

Problem: The 'balloondelay', 'ballooneval' and 'balloonexpr' options are not defined without the +balloon\_eval feature. Testing that an option value fails does not work for unsupported options.

Solution: Make the options defined but not supported. Don't test if setting unsupported options fails.

Files: src/option.c, src/gen\_opt\_test.vim

## Patch 8.0.0370

Problem: Invalid memory access when setting wildchar empty.

Solution: Avoid going over the end of the option value. (Dominique Pelle, closes #1509) Make option test check all number options with empty value.  
Files: src/gen\_opt\_test.vim, src/option.c, src/testdir/test\_options.vim

Patch 8.0.0371 (after 8.0.0365)  
Problem: Leaking memory when setting v:completed\_item.  
Solution: Or the flags instead of setting them.  
Files: src/eval.c

Patch 8.0.0372  
Problem: More options are not always defined.  
Solution: Consistently define all possible options.  
Files: src/option.c, src/testdir/test\_expand\_dllpath.vim

Patch 8.0.0373  
Problem: Build fails without +folding.  
Solution: Move misplaced #ifdef.  
Files: src/option.c

Patch 8.0.0374  
Problem: Invalid memory access when using :sc in Ex mode. (Dominique Pelle)  
Solution: Avoid the column being negative. Also fix a hang in Ex mode.  
Files: src/ex\_getln.c, src/ex\_cmds.c, src/testdir/test\_substitute.vim

Patch 8.0.0375  
Problem: The "+" register is not tested.  
Solution: Add a test using another Vim instance to change the "+" register. (Kazunobu Kuriyama)  
Files: src/testdir/test\_gui.vim

Patch 8.0.0376  
Problem: Size computations in spell file reading are not exactly right.  
Solution: Make "len" a "long" and check with LONG\_MAX.  
Files: src/spellfile.c

Patch 8.0.0377  
Problem: Possible overflow when reading corrupted undo file.  
Solution: Check if allocated size is not too big. (King)  
Files: src/undo.c

Patch 8.0.0378  
Problem: Another possible overflow when reading corrupted undo file.  
Solution: Check if allocated size is not too big. (King)  
Files: src/undo.c

Patch 8.0.0379  
Problem: CTRL-Z and mouse click use CTRL-O unnecessary.  
Solution: Remove stuffing CTRL-O. (James McCoy, closes #1453)  
Files: src/edit.c, src/normal.c

Patch 8.0.0380  
Problem: With 'linebreak' set and 'breakat' includes ">" a double-wide character results in "<<" displayed.  
Solution: Check for the character not to be replaced. (Ozaki Kiichi, closes #1456)  
Files: src/screen.c, src/testdir/test\_listlbr\_utf8.vim

Patch 8.0.0381  
Problem: Diff mode is not sufficiently tested.  
Solution: Add more diff mode tests. (Dominique Pelle, closes #1515)  
Files: src/testdir/test\_diffmode.vim

Patch 8.0.0382 (after 8.0.0380)

Problem: Warning in tiny build for unused variable. (Tony Mechelynck)  
Solution: Add #ifdefs.  
Files: src/screen.c

Patch 8.0.0383 (after 8.0.0382)

Problem: Misplaced #ifdef. (Christ van Willigen)  
Solution: Split assignment.  
Files: src/screen.c

Patch 8.0.0384

Problem: Timer test failed for no apparent reason.  
Solution: Mark the test as flaky.  
Files: src/testdir/runtest.vim

Patch 8.0.0385

Problem: No tests for arabic.  
Solution: Add a first test for arabic. (Dominique Pelle, closes #1518)  
Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_arabic.vim

Patch 8.0.0386

Problem: Tiny build has a problem with generating the options test.  
Solution: Change the "if" to skip over statements.  
Files: src/gen\_opt\_test.vim

Patch 8.0.0387

Problem: compiler warnings  
Solution: Add type casts. (Christian Brabandt)  
Files: src/channel.c, src/memline.c,

Patch 8.0.0388

Problem: filtering lines through "cat", without changing the line count,  
changes manual folds.  
Solution: Change how marks and folds are adjusted. (Matthew Malcomson, from  
neovim #6194).  
Files: src/fold.c, src/testdir/test\_fold.vim

Patch 8.0.0389

Problem: Test for arabic does not check what is displayed.  
Solution: Improve what is asserted. (Dominique Pelle, closes #1523)  
Add a first shaping test.  
Files: src/testdir/test\_arabic.vim

Patch 8.0.0390

Problem: When the window scrolls horizontally when the popup menu is  
displayed part of it may not be cleared. (Neovim issue #6184)  
Solution: Remove the menu when the windows scrolled. (closes #1524)  
Files: src/edit.c

Patch 8.0.0391

Problem: Arabic support is verbose and not well tested.  
Solution: Simplify the code. Add more tests.  
Files: src/arabic.c, src/testdir/test\_arabic.vim

Patch 8.0.0392

Problem: GUI test fails with Athena and Motif.  
Solution: Add test\_ignore\_error(). Use it to ignore the "failed to create  
input context" error.  
Files: src/message.c, src/proto/message.pro, src/evalfunc.c,  
src/testdir/test\_gui.vim, runtime/doc/eval.txt

Patch 8.0.0393 (after 8.0.0190)

Problem: When the same tag appears more than once, the order is unpredictable. (Charles Campbell)

Solution: Besides using a dict for finding duplicates, use a grow array for keeping the tags in sequence.

Files: src/tag.c, src/testdir/test\_tagjump.vim

Patch 8.0.0394

Problem: Tabs are not aligned when scrolling horizontally and a Tab doesn't fit. (Axel Bender)

Solution: Handle a Tab as a not fitting character. (Christian Brabandt)  
Also fix that ":redraw" does not scroll horizontally to show the cursor. And fix the test that depended on the old behavior.

Files: src/screen.c, src/ex\_docmd.c, src/testdir/test\_listlbr.vim,  
src/testdir/test\_listlbr\_utf8.vim,  
src/testdir/test\_breakindent.vim

Patch 8.0.0395 (after 8.0.0392)

Problem: Testing the + register fails with Motif.

Solution: Also ignore the "failed to create input context" error in the second gvim. Don't use msg() when it would result in a dialog.

Files: src/message.c, src/testdir/test\_gui.vim, src/testdir/setup\_gui.vim

Patch 8.0.0396

Problem: 'balloonexpr' only works synchronously.

Solution: Add balloon\_show(). (Jusufadis Bakamovic, closes #1449)

Files: runtime/doc/eval.txt, src/evalfunc.c, src/os\_unix.c,  
src/os\_win32.c

Patch 8.0.0397 (after 8.0.0392)

Problem: Cannot build with the viminfo feature but without the eval feature.

Solution: Adjust #ifdef. (John Marriott)

Files: src/message.c, src/misc2.c

Patch 8.0.0398

Problem: Illegal memory access with "t".

Solution: Use strncmp() instead of memcmp(). (Dominique Pelle, closes #1528)

Files: src/search.c, src/testdir/test\_search.vim

Patch 8.0.0399

Problem: Crash when using balloon\_show() when not supported. (Hirohito Higashi)

Solution: Check for balloonEval not to be NULL. (Ken Takata)

Files: src/evalfunc.c, src/testdir/test\_functions.vim

Patch 8.0.0400

Problem: Some tests have a one second delay.

Solution: Add --not-a-term in RunVim().

Files: src/testdir/shared.vim

Patch 8.0.0401

Problem: Test fails with missing balloon feature.

Solution: Add check for balloon feature.

Files: src/testdir/test\_functions.vim

Patch 8.0.0402

Problem: :map completion does not have <special>. (Dominique Pelle)

Solution: Recognize <special> in completion. Add a test.

Files: src/getchar.c, src/testdir/test\_cmdline.vim

## Patch 8.0.0403

Problem: GUI tests may fail.

Solution: Ignore the E285 error better. (Kazunobu Kuriyama)

Files: src/testdir/test\_gui.vim, src/testdir/test\_gui\_init.vim

## Patch 8.0.0404

Problem: Not enough testing for quickfix.

Solution: Add some more tests. (Yegappan Lakshmanan)

Files: src/testdir/test\_quickfix.vim

## Patch 8.0.0405

Problem: v:progbath may become invalid after ":cd".

Solution: Turn v:progbath into a full path if needed.

Files: src/main.c, src/testdir/test\_startup.vim, runtime/doc/eval.txt

## Patch 8.0.0406

Problem: The arabic shaping code is verbose.

Solution: Shorten the code without changing the functionality.

Files: src/arabic.c

## Patch 8.0.0407 (after 8.0.0388)

Problem: Filtering folds with marker method not tested.

Solution: Also set 'foldmethod' to "marker".

Files: src/testdir/test\_fold.vim

## Patch 8.0.0408

Problem: Updating folds does not work properly when inserting a file and a few other situations.

Solution: Adjust the way folds are updated. (Matthew Malcomson)

Files: src/fold.c, src/testdir/test\_fold.vim

## Patch 8.0.0409

Problem: set\_progbath is defined but not always used

Solution: Adjust #ifdef.

Files: src/main.c

## Patch 8.0.0410

Problem: Newer gettext/iconv library has extra dll file.

Solution: Add the file to the Makefile and nsis script. (Christian Brabandt)

Files: Makefile, nsis/gvim.nsi

## Patch 8.0.0411

Problem: We can't change the case in menu entries, it breaks translations.

Solution: Ignore case when looking up a menu translation.

Files: src/menu.c, src/testdir/test\_menu.vim

## Patch 8.0.0412 (after 8.0.0411)

Problem: Menu test fails on MS-Windows.

Solution: Use a menu entry with only ASCII characters.

Files: src/testdir/test\_menu.vim

## Patch 8.0.0413 (after 8.0.0412)

Problem: Menu test fails on MS-Windows using gvim.

Solution: First delete the English menus.

Files: src/testdir/test\_menu.vim

## Patch 8.0.0414

Problem: Balloon eval is not tested.

Solution: Add a few balloon tests. (Kazunobu Kuriyama)

Files: src/testdir/test\_gui.vim

## Patch 8.0.0415 (after 8.0.0414)



Problem: Balloon test fails on MS-Windows.  
Solution: Test with 0x7fffffff instead of 0xffffffff.  
Files: src/testdir/test\_gui.vim

Patch 8.0.0416

Problem: Setting v:progbath is not quite right.  
Solution: On MS-Windows add the extension. On Unix use the full path for a relative directory. (partly by James McCoy, closes #1531)  
Files: src/main.c, src/os\_win32.c, src/os\_unix.c

Patch 8.0.0417

Problem: Test for the clipboard fails sometimes.  
Solution: Add it to the flaky tests.  
Files: src/testdir/runtest.vim

Patch 8.0.0418

Problem: ASAN logs are disabled and don't cause a failure.  
Solution: Enable ASAN logs and fail if not empty. (James McCoy, closes #1425)  
Files: .travis.yml

Patch 8.0.0419

Problem: Test for v:progbath fails on MS-Windows.  
Solution: Expand to full path. Also add ".exe" when the path is an absolute path.  
Files: src/os\_win32.c, src/main.c

Patch 8.0.0420

Problem: When running :make the output may be in the system encoding, different from 'encoding'.  
Solution: Add the 'makeencoding' option. (Ken Takata)  
Files: runtime/doc/options.txt, runtime/doc/quickfix.txt, runtime/doc/quickref.txt, src/Makefile, src/buffer.c, src/if\_cscope.c, src/main.c, src/option.c, src/option.h, src/proto/quickfix.pro, src/quickfix.c, src/structs.h, src/testdir/Make\_all.mak, src/testdir/test\_makeencoding.py, src/testdir/test\_makeencoding.vim

Patch 8.0.0421

Problem: Diff mode is displayed wrong when adding a line at the end of a buffer.  
Solution: Adjust marks in diff mode. (James McCoy, closes #1329)  
Files: src/misc1.c, src/ops.c, src/testdir/test\_diffmode.vim

Patch 8.0.0422

Problem: Python test fails with Python 3.6.  
Solution: Convert new exception messages to old ones. (closes #1359)  
Files: src/testdir/test87.in

Patch 8.0.0423

Problem: The effect of adding "#" to 'cinoptions' is not always removed. (David Briscoe)  
Solution: Reset b\_ind\_hash\_comment. (Christian Brabandt, closes #1475)  
Files: src/misc1.c, src/Makefile, src/testdir/Make\_all.mak, src/testdir/test\_cindent.vim, src/testdir/test3.in

Patch 8.0.0424

Problem: Compiler warnings on MS-Windows. (Ajit Thakkar)  
Solution: Add type casts.  
Files: src/os\_win32.c

Patch 8.0.0425

Problem: Build errors when building without folding.  
Solution: Add #ifdefs. (John Marriott)  
Files: src/diff.c, src/edit.c, src/option.c, src/syntax.c

Patch 8.0.0426

Problem: Insufficient testing for statusline.  
Solution: Add several tests. (Dominique Pelle, closes #1534)  
Files: src/testdir/test\_statusline.vim

Patch 8.0.0427

Problem: 'makeencoding' missing from the options window.  
Solution: Add the entry.  
Files: runtime/optwin.vim

Patch 8.0.0428

Problem: Git and hg see new files after running tests. (Manuel Ortega)  
Solution: Add the generated file to .hgignore (or .gitignore). Delete the resulting verbose file. (Christian Brabandt) Improve dependency on opt\_test.vim. Reset the 'more' option.  
Files: .hgignore, src/gen\_opt\_test.vim, src/testdir/gen\_opt\_test.vim, src/Makefile, src/testdir/Make\_all.mak, src/testdir/Makefile, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, Filelist

Patch 8.0.0429

Problem: Options test does not always test everything.  
Solution: Fix dependency for opt\_test.vim. Give a message when opt\_test.vim was not found.  
Files: src/testdir/test\_options.vim, src/testdir/gen\_opt\_test.vim, src/testdir/Makefile, src/testdir/Make\_all.mak, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak

Patch 8.0.0430

Problem: Options test fails or hangs on MS-Windows.  
Solution: Run it separately instead of part of test\_alot. Use "-S" instead of "-u" to run the script. Fix failures.  
Files: src/testdir/Make\_all.mak, src/testdir/test\_alot.vim, src/testdir/Makefile, src/testdir/Make\_dos.mak, src/testdir/Make\_ming.mak, src/testdir/gen\_opt\_test.vim

Patch 8.0.0431

Problem: 'cinoptions' cannot set indent for extern block.  
Solution: Add the "E" flag in 'cinoptions'. (Hirohito Higashi)  
Files: runtime/doc/indent.txt, src/miscl.c, src/structs.h, src/testdir/test\_cindent.vim

Patch 8.0.0432

Problem: "make shadow" creates an invalid link.  
Solution: Don't link "\*.vim". (Kazunobu Kuriyama)  
Files: src/Makefile

Patch 8.0.0433

Problem: Quite a few beeps when running tests.  
Solution: Set 'belloff' for these tests. (Christian Brabandt)  
Files: src/testdir/test103.in, src/testdir/test14.in, src/testdir/test29.in, src/testdir/test30.in, src/testdir/test32.in, src/testdir/test45.in, src/testdir/test72.in, src/testdir/test73.in, src/testdir/test77.in, src/testdir/test78.in, src/testdir/test85.in, src/testdir/test94.in, src/testdir/test\_alot.vim, src/testdir/test\_alot\_utf8.vim, src/testdir/test\_close\_count.in, src/testdir/test\_cmdline.vim,

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src/testdir/test_diffmode.vim, src/testdir/test_digraph.vim,
src/testdir/test_erasebackward.in, src/testdir/test_normal.vim,
src/testdir/test_packadd.vim, src/testdir/test_search.vim,
src/testdir/test_textobjects.vim, src/testdir/test_undo.vim,
src/testdir/test_usercommands.vim, src/testdir/test_visual.vim
```

**Patch 8.0.0434**

Problem: Clang version not correctly detected.  
Solution: Adjust the configure script. (Kazunobu Kuriyama)  
Files: src/configure.ac, src/auto/configure

**Patch 8.0.0435**

Problem: Some functions are not tested.  
Solution: Add more tests for functions. (Dominique Pelle, closes #1541)  
Files: src/testdir/test\_functions.vim

**Patch 8.0.0436**

Problem: Running the options test sometimes resizes the terminal.  
Solution: Clear out t\_WS.  
Files: src/testdir/gen\_opt\_test.vim

**Patch 8.0.0437**

Problem: The packadd test does not create the symlink correctly and does not test the right thing.  
Solution: Create the directory and symlink correctly.  
Files: src/testdir/test\_packadd.vim

**Patch 8.0.0438**

Problem: The fnamemodify test changes 'shell' in a way later tests may not be able to use system().  
Solution: Save and restore 'shell'.  
Files: src/testdir/test\_fnamemodify.vim

**Patch 8.0.0439**

Problem: Using ":%argdel" while the argument list is already empty gives an error. (Pavol Juhas)  
Solution: Don't give an error. (closes #1546)  
Files: src/ex\_cmds2.c, src/testdir/test\_arglist.vim

**Patch 8.0.0440**

Problem: Not enough test coverage in Insert mode.  
Solution: Add lots of tests. Add test\_override(). (Christian Brabandt, closes #1521)  
Files: runtime/doc/eval.txt, runtime/doc/usr\_41.txt, src/edit.c, src/evalfunc.c, src/globals.h, src/screen.c, src/testdir/Make\_all.mak, src/testdir/test\_cursor\_func.vim, src/testdir/test\_edit.vim, src/testdir/test\_search.vim, src/testdir/test\_assert.vim, src/Makefile, src/testdir/runtest.vim

**Patch 8.0.0441**

Problem: Dead code in #ifdef.  
Solution: Remove the #ifdef and #else part.  
Files: src/option.c

**Patch 8.0.0442**

Problem: Patch shell command uses double quotes around the argument, which allows for \$HOME to be expanded. (Etienne)  
Solution: Use single quotes on Unix. (closes #1543)  
Files: src/diff.c, src/testdir/test\_diffmode.vim

**Patch 8.0.0443**

Problem: Terminal width is set to 80 in test3.

Solution: Instead of setting 'columns' set 'wrapmargin' depending on  
'columns'.  
Files: src/testdir/test3.in

Patch 8.0.0444 (after 8.0.0442)

Problem: Diffpatch fails when the file name has a quote.  
Solution: Escape the name properly. (zetzei)  
Files: src/diff.c, src/testdir/test\_diffmode.vim

Patch 8.0.0445

Problem: Getpgid is not supported on all systems.  
Solution: Add a configure check.  
Files: src/configure.ac, src/auto/configure, src/config.h.in,  
src/os\_unix.c

Patch 8.0.0446

Problem: The ";" command does not work after characters with a lower byte  
that is NUL.  
Solution: Properly check for not having a previous character. (Hirohito  
Higashi)  
Files: src/Makefile, src/search.c, src/testdir/test\_alot\_utf8.vim,  
src/testdir/test\_charsearch\_utf8.vim

Patch 8.0.0447

Problem: Getting font name does not work on X11.  
Solution: Implement gui\_mch\_get\_fontname() for X11. Add more GUI tests.  
(Kazunobu Kuriyama)  
Files: src/gui\_x11.c, src/syntax.c, src/testdir/Make\_dos.mak,  
src/testdir/Make\_ming.mak, src/testdir/Makefile,  
src/testdir/gui\_init.vim, src/testdir/gui\_preinit.vim,  
src/testdir/test\_gui.vim, src/testdir/test\_gui\_init.vim,  
Filelist

Patch 8.0.0448

Problem: Some macros are in lower case, which can be confusing.  
Solution: Make a few lower case macros upper case.  
Files: src/macros.h, src/buffer.c, src/charset.c, src/ops.c, src/diff.c,  
src/edit.c, src/evalfunc.c, src/ex\_cmds.c, src/ex\_getln.c,  
src/fileio.c, src/fold.c, src/gui.c, src/gui\_beval.c, src/main.c,  
src/mark.c, src/misc1.c, src/move.c, src/normal.c,  
src/option.c, src/popupmnu.c, src/regexp.c, src/screen.c,  
src/search.c, src/spell.c, src/tag.c, src/ui.c, src/undo.c,  
src/version.c, src/workshop.c, src/if\_perl.xs

Patch 8.0.0449 (after 8.0.0448)

Problem: Part of fold patch accidentally included.  
Solution: Revert that part of the patch.  
Files: src/ex\_cmds.c

Patch 8.0.0450

Problem: v:proppath is not reliably set.  
Solution: Read /proc/self/exe if possible. (idea by Michal Grochmal)  
Also fixes missing #if.  
Files: src/main.c, src/config.h.in

Patch 8.0.0451

Problem: Some macros are in lower case.  
Solution: Make a few more macros upper case. Avoid lower case macros use an  
argument twice.  
Files: src/macros.h, src/charset.c, src/misc2.c, src/proto/misc2.pro,  
src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c,  
src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/fold.c,

```
src/gui.c, src/gui_gtk.c, src/mark.c, src/memline.c, src/mbyte.c,
src/menu.c, src/message.c, src/misc1.c, src/ops.c, src/option.c,
src/os_amiga.c, src/os_mswin.c, src/os_unix.c, src/os_win32.c,
src/popupmenu.c, src/regexp.c, src/regexp_nfa.c, src/screen.c,
src/search.c, src/spell.c, src/spellfile.c, src/syntax.c,
src/tag.c, src/ui.c, src/undo.c, src/window.c
```

## Patch 8.0.0452

Problem: Some macros are in lower case.

Solution: Make a few more macros upper case.

Files: src/vim.h, src/macros.h, src/evalfunc.c, src/fold.c,  
src/gui\_gtk.c, src/gui\_gtk\_x11.c, src/charset.c, src/diff.c,  
src/edit.c, src/eval.c, src/ex\_cmds.c, src/ex\_cmds2.c,  
src/ex\_docmd.c, src/ex\_getln.c, src/fileio.c, src/getchar.c,  
src/gui.c, src/gui\_w32.c, src/if\_cscope.c, src/mbyte.c,  
src/menu.c, src/message.c, src/misc1.c, src/misc2.c, src/normal.c,  
src/ops.c, src/option.c, src/os\_unix.c, src/os\_win32.c,  
src/quickfix.c, src/regexp.c, src/regexp\_nfa.c, src/screen.c,  
src/search.c, src/spell.c, src/syntax.c, src/tag.c, src/userfunc.c

## Patch 8.0.0453

Problem: Adding fold marker creates new comment.

Solution: Use an existing comment if possible. (LemonBoy, closes #1549)

Files: src/ops.c, src/proto/ops.pro, src/fold.c,  
src/testdir/test\_fold.vim

## Patch 8.0.0454

Problem: Compiler warnings for comparing unsigned char with 256 always  
being true. (Manuel Ortega)

Solution: Add type cast.

Files: src/screen.c, src/charset.c

## Patch 8.0.0455

Problem: The mode test may hang in Test\_mode(). (Michael Soyka)

Solution: Set 'complete' to only search the current buffer (as suggested by  
Michael)

Files: src/testdir/test\_functions.vim

## Patch 8.0.0456

Problem: Typo in MinGW test makefile.

Solution: Change an underscore to a dot. (Michael Soyka)

Files: src/testdir/Make\_ming.mak

## Patch 8.0.0457

Problem: Using :move messes up manual folds.

Solution: Split adjusting marks and folds. Add foldMoveRange(). (neovim  
patch #6221)

Files: src/ex\_cmds.c, src/fold.c, src/mark.c, src/proto/fold.pro,  
src/proto/mark.pro src/testdir/test\_fold.vim

## Patch 8.0.0458

Problem: Potential crash if adding list or dict to dict fails.

Solution: Make sure the reference count is correct. (Nikolai Pavlov, closes  
#1555)

Files: src/dict.c

## Patch 8.0.0459 (after 8.0.0457)

Problem: Old fix for :move messing up folding no longer needed, now that we  
have a proper solution.

Solution: Revert patch 7.4.700. (Christian Brabandt)

Files: src/ex\_cmds.c

Patch 8.0.0460 (after 8.0.0452)

Problem: Can't build on HPUX.

Solution: Fix argument names in vim\_stat(). (John Marriott)

Files: src/misc2.c

Patch 8.0.0461 (after 8.0.0457)

Problem: Test 45 hangs on MS-Windows.

Solution: Reset 'shiftwidth'. Also remove redundant function.

Files: src/fold.c, src/testdir/test45.in

Patch 8.0.0462

Problem: If an MS-Windows tests succeeds at first and then fails in a way it does not produce a test.out file it looks like the test succeeded.

Solution: Delete the previous output file.

Files: src/testdir/Make\_dos.mak

Patch 8.0.0463

Problem: Resetting 'compatible' in defaults.vim has unexpected side effects. (David Fishburn)

Solution: Only reset 'compatible' if it was set.

Files: runtime/defaults.vim

Patch 8.0.0464

Problem: Can't find executable name on Solaris and FreeBSD.

Solution: Check for "/proc/self/path/a.out". (Danek Duvall) And for "/proc/curproc/file".

Files: src/config.h.in, src/configure.ac, src/main.c, src/auto/configure

Patch 8.0.0465

Problem: Off-by-one error in using :move with folding.

Solution: Correct off-by-one mistakes and add more tests. (Matthew Malcomson)

Files: src/fold.c, src/testdir/test\_fold.vim

Patch 8.0.0466

Problem: There are still a few macros that should be all-caps.

Solution: Make a few more macros all-caps.

Files: src/buffer.c, src/edit.c, src/ex\_cmds.c, src/ex\_cmds2.c, src/ex\_docmd.c, src/ex\_getln.c, src/farsi.c, src/fileio.c, src/getchar.c, src/gui\_beval.c, src/hardcopy.c, src/if\_cscope.c, src/if\_xcmdsrv.c, src/mark.c, src/memline.c, src/menu.c, src/message.c, src/misc1.c, src/normal.c, src/ops.c, src/option.c, src/quickfix.c, src/screen.c, src/search.c, src/syntax.c, src/tag.c, src/term.c, src/term.h, src/ui.c, src/undo.c, src/userfunc.c, src/version.c, src/vim.h

Patch 8.0.0467

Problem: Using g< after :for does not show the right output. (Marcin Szamotulski)

Solution: Call msg\_sb\_eol() in :echomsg.

Files: src/eval.c

Patch 8.0.0468

Problem: After aborting an Ex command g< does not work. (Marcin Szamotulski)

Solution: Postpone clearing scrollbar messages to until the command line has been entered. Also fix that the screen isn't redrawn if after g< the command line is cancelled.

Files: src/message.c, src/proto/message.pro, src/ex\_getln.c, src/misc2.c, src/gui.c

## Patch 8.0.0469

Problem: Compiler warnings on MS-Windows.  
Solution: Add type casts. (Christian Brabandt)  
Files: src/fold.c

## Patch 8.0.0470

Problem: Not enough testing for help commands.  
Solution: Add a few more help tests. (Dominique Pelle, closes #1565)  
Files: src/testdir/test\_help.vim, src/testdir/test\_help\_tagjump.vim

## Patch 8.0.0471

Problem: Exit callback test sometimes fails.  
Solution: Add it to the list of flaky tests.  
Files: src/testdir/runtest.vim

## Patch 8.0.0472

Problem: When a test fails and test.log is created, Test\_edit\_CTRL\_I matches it instead of test1.in.  
Solution: Match with runtest.vim instead.  
Files: src/testdir/test\_edit.vim

## Patch 8.0.0473

Problem: No test covering arg\_all().  
Solution: Add a test expanding ##.  
Files: src/testdir/test\_arglist.vim

## Patch 8.0.0474

Problem: The client-server feature is not tested.  
Solution: Add a test.  
Files: src/Makefile, src/testdir/Make\_all.mak, src/testdir/shared.vim, src/testdir/test\_clientserver.vim, src/os\_mswin.c

## Patch 8.0.0475

Problem: Not enough testing for the client-server feature.  
Solution: Add more tests. Add the remote\_startserver() function. Fix that a locally evaluated expression uses function-local variables.  
Files: src/if\_xcmdsrv.c, src/evalfunc.c, src/os\_mswin.c, src/proto/main.pro, src/testdir/test\_clientserver.vim, runtime/doc/eval.txt

## Patch 8.0.0476 (after 8.0.0475)

Problem: Missing change to main.c.  
Solution: Add new function.  
Files: src/main.c

## Patch 8.0.0477

Problem: The client-server test may hang when failing.  
Solution: Set a timer. Add assert\_report()  
Files: src/testdir/test\_clientserver.vim, src/testdir/runtest.vim, src/eval.c, src/evalfunc.c, src/proto/eval.pro, src/if\_xcmdsrv.c, src/os\_mswin.c, runtime/doc/eval.txt

## Patch 8.0.0478

Problem: Tests use assert\_true(0) and assert\_false(1) to report errors.  
Solution: Use assert\_report().  
Files: src/testdir/test\_cscope.vim, src/testdir/test\_expr.vim, src/testdir/test\_perl.vim, src/testdir/test\_channel.vim, src/testdir/test\_cursor\_func.vim, src/testdir/test\_gui.vim, src/testdir/test\_menu.vim, src/testdir/test\_popup.vim, src/testdir/test\_viminfo.vim, src/testdir/test\_vimscript.vim, src/testdir/test\_assert.vim

## Patch 8.0.0479

Problem: remote\_peek() is not tested.

Solution: Add a test.

Files: src/testdir/test\_clientserver.vim, src/testdir/runtest.vim

## Patch 8.0.0480

Problem: The remote\_peek() test fails on MS-Windows.

Solution: Check for pending messages. Also report errors in the first run if a flaky test fails twice.

Files: src/os\_mswin.c, src/testdir/runtest.vim

## Patch 8.0.0481

Problem: Unnecessary if statement.

Solution: Remove the statement. Fix "it's" vs "its" mistakes. (Dominique Pelle, closes #1568)

Files: src/syntax.c

## Patch 8.0.0482

Problem: The setbufvar() function may mess up the window layout. (Kay Z.)

Solution: Do not check the window to be valid if it is NULL.

Files: src/window.c, src/testdir/test\_functions.vim

## Patch 8.0.0483

Problem: Illegal memory access when using :all. (Dominique Pelle)

Solution: Adjust the cursor position right after setting "curwin".

Files: src/window.c, src/testdir/test\_window\_cmd.vim

## Patch 8.0.0484

Problem: Using :lhelpgrep with an argument that should fail does not produce an error if the previous :helpgrep worked.

Solution: Use another way to detect that autocmds made the quickfix info invalid. (Yegappan Lakshmanan)

Files: src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 8.0.0485

Problem: Not all windows commands are tested.

Solution: Add more tests for windows commands. (Dominique Pelle, closes #1575) Run test\_autocmd separately, it interferes with other tests. Fix tests that depended on side effects.

Files: src/testdir/test\_window\_cmd.vim, src/testdir/test\_alot.vim, src/testdir/test\_autocmd.vim, src/testdir/test\_fnamemodify.vim, src/testdir/test\_functions.vim, src/testdir/test\_delete.vim, src/testdir/Make\_all.mak

## Patch 8.0.0486

Problem: Crash and endless loop when closing windows in a SessionLoadPost autocmd.

Solution: Check for valid tabpage. (partly neovim #6308)

Files: src/testdir/test\_autocmd.vim, src/fileio.c, src/proto/window.pro, src/window.c

## Patch 8.0.0487

Problem: The autocmd test hangs on MS-Windows.

Solution: Skip the hanging tests for now.

Files: src/testdir/test\_autocmd.vim

## Patch 8.0.0488

Problem: Running tests leaves an "xxx" file behind.

Solution: Delete the 'verbosefile' after resetting the option.

Files: src/testdir/gen\_opt\_test.vim



## Patch 8.0.0489

Problem: Clipboard and "\*" register is not tested.  
Solution: Add a test for Mac and X11. (Kazunobu Kuriyama)  
Files: src/Makefile, src/testdir/Make\_all.mak,  
src/testdir/test\_quotestar.vim, src/testdir/runtest.vim

## Patch 8.0.0490

Problem: Splitting a 'winfixwidth' window vertically makes it one column smaller. (Dominique Pelle)  
Solution: Add one to the width for the separator.  
Files: src/window.c, src/testdir/test\_window\_cmd.vim

## Patch 8.0.0491

Problem: The quotestar test fails when a required feature is missing.  
Solution: Prepend "Skipped" to the thrown exception.  
Files: src/testdir/test\_quotestar.vim

## Patch 8.0.0492

Problem: A failing client-server request can make Vim hang.  
Solution: Add a timeout argument to functions that wait.  
Files: src/evalfunc.c, src/if\_xcmdsrv.c, src/proto/if\_xcmdsrv.pro,  
src/main.c, src/os\_mswin.c, src/proto/os\_mswin.pro,  
src/vim.h, runtime/doc/eval.txt, src/testdir/test\_clientserver.vim

## Patch 8.0.0493

Problem: Crash with cd command with very long argument.  
Solution: Check for running out of space. (Dominique Pelle, closes #1576)  
Files: src/testdir/test\_alot.vim, src/testdir/test\_cd.vim, src/Makefile,  
src/misc2.c

## Patch 8.0.0494

Problem: Build failure with older compiler on MS-Windows.  
Solution: Move declaration to start of block.  
Files: src/evalfunc.c, src/main.c, src/os\_mswin.c

## Patch 8.0.0495

Problem: The quotestar test uses a timer instead of a timeout, thus it cannot be rerun like a flaky test.  
Solution: Remove the timer and add a timeout. (Kazunobu Kuriyama)  
Files: src/testdir/test\_quotestar.vim

## Patch 8.0.0496

Problem: Insufficient testing for folding.  
Solution: Add a couple more fold tests. (Dominique Pelle, closes #1579)  
Files: src/testdir/test\_fold.vim

## Patch 8.0.0497

Problem: Arabic support is not fully tested.  
Solution: Add more tests for the untested functions. Comment out unreachable code.  
Files: src/arabic.c, src/testdir/test\_arabic.vim

## Patch 8.0.0498

Problem: Two autocmd tests are skipped on MS-Windows.  
Solution: Make the test pass on MS-Windows. Write the messages in a file instead of getting the output of system().  
Files: src/testdir/test\_autocmd.vim

## Patch 8.0.0499

Problem: taglist() does not prioritize tags for a buffer.  
Solution: Add an optional buffer argument. (Duncan McDougall, closes #1194)  
Files: runtime/doc/eval.txt, src/evalfunc.c, src/proto/tag.pro,

src/Makefile, src/tag.c, src/testdir/test\_alot.vim,  
src/testdir/test\_taglist.vim

Patch 8.0.0500

Problem: Quotestar test is still a bit flaky.

Solution: Add a slower check for v:version.

Files: src/testdir/test\_quotestar.vim

Patch 8.0.0501

Problem: On MS-Windows "!:start" does not work as expected.

Solution: When creating a process fails try passing the argument to  
ShellExecute(). (Katsuya Hino, closes #1570)

Files: runtime/doc/os\_win32.txt, src/os\_win32.c

Patch 8.0.0502

Problem: Coverity complains about possible NULL pointer.

Solution: Add an assert(), let's see if this works on all systems.

Files: src/window.c

Patch 8.0.0503

Problem: Endless loop in updating folds with 32 bit ints.

Solution: Subtract from LHS instead of add to the RHS. (Matthew Malcomson)

Files: src/fold.c

Patch 8.0.0504

Problem: Looking up an Ex command is a bit slow.

Solution: Instead of just using the first letter, also use the second letter  
to skip ahead in the list of commands. Generate the table with a  
Perl script. (Dominique Pelle, closes #1589)

Files: src/Makefile, src/create\_cmdidxs.pl, src/ex\_docmd.c, Filelist

Patch 8.0.0505

Problem: Failed window split for :stag not handled. (Coverity CID 99204)

Solution: If the split fails skip to the end. (bstaletic, closes #1577)

Files: src/tag.c

Patch 8.0.0506 (after 8.0.0504)

Problem: Can't build with ANSI C.

Solution: Move declarations to start of block.

Files: src/ex\_docmd.c

Patch 8.0.0507

Problem: Client-server tests fail when \$DISPLAY is not set.

Solution: Check for E240 before running the test.

Files: src/testdir/test\_quotestar.vim, src/testdir/test\_clientserver.vim

Patch 8.0.0508

Problem: Coveralls no longer shows per-file coverage.

Solution: Add coverage from codecov.io. (Christian Brabandt)

Files: .travis.yml

Patch 8.0.0509

Problem: No link to codecov.io results.

Solution: Add a badge to the readme file.

Files: README.md

Patch 8.0.0510 (after 8.0.0509)

Problem: Typo in link to codecov.io results.

Solution: Remove duplicate https:.

Files: README.md

Patch 8.0.0511

Problem: Message for skipping client-server tests is unclear.  
Solution: Be more specific about what's missing (Hirohito Higashi, Kazunobu Kuriyama)  
Files: src/testdir/test\_quotestar.vim, src/testdir/test\_clientserver.vim

#### Patch 8.0.0512

Problem: Check for available characters takes too long.  
Solution: Only check did\_start\_blocking if wtime is negative. (Daisuke Suzuki, closes #1591)  
Files: src/os\_unix.c

#### Patch 8.0.0513 (after 8.0.0201)

Problem: Getting name of cleared highlight group is wrong. (Matt Wozniski)  
Solution: Only skip over cleared names for completion. (closes #1592)  
Also fix that a cleared group causes duplicate completions.  
Files: src/syntax.c, src/proto/syntax.pro, src/evalfunc.c,  
src/ex\_cmds.c, src/testdir/test\_syntax.vim,  
src/testdir/test\_cmdline.vim

#### Patch 8.0.0514

Problem: Script for creating cmdidxs can be improved.  
Solution: Count skipped lines instead of collecting the lines. Add "const". (Dominique Pelle, closes #1594)  
Files: src/create\_cmdidxs.pl, src/ex\_docmd.c

#### Patch 8.0.0515

Problem: ml\_get errors in silent Ex mode. (Dominique Pelle)  
Solution: Clear valid flags when setting the cursor. Set the topline when not in full screen mode.  
Files: src/ex\_docmd.c, src/move.c, src/testdir/test\_startup.vim

#### Patch 8.0.0516

Problem: A large count on a normal command causes trouble. (Dominique Pelle)  
Solution: Make "opcount" long.  
Files: src/globals.h, src/testdir/test\_normal.vim

#### Patch 8.0.0517

Problem: There is no way to remove quickfix lists (for testing).  
Solution: Add the 'f' action to setqflist(). Add tests. (Yegappan Lakshmanan)  
Files: runtime/doc/eval.txt, src/evalfunc.c, src/quickfix.c,  
src/testdir/test\_quickfix.vim

#### Patch 8.0.0518

Problem: Storing a zero byte from a multi-byte character causes fold text to show up wrong.  
Solution: Avoid putting zero in ScreenLines. (Christian Brabandt, closes #1567)  
Files: src/screen.c, src/testdir/test\_display.vim

#### Patch 8.0.0519

Problem: Character classes are not well tested. They can differ between platforms.  
Solution: Add tests. In the documentation make clear which classes depend on what library function. Only use :cntrl: and :graph: for ASCII. (Kazunobu Kuriyama, Dominique Pelle, closes #1560)  
Update the documentation.  
Files: src/regexp.c, src/regexp\_nfa.c, runtime/doc/pattern.txt,  
src/testdir/test\_regexp\_utf8.vim

#### Patch 8.0.0520

Problem: Using a function pointer instead of the actual function, which we know.  
Solution: Change mb\_ functions to utf\_ functions when already checked for Unicode. (Dominique Pelle, closes #1582)  
Files: src/message.c, src/misc2.c, src/regexp.c, src/regexp\_nfa.c, src/screen.c, src/spell.c

## Patch 8.0.0521

Problem: GtkForm handling is outdated.  
Solution: Get rid of event filter functions. Get rid of GtkForm.width and .height. Eliminate gtk\_widget\_size\_request() calls. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_f.c, src/gui\_gtk\_f.h

## Patch 8.0.0522

Problem: MS-Windows: when 'clipboard' is "unnamed" yyp does not work in a :global command.  
Solution: When setting the clipboard was postponed, do not clear the register.  
Files: src/ops.c, src/proto/ui.pro, src/ui.c, src/globals.h, src/testdir/test\_global.vim, src/Makefile, src/testdir/test\_alot.vim

## Patch 8.0.0523

Problem: dv} deletes part of a multi-byte character. (Urtica Dioica)  
Solution: Include the whole character.  
Files: src/search.c, src/testdir/test\_normal.vim

## Patch 8.0.0524 (after 8.0.0518)

Problem: Folds are messed up when 'encoding' is "utf-8".  
Solution: Also set the fold character when it's not multi-byte.  
Files: src/screen.c, src/testdir/test\_display.vim

## Patch 8.0.0525

Solution: Completion for user command argument not tested.  
Problem: Add a test.  
Files: src/testdir/test\_cmdline.vim

## Patch 8.0.0526

Problem: Coverity complains about possible negative value.  
Solution: Check return value of ftell() not to be negative.  
Files: src/os\_unix.c

## Patch 8.0.0527

Problem: RISC OS support was removed long ago, but one file is still included.  
Solution: Delete the file. (Thomas Dzedzic, closes #1603)  
Files: Filelist, src/swis.s

## Patch 8.0.0528

Problem: When 'wildmenu' is set and 'wildmode' has "longest" then the first file name is highlighted, even though the text shows the longest match.  
Solution: Do not highlight the first match. (LemonBoy, closes #1602)  
Files: src/ex\_getln.c

## Patch 8.0.0529

Problem: Line in test commented out.  
Solution: Uncomment the lines for character classes that were failing before 8.0.0519. (Dominique Pelle, closes #1599)  
Files: src/testdir/test\_regexp\_utf8.vim

## Patch 8.0.0530

Problem: Buffer overflow when 'columns' is very big. (Nikolai Pavlov)  
Solution: Correctly compute where to truncate. Fix translation.  
(closes #1600)  
Files: src/edit.c, src/testdir/test\_edit.vim

## Patch 8.0.0531 (after 8.0.0530)

Problem: Test with long directory name fails on non-unix systems.  
Solution: Skip the test on non-unix systems.  
Files: src/testdir/test\_edit.vim

## Patch 8.0.0532 (after 8.0.0531)

Problem: Test with long directory name fails on Mac.  
Solution: Skip the test on Mac systems.  
Files: src/testdir/test\_edit.vim

## Patch 8.0.0533

Problem: Abbreviation doesn't work after backspacing newline. (Hkonrk)  
Solution: Set the insert start column. (closes #1609)  
Files: src/testdir/test\_mapping.vim, src/edit.c

## Patch 8.0.0534

Problem: Defaults.vim does not work well with tiny features. (crd477)  
Solution: When the +eval feature is not available always reset 'compatible'.  
Files: runtime/defaults.vim

## Patch 8.0.0535

Problem: Memory leak when exiting from within a user function.  
Solution: Clear the function call stack on exit.  
Files: src/userfunc.c

## Patch 8.0.0536

Problem: Quickfix window not updated when freeing quickfix stack.  
Solution: Update the quickfix window. (Yegappan Lakshmanan)  
Files: src/quickfix.c, src/testdir/test\_quickfix.vim

## Patch 8.0.0537

Problem: Illegal memory access with :z and large count.  
Solution: Check for number overflow, using long instead of int. (Dominique Pelle, closes #1612)  
Files: src/Makefile, src/ex\_cmds.c, src/testdir/test\_alot.vim, src/testdir/test\_ex\_z.vim

## Patch 8.0.0538

Problem: No test for falling back to default term value.  
Solution: Add a test.  
Files: src/testdir/test\_startup.vim

## Patch 8.0.0539 (after 8.0.0538)

Problem: Startup test fails on Mac.  
Solution: Use another term name, "unknown" is known. Avoid a 2 second delay.  
Files: src/testdir/test\_startup.vim, src/main.c, src/proto/main.pro, src/term.c

## Patch 8.0.0540 (after 8.0.0540)

Problem: Building unit tests fails.  
Solution: Move params outside of #ifdef.  
Files: src/main.c, src/message\_test.c

## Patch 8.0.0541

Problem: Compiler warning on MS-Windows.  
Solution: Add a type cast. (Mike Williams)

Files: src/edit.c

Patch 8.0.0542

Problem: getpos() can return a negative line number. (haya14busa)

Solution: Handle a zero topline and botline. (closes #1613)

Files: src/eval.c, runtime/doc/eval.txt

Patch 8.0.0543

Problem: Test\_edit causes older xfce4-terminal to close. (Dominique Pelle)

Solution: Reduce number of columns to 2000. Try to restore the window position.

Files: src/testdir/test\_edit.vim, src/evalfunc.c, src/term.c, src/proto/term.pro, src/term.h

Patch 8.0.0544

Problem: Cppcheck warnings.

Solution: Use temp variable. Change NUL to NULL. Swap conditions. (Dominique Pelle)

Files: src/channel.c, src/edit.c, src/farsi.c

Patch 8.0.0545

Problem: Edit test may fail on some systems.

Solution: If creating a directory with a very long path fails, bail out.

Files: src/testdir/test\_edit.vim

Patch 8.0.0546

Problem: Swap file exists briefly when opening the command window.

Solution: Set the noswapfile command modifier before splitting the window. (James McCoy, closes #1620)

Files: src/ex\_getln.c, src/option.c

Patch 8.0.0547

Problem: Extra line break in verbosefile when using ":echomsg". (Ingo Karkat)

Solution: Don't call msg\_start(). (closes #1618)

Files: src/eval.c, src/testdir/test\_cmdline.vim

Patch 8.0.0548

Problem: Saving the redo buffer only works one time, resulting in the "." command not working well for a function call inside another function call. (Ingo Karkat)

Solution: Save the redo buffer at every user function call. (closes #1619)

Files: src/getchar.c, src/proto/getchar.pro, src/structs.h, src/fileio.c, src/userfunc.c, src/testdir/test\_functions.vim

Patch 8.0.0549

Problem: No test for the 8g8 command.

Solution: Add a test. (Dominique Pelle, closes #1615)

Files: src/testdir/test\_normal.vim

Patch 8.0.0550

Problem: Some etags format tags file use 0x01, breaking the parsing.

Solution: Use 0x02 for TAG\_SEP. (James McCoy, closes #1614)

Files: src/tag.c, src/testdir/test\_taglist.vim

Patch 8.0.0551

Problem: The typeahead buffer is reallocated too often.

Solution: Re-use the existing buffer if possible.

Files: src/getchar.c

Patch 8.0.0552

Problem: Toupper and tolower don't work properly for Turkish when 'casemap'

is empty. (Bjorn Linse)  
Solution: Check the 'casemap' options when deciding how to upper/lower case.  
Files: src/charset.c, src/testdir/test\_normal.vim

Patch 8.0.0553 (after 8.0.0552)

Problem: Toupper/tolower test with Turkish locale fails on Mac.  
Solution: Skip the test on Mac.  
Files: src/testdir/test\_normal.vim

Patch 8.0.0554 (after 8.0.0552)

Problem: Toupper and tolower don't work properly for Turkish when 'casemap' contains "keepascii". (Bjorn Linse)  
Solution: When 'casemap' contains "keepascii" use ASCII toupper/tolower.  
Files: src/charset.c, src/testdir/test\_normal.vim

Patch 8.0.0555 (after 8.0.0552)

Problem: Toupper/tolower test fails on OSX without Darwin.  
Solution: Skip that part of the test also for OSX. (Kazunobu Kuriyama)  
Files: src/testdir/test\_normal.vim

Patch 8.0.0556

Problem: Getting the window position fails if both the GUI and term code is built in.  
Solution: Return after getting the GUI window position. (Kazunobu Kuriyama)  
Files: src/evalfunc.c

Patch 8.0.0557

Problem: GTK: using static gravities is not useful.  
Solution: Remove setting static gravities. (Kazunobu Kuriyama)  
Files: src/gui\_gtk\_f.c

Patch 8.0.0558

Problem: The :ownsyntax command is not tested.  
Solution: Add a test. (Dominique Pelle, closes #1622)  
Files: src/testdir/test\_syntax.vim

Patch 8.0.0559

Problem: Setting 'ttytype' to xxx does not always fail as expected. (Marvin Schmidt)  
Solution: Catch both possible errors. (closes #1601)  
Files: src/testdir/test\_options.vim

Patch 8.0.0560

Problem: :windo allows for ! but it's not supported.  
Solution: Disallow passing !. (Hirohito Higashi)  
Files: src/ex\_cmds.h

Patch 8.0.0561

Problem: Undefined behavior when using backslash after empty line.  
Solution: Check for an empty line. (Dominique Pelle, closes #1631)  
Files: src/misc2.c, src/testdir/test\_vimscript.vim

Patch 8.0.0562

Problem: Not enough test coverage for syntax commands.  
Solution: Add a few more tests. (Dominique Pelle, closes #1624)  
Files: src/testdir/test\_cmdline.vim, src/testdir/test\_syntax.vim

Patch 8.0.0563

Problem: Crash when getting the window position in tmux. (Marvin Schmidt)  
Solution: Add t\_GP to the list of terminal options. (closes #1627)  
Files: src/option.c

## Patch 8.0.0564

Problem: Cannot detect Bazel BUILD files on some systems.  
Solution: Check for BUILD after script checks. (Issue #1340)  
Files: runtime/filetype.vim

## Patch 8.0.0565

Problem: Using freed memory in :caddbuf after clearing quickfix list.  
(Dominique Pelle)  
Solution: Set qf\_last to NULL.  
Files: src/quickfix.c

## Patch 8.0.0566

Problem: Setting 'nocompatible' for the tiny version moves the cursor.  
Solution: Use another trick to skip commands when the +eval feature is  
present. (Christian Brabandt, closes #1630)  
Files: runtime/defaults.vim

## Patch 8.0.0567

Problem: Call for requesting color and ambiwidth is too early. (Hirohito  
Higashi)  
Solution: Move the call down to below resetting "starting".  
Files: src/main.c

## Patch 8.0.0568

Problem: "lgd" may hang.  
Solution: Don't get stuck in one position. (Christian Brabandt, closes #1643)  
Files: src/testdir/test\_goto.vim, src/normal.c

## Patch 8.0.0569

Problem: Bracketed paste is still enabled when executing a shell command.  
(Michael Smith)  
Solution: Disable bracketed paste when going into cooked mode. (closes #1638)  
Files: src/term.c

## Patch 8.0.0570

Problem: Can't run make with several jobs, creating directories has a race  
condition.  
Solution: Use the MKDIR\_P autoconf mechanism. (Eric N. Vander Weele,  
closes #1639)  
Files: src/configure.ac, src/auto/configure, src/Makefile,  
src/config.mk.in, src/install-sh, src/mkinstalldirs, Filelist

## Patch 8.0.0571

Problem: The cursor line number becomes negative when using :z^ in an empty  
buffer. (neovim #6557)  
Solution: Correct the line number. Also reset the column.  
Files: src/testdir/test\_ex\_z.vim, src/ex\_cmds.c

## Patch 8.0.0572

Problem: Building the command table requires Perl.  
Solution: Use a Vim script solution. (Dominique Pelle, closes #1641)  
Files: src/Makefile, src/create\_cmdidxs.pl, src/create\_cmdidxs.vim,  
src/ex\_cmdidxs.h, src/ex\_docmd.c, Filelist

## Patch 8.0.0573

Problem: Running parallel make after distclean fails. (Manuel Ortega)  
Solution: Instead of using targets "scratch config myself" use "reconfig".  
Files: src/Makefile, src/config.mk.dist

## Patch 8.0.0574

Problem: Get only one quickfix list after :caddbuf.  
Solution: Reset qf\_multiline. (Yegappan Lakshmanan)



Files: src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0575

Problem: Using freed memory when resetting 'indentexpr' while evaluating it. (Dominique Pelle)

Solution: Make a copy of 'indentexpr'.

Files: src/misc1.c, src/testdir/test\_options.vim

Patch 8.0.0576 (after 8.0.0570 and 8.0.0573)

Problem: Can't build when configure chooses "install-sh". (Daniel Hahler)

Solution: Always use install-sh. Fix remaining use of mkinstalldirs. (closes #1647)

Files: src/installman.sh, src/installml.sh, src/config.mk.in, src/configure.ac, src/auto/configure, src/Makefile

Patch 8.0.0577 (after 8.0.0575)

Problem: Warning for uninitialized variable. (John Marriott)

Solution: Initialize "indent".

Files: src/misc1.c

Patch 8.0.0578

Problem: :simalt on MS-Windows does not work properly.

Solution: Put something in the typeahead buffer. (Christian Brabandt)

Files: src/gui\_w32.c

Patch 8.0.0579

Problem: Duplicate test case for quickfix.

Solution: Remove the function. (Yegappan Lakshmanan)

Files: src/testdir/test\_quickfix.vim

Patch 8.0.0580

Problem: Cannot set the valid flag with setqflist().

Solution: Add the "valid" argument. (Yegappan Lakshmanan, closes #1642)

Files: runtime/doc/eval.txt, src/quickfix.c, src/testdir/test\_quickfix.vim

Patch 8.0.0581

Problem: Moving folded text is sometimes not correct.

Solution: Bail out when "move\_end" is zero. (Matthew Malcomson)

Files: src/fold.c, src/testdir/test\_fold.vim

Patch 8.0.0582

Problem: Illegal memory access with z= command. (Dominique Pelle)

Solution: Avoid case folded text to be longer than the original text. Use MB\_PTR2LEN() instead of MB\_BYTE2LEN().

Files: src/spell.c, src/testdir/test\_spell.vim

Patch 8.0.0583

Problem: Fold test hangs on MS-Windows.

Solution: Avoid overflow in compare.

Files: src/fold.c

Patch 8.0.0584

Problem: Memory leak when executing quickfix tests.

Solution: Free the list reference. (Yegappan Lakshmanan)

Files: src/quickfix.c

Patch 8.0.0585

Problem: Test\_options fails when run in the GUI.

Solution: Also check the 'imactivatekey' value when the GUI is not running. Specify test values that work and that fail.

Files: src/option.c, src/testdir/gen\_opt\_test.vim

Patch 8.0.0586

Problem: No test for mapping timing out.

Solution: Add a test.

Files: src/testdir/test\_mapping.vim

vim:tw=78:ts=8:ft=help:norl: