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 Wiki

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b10c59b 16 days ago

1021 lines (870 sloc) 48.9 KB

Raw Blame History

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1 *syntastic.txt* Syntax checking on the fly has never been so pimp.
2 *syntastic*
3
4
5         It's a bird! It's a plane! ZOMG It's ... ~
6
7           _____~
8          /   \_      _    //_____//_( )____~
9         \___\\_/_/_/_\__/_/_/_/_/_/_/_/_/_/_~
10        ___/_/_/_/_/_/_/_/_/_/_(_)_/_/_/_/_~
11       /___/\_,_/_/_/\_\_/,\_/_/\_\_/_\_/~
12              /\_/_/_/_/_/_/_/_/_/_/_/_/_/_~
13
14
15               Reference Manual~
16
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60
61
62 =====
63 1. Intro                                     *syntastic-intro*
64
65 Syntastic is a syntax checking plugin that runs files through external syntax
66 checkers. This can be done on demand, or automatically as files are saved and
67 opened. If syntax errors are detected, the user is notified and is happy
68 because they didn't have to compile their code or execute their script to find
69 them.
70
71 Syntastic comes in two parts: the syntax checker plugins, and the core. The
72 syntax checker plugins are defined on a per-filetype basis where each one wraps
73 up an external syntax checking program. The core script delegates off to these
74 plugins and uses their output to provide the syntastic functionality.
75
76 Take a look at the wiki for a list of supported filetypes and checkers:
77
78     https://github.com/scrooloose/syntastic/wiki/Syntax-Checkers
79
80 Note: This doc only deals with using syntastic. To learn how to write syntax
81 checker integrations, see the guide on the GitHub wiki:
82
83     https://github.com/scrooloose/syntastic/wiki/Syntax-Checker-Guide
84
85 -----
86 1.1. Quick start                             *syntastic-quickstart*
87
88 Syntastic comes preconfigured with a default list of enabled checkers per
89 |filetype|. This list is kept reasonably short to prevent slowing down Vim or
90 trying to use conflicting checkers.
91
92 You can see the list of checkers available for the current filetype with the
93 |:SyntasticInfo| command.
94
95 You probably want to override the configured list of checkers for the
96 filetypes you use, and also change the arguments passed to specific checkers
97 to suit your needs. See |syntastic-checker-options| below for details.
98
99 Use |:SyntasticCheck| to manually check right now. Use |:Errors| to open the
100 |location-list| window, and |:lclose| to close it. You can clear the error
101 list with |:SyntasticReset|, and you can use |:SyntasticToggleMode| to switch
102 between active (checking on writing the buffer) and passive (manual) checking.
103
104 You don't have to switch focus to the |location-list| window to jump to the
105 different errors. Vim provides several built-in commands for this, for
106 example |:lnext| and |:lprevious|. You may want to add shortcut mappings for
107 these commands, or perhaps install a plugin such as Tim Pope's 'unimpaired'
108 (see https://github.com/tpope/vim-unimpaired) that provides such mappings.
109
110 -----
111 1.2. Recommended settings                     *syntastic-recommended*
112
113 Syntastic has numerous options that can be configured, and the defaults are
114 not particularly well suitable for new users. It is recommended that you start
115 by adding the following lines to your vimrc, and return to them later as
116 needed: >
117     set statusline+=%#warningmsg#
118     set statusline+=%{SyntasticStatuslineFlag()}
119     set statusline+=%*
120
121     let g:syntastic_always_populate_loc_list = 1
122     let g:syntastic_auto_loc_list = 1
123     let g:syntastic_check_on_open = 1
124     let g:syntastic_check_on_wq = 0
125 <
126 =====
127 2. Functionality provided                     *syntastic-functionality*

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128
129 Syntax checking can be done automatically or on demand (see
130 |'syntastic_mode_map'| and |:SyntasticToggleMode| for configuring this).
131
132 When syntax checking is done, the features below can be used to notify the
133 user of errors. See |syntastic-global-options| for how to configure and
134 activate/deactivate these features.
135
136 * A statusline flag
137 * Signs beside lines with errors
138 * The |location-list| can be populated with the errors for the associated
139 buffer
140 * Erroneous parts of lines can be highlighted (this functionality is only
141 provided by some syntax checkers)
142 * Balloons (if the |+balloon_eval| feature is compiled in) can be used to
143 display error messages for erroneous lines when hovering the mouse over
144 them
145 * Error messages from multiple checkers can be aggregated in a single list
146
147 -----
148 2.1. The statusline flag                                *syntastic-statusline-flag*
149
150 To use the statusline flag, this must appear in your |'statusline'| setting >
151   %{SyntasticStatuslineFlag()}
152 <
153 Something like this could be more useful: >
154   set statusline+=%#warningmsg#
155   set statusline+=%{SyntasticStatuslineFlag()}
156   set statusline+=%*
157 <
158 When syntax errors are detected a flag will be shown. The content of the flag
159 is derived from the |syntastic_stl_format| option.
160
161 -----
162 2.2. Error signs                                        *syntastic-error-signs*
163
164 Syntastic uses the |:sign| commands (provided that the |+signs| feature is
165 compiled in) to mark lines with errors and warnings in the sign column. To
166 enable this feature, use the |'syntastic_enable_signs'| option.
167
168 Signs are colored using the Error and Todo syntax highlight groups by default
169 (see |group-name|). If you wish to customize the colors for the signs, you
170 can use the following groups:
171   SyntasticErrorSign - For syntax errors, links to 'error' by default
172   SyntasticWarningSign - For syntax warnings, links to 'todo' by default
173   SyntasticStyleErrorSign - For style errors, links to 'SyntasticErrorSign'
174                           by default
175   SyntasticStyleWarningSign - For style warnings, links to
176                           'SyntasticWarningSign' by default
177
178 Example: >
179   highlight SyntasticErrorSign guifg=white guibg=red
180 <
181 To set up highlighting for the line where a sign resides, you can use the
182 following highlight groups:
183   SyntasticErrorLine
184   SyntasticWarningLine
185   SyntasticStyleErrorLine - Links to 'SyntasticErrorLine' by default
186   SyntasticStyleWarningLine - Links to 'SyntasticWarningLine' by default
187
188 Example: >
189   highlight SyntasticErrorLine guibg=#2f0000
190 <
191 -----
192 2.3. The error window                                *syntastic-error-window*
193
194 You can use the |:Errors| command to display the errors for the current buffer
195 in the |location-list|.
196
197 By default syntastic doesn't fill the |location-list| with the errors found by
198 the checkers, in order to reduce clashes with other plugins. Consequently, if
199 you run |:lopen| or |:lwindow| rather than |:Errors| to open the error window
  
```

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you wouldn't see syntastic's list of errors. If you insist on using |:lopen|
  
```

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200
201 or |:lwindow| you should either run |:SyntasticSetLoclist| after running the
202 checks, or set |syntastic_always_populate_loc_list| which tells syntastic to
203 update the |location-list| automatically.
204
205 -----
206 2.4. Error highlighting                                *syntastic-highlighting*
207
208 Some checkers provide enough information for syntastic to be able to highlight
209 errors. By default the SpellBad syntax highlight group is used to color errors,
210 and the SpellCap group is used for warnings. If you wish to customize the
211 colors for highlighting you can use the following groups:
212     SyntasticError - Links to 'SpellBad' by default
213     SyntasticWarning - Links to 'SpellCap' by default
214     SyntasticStyleError - Links to SyntasticError by default
215     SyntasticStyleWarning - Links to SyntasticWarning by default
216
217 Example: >
218     highlight SyntasticError guibg=#2f0000
219 <
220 -----
221 2.5. Aggregating errors                                *syntastic-aggregating-errors*
222
223 By default, namely if '|syntastic_aggregate_errors|' is unset, syntastic runs
224 in turn the checkers corresponding to the filetype of the current file (see
225 |syntastic-filetype-checkers|), and stops as soon as a checker reports any
226 errors. It then notifies you of the errors using the notification mechanisms
227 above. In this mode error lists are always produced by a single checker, and,
228 if you open the error window, the name of the checker that generated the errors
229 is shown on the statusline of the error window.
230
231 If '|syntastic_aggregate_errors|' is set, syntastic runs all checkers that
232 apply (still cf. |syntastic-filetype-checkers|), then aggregates errors found
233 by all checkers in a single list, and notifies you. In this mode each error
234 message is labeled with the name of the checker that generated it, but you can
235 disable generation of these labels by turning off '|syntastic_id_checkers|'.
236
237 If '|syntastic_sort_aggregated_errors|' is set (which is the default), messages
238 in the aggregated list are grouped by file, then sorted by line number, then
239 type, then column number. Otherwise messages produced by the same checker are
240 grouped together, and sorting within each group is decided by the variables
241 '|syntastic_<filetype>_<checker>_sort|'.
242
243 -----
244 2.6 Filtering errors                                    *syntastic-filtering-errors*
245
246 You can selectively disable some of the errors found by checkers either
247 using '|syntastic_quiet_messages|', or by specifying a list of patterns in
248 '|syntastic_ignore_files|'.
249
250 See also: '|syntastic_<filetype>_<checker>_quiet_messages|' and
251 '|b:syntastic_skip_checks|'.
252
253 =====
254 3. Commands                                            *syntastic-commands*
255
256 :Errors                                                *:Errors*
257
258 When errors have been detected, use this command to pop up the |location-list|
259 and display the error messages.
260
261 Please note that the |:Errors| command overwrites the current location list with
262 syntastic's own location list.
263
264 :SyntasticToggleMode                                    *:SyntasticToggleMode*
265
266 Toggles syntastic between active and passive mode. See '|syntastic_mode_map|'
267 for more info.
268
269 :SyntasticCheck                                          *:SyntasticCheck*
270
271 Manually cause a syntax check to be done. By default the checkers in the

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272 |'g:syntastic_<filetype>_checkers'| or |'b:syntastic_checkers'| lists are run,
273 cf. |syntastic-filetype-checkers|. If |'syntastic_aggregate_errors'| is unset
274 (which is the default), checking stops the first time a checker reports any
275 errors; if |'syntastic_aggregate_errors'| is set, all checkers that apply are
276 run in turn, and all errors found are aggregated in a single list.
277
278 The command may be followed by a (space separated) list of checkers. In this
279 case |'g:syntastic_<filetype>_checkers'| and |'b:syntastic_checkers'| are
280 ignored, and the checkers named by the command's arguments are run instead, in
281 the order specified. The set by |'syntastic_aggregate_errors'| still apply.
282
283 Example: >
284       :SyntasticCheck flake8 pylint
285 <
286 :SyntasticInfo                                     *:SyntasticInfo*
287
288 The command takes an optional argument, and outputs information about the
289 checkers available for the filetype named by said argument, or for the current
290 filetype if no argument was provided.
291
292 :SyntasticReset                                     *:SyntasticReset*
293
294 Resets the list of errors and turns off all error notifiers.
295
296 :SyntasticSetLoclist                               *:SyntasticSetLoclist*
297
298 If |'syntastic_always_populate_loc_list'| is not set, the |location-list| is
299 not filled in automatically with the list of errors detected by the checkers.
300 This is useful if you run syntastic along with other plugins that use location
301 lists. The |:SyntasticSetLoclist| command allows you to stick the errors into
302 the location list explicitly.
303
304 =====
305 4. Global Options                                     *:syntastic-global-options*
306
307                                     *'syntastic_check_on_open'*
308 Default: 0
309 If this variable is enabled, syntastic in active mode will run syntax checks
310 when buffers are first loaded, as well as on saving: >
311     let g:syntastic_check_on_open = 1
312 <
313                                     *'syntastic_check_on_wq'*
314 Default: 1
315 In active mode syntax checks are normally run whenever buffers are written to
316 disk, even when the writes happen just before quitting Vim. If you want to
317 skip checks when you issue |:wq|, |:x|, and |:ZZ|, set this variable to 0: >
318     let g:syntastic_check_on_wq = 0
319 <
320                                     *'syntastic_aggregate_errors'*
321 Default: 0
322 When enabled, syntastic runs all checkers that apply to the current filetype,
323 then aggregates errors found by all checkers and displays them. When disabled,
324 syntastic runs each checker in turn, and stops to display the results the first
325 time a checker finds any errors. >
326     let g:syntastic_aggregate_errors = 1
327 <
328                                     *'syntastic_id_checkers'*
329 Default: 1
330 When results from multiple checkers are aggregated in a single error list
331 (that is either when |'syntastic_aggregate_errors'| is enabled, or when
332 checking a file with a composite filetype), it might not be immediately
333 obvious which checker has produced a given error message. This variable
334 instructs syntastic to label error messages with the names of the checkers
335 that created them. >
336     let g:syntastic_id_checkers = 0
337 <
338                                     *'syntastic_sort_aggregated_errors'*
339 Default: 1
340 By default, when results from multiple checkers are aggregated in a single
341 error list (that is either when |'syntastic_aggregate_errors'| is enabled,
342 or when checking a file with a composite filetype), errors are grouped by
343 file, then sorted by line number, then grouped by type (namely errors take

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344 precedence over warnings), then they are sorted by column number. If you want
345 to leave messages grouped by checker output, set this variable to 0: >
346     let g:syntastic_sort_aggregated_errors = 0
347 <
348                                     '*syntastic_echo_current_error'*
349 Default: 1
350 If enabled, syntastic will echo current error to the command window. If
351 multiple errors are found on the same line, '|syntastic_cursor_columns|' is
352 used to decide which one is shown. >
353     let g:syntastic_echo_current_error = 1
354 <
355                                     '*syntastic_cursor_columns'*
356 Default: 1
357 This option controls which errors are echoed to the command window if
358 '|syntastic_echo_current_error|' is set and multiple errors are found on the
359 same line. When the option is enabled, the first error corresponding to the
360 current column is shown. Otherwise, the first error on the current line is
361 echoed, regardless of the cursor position on the current line.
362
363 When dealing with very large lists of errors, disabling this option can speed
364 up navigation significantly: >
365     let g:syntastic_cursor_column = 0
366 <
367                                     '*syntastic_enable_signs'*
368 Default: 1
369 Use this option to tell syntastic whether to use the |:sign| interface to mark
370 syntax errors: >
371     let g:syntastic_enable_signs = 1
372 <
373                                     '*syntastic_error_symbol'* '*syntastic_style_error_symbol'*
374                                     '*syntastic_warning_symbol'* '*syntastic_style_warning_symbol'*
375 Use this option to control what the syntastic |:sign| text contains. Several
376 error symbols can be customized:
377     syntastic_error_symbol - For syntax errors, defaults to '>>'
378     syntastic_style_error_symbol - For style errors, defaults to 'S>'
379     syntastic_warning_symbol - For syntax warnings, defaults to '>>'
380     syntastic_style_warning_symbol - For style warnings, defaults to 'S>'
381
382 Example: >
383     let g:syntastic_error_symbol = "X"
384     let g:syntastic_warning_symbol = "Δ"
385 <
386                                     '*syntastic_enable_balloons'*
387 Default: 1
388 Use this option to tell syntastic whether to display error messages in balloons
389 when the mouse is hovered over erroneous lines: >
390     let g:syntastic_enable_balloons = 1
391 <
392 Note that Vim must be compiled with |+balloon_eval|.
393
394                                     '*syntastic_enable_highlighting'*
395 Default: 1
396 Use this option to tell syntastic whether to use syntax highlighting to mark
397 errors (where possible). Highlighting can be turned off with the following >
398     let g:syntastic_enable_highlighting = 0
399 <
400                                     '*syntastic_always_populate_loc_list'*
401 Default: 0
402 By default syntastic doesn't fill the |location-list| with the errors found
403 by the checkers, in order to reduce clashes with other plugins. Enable this
404 option to tell syntastic to always stick any detected errors into the
405 |location-list|: >
406     let g:syntastic_always_populate_loc_list = 1
407 <
408 Please note that if '|syntastic_auto_jump|' is set to a non-zero value the
409 location list is overwritten with Syntastic's own list when taking a jump,
410 regardless of the value of '|syntastic_always_populate_loc_list|'. The
411 location list is also overwritten when running the |:Errors| command.
412
413                                     '*syntastic_auto_jump'*
414 Default: 0
415 Enable this option if you want the cursor to jump to the first detected issue
416 when saving or opening a file.

```

```

417
418 When set to 0 the cursor won't jump automatically. >
419     let g:syntastic_auto_jump = 0
420 <
421 When set to 1 the cursor will always jump to the first issue detected,
422 regardless of type. >
423     let g:syntastic_auto_jump = 1
424 <
425 When set to 2 the cursor will jump to the first issue detected, but only if
426 this issue is an error. >
427     let g:syntastic_auto_jump = 2
428 <
429 When set to 3 the cursor will jump to the first error detected, if any. If
430 all issues detected are warnings, the cursor won't jump. >
431     let g:syntastic_auto_jump = 3
432 <
433 Please note that in either situation taking the jump also has the side effect
434 of the location list being overwritten with Syntastic's own location list,
435 regardless of the value of 'syntastic_always_populate_loc_list|.
436
437                                     '*syntastic_auto_loc_list'*
438 Default: 2
439 Use this option to tell syntastic to automatically open and/or close the
440 |location-list| (see |syntastic-error-window|).
441
442 When set to 0 the error window will be neither opened nor closed
443 automatically. >
444     let g:syntastic_auto_loc_list = 0
445 <
446 When set to 1 the error window will be automatically opened when errors are
447 detected, and closed when none are detected. >
448     let g:syntastic_auto_loc_list = 1
449 <
450 When set to 2 the error window will be automatically closed when no errors are
451 detected, but not opened automatically. >
452     let g:syntastic_auto_loc_list = 2
453 <
454 When set to 3 the error window will be automatically opened when errors are
455 detected, but not closed automatically. >
456     let g:syntastic_auto_loc_list = 3
457 <
458                                     '*syntastic_loc_list_height'*
459 Default: 10
460 Use this option to specify the height of the location lists that syntastic
461 opens. >
462     let g:syntastic_loc_list_height = 5
463 <
464                                     '*syntastic_ignore_files'*
465 Default: []
466 Use this option to specify files that syntastic should never check. It's a
467 list of |regular-expression| patterns. The full paths of files (see |::p|) are
468 matched against these patterns, and the matches are case-sensitive. Use |\c|
469 to specify case-insensitive patterns. Example: >
470     let g:syntastic_ignore_files = ['\m^/usr/include/', '\m\c\.h$']
471 <
472                                     '*syntastic_filetype_map'*
473 Default: {}
474 Use this option to map non-standard filetypes to standard ones. Corresponding
475 checkers are mapped accordingly, which allows syntastic to check files with
476 non-standard filetypes: >
477     let g:syntastic_filetype_map = {
478         \ "plaintex": "tex",
479         \ "gentoo-metadata": "xml" }
480 <
481 Composite filetypes can also be mapped to simple types, which disables the
482 default behaviour of running both checkers against the input file: >
483     let g:syntastic_filetype_map = { "handlebars.html": "handlebars" }
484 <
485                                     '*syntastic_mode_map'*
486 Default: { "mode": "active",
487             "active_filetypes": [],
488             "passive_filetypes": [] }
489 Use this option to fine tune when automatic syntax checking is done (or not

```

```

490 done).
491
492 The option should be set to something like: >
493
494     let g:syntastic_mode_map = {
495         \ "mode": "active",
496         \ "active_filetypes": ["ruby", "php"],
497         \ "passive_filetypes": ["puppet"] }
498
499 <
500 "mode" can be mapped to one of two values - "active" or "passive". When set
501 to "active", syntastic does automatic checking whenever a buffer is saved or
502 initially opened. When set to "passive" syntastic only checks when the user
503 calls |:SyntasticCheck|.
504
505 The exceptions to these rules are defined with "active_filetypes" and
506 "passive_filetypes". In passive mode, automatic checks are still done for
507 filetypes in the "active_filetypes" array (and "passive_filetypes" is
508 ignored). In active mode, automatic checks are not done for any filetypes in
509 the "passive_filetypes" array ("active_filetypes" is ignored).
510
511 If any of "mode", "active_filetypes", or "passive_filetypes" are left
512 unspecified, they default to values above.
513
514 If local variable |'b:syntastic_mode'| is defined its value takes precedence
515 over all calculations involving |'syntastic_mode_map'| for the corresponding
516 buffer.
517
518 At runtime, the |:SyntasticToggleMode| command can be used to switch between
519 active and passive modes.
520
521                                     *'b:syntastic_mode'*
522 Default: unset
523 Only the local form |'b:syntastic_mode'| is used. When set to either "active"
524 or "passive", it takes precedence over |'syntastic_mode_map'| when deciding
525 whether the corresponding buffer should be checked automatically.
526
527                                     *'syntastic_quiet_messages'*
528 Default: {}
529 Use this option to filter out some of the messages produced by checkers. The
530 option should be set to something like: >
531     let g:syntastic_quiet_messages = {
532         \ "!level": "errors",
533         \ "type": "style",
534         \ "regex": '\m\[\C03\d\d\]',
535         \ "file:p": ['\m^usr/include/', '\m\c\.h$'] }
536
537 <
538 Each element turns off messages matching the patterns specified by the
539 corresponding value. Values are lists, but if a list consist of a single
540 element you may omit the brackets (e.g. you may write "style" instead of
541 ["style"]). Elements with values [] or '' are ignored (this is useful for
542 overriding filters, cf. |filter-overrides|).
543
544     "level" - takes one of two values, "warnings" or "errors"
545     "type"   - can be either "syntax" or "style"
546     "regex"  - each item in list is matched against the messages' text as a
547                 case-insensitive |regular-expression|
548     "file"   - each item in list is matched against the filenames the messages
549                 refer to, as a case-sensitive |regular-expression|.
550
551 If a key is prefixed by an exclamation mark "!", the corresponding filter is
552 negated (i.e. the above example silences all messages that are NOT errors).
553
554 The "file" key may be followed by one or more filename modifiers (see
555 |filename-modifiers|). The modifiers are applied to the filenames the messages
556 refer to before matching against the value (i.e. in the above example the full
557 path of the issues are matched against '\m^usr/include/' and '\m\c\.h$').
558
559 If |'syntastic_id_checkers'| is set, filters are applied before error messages
560 are labeled with the names of the checkers that created them.
561
562 There are also checker-specific variants of this option, providing finer
563 control. They are named |'syntastic_<filetype>_<checker>_quiet_messages'|.

```



```

563 For a particular checker, if both a |'syntastic_quiet_messages'| filter and
564 a checker-specific filter are present, they are both applied (to the list of
565 errors produced by the said checker). In case of conflicting values for the
566 same keys, the values of the checker-specific filters take precedence.
567
568                                     *filter-overrides*
569 Since filter elements with values [] or '' are ignored, you can disable global
570 filters for particular checkers, by setting the values of the corresponding
571 elements in |'syntastic_<filetype>_<checker>_quiet_messages'| to [] or ''. For
572 example, the following setting will silence all warnings, except for the
573 ones produced by "pylint": >
574     let g:syntastic_quiet_messages = { "level": "warnings" }
575     let g:syntastic_python_pylint_quiet_messages = { "level" : [] }
576 <
577                                     *'syntastic_stl_format'*
578 Default: [Syntax: line:%F (%t)]
579 Use this option to control what the syntastic statusline text contains. Several
580 magic flags are available to insert information:
581     %e - number of errors
582     %w - number of warnings
583     %t - total number of warnings and errors
584     %ne - filename of file containing first error
585     %nw - filename of file containing first warning
586     %N - filename of file containing first warning or error
587     %pe - filename with path of file containing first error
588     %pw - filename with path of file containing first warning
589     %P - filename with path of file containing first warning or error
590     %fe - line number of first error
591     %fw - line number of first warning
592     %F - line number of first warning or error
593
594 These flags accept width and alignment controls similar to the ones used by
595 |'statusline'| flags:
596     %-0{minwid}.{maxwid}{flag}
597
598 All fields except {flag} are optional. A single percent sign can be given as
599 "%%".
600
601 Several additional flags are available to hide text under certain conditions:
602     %E{...} - hide the text in the brackets unless there are errors
603     %W{...} - hide the text in the brackets unless there are warnings
604     %B{...} - hide the text in the brackets unless there are both warnings AND
605                errors
606 These flags can't be nested.
607
608 Example: >
609     let g:syntastic_stl_format = "[%E{Err: %fe #e}%B{, }%W{Warn: %fw #w}]"
610 <
611 If this format is used and the current buffer has 5 errors and 1 warning
612 starting on lines 20 and 10 respectively then this would appear on the
613 statusline: >
614     [Err: 20 #5, Warn: 10 #1]
615 <
616 If the buffer had 2 warnings, starting on line 5 then this would appear: >
617     [Warn: 5 #2]
618 <
619                                     *'b:syntastic_skip_checks'*
620 Default: unset
621 Only the local form |'b:syntastic_skip_checks'| is used. When set to a true
622 value, no checks are run against the corresponding buffer. Example: >
623     let b:syntastic_skip_checks = 1
624 <
625                                     *'syntastic_full_redraws'*
626 Default: 0 in GUI Vim and MacVim, 1 otherwise
627 Controls whether syntastic calls |:redraw| or |:redraw!| for screen redraws.
628 Changing it can in principle make screen redraws smoother, but it can also
629 cause screen to flicker, or cause ghost characters. Leaving it to the default
630 should be safe.
631
632                                     *'syntastic_exit_checks'*
633 Default: 0 when running under "cmd.exe" on Windows, 1 otherwise
634 Syntastic attempts to catch abnormal termination conditions from checkers by

```

```

635 looking at their exit codes. The "cmd.exe" shell on Windows make these checks
636 meaningless, by returning 1 to Vim when the checkers exit with non-zero codes.
637 The above variable can be used to disable exit code checks in syntastic.
638
639             *'syntastic_shell'*
640 Default: Vim's 'shell'
641 This is the (full path to) the shell syntastic will use to run the checkers.
642 On UNIX and Mac OS-X this shell must accept Bourne-compatible syntax for
643 file "stdout" and "stderr" redirections ">file" and "2>file". Examples of
644 compatible shells are "zsh", "bash", "ksh", and of course the original Bourne
645 "sh".
646
647 This shell is independent of Vim's 'shell', and it isn't used for interactive
648 operations. It must take care to initialize all environment variables needed
649 by the checkers you're using. Example: >
650     let g:syntastic_shell = "/bin/sh"
651 <
652             *'syntastic_nested_autocommands'*
653 Default: 0
654 Controls whether syntastic's autocommands |BufReadPost| and |BufWritePost|
655 are called from other |BufReadPost| and |BufWritePost| autocommands (see
656 |autocmd-nested|). This is known to trigger interoperability problems with
657 other plugins, so only enable it if you actually need that functionality.
658
659             *'syntastic_debug'*
660 Default: 0
661 Set this to the sum of one or more of the following flags to enable
662 debugging:
663
664     1 - trace general workflow
665     2 - dump location lists
666     4 - trace notifiers
667     8 - trace autocommands
668    16 - dump options
669    32 - trace running of specific checkers
670
671 Example: >
672     let g:syntastic_debug = 1
673 <
674 Syntastic will then add debugging messages to Vim's |message-history|. You can
675 examine these messages with |:mes|.
676
677             *'syntastic_debug_file'*
678 Default: unset
679 When set, debugging messages are written to the file named by its value, in
680 addition to being added to Vim's |message-history|: >
681     let g:syntastic_debug_file = '~/syntastic.log'
682 <
683             *'syntastic_extra_filetypes'*
684 Default: []
685 List of filetypes handled by checkers external to syntastic. If you have a Vim
686 plugin that adds a checker for syntastic, and if the said checker deals with a
687 filetype that is unknown to syntastic, you might consider adding that filetype
688 to this list: >
689     let g:syntastic_extra_filetypes = [ "make", "gitcommit" ]
690 <
691 This will allow |:SyntasticInfo| to do proper tab completion for the new
692 filetypes.
693
694 =====
695 5. Checker Options                               *syntastic-checker-options*
696
697 -----
698 5.1 Choosing which checkers to use               *syntastic-filetype-checkers*
699
700             *'g:syntastic_<filetype>_checkers'*
701 You can tell syntastic which checkers to run for a given filetype by setting a
702 variable 'g:syntastic_<filetype>_checkers' to a list of checkers, e.g. >
703     let g:syntastic_php_checkers = [ "php", "phpcs", "phpmd" ]
704 <
705
706             *'b:syntastic_checkers'*
707 There is also a per-buffer version of this setting, 'b:syntastic_checkers'.

```

```

707 When set, it takes precedence over |'g:syntastic_<filetype>_checkers'|. You can
708 use this in an autocmd to configure specific checkers for particular paths: >
709     autocmd FileType python if stridx(expand("%:p"), "/some/path/") == 0 |
710         \ let b:syntastic_checkers = ["pylint"] | endif
711 <
712 If neither |'g:syntastic_<filetype>_checkers'| nor |'b:syntastic_checkers'|
713 is set, a default list of checker is used. Beware however that this list
714 deliberately kept minimal, for performance reasons.
715
716 Take a look at the wiki to find out what checkers and filetypes are supported
717 by syntastic:
718
719     https://github.com/scrooloose/syntastic/wiki/Syntax-Checkers
720
721 Use |:SyntasticInfo| to see which checkers are available for a given filetype.
722
723 -----
724 5.2 Choosing the executable                                *syntastic-config-exec*
725
726     *'syntastic_<filetype>_<checker>_exec'*
727 The executable run by a checker is normally defined automatically, when the
728 checker is registered. You can however override it, by setting the variable
729 'g:syntastic_<filetype>_<checker>_exec': >
730     let g:syntastic_ruby_mri_exec = '~/bin/ruby2'
731 <
732 This variable has a local version, 'b:syntastic_<filetype>_<checker>_exec',
733 which takes precedence over the global one in the corresponding buffer.
734
735     *'b:syntastic_<checker>_exec'*
736 And there is also a local variable named 'b:syntastic_<checker>_exec', which
737 takes precedence over both 'b:syntastic_<filetype>_<checker>_exec' and
738 'g:syntastic_<filetype>_<checker>_exec' in the buffers where it is defined.
739
740 -----
741 5.3 Configuring specific checkers                        *syntastic-config-makeprg*
742
743 Most checkers use the 'makeprgBuild()' function and provide many options by
744 default - in fact you can customise every part of the command that gets called.
745
746     *'syntastic_<filetype>_<checker>_<option>'*
747 Checkers that use 'makeprgBuild()' construct a 'makeprg' like this: >
748     let makeprg = self.makeprgBuild({
749         \ "exe": self.getExec(),
750         \ "args": "-a -b -c",
751         \ "post_args": "--more --args",
752         \ "tail": "2>/dev/null" })
753 <
754 The result is a 'makeprg' of the form: >
755     <exe> <args> <fname> <post_args> <tail>
756 <
757 All arguments above are optional, and can be overridden by setting global
758 variables 'g:syntastic_<filetype>_<checker-name>_<option-name>' - even
759 parameters not specified in the call to makeprgBuild(). These variables also
760 have local versions 'b:syntastic_<filetype>_<checker-name>_<option-name>',
761 which take precedence over the global ones in the corresponding buffers.
762
763 If one of these variables has a non-empty default and you want it to be empty,
764 you can set it to an empty string, e.g.: >
765     let g:syntastic_javascript_jslint_args = ""
766 <
767     *'syntastic_<filetype>_<checker>_exe'*
768 The 'exe' is normally the same as the 'exec' attribute described above, in
769 which case it may be omitted. However, you can use it to add environment
770 variables, or to change the way the checker is run. For example this setup
771 allows you to run PC-Lint under Wine emulation on Linux: >
772     let g:syntastic_c_pc_lint_exec = "wine"
773     let g:syntastic_c_pc_lint_exe = "wine c:/path/to/lint-nt.exe"
774 <
775 To override the args and the tail: >
776     let g:syntastic_c_pc_lint_args = "-w5 -Iz:/usr/include/linux"
777     let g:syntastic_c_pc_lint_tail = "2>/dev/null"
778 <
779 The general form of the override options is: >

```

```

780 syntastic_<filetype>_<checker>_<option-name>
781 <
782 For checkers that do not use the 'makeprgBuild()' function you will have to
783 look at the source code of the checker in question. If there are specific
784 options that can be set, these are usually documented in the wiki:
785
786 https://github.com/scrooloose/syntastic/wiki/Syntax-Checkers
787
788         *syntastic_<filetype>_<checker>_quiet_messages'*
789 In the same vein, 'g:syntastic_<filetype>_<checker-name>_quiet_messages' can
790 be used to restrict message filters to messages produced by specific checkers.
791 Example: >
792     let g:syntastic_python_pylama_quiet_messages = {
793         \ "type": "style",
794         \ "regex": '\m\[C03\d\d\]' }
795 <
796 See |syntastic_quiet_messages| for the syntax.
797
798 -----
799 5.4 Sorting errors                                *syntastic-config-sort*
800
801         *syntastic_<filetype>_<checker>_sort'*
802 Syntastic may decide to group the errors produced by some checkers by file,
803 then sort them by line number, then by type, then by column number. If you'd
804 prefer to see the errors in the order in which they are output by the external
805 checker you can set the variable |'g:syntastic_<filetype>_<checker>_sort'| to 0.
806
807 Alternatively, if syntastic doesn't reorder the errors produced by a checker
808 but you'd like it to sort them, you can set the same variable to 1.
809
810 There is also a local version |'b:syntastic_<filetype>_<checker>_sort'| of
811 this variable, that takes precedence over it in the buffers where it is
812 defined.
813
814 For aggregated lists (see |syntastic-aggregating-errors|) these variables are
815 ignored if |'syntastic_sort_aggregated_errors'| is set (which is the default).
816
817 =====
818 6. Notes                                           *syntastic-notes*
819
820 -----
821 6.1. Handling of composite filetypes              *syntastic-composite*
822
823 Some Vim plugins use composite filetypes, such as "django.python" or
824 "handlebars.html". Normally, syntastic deals with this situation by splitting
825 the filetype in its simple components, and calling all checkers that apply.
826 If this behaviour is not desirable, you can disable it by mapping the
827 composite filetypes to simple ones using |'syntastic_filetype_map'|, e.g.: >
828     let g:syntastic_filetype_map = { "handlebars.html": "handlebars" }
829 <
830 -----
831 6.2 Editing files over network                    *syntastic-netrw*
832
833 The standard plugin |netrw| allows Vim to transparently edit files over
834 network and inside archives. Currently syntastic doesn't support this mode
835 of operation. It can only check files that can be accessed directly by local
836 checkers, without any translation or conversion.
837
838 -----
839 6.3 The 'shellslash' option                      *syntastic-shellslash*
840
841 The 'shellslash' option is relevant only on Windows systems. This option
842 determines (among other things) the rules for quoting command lines, and there
843 is no easy way for syntastic to make sure its state is appropriate for your
844 shell. It should be turned off if your 'shell' (or |'syntastic_shell'|) is
845 "cmd.exe", and on for shells that expect an UNIX-like syntax, such as Cygwin's
846 "sh". Most checkers will stop working if 'shellslash' is set to the wrong
847 value.
848
849 -----
850 6.4 Saving Vim sessions                          *syntastic-sessions*
851
852 If you use |:mksession| to save Vim sessions you should probably make sure to

```

```

853 remove option "blank" from 'sessionoptions': >
854     set sessionoptions-=blank
855 <
856 This will prevent |:mksession| from saving |syntastic-error-window| as empty
857 quickfix windows.
858
859 =====
860 7. Compatibility with other software                                *syntastic-compatibility*
861
862 -----
863 7.1 The csh and tcsh shells                                        *syntastic-csh*
864
865 The "csh" and "tcsh" shells are mostly compatible with syntastic. However,
866 some checkers assume Bourne shell syntax for redirecting "stderr". For this
867 reason, you should point |'syntastic_shell'| to a Bourne-compatible shell,
868 such as "zsh", "bash", "ksh", or even the original Bourne "sh": >
869     let g:syntastic_shell = "/bin/sh"
870 <
871 -----
872 7.2. Eclim                                                        *syntastic-eclim*
873
874 Syntastic can be used together with "Eclim" (see http://eclim.org/). However,
875 by default Eclim disables syntastic's checks for the filetypes it supports, in
876 order to run its own validation. If you'd prefer to use Eclim but still run
877 syntastic's checks, set |g:EclimFileTypeValidate| to 0: >
878     let g:EclimFileTypeValidate = 0
879 <
880 It is also possible to re-enable syntastic checks only for some filetypes, and
881 run Eclim's validation for others. Please consult Eclim's documentation for
882 details.
883
884 -----
885 7.3 The fish shell                                                *syntastic-fish*
886
887 At the time of this writing the "fish" shell (see http://fishshell.com/)
888 doesn't support the standard UNIX syntax for file redirections, and thus it
889 can't be used together with syntastic. You can however set |'syntastic_shell'|
890 to a more traditional shell, such as "zsh", "bash", "ksh", or even the
891 original Bourne "sh": >
892     let g:syntastic_shell = "/bin/sh"
893 <
894 -----
895 7.4. The fizsh shell                                              *syntastic-fizsh*
896
897 Using syntastic with the "fizsh" shell (see https://github.com/zsh-users/fizsh)
898 is possible, but potentially problematic. In order to do it you'll need to set
899 'shellredir' like this: >
900     set shellredir=>%s\ 2>&1
901 <
902 Please keep in mind however that Vim can't take advantage of any of the
903 interactive features of "fizsh". Using a more traditional shell such as "zsh",
904 "bash", "ksh", or the original Bourne "sh" might be a better choice: >
905     let g:syntastic_shell = "/bin/sh"
906 <
907 -----
908 7.5 flagship                                                      *syntastic-flagship*
909
910 The "flagship" Vim plugin (https://github.com/tpope/vim-flagship) has its
911 own mechanism of showing flags on the |'statusline'|. To allow "flagship"
912 to manage syntastic's statusline flag add the following |autocommand| to
913 your vimrc, rather than explicitly adding the flag to your |'statusline'| as
914 described in the |syntastic-statusline-flag| section above: >
915     autocmd User Flags call Hoist("window", "SyntasticStatuslineFlag")
916 <
917 -----
918 7.6. powerline                                                    *syntastic-powerline*
919
920 The "powerline" Vim plugin (https://github.com/powerline/powerline) comes
921 packaged with a syntastic segment. To customize this segment create a file
922 ~/.config/powerline/themes/vim/default.json, with a content like this: >
923 {
924     "segment_data" : {
925         "powerline.segments.vim.plugin.syntastic.syntastic" : {

```

```

926         "args" : {
927             "err_format" : "Err: {first_line} #{num} ",
928             "warn_format" : "Warn: {first_line} #{num} "
929         }
930     }
931 }
932 }
933 <
934 -----
935 7.7. The PowerShell shell                                *syntastic-powershell*
936
937 At the time of this writing, syntastic is not compatible with using "Windows
938 PowerShell" (http://technet.microsoft.com/en-us/library/bb978526.aspx) as Vim's
939 'shell'. You may still run Vim from 'PowerShell', but you do have to point
940 Vim's 'shell' to a more traditional program, such as "cmd.exe": >
941     set shell=cmd.exe
942 <
943 -----
944 7.8 python-mode                                          *syntastic-pymode*
945
946 Syntastic can be used along with the "python-mode" Vim plugin (see
947 https://github.com/klen/python-mode). However, they both run syntax checks by
948 default when you save buffers to disk, and this is probably not what you want.
949 To avoid both plugins opening error windows, you can either set passive mode
950 for python in syntastic (see |'syntastic_mode_map'|), or disable lint checks in
951 "python-mode", by setting |pymode_lint_on_write| to 0. E.g.: >
952     let g:pymode_lint_on_write = 0
953 <
954 -----
955 7.9. vim-auto-save                                      *syntastic-vim-auto-save*
956
957 Syntastic can be used together with the "vim-auto-save" Vim plugin (see
958 https://github.com/907th/vim-auto-save). However, syntastic checks in active
959 mode only work with "vim-auto-save" version 0.1.7 or later.
960
961 -----
962 7.10. vim-go                                            *syntastic-vim-go*
963
964 Syntastic can be used along with the "vim-go" Vim plugin (see
965 https://github.com/fatih/vim-go). However, both "vim-go" and syntastic run
966 syntax checks by default when you save buffers to disk. To avoid conflicts,
967 you have to either set passive mode in syntastic for the go filetype (see
968 |'syntastic_mode_map'|), or prevent "vim-go" from showing a quickfix window when
969 |g:go_fmt_command| fails, by setting |g:go_fmt_fail_silently| to 1. E.g.: >
970     let g:go_fmt_fail_silently = 1
971 <
972 -----
973 7.11. vim-virtualenv                                    *syntastic-vim-virtualenv*
974
975 At the time of this writing, syntastic can't run checkers installed
976 in Python virtual environments activated by "vim-virtualenv" (see
977 https://github.com/jmcantrell/vim-virtualenv). This is a limitation of
978 "vim-virtualenv".
979
980 -----
981 7.12 YouCompleteMe                                      *syntastic-ycm*
982
983 Syntastic can be used together with the "YouCompleteMe" Vim plugin (see
984 http://valloric.github.io/YouCompleteMe/). However, by default "YouCompleteMe"
985 disables syntastic's checkers for the "c", "cpp", "objc", and "objcpp"
986 filetypes, in order to allow its own checkers to run. If you want to use YCM's
987 identifier completer but still run syntastic's checkers for those filetypes you
988 have to set |g:ycm_show_diagnostics_ui| to 0. E.g.: >
989     let g:ycm_show_diagnostics_ui = 0
990 <
991 -----
992 7.13 The zsh shell and MacVim                          *syntastic-zsh*
993
994 If you're running MacVim together with the "zsh" shell (http://www.zsh.org/)
995
996 you need to be aware that MacVim does not source your .zshrc file, but will
997 source a .zshenv file. Consequently you have to move any setup steps relevant
to the checkers you're using from .zshrc to .zshenv, otherwise your checkers

```

```
998 will misbehave when run by syntastic. This is particularly important for
999 programs such as "rvm" (https://rvm.io/) or "rbenv" (http://rbenv.org/), that
1000 rely on setting environment variables.
1001
1002 =====
1003 8. About *syntastic-about*
1004
1005 The core maintainers of syntastic are:
1006     Martin Grenfell (GitHub: scrooloose)
1007     Gregor Uhlenheuer (GitHub: kongo2002)
1008     LCD 047 (GitHub: lcd047)
1009
1010 Find the latest version of syntastic at:
1011
1012     http://github.com/scrooloose/syntastic
1013
1014 =====
1015 9. License *syntastic-license*
1016
1017 Syntastic is released under the WTFPL.
1018 See http://sam.zoy.org/wtfpl/COPYING.
1019
1020 vim:tw=78:sw=4:ft=help:norl:
```

