

# Aquamacs Emacs Manual

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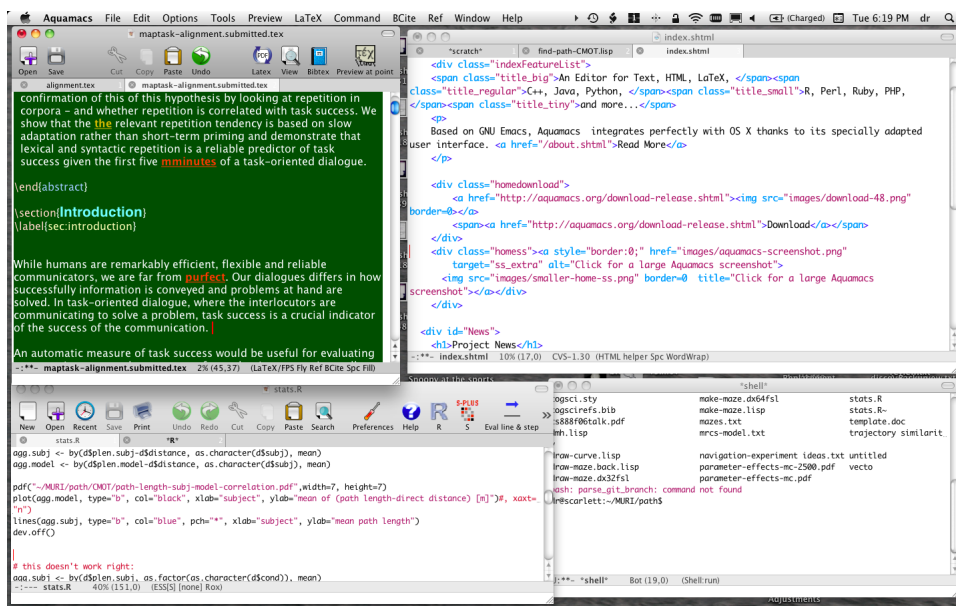


Figure 1: Aquamacs combines the legendary power of Emacs with user-friendly customizations to provide a more Aqua-specific user experience.

## 1 Aquamacs Emacs: a User-friendly Emacs Distribution

Aquamacs is an freely-available Aqua-native build of the powerful Emacs text editor (<http://www.gnu.org/software/emacs/emacs.html>). By “Aqua-native,” we mean more than just the fact that this version of Emacs runs as a standard OS X application. Aquamacs features extensive customization that enables it to conform better with Apple’s standard Human Interface Guidelines (HIG) than standard versions of the editor do.

Emacs is a text editor of legendary power and configurability, but it also has an enormously complex interface that, while consistent across platforms, is usually at odds with the specific interface conventions of the particular platform on which it is being used. The original GNU version of Emacs for the Mac, called Carbon Emacs, is no different.

Aquamacs Emacs implements the standard OS X keyboard shortcuts and other interface conventions, integrating Emacs into the Aqua environment to a far greater degree than other versions of Emacs. This allows Mac users who might be unfamiliar with Emacs’ complex standard interface to harness its amazing editing power in a familiar way.

You can always download the latest version of Aquamacs from the project home page, <http://aquamacs.org>. Just download the disk image (DMG), move the Aquamacs application bundle to your hard drive, and launch.

This documentation aims to introduce Aquamacs to novice users of Aquamacs Emacs, to help them get started with this powerful text editor. The documentation also aims to introduce Aquamacs to experienced users of Emacs, who may find aspects of its interface inconsistent with their experience.

The Aquamacs documentation will focus on the following areas:

- What's New in this Release
- Tutorial: Aquamacs for Beginners
- In-Depth: The Aquamacs Interface
- Aquamacs for Emacs Veterans

Our hope is that using Aquamacs will be a rewarding experience both for new users, who come to appreciate the power of Emacs without the steep learning curve, and for experienced Emacs users, who may find Emacs' integration into the Aqua environment an unexpectedly pleasant surprise.

## 1.1 Terminology in this Manual

GNU Emacs uses a terminology that is different from what users of modern, graphical environments are used to. Windows become *frames*, and documents are held in *buffers*. We will concentrate on the Emacs terminology in this manual in places where this is not confusing.

Aquamacs Emacs is an extensive *distribution* of GNU Emacs with modified defaults – almost up to the point where it could be called a *fork* - a completely new program. However, Aquamacs always contains the latest version of GNU Emacs. It is useful to understand the relationship between Emacs and Aquamacs. In this manual, we will use the term *Emacs* to refer to the core which is used on many different operating systems and built and distributed by the GNU Project. We will use the term *Aquamacs Emacs* (or just *Aquamacs*) to refer to the present implementation.

## 2 Tutorial: Aquamacs for Beginners

### 2.1 What Makes Aquamacs Like Other Text Editors

When you first launch Aquamacs, you will see that it is like many other text editors: you can type text, cut and paste text, and save and close a file using the menubar or standard OS X keyboard shortcuts (Command-S for save, Command-X for cut, Command-V for paste, and so on). If you are writing one of the many text formats that is supported by Aquamacs, such as HTML, you will also note Aquamacs' use of *syntax coloring*, which sets certain parts of the text—such as HTML markup—in a different color than the text content. This makes editing the text and adjusting the markup easier.

If you are used to the way Emacs does things, you may be surprised about how Aquamacs works: Aquamacs differs significantly from Emacs. While the useful Emacs key bindings are supported and Emacs packages usually just work, Aquamacs is adapted to be comparable to younger text editors (than Emacs). It also comes with a range of packages that give you greater comfort in editing certain types of files.

### 2.2 What Makes Aquamacs Emacs Different from Other Text Editors

If you look at some of the menu items and keyboard shortcuts, you will see some of the features that make Emacs different from other text editors. Although Aquamacs

OS X Term	Emacs Term
Window	Frame
Tab/pane	Window
Document	Buffer
Cursor	Point
Mouse pointer	Pointer
Keyboard shortcut	Key (binding)

Table 1: Key Emacs terms and their Apple counterparts.

has been designed to present many of these features in an Aqua-friendly way, it does not hide these features. Aquamacs is a complete editing environment.

- **Sophisticated text processing.** Aquamacs features text editing capabilities that go far beyond the average text editor. For instance, Aquamacs features several kinds of search and replace: it can replace text incrementally, it can search and replace text by complex patterns of characters (regular expressions) and not just by word matching, and so on. Aquamacs also features support for virtually every kind of text file imaginable: computer code such as C/C++, HTML,  $\text{\LaTeX}$ , XML, and other formats.
- **Buffers.** One of the features that makes Emacs such a productive editing environment for experienced users is the concept of *buffers*. A buffer is, simply said, a document that is being edited. It can be displayed in any window, and you can even display a buffer twice. But buffers don't just hold text files. They can hold messages from a program that's running, they can be shown in a window that you can use to actually send commands that Aquamacs executes, and other functions. The Buffers menu in Aquamacs Emacs allows you to switch quickly between windows, to send execute or preview the code you are writing with a couple of keystrokes, and to monitor logs of commands you are executing.
- **Integration with additional tools.** Aquamacs' "Tools" menu provides access to file comparison and version control, compiling and debugging of program code, the ability to read e-mail and newsgroups, and more.

In addition to its large number of features, Aquamacs also defines some interface terms differently than other OS X applications. See Table 1 for more information.

This list provides just a small sample of the functionality available in Emacs. Aquamacs' customizations make Emacs much easier to learn; it is possible to get started and become productive quickly. However, harnessing all of Emacs' power, even with assistance from the familiar Aqua user interface, will take time.

### 3 In Depth: The Aquamacs Interface

In this section, we will walk through the Aquamacs interface step by step, and will introduce relevant points about how Aquamacs Emacs solves particular editing problems in a distinctive way. We will specifically emphasize the functions that Aquamacs offers as opposed to GNU Emacs, which readers might be familiar with anyways.

### 3.1 Tabs and Windows

Aquamacs has an optional tabbed interface for organizing multiple open buffers. A tab is a GUI handle for a particular buffer. If you have “Show Tabs” checked in the Options menu, then each displayed buffer and any buffers that are subsequently created will be associated with a tab in the tab bar, just above the text area. (Note that the tab bar is hidden whenever it would display only a single tab. You may want to turn off “Show Buffers in New Frames” in the Options menu, in order to get full benefit from tabs.) If the tab bar cannot display all tabs at once, scroll bars appear to allow you to choose the displayed subset of tabs. Additional tab-related functions are available from the Window menu and from the tab bar’s context menu.

Tabs in Aquamacs do not act like containers – one can’t open a file in an existing tab. (This is in contrast to tab implementation in a number of popular internet browsers.) Rather, tabs provide a convenient way to navigate existing buffers. Because Emacs allows you to simultaneously display the same file in multiple windows or frames, it is possible to have multiple tabs (in different windows) that are associated with the same buffer.

To access tabs quickly, the key commands A-M-0,1,2 through 9 may be used; A-M-1 (normally: Command-Option-1) will select the first, leftmost tab in the window.<sup>1</sup>

Note that Tab functionality may be impaired in modes that use the Emacs Header Line. This includes the Buffer List (C-x C-b) and *psvn*.

A related option lets Aquamacs open new buffers in their own, extra frames. The option may be combined with Tabs, when you want to create tabs manually (Command-T), but visit new files in separate windows. Normally, we would not recommend to combine the two options.

Note that when tabs are switched on, or when buffers are shown in new frames, then closing a window has a different implication: it will remove the buffer from memory (in Emacs terminology, it will *kill* the buffer). In case there are unsaved modifications, you will be asked whether you’d like to save them. If neither tabs nor “Show Buffers in New Frames” is on, then closing a window using Command-W, or closing a whole frame with the red closer button has no such implication. The buffer remains in memory and is available from the Window menu. It is not automatically saved.

### 3.2 Configuring the Toolbars

The easiest way to set up icons in the toolbars is to right click on the toolbar that you’d like to customize and select *Customize Toolbar....* This will show a panel with all available icons. Drag and drop those into the toolbar.

Note that if a mode provides its own set of icons or additional icons, Aquamacs will store a separate configuration for that toolbar. This way, you can set up toolbars for different tasks. (Note that if modes, perhaps after an upgrade, add or remove icons, Aquamacs will adopt a new customization set for the toolbar.)

Click on the button in the top right corner of the frame to remove the toolbar completely. Use the menu items *Options / Appearance / Adopt Face and Frame Parameters as Default* and *Options / Save Options* to make this change stick.

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<sup>1</sup>Use the function ‘tabbar-define-access-keys’ to configure the keys in your `Preferences.el` file.

### 3.3 File

The File menu includes basic operations for opening, closing, and printing files. Opening and saving files uses standard Mac keyboard shortcuts (Command-O, Command-S), and uses standard Aqua dialog boxes.

You can create a new buffer: Aquamacs allows you to choose from a list of recently and commonly used editing modes. A similar function lets you change the current editing mode.

You can also open a directory. When called by mouse from the menubar, this brings up a standard Aqua dialog box. When called up with a keyboard command (C-x d), it brings up a directory name in the “minibuffer” (small space for commands at the bottom of the main window, or frame).

Printing is fully supported, although no “Page Setup” option is available at this point. You will see a print screen (in the system’s Preview.app) from where you can select a printer and the usual options. This may take a few seconds to appear with very large buffers. (Printing of embedded images such in LaTeX Preview mode is currently not supported.)

You may export your buffer to PDF or to HTML format. This operation preserves all the formatting, including any word-wrapping - so you may want to choose a font and resize the frame so that the lines are wrapped in the intended way (if Soft Wrapping is used).

The paper size for printing and PDF export can be configured by customizing the variable ‘ps-paper-type’ (use Options / Customize Aquamacs / Specific Option).

### 3.4 Edit

The Edit menu is the heart of Aquamacs’ textual wizardry. Aquamacs supports all customary editing functions, such as cut, copy, paste, and simple search and replace. In Aquamacs these basic functions are supported by standard Aqua keyboard shortcuts. There is a great deal more functionality, however, than the average text editor. For instance, Aquamacs Emacs allows you to go to a specific line number in the file you are editing, to the top or bottom of the buffer, and so on. It also supports searches with *regular expressions*, which are sophisticated text patterns that go beyond simply matching a specific set of characters (or “string”). Aquamacs Emacs also stores more than twenty of the most recently-copied items on the clipboard, and these are accessible from the menu in case you need to paste these items again. The Edit menu also supports “bookmarks,” a feature that allows you to save your place in a specific file.

Aquamacs lets you spell-check your texts, either while typing (‘flyspell-mode’) or for the whole buffer with an interactive interface (‘ispell’).

### 3.5 Options

The Options menu is where you can easily customize your settings. The options that you can configure include syntax coloring, matching of parentheses (useful for text markup that depends on open and close brackets), how to display buffers and frames, fonts, and other settings. For more information on fonts, please see Section 3.5.4.

If you want to delve deeply into customizing Aquamacs, select “Customize Emacs:Top-Level Customization Group” in the Options menu. A new frame titled “Customize Group: Emacs” will open. Scroll down and find the “Aquamacs Group” listing, and



push the “Go to Group” button. This will open a new frame with all of the configuration options for Aquamacs —power users can customize Aquamacs this way, or via the Emacs Lisp programming language, elisp—and each option is documented there. Table 4 displays a complete list of the options.

### 3.5.1 Line wrapping

Text is usually shown and read line by line. Several lines commonly form a paragraph. However, text is not necessarily stored this way in a file: sometimes, a *line* stored in a file is much wider than what would fit on a computer screen, and is really a paragraph. This makes sense: authors of documents do not know how wide the reader’s computer screen is, or how wide the window is going to be that is used to read and edit the text. Aquamacs supports this mode of editing with *word wrapping*: lines are wrapped at word boundaries. This way, a buffer line is displayed as a paragraph (several visual lines) on the screen. In Aquamacs, this mode of operation is called **word wrap** and is available from the Options menu. Internally, word wrapping enables *Visual Line Mode*.<sup>2</sup>

What’s the alternative? **Hard line breaking** means that one line shown on the screen corresponds to one line in the buffer and file. This means that even if a window is resized, the lines still stay the same, and word wrap will occur in the same place on every machine that displays the file. Line Breaking, called *Auto Fill* in classical Emacs, changes the actual buffer and file contents, unlike all the other options discussed here.

Long lines can also be **truncated** (cut off) or be continued (**wrap**) on the next line.

Line wrapping can be set to Truncate, Wrap, Word Wrap and Line Breaking (auto fill) under *Options / Line Wrapping* for the current buffer. A *Set as Default* will set it as default for all buffers that have no explicit line wrap setting.

Note that Word Wrapping (‘visual-line-mode’) affects the function of the cursor movement keys (arrows, and C-a, C-e, C-p and C-n). In Aquamacs, this can be easily customized. The default is as such:

- In Word Wrapping (visual-line-mode), C-aenp and arrow keys move according to visual lines.
- Without Word Wrapping (visual-line-mode off), arrow keys move visually, but C-aenp move non-visually according to buffer lines as in Emacs 22 and Aquamacs 1.x.

ou may configure this behavior via the ‘line-move-visual’ customization variable. Set it to *t* for unconditional visual movement of all keys, and *nil* for unconditional logical (buffer) movement of all keys.

Aquamacs allows you to automatically set the right type of line wrapping for text files using the “Detect Line Wrap in Text Files” function. (You can control the default, e.g., for new files, by setting ‘auto-word-wrap-default-function’ to ‘set-word-wrap’ using Options / Customize Aquamacs / Specific Option.)

A useful function to convert hard wrapped text into soft wrapped text can be found in the Edit menu: *Remove Hard Line Breaks* will turn (non-indented!) paragraphs into soft-wrapped lines (turn on soft wrapping to see).

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<sup>2</sup>Earlier Emacs versions provided ‘longlines-mode’, which is similar, but is unreliable and deprecated.



Similarly, to manually reformat text that is laid out line by line, using hard line wraps, use *Wrap and Re-Format*. Emacs terminology calls this process *filling*.

### 3.5.2 Using the Options key and more...

The keyboard has always been the essential user interface to Emacs - it's what makes Emacs so efficient as an editor for daily tasks. There are keyboard bindings for pretty much every task. Many bindings involve pressing the "Meta" modifier key - it's a key just like Control or Shift, which all go together with another (normal) key. "Meta" has only really existed on Unix keyboards long time ago - nowadays, computers have other keys instead. Therefore, you will need to press another key on your Macintosh keyboard. *By default, this is the Option key*, but you can use the ESC key instead (in this case, you may press ESC first, then the rest of the keys).

**Inputting characters with the Option key on non-English keyboards.** In most non-English keyboard layouts, the Option key also serves to input characters such as { or \ or @. Using Option as Meta would inhibit you from inputting those characters. You have three options to get around this. *Either*, you deselect "Option Key for Meta" in the Options menu (under "Option Key"), in which case you will have to use ESC for Meta, *or* you toggle back and forth between the modes using Command-;, *or* you use Option for Meta, but enable one of the emulation modes provided in the same menu under "Option Key". For those keyboard layouts supported, **this option is the most convenient**. The emulation will allow you to input all common characters with the Option key, while using Option for Meta in general.

Alternatively, Aquamacs allows you to use another modifier key - such as the Function key on laptops. The customization group "Aquamacs" contains appropriate settings, reachable via the menu items in Options / Customize Emacs.

### 3.5.3 Languages of the World - Dealing with Different Character Sets

Computer keyboards were designed to input text in languages with a small character set. Aquamacs Emacs lets you use your keyboard with a variety of *input methods* in order to input text in languages with many characters, among them Asian languages.

By default, Aquamacs uses the standard Mac user interface to input characters, called "System Input Method".

The Multilingual Environment, present in GNU Emacs, provides a number of pre-defined input methods. Aquamacs Emacs extends this: On Mac OS X, because of the particular ways of user interface and unicode handling, these standard Emacs language environments are not enough to read and write some international languages. One needs to set additional parameters, especially, the language specific coding systems.

You can find these new language environments (Korean, Japanese, Chinese-GB and Chinese-BIG5) - among other ones - under "Aquamacs Multilingual Environment".

### 3.5.4 The Right Look: Colors and Fonts for Frames and Modes

Aquamacs allows you to alter specific features of the current frame via functions in the Options menu. "Font for \*-mode..." lets you choose from the installed system fonts.

You can also choose foreground and background colors. *These settings only apply to buffers in the current major mode*, provided *Autofaces* is turned on (as is by default). Without *Autofaces*, the settings apply to all frames and set the frame default.

With *Autofaces*, Aquamacs Emacs lets you pick a style specific to the current mode. For example, you can use different font settings when you are editing C or LaTeX, then when you are editing a text file. Note that all settings not specified for the mode are taken over from the default. Specifically, color and font choices are prioritized in this order: 1. Mode-specific face, 2. Autoface Default Face, 3. Frame default.

You can use “Adopt Frame Parameters as Frame Default” to accept the appearance of the current frame for future frames; this includes the visibility of the tool bar, fringes, and more (but not position and size).

If you’re more of an Emacs expert and you’d like to configure things manually by means of elisp or the customization buffer, configure the following faces. With *Autofaces*, you can customize the faces directly (via M-x *customize-face*). The face name for a major mode is always named after the major mode, e.g. “*latex-mode-default*” is the autoface face for ‘*latex-mode*’. The Autoface default face is named ‘*autoface-default*’. The default for all frames is the ‘*default*’ face.

You can also customize the variables for the frame default: “*default-frame-alist*” and “*initial-frame-alist*”, as documented in the Emacs manual. You can, alternatively, use “Adopt Frame Parameters as Frame Default” to accept the appearance of the current frame for future frames; this includes the visibility of the tool bar.

### 3.6 Window

The Window menu allows you to navigate through the windows and frames that you may have open. Note that a “buffer” is not synonymous with a window or frame, in that you can split a frame and have more than one buffer contained within. (Multiple windows/frames is a feature of Aquamacs; standard Emacs does not support this.) In addition to standard frames that display open files, there are a few other important buffer types. One is the “scratch” buffer, which is simply a buffer to type notes into; this can also be the starting point for a file to save, and a buffer to type configuration commands for Aquamacs (an advanced feature). Another is the “Messages” buffer, which displays a log of output from Emacs commands and operations. Finally, there is the “info” buffer, in which Aquamacs Emacs displays built-in user help, tutorials and other documentation in Emacs’ “info” format.

From the Window menu, you can also open a new “frame,” or split the open window into two separate ones. There are keyboard shortcuts for all of these commands.

### 3.7 Tools

The Tools menu provides access to a variety of functions, including integration with version control systems, running shell commands, searching external files for text, and compiling and debugging software code. The Tools menu also provides access to newsgroups and e-mail.<sup>3</sup>

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<sup>3</sup>The functionality provided in the Tools menu is, to say the least, diverse, and is part of the attraction of Emacs for a large number of users—particularly advanced users. It is not necessary to use Aquamacs as an e-mail client to appreciate its considerable power and utility, however.

## 3.8 Help

The Help menu contains a wealth of information about Aquamacs Emacs and GNU Emacs. Except for the help provided in this document, Aquamacs' Help menu also provides documentation of the Mac-specific customizations with the present User Manual. The general Emacs user help is comprehensive and detailed to the point of possibly overwhelming the inexperienced user. The beginner should definitely start with the Emacs tutorial contained in the Help menu. While geared toward the traditional Emacs interface instead of the OS X Aquamacs version, the tutorial is a good introduction to Emacs' unique capabilities. And, as you gain more experience, you will appreciate the depth of the Emacs documentation.

## 4 Aquamacs for Emacs Veterans

While experienced users of Emacs on other platforms can continue to use all the key combinations to which they are accustomed, we recommend that they use the Aquamacs-specific conventions to get the most benefit from the applications. Many of the standard Emacs behaviors and interface conventions have been modified in Aquamacs in the interest of providing a more Aqua-native experience. In this section, we discuss some of the ways that Emacs conventions are mapped to Aqua conventions, and outline some advanced ways that users can modify Aquamacs to their specific preferences.

### 4.1 Bringing some Emacs 23 behavior back

Export users who find themselves confused by some changes to the Emacs behavior that they are used to, either due to the upgrade to Emacs 23, or to Aquamacs, may undo configuration changes quickly by using the Emacs Lisp code shown at <http://www.emacswiki.org/emacs/AquamacsEmacsCompatibilitySettings> in their Preferences.el file.

### 4.2 Keyboard Shortcuts

Emacs has a well-defined set of keyboard shortcuts, to which Aquamacs adds its own to accomodate OS X conventions. See Table 2 and Table 3 for details.

Note that the descriptions of keys in Aquamacs conform to the Mac standards.

### 4.3 Customizing Aquamacs

One of the distinguishing features of Emacs is the degree to which it can be customized by the end user. Emacs includes its own internal scripting language, elisp, which allows the user to customize such things as keyboard shortcuts, window settings, fonts, and more. The Aquamacs customizations themselves are implemented in elisp.<sup>5</sup>

We recommend that user customizations be placed in specific locations:

- `/Library/Preferences/Aquamacs Emacs/Preferences.el`: Preferences for Aquamacs and for all users

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<sup>5</sup>The Aquamacs customizations are stored in elisp files in the application bundle. It is possible to modify these files directly, but we discourage this practice and provide no support for it.

Shortcut	Elisp Command	Function
Command-N	new-frame-with-new-scratch	Create new buffer
Command-O	mac-find-file-other-frame	Open a file
Command-W	close-window	Close selected window deleting buffer
Command-Shift-S	mac-save-file-as	Save as
Command-A	mark-whole-buffer	Select all text
Command-V	yank	Paste text
Command-C	clipboard-kill-ring-save	Copy text
Command-Option-C	aquamacs-clipboard-kill-ring-save-secondary	Copy text from secondary selection
Command-X	clipboard-kill-region	Cut text
Command-Option-X	aquamacs-clipboard-kill-secondary	Cut text from secondary selection
Command-S	save-buffer	Save file
Command-L	goto-line	Go to specified line
Command-F	isearch-forward	Search
Command-G	isearch-repeat-forward	Repeat search
Command-E	aquamacs-use-selection-for-find	Use selected text for next search
Command-;	spellcheck-now	Jump to next spelling error
Command-M	iconify-or-deiconify-frame	Minimize window to the Dock
Command-.	keyboard-quit)	Keyboard quit
Command-,	customize	Show Customization Buffer
Control-;	toggle-mac-option-modifier	Change Option key function
Command- / / '	(un)comment-region-or-line current line or region if marked	Comment out or in the
Command-Backspace	kill-whole-visual-line	Deletes the current line
Command-Delete	kill-visual-line	Deletes the remainder of the current line
Command-Q	save-buffers-kill-emacs	Save file, exit program
Command-Z	undo	Undo
Command-Shift-Z	redo	Redo
Mouse-drag		select text
Option-Mouse-drag		select text as secondary selection

Table 2: Aqua-specific keyboard shortcuts implemented in Aquamacs. This assumes that the “Option Key is Meta” (Options menu). Commands given are usually the traditional Emacs commands rather than direct bindings.

Emacs Command Key	Aquamacs / Mac Command Key
C-*	Control-*
A-*	Command-*
M-*	Option- <sup>4</sup> (or Esc)

Table 3: Aqua-specific command keys implemented in Aquamacs.

- `/Users/User Name/Library/Preferences/Aquamacs Emacs/Preferences.el`: User-specific preferences for Aquamacs

If in doubt, use the last option. This should replace the usual `~.emacs` file, which is still loaded for compatibility.<sup>6</sup>

Note that Emacs Lisp settings in a `Preference.el` file take priority over any other defined customizations such as those chosen in the Options menu or in customization buffers (Aquamacs / Preferences and elsewhere). Settings in a `~.emacs` file have lower priority. (The order of loading is: `~.emacs`, *custom-file*, `Preferences.el` files. Note that *custom-file* is `~Library/Preferences/Aquamacs Emacs/customizations.el`. This file is not intended to be changed by users. It is written and overwritten automatically by Aquamacs when saving options (“Save Options” in the “Options” menu).

Below are some specific customization options and groups that may be of interest:

- **Frame.** Aquamacs opens new files (and other buffers) in new frames. That is usually more convenient and allows you to use the graphical user interface of today’s computers, which did not exist when Emacs was conceived almost three decades ago. If you do not like this behavior, perhaps because you are used to traditional Emacs, just deselect “Display Buffers in Separate Frames” in the Options menu and save your choice with “Save Options.” (The associated global minor mode is called “one-buffer-one-frame-mode”.)
- **Autofaces.** These styles provide a convenient way to tie default faces to specific major modes so that every frame showing a buffer in a particular major mode is styled that way. Such faces can determine background and foreground color as well as font settings. Such settings always override any global choices made with, for instance, ‘`default-frame-alist`’ or the ‘`default`’ face. The autofaces may be customized (‘`customize-face`’) directly or set through the GUI. Note that these faces apply *per buffer*.
- **ns-alternate-modifier.** This is the modifier to use for the Mac alt/option key. The value can be `alt`, `hyper`, or `super` for the respective modifier. If the value is `nil` then the key will act as the normal Mac option modifier, and the option key can be used to compose characters depending on the chosen Mac keyboard setting.
- **Additional customization.** Of course, Aquamacs Emacs offers you almost all the customization possibilities that Emacs has. Under “Customize Emacs,” you

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<sup>6</sup>Two more files are loaded as well for compatibility with earlier Aquamacs versions: `/Library/Preferences/Emacs/Preferences.el` and `/Users/User Name/Library/Preferences/Emacs/Preferences.el`. The use of these files is not recommended.

Variable
Aquamacs Set Creator Codes After Writing Files
Aquamacs Quick Yes Or No Prompt
Aquamacs Ring Bell On Error
Aquamacs Known Major Mode
Aquamacs Default Styles
Aquamacs Buffer Specific Frame Styles
Aquamacs Auto Frame Parameters Flag
One Buffer One Frame Mode
Tabbar Mode
Smart Frame Positioning Mode
Mac Option Modifier
Mac Control Modifier
Mac Command Modifier
Mac Function Modifier
Aquamacs Known Buffer Modes
OS X Key Mode
OS X Key Mode Mouse-3 Behavior
Visual Scroll Margin
Emulate Mac ... Keyboard Mode

Table 4: Selection of Aquamacs-specific variables that can be customized in the Aquamacs customization group.

will find a sub-menu that allows you to browse the vast space of customization settings. Beware: some of them are complex and not easy to understand. If you would like to tinker with some general Aquamacs-specific behavior, you can customize the group “Aquamacs.”

- **The Scratch Buffer**

As mentioned above, the Aquamacs scratch buffer is simply a buffer into which notes can be typed. For this reason, the scratch buffer is opened in text mode, as opposed to lisp interaction mode (the default mode for the plain GNU Emacs). Customize ‘initial-major-mode’ (and restart) to change this. In Aquamacs, the scratch buffer is automatically retained between sessions. It can also be saved using the normal save commands; you are free to save its contents to another file.

- **Want some GNU Emacs 23 behavior back?** In most cases that represents no problem. Aquamacs provides a customization group called “Aquamacs-is-more-than-Emacs” which contains all the settings whose default values differ from the ones in GNU Emacs (23) or the appropriate package. We recommend that you tinker with these one at a time and check their (often wider-than-you-think-reaching, sometimes detrimental) effects.

Also, see Table 4 for a partial list of such settings.

The range of possible customizations—including restoring some of Emacs’ tradi-

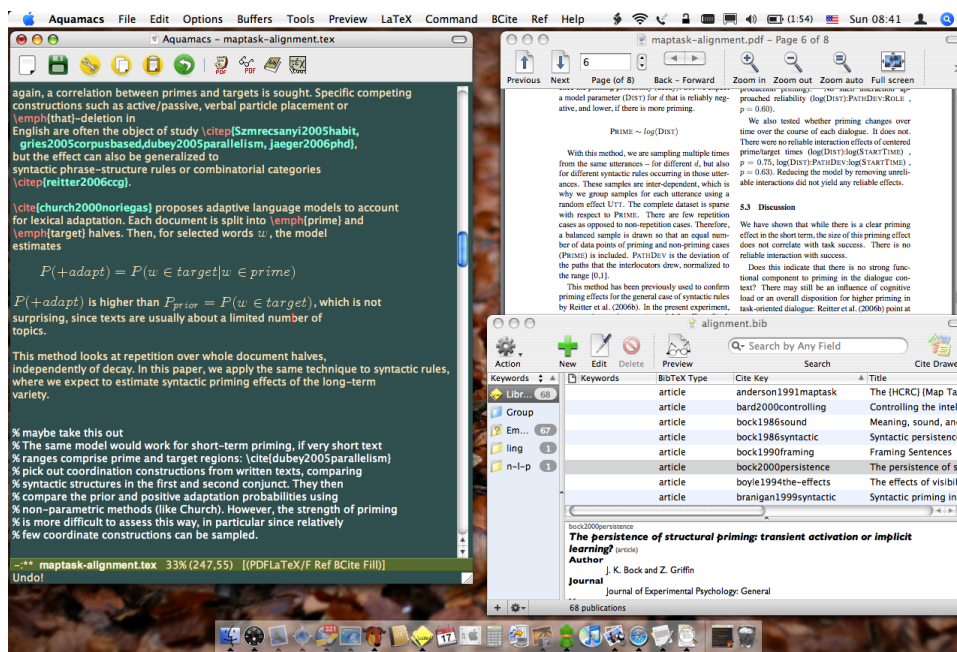


Figure 2: Aquamacs offers extensive support for  $\text{\LaTeX}$  documents and can be combined with viewer applications such as Skim and bibliographic databases such as BibDesk.

tional interface conventions—is beyond the scope of this help document. However, we provide a wiki for users to share their modifications. See <http://www.emacswiki.org/emacs/AquamacsEmacs> for more details.

## 4.4 $\text{\LaTeX}$ Support

One special feature of Aquamacs is its extensive support for the editing of  $\text{\LaTeX}$  documents, especially Emacs' AU $\text{\TeX}$  mode.

AU $\text{\TeX}$  comes with its own manual, accessible via the LaTeX menu (when in latex mode after loading a .tex file), “Read the AU $\text{\TeX}$  manual”. If you have a question, please consult the manual. If that doesn't work, or you suspect you've found a bug in AU $\text{\TeX}$ , please turn to the AU $\text{\TeX}$  mailing lists, accessible here: <http://www.gnu.org/software/auctex/mailling-lists.html>.

To access the enhanced  $\text{\LaTeX}$  functionality that Aquamacs offers, you will need to install a LaTeX system. We recommend to install the *MacTeX distribution*, available at <http://www.tug.org/mactex/>. Alternatively, you can install a smaller distribution provided by Gerben Wierda (<http://www.rna.nl/tex.html>). Both install packages are complete and user-friendly. (While you can obtain  $\text{\TeX}$  from other sources, the binary distributions are particularly well supported in Aquamacs.)

Note that AU $\text{\TeX}$ , as it comes with Aquamacs, is configured to compile documents directly to PDF, a standard on the Mac. If you prefer to produce DVI and Postscript documents with LaTeX, switch off PDF Mode in Command / TeXing Options.



#### 4.4.1 Skim: A $\text{\LaTeX}$ Previewer

When editing  $\text{\LaTeX}$  files, you will often need to view the compiled results. Apple's Preview.app can view PDF files. But for regular use you may prefer a program like *Skim* which has features specifically supporting  $\text{\LaTeX}$  editing. Skim is available here: <http://skim-app.sourceforge.net/>. Skim can automatically reload PDFs after every they are recompiled. It also includes a configuration preset to allow it to jump back and forth between Aquamacs and Skim, showing the documents at the corresponding locations. An up-to-date LaTeX distribution such as MacTeX 2009 is required to use the "SyncTeX" feature.

Clicking on a position in the PDF file in Skim while holding the Command and Shift keys causes Aquamacs to move your cursor to the corresponding point in the underlying source file, opening it if necessary. To enable Skim with SyncTeX, enable Aquamacs in Skim's Preferences dialog. Aquamacs does not need to be configured further – it should recognize Skim when it is running (you need to start it yourself).

If you want to be able to start Skim from inside Aquamacs, do the following.

Having opened a Latex buffer in Aquamacs, go "Menu>Latex>Customize Auctex" and then click on "Extend this Menu." Then, once more, go "Menu>Latex>Customize Auctex." In the list of items you see now, drag the mouse to "Tex Command," in the list you see then, drag it to "Tex View", and in the list which finally opens, click on "Tex View Program Selection." You now have a customization buffer opened. There, you see a line which contains the words "output-pdf." In the line below that line, you see the word "Viewer." To the right of it, there is a button "Value Menu." Click on it, and choose "Skim" in the list that pops up.

Finally, before you close the customization buffer, do not forget to click on the button "State" and, in the list then popping up, to click on "Save for Further Sessions". That's all.

Now you can use the view icon in the toolbar, or the key combination C-c C-v, or "Menu>Command>View" to open Skim with your pdf-output file.

Furthermore, things are configured so that these three ways to call Skim also yield syncing from source to pdf-output. Syncing from source to pdf-output can also be obtained by clicking on a position in your source-file while holding the Command and Shift keys.

(If you had not rejected Apple's default in the installation of Leopard or Snow Leopard to put X11 on your system, you may also consider to choose xdvi for "output-dvi.")

#### 4.5 Lisp Support

Lisp programmers will appreciate the Superior Lisp Interaction Mode for Emacs, SLIME. This is available from the Aquamacs website as a convenient point-and-click installer package, which will result in fully integrated Lisp experience.

#### 4.6 Java Support

Java programmers should install the JDEE point-and-click installer package, available from the Aquamacs website (<http://aquamacs.org/download.shtml>).

## 5 Extending Aquamacs

Aquamacs supports Plugins that can be packaged to provide point-and-click installers (via Apple's PackageMaker). The interface is simple. Adding standard Emacs packages is easy as well.

### 5.1 Plug-in Interface

All files named *site-start.el* anywhere in the load-path are loaded at startup, before the user's init files are loaded. For example, such a file may be placed in `/Users/User Name/Library/Application Support/Aquamacs Emacs/myPlugin`.

The load-path is automatically extended to cover all subdirectories in standard paths (see Section 5.2).

If a plug-in needs to execute code earlier in the initialization phase, that is, before any Aquamacs-specific code is executed (but after Emacs initialization code has been executed), this code can be provided in a file *site-prestart.el* anywhere in the load-path.

Info files (M-x info) can be provided in a directory called `info` inside the plugin directory. Aquamacs will automatically add this path to 'Info-default-directory-list'. Plugins should provide a `dir` file inside the `info` directory containing an overview (see the Emacs documentation for 'info').

Note that plug-ins should not make any assumptions about whether a frame exists or is visible.

### 5.2 Load path

Aquamacs is able to find configuration files and Emacs packages from any of the following locations (load-path).

- `/Library/Application Support/Aquamacs Emacs/`
- `/Users/User Name/Library/Preferences/Aquamacs Emacs/`

The following paths are available in the load-path for individual preference settings. *They should not be used if you distribute a point-and-click installer package.*

- `/Library/Preferences/Aquamacs Emacs/`
- `/Users/User Name/Library/Preferences/Aquamacs Emacs/`

All subsequent directories are added recursively, so Aquamacs will find any path that starts below. Type `C-h v load-path` for more information.<sup>7</sup>

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<sup>7</sup>The following paths are loaded for backward compatibility reasons:

- `/Library/Application Support/Emacs/`
- `/Library/Preferences/Emacs/`
- `/Users/User Name/Library/Preferences/Emacs/`
- `/Users/User Name/Library/Preferences/Emacs/`

. Do not use these paths.

### 5.3 Disabling a plug-in or a load-path

If an (empty) file named *.ignore* exists in a specific path, Aquamacs does not load any *site-start* and *site-prestart* source files in this or descending paths and does not add that or subsequent paths to the load-path.

### 5.4 Changing Aquamacs source files

If you'd like to tinker with the Emacs lisp source files that come with Aquamacs, you can do so quite easily. When activating a new function or evaluating an expression, C-x C-e is your friend.

However, you may notice that some of your changes aren't active after you've saved your work (into the Aquamacs application bundle) and restart. That is because some of the code is precompiled into the Aquamacs binary and not loaded from the source (or .elc / .el.gz) files. To alleviate that problem, create a file

`/Users/User Name/Library/Application Support/Aquamacs Emacs/site-prestart.el` with the following content:

```
(setq aquamacs-reload-preloaded-files t)
```

This will cause to re-read the otherwise preloaded files from disk.

## 6 Getting Help

There are many options for getting help with Aquamacs.

From within Aquamacs, you can access user documentation from the menu or from specific key combinations. This manual is available from the Help menu, as is a very complete Emacs documentation, the *Emacs Manual*. To extend Emacs using the built-in programming language Emacs Lisp, refer to the *Emacs Lisp Reference*, which is also available from the Help menu. (The latter can be used via the Mac's convenient Help Books, or via Emacs' powerful Info interface.)

Emacs is self-documenting. The Help menu (under *Describe*) contains documentation for every function available to the user. You can reach these functions easily: C-h k (plus key/menu entry) brings up help for any key or menu binding; C-h f (plus function name) gives help for an elisp function; autocompletion support is available with (tab); and C-h a brings up apropos, a search function.

For help from other Aquamacs/Emacs users, the best place to begin is the OS X Emacs mailing list. The searchable list archives are located at <http://dir.gmane.org/gmane.emacs.macintosh.osx>. For more information on subscribing to the list, see <http://email.esm.psu.edu/mailman/listinfo/macosex-emacs>. Another option for general Emacs help is the [gnu.emacs.help](http://gnu.emacs.help) newsgroup.

Remember: almost every question has been asked before. Google will give you an instant answer, provided you know the right keywords.

Apart from answering questions at the OS X Emacs mailing list, you can also file bug reports on Aquamacs. Use the "Send Bug Report" function in the Help / Diagnose and Report Bug menu. The same menu has a function to restart Aquamacs without any of your customizations – please use this function to ensure that it is really a bug in Aquamacs that you are seeing. (Your settings may be flawless, but even so we'd like to know which ones will cause the bug to show up!)

In addition to requesting help, you can also offer it in these mailing lists. *Please note that in case we have helped you with a configuration problem on the mailing list, we may ask you to write a little note in the Aquamacs Wiki so others can profit, too.* Remember: Aquamacs is an Open Source community project!

## 7 Aquamacs lives from your donations

Aquamacs Emacs is a project that depends on your support. The project has no other source of substantial income: the application is free, the downloads are free.

Free software is developed because programmers love their work. Donations will never remunerate them financially as a job in the software industry would. But every donation is a recognition of the programmer's hard work, and the bigger ones actually help paying some bills.

If you would like to say "thank you", or if you would like to see the project developed further, *please make a donation.*

<http://aquamacs.org/donate>

## 8 Contribute to Aquamacs – Join the Fun!

If you'd like to join us in working on Aquamacs, download the source code from Git and take a look. Do ask if you have questions! When you have a patch or a less specific suggestion for improvements, send it to the development mailing list.

We're a very open team. Everyone is allowed to suggest modifications to every piece of code. There is no "ownership" of code, so please join us to make Aquamacs even better!

## 9 Acknowledgments

Who's behind Aquamacs?

It's a free software project, and naturally, Aquamacs could not exist without the help of developers, designers, writers and users. The following people have contributed code, bug reports and ideas to the Aquamacs project at one point or the other.<sup>8</sup>

Part of the development team of Aquamacs 2.0 are: David Reitter (co-founder, lead developer) and Nathaniel Cunningham (developer). Kevin Walzer (co-founder) wrote the initial manual. Konrad Podczeck: AUCTeX. Dave Carlton: web server maintenance. Aquamacs contains icon artwork by Adrian Chromenko, Jessica Walker (Aquamacs 2.0 application icon) and David Reitter, Jasper Hauser, and the Nuovext Project. The Aquamacs website was designed by Ted Roden.

We would also like to acknowledge the contributions of the many authors whose source code and hints on public forums have already been integrated into the build. They are too numerous to mention here.

Aquamacs is based on GNU Emacs, which is the work of Richard Stallman and many other developers, in particular Andrew Choi (original GNU Emacs-to-MacOS

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<sup>8</sup>We apologize for not being able to list everyone. If you feel that someone should be mentioned, please e-mail us.

and OSX ports), Steven Tamm, Mitsuharu Yamamoto, Adrian Robert. We also would like to acknowledge the work of the many authors of the major modes included.

Last but not least, Aquamacs couldn't exist without the dedication of its users, who donate money, report bugs and help us fix them.

## 10 Nightly Development Builds

Ready to install, the Aquamacs project offers nightly built binary packages that contain the latest in Aquamacs development. These builds are not considered “stable”, but experimental.

See <http://aquamacs.org/nightlies.shtml> for downloads.

## 11 Obtaining the Source Code

You may download the source code for each release of Aquamacs, or download the source of the current development version from <http://aquamacs.org/development.shtml>. You need Git (<http://git-scm.com>) in order to download it.

The author offers to provide you with the source code for a time period of at least three years from the date of release. Source code should be obtained from the aforementioned Git repository or, if this is impossible, by written request from the author.

## 12 Licenses

Aquamacs: the Emacs distribution, (c) 2005,2006,2007,2008,2009,2010 by Free Software Foundation, Inc., and by David Reitter. Aquamacs is licensed under the terms of the GNU General Public License, either Version 3, or (at your option) any later version.

For details of this license, type C-h C-c in Aquamacs (Help: Copying Conditions) or visit <http://www.fsf.org/licensing/licenses/gpl.html>. The Aquamacs documentation is licensed under the terms of the GNU Free Documentation License. For details of this license, please see <http://www.gnu.org/copyleft/fdl.html#SEC1>.

The license does not apply to the toolbar icons contained in the Aquamacs .app bundle. They may be used and redistributed within Aquamacs, but not separately or in another application. Some of the icons may be redistributed, however - see the COPYING file in the etc/images directory in the Aquamacs .app bundle or in the source code.

## 13 Aquamacs Emacs: What's New in This Release

### 13.1 Changes— after 2.1

- Improved fullscreen mode: addresses rare display issues (related to scrollbars), crashes after switching back from fullscreen mode, and empty menus during fullscreen mode. Note that multiple frames may be shown in fullscreen mode (switch with, e.g., A-'). Code by Daisuke Murase and David Reitter. Suggested by many.
- Repeated cycling between frames (forwards with A-') now cycles through all frames rather than just the two most recent ones. Suggested by many Aquamacs users.
- When using `emacsclient -t` to connect to a running Aquamacs session from the terminal, entering the minibuffer no longer produces an error. Reported by Stephen T.
- When hollow cursors are used, ensure that the glyph underneath the cursor remains visible. Reported by Marcin Koziej.
- Find-file (C-x C-f) with a file that is already visible in another window now switches to that window again ('one-buffer-one-frame-mode' being on). Reported by Dan Coe. Cursor movement (up/down) is more precise in terms of horizontal placement. Reported by Matt Crawford.

### 13.2 Changes— 2.1

To all supporters: thank you so much for your donations. See also: <http://aquamacs.org/donations.shtml>. To all users and hackers: Thank You for your support! We appreciate your bug reports, success stories, ideas and code.

- Aquamacs is now optimized further for speed on machines with Intel processors: It starts up faster and also executes lisp faster (up to 50% in some situations).
- The "Line Numbers" item in the Options/View menu now turns on 'global-linum-mode', displaying line numbers to the left of each buffer line. Suggested by Konrad Podczeck.
- Copying bug reports and other mail to the pasteboard in order to send them with GMail or another mail program now works reliably. Reported by Matt Mollison.
- C-x s ('save-some-buffers') and other functions that ask questions applying to a series of items accept the ! command again to apply the action to all items (e.g., save all buffers). Reported by Michael Kohlhas.
- Users should now experience no more trouble binding the new Aquamacs version to file types with the Finder's "Open With" and "Change all" functions when earlier versions of Aquamacs are present. In case of persistent issues, we advise to reset the LaunchServices database with the 'lsregister' command as described here: <http://www.macosxhints.com/article.php?story=20071102084155353> Reported by Arthur Ogus

- The Spellchecking context menu (flyspell-mode / Check Spelling While Typing) now shows suggested alternatives in the right order.
- The LaTeX icon in the toolbar changes again when toggling PDF mode. Reported by Gabriel Cardona and Konrad Podcizek.
- Jumping to the exact source/PDF position with Skim now works even in multi-file LaTeX projects where files are in different locations. Reported by Brad Miller and Jeffery Kline.
- Setting frame position and size in ‘default-frame-alist’ (and elsewhere) now works again. Reported by Konrad Podcizek.
- Fixed “Join Windows” menu item (was: “Remove Splits”).
- PHP-mode has been updated to version 1.5.0.
- Files opened from the command line or via the Finder will be shown if they are already visible in a tab or in any other window; unless ‘Show Buffers in New Frames’ (one-buffer-one-frame-mode) is enabled, Aquamacs no longer creates a new frame for those files. The customization variable ‘dnd-open-file-other-window’ can be used to control the behavior. Reported by Mike Pelican.
- With all frames closed, minimized or on other spaces, Aquamacs now recognizes key commands again. If the minibuffer is needed, a frame showing an *empty* buffer will appear. This buffer is always read-only and, unsurprisingly, rather empty.
- Frames are now cycled in order of their last selection, rather than their creation. Selecting a frame and deleting it will, for instance, select the previously selected frame. Cycling with A-’ (‘next-frame’) will cycle accordingly. Reported by Konrad Podcizek and David Eyk.
- Haskell-mode has been updated to version 2.7.0. Suggested by Johannes Krause.
- Menu-bar-mode, not supported in Aquamacs, will no longer cause problems for people who try to switch the menu bar off in their customizations.
- The cursor is now drawn correctly when ‘line-spacing’ is set.
- Aquamacs no longer hangs in some situations when using ‘ispell’.

### 13.3 Changes— 2.0

*Aquamacs is now based on Emacs 23 and the Cocoa NextStep port. There are many changes under the hood associated with this, but also a plethora of visible improvements. Major ones, and those pertaining to Aquamacs specifically, are listed here. Further changes can be found in the NEWS file for Emacs 23.*

#### **Major User Interface Improvements**



- Spell-checking now uses the system-wide dictionaries in all the languages supported on OS X. The standard spelling user interface is available as well as the traditional Emacs ‘ispell’ interface (which also uses the system-wide spelling mechanism). Configure the use of GNU ‘aspell’ through the ‘ispell-program-name’ variable if desired.

Code by Nathaniel Cunningham.

- Aquamacs has a new icon in the Dock, designed by graphic designer Jessica Walker (jekawacaneer@gmail.com).
- The Aquamacs application has been renamed to *Aquamacs.app* (from Aquamacs Emacs.app).
- Dialogs have been vastly improved: they appear as sheets over the frames where they belong, contain better UI elements (as in the case of the dialog displayed before quitting Aquamacs, which was once called “dialog from hell” before receiving a makeover). The standard Enter, Space and Esc keys (and more) are supported. “File Save” panels also appear as sheets.
- Toolbars can now be configured through the normal customization panel. Right-click on the toolbar, use the Options/View menu item (or use M-x ns-tool-bar-customize). The chosen icons are persistent; toolbar customizations are, however, tied to the toolbars set by modes. That means that users can choose a different set of icons to display in latex-mode, for instance. The ‘ns-tool-bar-display-mode’ variable now supports label-only toolbars. Right-click on the toolbar to change; or use M-x customize or `Preferences.el` to set it to ‘labels’ in order to only show labels. The former meaning of this value (showing labels and icons) is now ‘both’ (or, usually, nil, the default).
- Fonts and colors of all (mode-specific) faces can now be configured using the standard font and color panels. The Options / Appearance menu provides a function to show the font panel, which leads to buttons for foreground and background colors. We also have a menu item for the color panel separately, from where colors can be dragged&dropped directly onto any piece of text to customize its face. Holding down the Option key will, instead, set the face’s background color.
- The printing system has been revised; the standard print and page setup dialogs are used inside the application. The print dialog now appears more quickly. (Note: over-long lines will always be wrapped at word boundaries when printing. Clipping or horizontal pagination are not supported at this time.)
- Line wrapping is now set to Truncate, Wrap, Word Wrap and Line Breaking (auto fill) under *Options / Line Wrapping* for the current buffer. A *Set as Default* will set it as default for all buffers that have no explicit line wrap setting. As before, there is also a setting to detect word wrap in text files. When it is on, Aquamacs detects the wrapping style of text-mode buffers automatically, but prefers word wrapping (see the customization variable ‘auto-word-wrap-default-function’). Word Wrapping translates to ‘visual-line-mode’ internally now, and the former Aquamacs 1.x

mode of the same name now corresponds to a customization variable called 'line-move-visual', which is enabled by default. 'Longlines-mode' is obsolete. Users with manual customizations should adjust their settings. Fine control can be achieved by customizing 'visual-line-mode', 'word-wrap', 'truncate-lines', and 'auto-fill-mode'.

## Key Bindings

- It is now possible to customize behavior of right Option/Alternate, Command and Control modifiers independently of the left ones using new entries in the (renamed) "Option, Command, Meta keys" menu (in Options) or the new customization variables named 'ns-right-alternate-modifier' (etc). Patch by Marcin Koziej.
- Even when the Option modifier keys are set up to be handled by the system (rather than being Meta - see Options - Option Key menu), Option-Arrow and Option-Delete key combinations lead to wordwise operations (they are recognized as Meta). (Set the new 'ns-alternate-meta-special-codes' to nil to disable.)
- Note that Word Wrapping ('visual-line-mode') affects the function of the cursor movement keys (arrows, and C-a, C-e, C-p and C-n). In Aquamacs, this can be easily customized. The default is as such:
  - In Word Wrapping (visual-line-mode), C-aenp and arrow keys move according to visual lines.
  - Without Word Wrapping (visual-line-mode off), arrow keys move visually, but C-aenp move non-visually according to buffer lines as in Emacs 22 and Aquamacs 1.x.

Users may configure this behavior via the (new) 'line-move-visual' customization variable. Set it to *t* for unconditional visual movement of all keys, and *nil* for unconditional logical (buffer) movement of all keys.

- Keyboard bindings are displayed more consistently in the menus now. Throughout Aquamacs, Mac standard key descriptions are used (this may be configured using the variable 'ns-use-mac-modifier-symbols'). Users should be aware that manuals and tutorials will often refer to keys such as C-x (⌘ or Control X), and that keys like M-q correspond to the chosen Meta key modifier, normally the Option key.
- Tabs are now available via the A-1..9 (Command-1..9) keybindings. 'Split-window-vertically' is now bound to A-M-2 (Command Option 2), 'split-window-horizontally' is A-M-3 (Command Option 3).
- Command-~ now cycles backward to the previously selected frame ('raise-previous-frame'). Patch by Matthew Dempsky.
- Command-Meta-; now runs 'flyspell-buffer', which marks all misspellings in the current buffer. Patch by Nathaniel Cunningham.
- Command-PageUp/PageDown now jump to the beginning or end of the buffer, respectively ('beginning-of-buffer', 'end-of-buffer').

- When ‘osx-key-mode’ is switched off, ‘x-select-enable-clipboard’ is restored to its (new) default value, *t*. That means that kill and yank operations (C-w, C-y, mouse text selection and more) are integrated with the Mac pasteboard. When ‘osx-key-mode’ is on (as is default), everything is as in previous Aquamacs versions: the standard copy&paste operations (A-c, A-v) use the system pasteboard, while the killing operations from traditional Emacs do not. Suggested by José M Figueroa-O’Farrill.

## Editing and Major Modes

- Internally, Emacs is based on a superset of Unicode now. Emacs also uses Cocoa, a modern technology that facilitates program development and maintenance, supports 64-bit computing on Macs and allows for better integration of applications with the operating system and other applications.
- Semantic features and Project Support (EDE) are now included in Emacs and available from the Tools menu. Note that the JDEE plugin distributed with earlier versions of Aquamacs is not compatible (and prevents functioning of the new functionality). You should remove it (from `/Library/Application Support/Aquamacs Emacs/JDEE`) or update to a new version of the plugin.
- AUCTeX has been updated to version 11.86 (was: 11.85). LaTeX editing has become more comfortable with this version. For the details, please see <http://www.gnu.org/software/auctex/manual/auctex/Changes.html>. The new version improves synchronization with viewer programs. Internally, Skim.app integration has changed: Skim is always used for all View commands (like C-c C-v) if it is already running (customize variable ‘TeX-view-program-selection’ to control this). ‘TeX-source-correlate-mode’ is on by default in Aquamacs (disable by customizing ‘TeX-mode-hook’: remove ‘aquamacs-latex-viewer-support’). To manually change the Viewer used for various kinds of files (DVI, PDF, PS), select “LaTeX” / “Customize” and navigate to “TeX Command”, “TeX View”, “TeX View Program Selection”. There, choose, for instance, Xdvi for the viewer in DVI mode, Skim or Preview for PDF mode.

Patch by Konrad Podcizek and David Reitter.

- TeX / LaTeX macros are now found more reliably when using TeXLive (‘TeX-macro-global’ is configured differently). Reported by Wolfgang Meiners.
- LaTeX master files in different directories are now found reliably when calling ‘Jump to PDF’. Reported by Mac Pigman.
- Aquamacs uses “Python-mode” by default now for Python source files. Users who prefer the original Emacs python package can switch by including `(require ‘python)` in their `Preferences.el` file. Code by Barry Warsaw.
- Emacs Speaks Statistics (ESS) has been updated to version 5.8 (was: 5.3.10). Refer to the ESS website for changes (<http://ess.r-project.org/Manual/readme.html#New-Features>).
- Ruby mode has been revised to match and track the latest version included with GNU Emacs.

- Many more improvements between Emacs 22 and Emacs 23. See etc/NEWS at <http://www.gnu.org/software/emacs/NEWS.23.1>. NB, many of the items listed there do not apply to Mac OS X.
- DocView mode is no longer used to display PDF and other files (it didn't work well).
- .wiki files now open in wikipedia-mode.

## Miscellany

- Aquamacs 2.x requires Mac OS X 10.6, or 10.5.8 or later. (OS X 10.4 users may compile from source at their own risk.)
- When printing, double spaces are formatted as such and can be used to align text. Reported by George Nurser.
- HTML and PDF export functions have changed: PDF export can be achieved as in any Mac application via the Print dialog. Use the new *Copy as HTML* function in the *Edit* menu to copy formatted text including all the coloring into the clipboard in HTML format. Many other applications, including presentation software, can then display the formatted text and keep it editable.
- Fullscreen mode works largely as before in Mac OS X 10.6; in older versions of OS X, it will unconditionally take over the full screen (Dock and menu are not visible). *Note: there are known issues related to scrollbars when returning from fullscreen mode. These will be addressed in the next version of Aquamacs.*
- 'aquamacs-find-file' (C-x C-f) will ask for confirmation if you first complete partial filename input in the minibuffer, but then attempt to create a new file.
- Completion is, in many cases, more powerful by completing to the left *and* the right of the input string. Customize the option 'completion-styles' to control this.
- As per Emacs 23, Aquamacs now supports multi-file commits in distributed version-control systems through the VC-dir package.
- Users who have included 'turn-on-auto-fill' or 'turn-on-word-wrap' in their customization of 'text-mode-hook' or other hooks are advised to change this to 'set-auto-fill', or 'set-word-wrap', respectively. These functions are more comprehensive and disable (usually) nonsensical alternatives.
- A new customization variable 'aquamacs-default-major-mode' is provided to set the default major mode of newly opened, empty buffers. (We recommend keeping 'default-major-mode' at 'fundamental-mode'.)
- The appearance of the echo area (at the bottom of each frame) can now be configured via M-x customize-face RET echo-area RET. Besides the echo area in general, note the more specific faces 'minibuffer-prompt' and the new 'minibuffer' face.
- The Aquamacs Help books (Apple Help) are now displayed more reliably when multiple versions of Aquamacs are present on the system. The Emacs Lisp Reference as well as the Emacs Manual are up to date.

- Auto Save files are now stored in `/Library/Caches/Aquamacs Emacs`. This way, they survive reboots such as after system crashes (kernel panics, etc.). Reported by Neil Best, Justin Pitts and Richard Busby.
- Auto Save files and Session files are purged after 31 days.
- In some circumstances, point position was changed when switching back and forth between tabs directly and also via other buffer-switching mechanisms such as opening new files.

### 13.4 Changes— 1.9

- Copy (Command-c) works again reliably for text selected by mouse. However, the previous improvement avoiding duplicate entries in the kill ring has been reverted. Reported by Tom van Vleck.
- Jumping to a LaTeX error after compilation works more reliably now. The LaTeX-command setting has been changed to include ‘file-line-error’ style. Suggested by Enrico Franconi.
- Recognize Objective C files (extensions `.m` and `.h`) by their content. Patch by Kendall Gelner and D.R.
- Automatic word wrapping works better in large hard-wrapped (auto-fill-mode) documents with occasional (6+) over-long lines.
- The Apple Help books (for Aquamacs, Emacs and the Emacs Lisp Reference) now work on 10.6 “Snow Leopard”. Reported by Philippe Sismondi.
- Aquamacs now by default enables syntex when compiling latex documents.
- CSS-Mode has been revised to match the GNU Emacs 22/23 CSS mode.

### 13.5 Changes— 1.8c

- Tabs are now directly accessible using keys A-M-1,2,3...9,0 (normally: Command-Option-1,2,3...9,0). The number of each tabs is marked. For configuration, see the new customization variable ‘tabbar-show-key-bindings’ and the function ‘tabbar-define-access-keys’. For instance, use `(tabbar-define-access-keys '(alt))` in your `Preferences.el` file to use Command-1,2,3.. bindings.
- Aquamacs now asks for confirmation when printing is requested via A-p. This helps avoid long waits for rendering with large buffers when A-p is pressed by mistake.
- On systems with faulty LaTeX installations, Aquamacs will now do a better job at choosing the right TeXLive (or legacy teTeX) binaries.
- When scrolling back and forth page-wise, the point will now end up in its previous position.

- Command-, can now be re-bound via the normal Aquamacs key maps ('osx-key-mode-map'). (Note that even if rebound, the application menu will still show the A-q and A-, key bindings for Quit and Preferences, respectively). A-h remains unmappable for now. Reported by Chris Bernard.
- The mark is now deactivated when point is restored while switching tabs (in transient-mark-mode, which is on by default).
- Command-C (clipboard-kill-ring-save) will take care not to create duplicate entries in the kill ring. Reported by Konrad Podcizek.
- Fixed a rare failure of dired to view directories. Reported by Uwe Pieczynski.
- Fixed a startup failure when environment variables with values were used that could not be encoded with the coding system assigned to the system's "input source" language. ('locale-coding-system' is now set according to the locale in the default login shell.) Reported by André Berg.
- Fixed an error when deleting the whole buffer contents while smart-spacing-mode was on. Patch by Jon Shea.
- Fixed a potential security hole in smtpmail. Code by Simon Josefsson.
- 'LaTeX-mode-hook' can now be customized and saved through the customization interface. Reported by Bruno Cadonna.
- ESS (R-mode) will now retain an active mark (and region) after evaluating code, e.g. with C-c C-r.
- In the keyboard emulation modes that allow the mac-native use of Option on various keyboard layouts, while retaining Option as Meta key for Emacs, ESC key sequences always act as Meta sequences. For instance, with the German layout, ESC-l acts as 'downcase-word' (the original M-l binding), while Option-l inserts the @ sign.
- Adopting fonts as default fonts for frames: keep frames inside screen. Reported by Stefan Vollmar.
- The Aquamacs application bundle has shrunk by about 17 MB thanks to compression.
- Version 1.8b: Show more buffers in Window menu.
- Version 1.8b: Avoid slow-down of editing when Tramp is used to access a remote file. Reported by Alison Lister.
- Version 1.8b: Avoid hang during startup when remote, now inaccessible files were edited during a previous session. Reported by Christopher Menzel.
- Version 1.8b: org-mode is now used automatically for all .org files.
- Version 1.8c: AUCTeX is used again as latex-mode Reported by Herbert Korté.

## 13.6 Changes— 1.7

- Aquamacs now makes it easier for users to copy, cut and paste (and kill and yank) whole words, phrases or sentences by managing the spaces between words for them. Spaces are removed and automatically inserted where needed, whenever the new ‘smart-spacing-mode’ is turned on. The Options menu provides a setting to turn it on automatically for all *text-mode* and related buffers. To set a default for all buffers, configure the option ‘global-smart-spacing-mode’ using the customization interface.
- A problem that caused error messages upon startup and, sometimes, a failure to quit for some users (and only if Aquamacs was installed for the first time) was fixed. Reported by William Triplett, Kevin Brubeck Unhammer and Jean-Christophe Helary.
- Aquamacs now quits faster in some situations.
- JDEE, the Java Development Environment for Emacs is no longer included in Aquamacs but provided as a point-and-click installer plugin, which can be downloaded from the Aquamacs website. This reduces the size of the Aquamacs distribution, while maintaining an easy way for Java programmers to install the package. Note that JDEE also includes CEDET.
- Tabs showing a buffer that is mirrored in other windows will retain their position of point.
- With soft wrapping on (Options menu), M-q now calls ‘unfill-paragraph-or-region’, which has the same semantics as ‘fill-paragraph-or-region’ for hard wrapped text.
- C-z is no longer bound to minimize the frame. Users who require this feature can add the key binding in their `Preferences.el` file: `(define-key osx-key-mode-map `[(control z)] 'iconify-or-deiconify-frame)` (If you have bound C-z to something else using ‘global-set-key’, note that the new ‘ignore’ binding in ‘osx-key-mode-map’ will shadow this. You need to use ‘define-key’ as above.)
- Cursor movement is no longer sluggish when multiple windows are visible. Generally, Aquamacs should feel faster. Reported by Drew Hess.
- When clicking into an (unselected) window, Aquamacs no longer sets the mark and marks a region in the buffer in certain circumstances. Reported by Konrad Podcizek.
- Resolved a problem where clicking in the fringe to set a breakpoint when using C-mode in conjunction with ‘gdb’ (in the Emacs debugger) caused Aquamacs to crash. Reported by Eric Martin.
- ‘gdb’ and possibly other packages no longer fail to open certain additional ‘special display’ windows. Reported by Eric Martin.



- Aquamacs no longer opens additional windows when it opens files per drag&drop or as directed by another application (such as Finder), if these files are already shown in a buffer. Reported by Tim Hsu.
- Aquamacs no longer de-minimizes frames (from the Dock) when opening new files while all its frames are hidden. Reported by Tim Hsu.
- Documents printed or exported to HTML with soft word wrapping turned on will now also exhibit soft wrapping in HTML, and wrap as expected at the page boundary on printed pages. Reported by Enrico Indiogine.
- OS X will now more reliably recognize the latest installed Aquamacs version in order to open documents.
- Aquamacs now remembers more and longer undo steps (maximum undo memory and number of steps increased four-fold).
- The “dialog from hell”, asking users whether they want to save a file, or all, or none, or view the file or the differences, is now less ridiculous and has a Cancel button. Whether the dialog is shown or the minibuffer is used, Aquamacs always shows the buffer that is up for saving.
- The command line tool (installed with the Tools menu) will now find Aquamacs wherever it is installed in the system. It will always use the latest Aquamacs Emacs that is known to the system. (As a side-effect, you cannot use the command in connection with “sudo” any longer. We recommend using Tramp.) Reported by Jean-Christophe Helary.
- Bug reporting, and generally, sending e-mail, works now for users whose default Email client is Gmail. Gmail receives special treatment because of a bug on Google’s server.
- Charsets are given in HTML generated with “Export to HTML”. Documents now validate as HTML 4.01 Strict.
- A rare display problem was fixed in cases of vertically split windows, with fringes and scroll bars turned off. Reported by Rolf Hanson.
- Autoface mode works better with major modes derived from other ones.
- More key bindings are now shown correctly in the menus (e.g., Undo/Redo).
- Python-mode updated to version 5.1.0. See also: <https://launchpad.net/python-mode/+announcements>.
- Haskell Mode updated to version 2.4. We also provide better integration of the mode (recognition of various file types). Maintained by Stefan Monnier.
- Prolog Mode 1.18 included with vast improvements (and some pre-configuration for Aquamacs). Suggested by Kevin Brubeck Unhammer. Code by Stefan Bruda et al.
- ACT-R major mode improved: it inherits ‘lisp-mode’ key bindings now. `.actr` files are recognized automatically.

- The Enhanced Carbon Emacs plugin is no longer loaded from `ec-emacs` directories, because it is incompatible with the latest Aquamacs versions.

## 13.7 Changes— 1.6

### *Display*

- Tabs are now on by default in new installations. “Show buffers in new frames” (one-buffer-one-frame-mode) is off by default. Use the Options menu if you’d like to configure different settings. (That users who had previously installed and configured Aquamacs will retain their chosen settings.) Tab code by Nathaniel Cunningham, David Ponce and David Reitter.
- Aquamacs Styles have seen a major overhaul and are now called *Aquamacs Autofaces*. To recap, these autofaces apply settings such as fonts, background and foreground colors to buffers and the frames as they show the buffers. The settings are chosen according to the major mode used in the buffer. This makes it possible to automatically edit prose texts (such as LaTeX) in a variable-width (proportional) font, but do one’s programming (e.g., Python or C) in a fixed-width font. Refer below for a technical explanation of the change.
- The use of color themes is being phased out. While still included in Aquamacs, they are not available any longer from the Options menu. We recommend the new light-weight functions to set fore/background colors using the Options / Appearance menu.
- Fontsets are no longer defined on startup (with a few exceptions to ease the transition). If your frame settings (‘default-frame-alist’ and ‘special-display-frame-alist’) contain references to fontsets like `fontset-monaco12`, we recommend to remove them, e.g., via M-x customize-option.
- The font used for text in the echo area (the ‘default’ face) is now Lucida 13pt, as is customary on the Mac. Note that the size of this font is used to express frame geometry settings, so this may need manual adjustment. The font used for major modes that do not have a special setting (the ‘autoface-default’ face) is Monaco, so that buffers are generally shown in a monospaced font. The default for certain other modes such as ‘text-mode’ (face: ‘text-mode-default’) and ‘latex-mode’ (face: ‘latex-mode-default’) is Lucida 13pt. You may change these settings using the font settings in the Options / Appearance menu, and also using M-x customize-face.
- There is a new function (in Options / Appearance) that will “Adopt the frame parameters as default” for all new frames. Note that this will set ‘default-frame-alist’ (or ‘special-display-frame-alist’). These settings will be saved in the customizations file with “Save Options”. Emacs hackers need to be aware that such customization settings override any settings in `.emacs` files (but not those in `Preferences.el`).
- Zoom: press Command++ (or Command=) to zoom in, and Command-{}- to zoom out, changing the font size of the text shown. You can also use your Meta

key (normally Option) and the mouse wheel. This zoom applies just to a buffer and frame.

- The line where the point (cursor) is can be highlighted with ‘highline-mode’, available via Option / Show/Hide / Highlight Lines (‘global-highline-mode’). Code by Vinicius Jose Latorre.
- Fringes now blend with the rest of the window (background color). Customize the ‘fringe’ face if you’d like more pronounced fringes.

### *Configuring and Extending Aquamacs*

- New (text-mode) buffers will have soft word wrap enabled (rather than hard auto-fill mode), in line with the standard way of text editing on the Mac. Soft word wrap is also used for opened files as a default, when the wrapping mode cannot be determined automatically. (Customize ‘auto-word-wrap-default-function’ to nil to change this back.)
- More user-installed files (in the /Library and /Users/.../Library folders now take precedence over Aquamacs-supplied packages. Specifically, user-supplied packages contained in subdirectories, including an AUCTeX distribution (must be compiled) are loaded when present. Thus, almost all packages that come with Aquamacs can now be replaced. Warning: supplying your own packages may cause errors.
- A new function in the Tools menu will install a small tool that allows users to open files in Aquamacs from a shell (command-line / Terminal). The command format is `aquamacs filename.txt`.
- The Options menu has been restructured. You can now find the functions “Enter Debugger on Error” and “Enter Debugger on Quit” in the “Help / Diagnose and Report Bug” sub-menu.
- When started from a shell (e.g. in a terminal), ‘default-directory’ will be the inherited from the shell. Reported by Robert Goldman.
- Aquamacs can now automatically select the frame and window over which you move your mouse cursor, as provided by Apple’s Terminal.app and by many X11-based window managers under Unix and GNU/Linux. We now include the ‘follow-mouse’ package with a few extensions to make it work on the Mac. You can turn it on with a simple `(turn-on-follow-mouse)` in your Preferences.el file.
- The “vl” indicator in the mode-line has been removed. ‘global-visual-line-mode’ is on by default in Aquamacs.
- The mode-line now shows “Wrap” to indicate that soft word wrapping (‘word-wrap’) is on in the buffer. Word wrapping can be toggled with C-x w now.
- There is a new menu item to customize Aquamacs-specific options (as compared to GNU Emacs defaults) in the Options / Customize Aquamacs menu.

- To see only labels (and not icons or icons and labels) in the tool-bar, use this setting in your `Preferences.el` file:

```
(setq mac-tool-bar-display-mode 'labels)
```

Note that this used to cause labels and icons to be displayed. The variable value for labels and icons is now `both`.

- Note that the 'cl' library is no longer loaded by any of the default packages that come with Aquamacs. As a result, you may need to insert `(require 'cl)` into your `Preferences.el` file to load this package manually if you use any of the Lisp style functions or macros provided therein.

### *Major Modes*

- SLIME, the Superior Lisp Interaction Mode is no longer included in Aquamacs but provided as a point-and-click installer plugin, which can be downloaded from the Aquamacs website. The SLIME developers do not release validated versions; the SLIME plugins available from the Aquamacs website are development builds that are updated regularly.
- Wikipedia mode (version 1.5 plus Aquamacs modification) included. This can be used to edit text for Wikipedia and other Mediawiki wikis. Start with M-x `wikipedia-mode`. Code by Chong Yidong, Uwe Brauer.
- Python mode has been updated to use 'python-mode' (as found on Launchpad). Reported by Jin Choi. Python-mode Code maintained by Barry Warsaw. Research by Skip Montanaro.
- Emacs Speaks Statistics (ESS) has been updated to version 5.3.10 (was: 5.3.6). Refer to the ESS website for changes ( <http://ess.r-project.org/Manual/readme.html#New-Features>).

### *Bugfixes and Miscellany*

- Aquamacs has a smaller footprint; The download is about 7 MBytes smaller; the installed program about 4 MBytes.
- Aquamacs will now start up again for use in a terminal (`-nw` argument). Reported by Ian Soboroff.
- The "Check for Updates" menu item in the Aquamacs menu should work in all circumstances now.
- Fullscreen mode (A-S-Return, or Window menu) works again on all secondary displays.
- Dragging and dropping more than one file or opening several files from a terminal with Aquamacs with `tabbar-mode` will now lead to all files being shown in tabs, not just the last one.
- Command-1 ('aquamacs-delete-other-windows') no longer hides the `tabbar` in certain circumstances.

- Re-opening files already shown in a buffer or switching to buffers will bring up their tab, even if the tab is shown in another frame.
- An issue was addressed that could lead to the wrong tab being selected after killing or renaming a buffer. The problem was evident with 'find-alternate-file'. Reported by Tao Peng.
- C-e (end-of-visual-line) will now work correctly in the last line of a buffer that does not end with a newline. Reported by Raymond Namyst.
- Command/Control-left/right will jump to the beginning or end of the visual line, respectively, rather than to the beginning or end of the buffer line. Reported by Jean-Christophe Helary.
- When soft word wrap ('word-wrap') is off (see Options menu), then C-k (kill-visual-line) and Command-Backspace (kill-whole-visual-line) now behave like their non-visual counter-parts, i.e. they delete the whole (rest of the) buffer line, rather than the visual line. This is in line with the extant behavior of C-a and C-e. Reported by Tom van Vleck.
- When Aquamacs is given files from the command line or by some drag'n'drop event while no frames are shown, it now only shows a new or pre-existing frame with the new file(s) rather than two frames. Reporter unknown (thanks for letting us know though).
- Page-wise scrolling (PgUp, M-up, aquamacs-page-up and friends) now works correctly when faces with different sizes are used in buffers, such as in LaTeX-mode. (Note that the 'pager' package is not used any longer. While the screen position of the cursor should be preserved in most cases, this is not perfect. 'pager' can still be activated using (require 'pager) in Preferences.el.
- C-a (beginning-of-visual-line in 'visual-line-mode' which is the default) will now always skip a prompt (e.g., in shell-mode) at the beginning of the line.
- Moving the cursor up and down failed in certain situations involving side-by-side windows in a frame. Reported by Jin Choi.
- Beginning/End-of-line movement commands don't signal an error any longer in visual line mode (so there is also no echo area message).
- Functions like 'enlarge-frame' are bound to A-C-left/right/up/down (Command-Control) in all cases (and depend on osx-key-mode).
- The mouse cursor changes its shape when over buffer text.
- The Options / Show / Hide menu is now called View. Suggested by Jean-Christophe Helary.
- Changed fringe mode is now recongized when options are saved. The fringe menu was revised.
- Options -z Save Options will always save the options now (whether considered needed or not).

- Scrolling with the mouse wheel now works without first selecting the frame – just move the mouse cursor over the window. (N.B., ‘mouse-wheel-follow-mouse’ only applies to windows, not to frames.)
- Maintaining full-screen frames across sessions works again; as does opening additional frames when the current frame is in full-screen mode.
- ‘ediff’ (Tools menu, under “Compare”) no longer brings up additional controller frames. This fix may also improve the function of other modes that use a complex set of frames. (By popular demand.)
- Info-mode is now compatible with the tabbar.
- Desktop-save-mode does not open additional scratch buffers any longer. Reported by Ivan Werning.
- Auto-save files (usually named #filename#) are now saved in a temporary directory, out of sight of the user.
- We forgot to offer to save newly created buffers when removing them (Command-W (close-buffer) or killing) after their major mode was changed.
- Showing a dired buffer with “Show Buffers in New Frames” (one-buffer-one-frame-mode, OBOF) enabled could lead to the minor mode (OBOF) being turned off unexceptedly.

*What’s behind the change from Aquamacs Styles to Aquamacs Autofaces?* Technical explanation: the core functionality of changing fonts and fore/background colors (in short: faces) is now provided by the new ‘aquamacs-autoface-mode’.

How does the new *autoface* mode differ from the *styles* mode? Font and color settings now apply primarily to the default “face” used in the buffer. For each major mode, a new face is defined. For instance, the default face for LaTeX buffers is called ‘latex-mode-default’. These faces can be edited directly via the Options menu (to choose a font and some new entries to choose fore- and background colors) or even with M-x customize-face. These changes apply automatically and immediately to all buffers in the given major mode. In contrast, the *styles* mode used to set frame-wide parameters, including the font, fore- and background colors, and change these parameters in a frame according to the buffer shown in the first window within the frame. Frame parameters also included the presence of a toolbar, cursor color, fringes, and the like. These are not available in the new mode. Previously, colors of a whole plethora of faces for various occasions could be chosen via the ‘color-theme’ package. These were needlessly tied to major modes using ‘aquamacs-styles’.

One advantage of the new, lightweight implementation of ‘autofaces’ is that switching between buffers (e.g., with tabs) is smooth and does not lead to ugly frame resizing effects. Multiple windows in the same frame can now display their buffers in the correct fonts.

Transition: relevant mode-specific settings from ‘aquamacs-styles-mode’ are automatically imported. The now deprecated functionality of ‘aquamacs-styles-mode’ (changing frame parameters including the visibility of the toolbar) is still available to users by inserting

```
(require 'aquamacs-styles)
(aquamacs-autoface-mode 0)
(aquamacs-styles-mode 1)
```

into their `Preferences.el` file. Users can also access color themes with M-x color-theme-select, but note that faces set using ‘aquamacs-autoface-mode’ will override foreground and background colors.

## 13.8 Changes—1.5

- Aquamacs now handles paragraphs better that are stored as single lines in the buffer: these very long “lines” are shown as paragraphs, with words wrapped where appropriate. The wrap functions in the Options menu will use the new technique. As a result, line numbers shown in Aquamacs correspond to line numbers in the file. Also, word wrap will work better now with variable-width fonts. Syntax highlighting is now correct in all situations, because it is based on the line separation in the underlying file and not on what’s displayed (‘longlines-mode’ is not used any longer; a new variable ‘word-wrap’ controls the display-time word wrapping.) Code by Kim F. Storm, Chong Yidong, David Reitter.
- The end of file lines (newlines) or paragraph endings in soft word wrapping can be visualized via Option / Show/Hide / Show Newlines (‘global-show-newlines-mode’).
- Symbols in the fringes have been adapted to look less conspicuous. (These are the indicators to the left and right of text lines.) Code by Kim F. Storm.
- The “small left fringe” setting in the Show/Hide menu works again as intended.
- Automatic wrapping detection (hard word wrap = auto-fill, vs. soft word wrap) improved. A new customization option ‘auto-word-wrap-default-function’ may be used to configure the default, which is hard word wrapping.
- Navigation in buffers (up/down) optimized and improved. This is also a new buffer-local mode (‘visual-line-mode’), which is enabled globally (‘global-visual-line-mode’). That’s also what the “vl” mode line indicator stands for.
- Command-Backspace will remove the whole visual line now (‘kill-whole-visual-line’), while Command-Shift-Backspace will remove the entire buffer line (which may be a paragraph, when soft wrap is on).
- Environment variables are imported again in most situations despite bugs in OS X / Emacs. This issue could cause LaTeX calls to fail. The \*Messages\* buffer contains helpful notices. Reported by Thomas S. Dye and others.
- An issue where pressing M-Backspace (especially in the minibuffer) could lead to an error message has been resolved.
- An issue where the Mac (system) input method would automatically switch to US or Romaji (in Japanese modes) has been resolved.
- An issue where a “buffer is read-only” message appeared when quitting Aquamacs after some buffer was printed has been resolved.
- The frame size, which is retained across sessions, is not limited to what is available on the screen: frames cannot be bigger any longer.
- A toolbar item to revert the buffer (M-x revert-buffer) is now available (configure with Options / Show/Hide / Toolbar items)



- isearch, when entered with C-s or C-r, will not cause the region to be set to the search match any longer; the region is, however, set when isearch is entered with A-f, A-g or A-G. The behavior can be controlled with the new customization variable 'set-region-to-isearch-match'.
- The Help menu (in "Diagnose and Report Bug") provides a way to start another Aquamacs Emacs instance without any personal customizations. This should be used to reproduce any potential bugs before reporting them.
- LaTeX configuration (standard paths) simplified.
- Auto Frame Styles are turned on automatically when the user chooses to retain frame settings (colors, fonts) for a mode or as a default.
- After deleting a tab, the previously selected buffer in a window is selected when possible, rather than the rightmost tab. This resembles tabs in Firefox rather than tabs in Safari. It is more consistent with Emacs and makes life easier for users of packages that expect the previous buffer on the stack to be selected rather than what's in the tab that happens to be at the right edge.
- Tabs and Windows can now be removed without killing the buffer shown (Window or tab context menu: Hide Tab, Emacs function 'tabbar-delete-current-tab').
- Command-W ('close-window') will now delete the selected window and, if there is only one window in the frame, the frame. When 'one-buffer-one-frame-mode' and 'tabbar-mode' are off, it will not kill the buffer (or even ask to save it). The frame's red "close" button will close all windows in the frame. This should be convenient for traditional Emacs users. *Note that C-x k can still be used to just kill a buffer without affecting its window.*
- Clicking the red 'close' button will now attempt to kill all buffers shown and remove the frame when 'one-buffer-one-frame-mode' or 'tabbar-mode' are on. Because the mouse was used to start the action, dialog boxes are now shown in this situation to ask about saving the buffers, rather than minibuffer prompts.
- When 'one-buffer-one-frame-mode' is off and tabs are on, killing the buffer (e.g., with C-x k) will now not remove the window and frame any longer (unless Command-W ('close-window') is used. Reported by Ian Eure.
- Burying buffers does not always lead to deleting a window any longer when 'one-buffer-one-frame-mode' is turned on.
- 'find-alternate-file' (C-x C-v) now works correctly when tabs are used. Reported by Ian Eure.
- Command-Backspace ('kill-whole-visual-line') will not work in Comint and related modes that display a read-only prompt at the beginning of the line.
- When applied to a region, 'unfill' (Edit menu, 'unfill-paragraph-or-region') will be more flexible in recognizing paragraph boundaries. Specifically, paragraphs with indented lines will be correctly recognized. Just mark the paragraph before pressing M-Q!

- Searching for keywords in the Help menu now includes the Emacs Manual and the Emacs Lisp Reference.
- Improvements for Aquamacs calls from the command line: files to be opened do not need to exist, and they are now shown in the most appropriate window available (or in a new one).
- The “Text properties” submenu has been removed from the Edit menu. (Among the issues: its entries were misleading; text properties aren’t saved in files.)
- Structure of Help menu revised.
- in SLIME (Lisp mode) and ERC, the Aquamacs tabs work again. (`‘slime-header-line-p’` and `‘erc-header-line-format’` now default to nil. `‘erc-mode-line-format’` has a new default value. Customize these variables to revert to the old behavior.)
- Incompatibility with VM (an optional install) removed. Reported by José Figueroa-O’Farrill.
- Internal change: Full-screen editing is now handled via the frame parameter `‘fullscreen’`.
- Page-wise scrolling where a single line filled more than a screen page has been fixed. Reported by Mac Pigman.
- Command-Shift-S (A-S) now leads to a file selector dialog that shows the file name associated with the current buffer, as the menu item has done all along. Reported by Nathaniel Cunningham.
- Further minor bug fixes.
- Many thanks for your donations since the last version was published. Specifically, we would like to thank William Ziemer for donating a Mac Mini as our project server.

If you haven’t done so lately, please consider making a donation to the project at <http://aquamacs.org/donate>. Your donations are essential in keeping the project going—we have no other source of income from Aquamacs. We’d like to do great things with Aquamacs, but that’ll only happen with your support.

## 13.9 Changes—1.4

- **Aquamacs has tabs.** Press Apple-T to create one. You can switch the general use of tabs on in the Options menu. (Note that while the `‘tabbar’` package is provided and used internally, the actual functionality is different.) Concept and Code by Nathaniel Cunningham, David Ponce and David Reitter.
- **“Frame Styles” are turned off** by default now. This means that there are no major mode specific settings (fonts, colors) unless the styles are turned back on (Options menu). There is a new “Clear All Styles” menu item, and the wording has been improved. There should be less flicker when switching buffers. The frame size and position are not changed, even if the frame leaves the screen.

- **Revised word wrapping:** Soft and hard wrapping can now be recognized automatically (Options / Auto Word Wrap for Text Modes). Also, Soft and Hard wrap modes are now enabled just for the current buffer. (The former option to automatically enable this is still available via customization of the ‘text-mode-hook’ setting.)
- **Full screen editing:** Press Apple-Shift-Return to get into full screen mode. (There are some known problems with this in conjunction with changing the frame’s fonts. These will be addressed in the future.) Code by Joel Stanley and David Reitter.
- **Aquamacs does not create backup files (foo.bar ) any longer** by default. This way, no unnecessary files won’t get in your way any longer. (No Mac application creates these. Use Time Machine or a dedicated backup solution for backup needs.) There is an Option in the “Options” menu which will turn backups on again.
- **The \*scratch\* buffer is now persistent** across sessions. It is saved to an internal file, but File / Save As (or Apple-Shift-S or C-x C-w) still allow users to save the file elsewhere. (To switch this off, customize the ‘aquamacs-scratch-file’ variable to nil.)
- The position (and height and width) of the (main) frame is now persistent across sessions. (Customize ‘initial-frame-alist’ as documented to open the first frame somewhere else.) ‘default-frame-alist’ settings for the frame position and extent of subsequent frames are now respected by default. Aquamacs will not, however, open frames off the screen.
- The tool bar looks like other toolbars on OS X now. Code by Yamamoto Mitsuharu.
- We’ve got better-looking icons (“alpha channel”) for the tool bar, and labels under the icons like in other OS X programs. (You can save the space for that by customizing ‘mac-tool-bar-display-mode’ to ‘icons’.)
- Toolbar items of other modes (such as for LaTeX editing) can be configured via Options / Show/Hide / Toolbar items.
- Multi-lingual CocoAspell support: installed dictionaries can now be changed from within Aquamacs. Code by Nathaniel Cunningham
- “Check Spelling as You Type” can now be set as the default for all text modes, in the Edit / Spelling menu.
- Aquamacs generally will not show graphical dialog boxes for confirmation questions (unless the mouse has been used last) any longer. This ensures greater consistency on multi-screen setups and when the frame was off the visible area of the screen.
- Before any minibuffer interaction takes place, Aquamacs will attempt to ensure that the minibuffer is actually visible: this may involve moving frames into a visible area of the screen. (To turn this behavior off, try M-x smart-frame-positioning-mode RET, or customize the variable of the same name.)

- Aquamacs now knows more about multi-screen setups (when it comes to frame positioning).
- Preferences and other code defined in Preferences.el now override any customizations: the customization file ('custom-file', i.e. customizations.el) is now loaded before the Emacs Lisp code in Preferences.el. This may have consequences for individual configurations, but it ultimately allows users to override any semi-automatic customizations in their Emacs Lisp code. (Note that ~/.emacs is still loaded before the customization file in order to maintain compatibility with GNU Emacs.)
- **Improved LaTeX support:** AUCTeX 11.85 included. This brings a number of advantages for LaTeX users, in particular:
  - Better analysis of errors reported by the LaTeX compiler.
  - Improved syntax highlighting when editing .tex documents.

Code by Ralf Angeli, David Kastrup and others.

- Searching with Apple-F and Apple-G (isearch) is now more comfortable: it will not normally extend a region (unless started with C-Space). Apple-G (repeat the search) will always set the mark to the beginning of the match so that the region captures the match. This allows users to replace the text of the match with something else easily.
- When the mark is set with C-Space, it is more persistent than before: clicking somewhere will not disable it, but extend the region, just like moving the point with arrow keys (and other movement keys) would do.
- LaTeX mode comes with more appropriate icons now.
- Color Themes updated to version 6.6.0. Code by Xavier Maillard and Jonadab the Unrightly One.
- The "Buffers" menu can now be found on the right hand side of the menu bar. It is called "Window".
- The mode line (at the bottom of each frame) now uses the system's standard font.
- Control-left and Control-right will now move to the beginning or end of the line, respectively, as is standard in OS X. Similarly, Meta-left and Meta-right will now move forward or back by single words (this is usually Option-left or Option-right). ('forward-' and 'backward-sexp-nomark' can now be invoked via C-M-right or -left.) Suggested by Jean-Christophe Helary.
- Apple-[ and Apple-] switch between Emacs windows (i.e., within a frame). Suggested by Jean-Christophe Helary.
- C-backspace deletes a whole file name (i.e., one part of a path) instead of just a word in the minibuffer when a file is selected. M-backspace (usually Option-backspace) deletes the portion of the word to the left, as is standard, while M-delete (usually Option-delete) the one to the right. If a region is marked, that is deleted.

- M-e (forward-sentence) and M-a (backward-sentence) do the right thing now even if the text does not have two spaces after each sentence. (New customization variable ‘sentence-end-double-space-for-recognition’.)
- Apple-F and Apple-G (search, repeat the search) will now mark the found text as region as is standard.
- Apple-V can now be used immediately after entering isearch (Apple-F) in order to look for the text stored in the pasteboard. Suggested by Nathaniel Cunningham.
- Apple-2 (split window) will now select the newly created window.
- Improved usability in the Options menu: Wrap options greyed out when not in a text mode, and no more “save places” option.
- There’s a new “Check for Updates” menu item in the Aquamacs menu. If a new version is available, it can be downloaded using a key binding (C-h u).
- Undo/Redo toolbar and menu items are disabled/enabled at the right times (i.e., when there is something to undo/redo).
- “Search” toolbar item is not shown by default. “History” and “Redo” items are shown by default. (Use the Options / Show/Hide / Toolbar menu to configure.)
- The context menu now allows to “search on this Mac” with Spotlight (on OS X 10.4 or newer).
- Font settings for a frame do not affect the mode-line any longer. You can M-x customize-face mode-line, specifying a standard OS X font as “Font family” (such as Monaco).
- Files are loaded (visited) a little faster now. ‘default-major-mode’ now defaults to ‘fundamental-mode’ rather than ‘text-mode’, which should have no practical consequences apart from the speed-up.
- Worked around a bug in OS X that caused occasional, very slow program start on some systems.
- User-supplied settings of ‘fill-column’ should now be respected (used for hard word wrapping as enabled in the Options menu). Reported by Ivan Werning.
- Some commands (such as M-x shell) will use the current window rather than showing a new one, unless ‘one-buffer-one-frame-mode’ (Options / Show Buffers in New Frames) is enabled. Suggested by Jean-Christophe Helary.

### 13.10 Changes—1.3b

- Bug fix: On OS X 10.5 “Leopard”, Aquamacs consumed a lot of CPU power in certain rare circumstances.
- The minibuffer history is now retained between Aquamacs sessions.

- LaTeX editing: better support for jumping from and to the PDF if Skim.app is installed and used. No configuration is necessary. You can jump from Aquamacs to Skim with Shift-Command-Click, or with the AUCTeX command “Jump to PDF” (enter C-c C-c J RET) and back. You will need to `\usepackage{pdfsync}` in your document preamble and re-compile before you can use the feature.
- Press Command-E to use the region (selected text) for the next search operation (Command-F). Suggested by Mathieu Godart.
- When using Frame Styles (especially with One Buffer One Frame Mode switched off), frames should (mostly) retain their original sizes now. Less jumping around!
- Aquamacs now remembers the positions of frames containing *\*Help\**, *\*Messages\** and other buffers.
- Improved frame positioning and sizing. In particular, *\*Help\** frames should not come up too small any longer.
- Frames can now be tiled (horizontally/vertically) and scattered (automatic placement) with functions in the Buffers menu. Tiling code by Drew Adams.
- Speedier cursor movements (up/down) in outline-minor-mode and (similar situations with hidden text).
- The red “close” button will now delete all windows of the frame and kill associated buffers (after checking back) where sensible.
- Setting of ‘mac-function-modifier’ now works in conjunction with arrow keys on Leopard. Reported by Claude Flener. Patch by Yamamoto Mitsuharu.
- Spanish keyboards are now better supported, e.g., Emulate Spanish Keyboard Mode now supports typing backslashes. Patches by Arcadio Rubio García and Elias Baixas.
- Swiss German and Swiss French keyboard emulations added (Emulate Spanish Keyboard Mode. See Options / Option Key menu.) Patch by Claude Fenner.
- File names with non-ASCII characters such as German Umlauts or accented characters will be displayed and dealt with correctly. Reported by Ted Roden.
- Existing files that are edited with Aquamacs are not automatically turned into “Aquamacs” files, i.e. will not always be opened in Aquamacs with a double click from the Finder. This behavior can be controlled with the ‘aquamacs-set-creator-codes-after-writing-files’ customization variable. Suggested by Joshua Smith and Nathaniel Cunningham.
- Longlines mode (Soft wrap) has been improved: it works better with variable-width fonts and with LaTeX mode
- ESS Info file updated from 5.3.0 to 5.3.6
- Cedet was missing a file and produced errors (JDE Mode). Reported by Nick Frolov.

- ACT-R support fixed.
- Loading of preferences files revised once more. Preferences.el and customizations.el are now loaded along with the user's .emacs, and changes to 'after-init-hook' should work (e.g. to use the 'desktop' package) just fine. Based on an issue reported by Phil Kime.
- The Aquamacs application icon has been revised to look better in Leopard's Dock.
- 1.3b: Aquamacs now checks for new versions again.

### 13.11 Changes—1.2

- Aquamacs failed to start up correctly on some systems with a Japanese (or other) locale. Reported by Carson Reynolds.
- Printing through htmllize now has a monochrome option that removes all face foreground and background colors and simply prints black on white.
- Apple-< and Apple-> now raise the next or previous frame (respectively).
- To bring up the \*Messages\* buffer, a double click into the echo area is now needed instead of a single click.
- Aquamacs now includes the Emacs Lisp Reference as convenient Apple Help document, available from the Help menu ("More Manuals").
- Files created with Aquamacs can now have their default associations changed in Finder more reliable. Aquamacs now sets the file type of newly created files to TEXT. Icons associated with such files should now bear the Aquamacs logo. Reported by Frank J.R. Hanstick.
- Ediff does not bring up errors any longer when called repeatedly. Reported by various users.
- In LaTeX-mode, references such as cite{...} are not highlighted any longer when hovering with the mouse over them. This was confusing. Use 'bib-highlight-mouse-t' to turn it back on.
- Ruby on Rails mode updated to emacs-rails 0.5.99.5. This fixes a the startup problem (missing "snippet") with rails. Reported by Marc Siegel.
- Emacs Speaks Statistic (ESS, R-mode etc.) updated to version 5.3.6.
- Fitting frame sizes to the content displayed with M-x fit-frame works now, because 'inhibit-fit-frame' is nil by default. Frames will still be at least 68 characters wide ('create-frame-min-width') to ensure that \*Help\* frames are wide enough (if Frame Appearance Styles are active, as by default).
- The menu entry 'Paste' works for material copied from other applications now just like Apple-V always did. Reported by Matthew Hoyles.

- Aquamacs has always imported the environment from the login shell, e.g. any environment variable you might have set in your `~/.bash_profile`. The elements of a PATH known to the login shell now take priority over elements in the PATH defined by the system. That means that if newer versions of system-supplied utilities are installed with Fink or Darwinports, these will be used from within Aquamacs.
- Aquamacs should run even without the font Monaco available on the system.
- The location of the Abbreviations file was changed. If you have any personal customizations there, move them:  

```
mv ~/.abbrev_defs ~/Library/Preferences/Aquamacs Emacs/Abbreviations"
```
- Revised message in echo area upon startup. Suggested by Richard Stallman.
- Based on the latest GNU Emacs 22 code, including improvements to the 22.1 release.
- Our sincere appreciation goes you to all users who have donated (<http://aquamacs.org/donate>). If you haven't had the chance to support the Aquamacs project yet, please consider a contribution now. Only with your support can we continue to work on Aquamacs.

### 13.12 Changes—1.1

- Based on GNU Emacs 22.1.
- Aquamacs is now much faster when opening new frames (windows).
- The Aquamacs binary now starts fine from the command-line on certain Intel machines.
- Preference file loading has been revised. Aquamacs now displays helpful error messages if one of the Preferences files causes problems. M-x aquamacs-load-preferences allows users to test their preference files. Starting from a Terminal window by calling the "Aquamacs Emacs" binary with a "-q" argument will prevent Aquamacs from loading any preference files, not just .emacs. (Note that customizations.el is not meant to be edited by users.)
- Aquamacs now starts up faster.
- Aquamacs does not define a number of fontsets any longer on startup. Since the font selection dialog can be used (Apple-T), fonts can be chosen freely and fontsets only need to be defined to combine fonts, which is rarely needed. Users may define their fontsets as before - Aquamacs just doesn't do it for them (unless such fontsets are used in customizations). Call (aquamacs-create-standard-fontsets) from Preferences.el should any problem occur.
- Emacs 22 Manuals (man / info, available from the Help menu) are now displayed on all systems. Reported by Eric Martin.
- Customization groups are not shown in separate windows any longer.



- Plugins may now contain ‘info’ files, which will automatically be found by Aquamacs (and M-x info). Reported by Wei Tang.
- An issue with the font size on some pages of the Aquamacs manual (as available from the Help menu) has been addressed. Reported by David Romano.
- The “Emulate Some Italian Option key combinations” mode (emulate-mac-italian-keyboard-mode) allows users to type “m” again. Reported by Domenico Praticchizzo.
- X Resources specified via the OS X defaults system (plist) are not supported any longer.
- Thank you to all users who have donated (<http://aquamacs.org/donate>). Those who haven’t had the chance to support the Aquamacs project, please consider a contribution now!

### 13.13 Changes—1.0b

- Based on GNU Emacs 22.1.
- Java support has just gotten a lot better. JDEE is a complete, integrated development environment for Java in Emacs. It supports building, source-level debugging, code generation and much more. Aquamacs now contains the latest version of JDEE, configured to work with the Java SDK installed via Apple’s Developer Tools. Visit <http://jdee.sunsite.dk> for more information.
- Toolbar: The icons have been completely redesigned. The colors make them easy to distinguish. The functions available from the standard toolbar have been carefully selected. Using the Options - Show/Hide - Toolbar items menu, icons may be shown or hidden to fit the user’s needs.

Available functions:

- New, open, save/save as, revert buffer
- Undo, redo
- Cut/copy/paste
- Find (isearch)
- Spell-check buffer (ispell-buffer)
- Print
- Make a new frame
- Preferences
- Help

We’d like to acknowledge the artists:

- Preferences, Revert Buffer, Kill Buffer: Jasper Hauser
- New Frame, Recent Files, Spell-check: Nuovext Project
- all other icons: Adrian Chromenko and David Reitter

- Spell-Checking can now be found in the Edit menu, not in Tools. The “Check As You Type” function (flyspell-mode) will automatically check the buffer contents (unless it’s a big buffer) when first enabled.
- Spell-Checking now supports the popular cocoAspell package, which includes English language dictionaries and the GNU Aspell spell-checking library. Additional dictionaries may be installed.
- Formatting (filling) text with M-q (Option-q) is a bit more convenient now: when a region is selected, the command applies to the whole region and not just to a paragraph. We also provide M-Q (Option-Shift-q) to “unfill” a paragraph or a region, which comes in handy when wrapped text needs to be converted to soft-wrapped text, or to copy&paste it into other applications.
- one-buffer-one-frame-mode is more compatible to the normal Emacs paradigm of one-frame-many-buffers for internal technical reasons, but also with respect to whether newly opened frames (windows) are actually selected and receive the following user inputs. In many situations, classical Emacs shows a buffer in an extra window, but doesn’t select it - so the user can keep working on the original document. Aquamacs will now do the same - it will raise the appropriate frame, but not select it. If you would like to make it select at all newly opened frames, use this in your Preferences.el:

```
(setq display-buffer-reuse-frames 'select)
```

Also (the technical change): Function ‘switch-to-buffer’ will set the current buffer immediately without waiting for the next top-level event loop.) Thanks to Lowell Vaughn for pointing out a seemingly unimportant bug in one of Emacs’ on-board games, which led to the discovery of this issue.

- Undo as in the original Emacs is available again via ‘undo’. Apple-Z and Apple-Shift-Z are bound to Aquamacs undo/redo functions (now called ‘aquamacs-undo/redo’ as they used to be, but seasoned Emacs users may now use Control-underscore to access the classical undo. The difference is that the old-school undo will undo it’s own undo steps. Suggested by Rudi Schlatte
- Undo (aquamacs-undo, Apple-Z) will now restore point and mark as appropriate.
- Left/Right keys will now behave more Mac-like, whenever text is marked (i.e. the mark is active / text has been selected). They now move to the beginning or the end of that region, respectively. To turn off this behavior, turn off CUA mode or rebind left/right keys in osx-key-low-priority-key-map by adding this to your Preferences.el or .emacs file: ] (define-key osx-key-low-priority-key-map [left] 'backward-char)  
(define-key osx-key-low-priority-key-map [right] 'forward-char)  
(osx-key-mode 1)
- Apple-2 can now be used to split the window into two (like C-x 2), Apple-1 will undo that split (like C-x 1).

- Cut/Copy/Paste with the secondary selection (use Option + mouse) are now bound to Option-Apple-X, Option-Apple-C, respectively (unless Option is not Meta, in which case you'd use ESC Apple C, or whatever M-A-c is for you.) (This is to avoid problems in cases when Caps Lock is on, which is recognized as Shift modifier.)
- The current major mode may be changed in the context menu
- Emulate-Mac-German—Italian—...-Keyboard-Modes now allow you to call the commands bound to the original Meta key combinations using the "Esc" key. For example, in the German keyboard emulation, pressing Option-l will give you @, while Esc l will do 'downcase-word'. Also, this mode now supports searching (Apple-F) with 'isearch'. Reported by Thomas Käufl. Additionally, an emulation mode for the Finnish keyboard layout is available now. Patch by Lauri Raittila.
- Default colors in help and \*Messages\* frames/buffers revised. Suggested by Charles Bailey
- Recently opened files that were opened from the "Recent Files" menu, or from an external shell with the 'open' command or something similar are now available in the minibuffer history that one gets with C-x C-f 'up'.
- Clicking into raised frames (windows) that are not the selected frame (i.e. have grey instead of red-yellow-green buttons) will now activate that frame. Patch by Yamamoto Mitsuharu
- Creator codes for loaded files are maintained and not always reset to the Aquamacs / Emacs code. This way, users may use the Finder to open specific files with another application by default, but still edit the file in Aquamacs.
- Updated AUCTeX (11.84). [M-x latex-mode]. XeTeX users: please customize 'TeX-command-list' to call XeTeX directly.
- Haskell mode included (2.3). [M-x haskell-mode]
- RubyOnRails support via emacs-rails included (0.5.3) [M-x rails-minor-mode, with M-x ruby-mode]
- ACT-R support. [M-x actr-mode]
- Menu Bar fixes. (Disabled menu bar entries when frames invisible.)
- Aquamacs menu name shortened. Suggested by Enrico Franconi
- Accessibility in OS X fixes (simulated clicks on Window elements) Suggested by Alexis Gallagher Patch by Yamamoto Mitsuharu
- HTML files (and others) can be opened in the system's default browser again. This applies to C-c C-z v in html-helper-mode and other modes using 'browse-url'.
- Tramp files (i.e. remote files loaded with /uid@host:/path/to/file syntax) are noted in the "recent files" history list and not discarded any longer when Aquamacs is restarted.

- 1.0a: Some documentation of Emacs functions (C-h f setq RET, e.g.) was not available on PPC Macs. Reported by David Sagan and Bill Rising.
- 1.0a: Some additional executables like movemail did not work on PPC Macs. Reported by Barbara Shirtcliff.
- 1.0b: Ruby-mode included in new-buffer/change major mode menu
- 1.0b: The underlying source code is now fixed to be GNU Emacs 22.1 plus Aquamacs extensions.
- 1.0b: On older PPC Macs, text input was only updated slowly whenever the tool bar (icons at the top of the frame) was turned on.
- 1.0b: Gnus did not work correctly. Reported by Martin Jørgensen.
- 1.0b: M-x tile-frames-horizontally/vertically fixed. Patch by Ben Hyde. Updated to new 'oneonone' library version, code by Drew Adams.
- 1.0b: Moving the point left or right with the arrow keys could cause an error message "Mark inactive" to appear in certain circumstances. Reported by Michel Charpentier.

Thanks for supplying build machines: Toby Blake (U Edinburgh), James Pringle (U New Hampshire) and Carlo Gandolfi (Milan).

### 13.14 Changes—0.9.9d

- Frames (windows) now have a little icon in the title bar for the selected buffer, and you can drag&drop this to other applications. Patch by Mitsuharu Yamamoto
- Clicking the Dock icon of Aquamacs will now bring up a minimized frame, if there is no other frame to be shown - just like in any OS X application. Suggested by Frank Atanassow
- Fonts can now be selected comfortably with the OS X standard font selector, accessible via "Options - Show Fonts". Remember - to make a setting stick, use the "Frame Appearance Styles". Set the new style either for the given major mode, or as a default. Patch by Mitsuharu Yamamoto
- C-n and C-p are now mapped to 'next-line' / 'previous-line' again, so they may be used to jump full lines (as defined by carriage returns) - even if the lines are wrapped around. The arrow keys move the cursor visually as before. Suggested by Tom van Vleck
- Apple- now cycles through all the frames, not just the topmost two. Reported by William Henney
- Apple-: now spell-checks the buffer, provided ispell is installed. Suggested by Jean-Christophe Helary
- Apple-Shift-S will now bring up a file selector rather than prompting for a file name in the minibuffer. If you prefer the Emacs-style prompt, you should use the Emacs-style key binding: C-x C-w. Suggested by Jean-Christophe Helary

- Emulate-Mac-Keyboard-Mode: improved support for French keyboard layouts
- ESS 5.3.0 included
- SLIME - the Superior Lisp Interaction Mode is now available with Aquamacs. It's pre-configured for you. Use 'lisp-mode' for your Lisp editing, and run M-x slime to start a lisp inferior process. You may need to set the variable 'inferior-lisp-program' via customization or in your Preferences.el as follows:

```
(setq inferior-lisp-program "path to lisp")
```

- C++ Mode is used automatically for .cp files.
- Keyboard bug-fix: certain keys could not be successfully input on certain keyboard layouts, most notably the key combination C-c ' as used in LaTeX mode (AUCTeX) was not available on German keyboards. Patch by Taiichi Hashimoto
- Ispell/LaTeX bug-fix: ispell will now ignore TeX commands in such buffers. Patch by Bill Rising

### 13.15 Changes—0.9.9c

- Bugfix: Emacs-internal Input methods work again.
- System-wide input methods (via the "International" preference panel) can now be used instead of the Emacs-specific ones. Use Options - Aquamacs Multilingual Environment - Use System Input Method to turn it on or off - it's switched on by default. Patch by Taiichi Hashimoto

### 13.16 Changes—0.9.9b

- 'mac-pass-option-to-system' didn't work as intended. There may have been other input problems.
- Switching to another buffer did not change the input focus (i.e. where things you type go), even though the frame displaying the buffer was raised. Reported by Rick Taube
- tool-bar-mode calls in Preferences.el / .emacs could bring up errors under certain circumstances Reported by William Henney
- 'bury-buffer' didn't work correctly, causing situations where a frame was shown and was removed immediately, for example when SLIME started up or, in LaTeX (AUCTeX) mode, C-c C-l was used to display compiler output.
- Crash in 'show mouse face' fixed Reported by Phil
- Russian as first application language (System Preference) does not cause startup problems any more. Reported by Vladimir Lech

### 13.17 Changes—0.9.9a

- SUMMARY: More bugs and other annoyances have been removed. Opening new frames (for new buffers) is more useful now, and frame themes aren't applied when a frame is split up. Options are automatically saved across sessions. A new customization groups for Emacs-die-hards makes it easier to change Aquamacs-specific customization defaults.
- Intel: Aquamacs is now available as native version for Mac computers with Intel CPU. Thanks to Jonathan Shea, Mike Bennett and Richard Koch for providing compile machines.
- Dired in one-buffer-one-frame-mode will show new directories and open files in the same frame.
- Customize will show new groups etc. in the same frame and window.
- One-Buffer-One-Frame-Mode ("Display Buffers in Separate Frames") will now show buffers such as `*mail*`, `*grep*`, `*shell*` in their own frames. This also applies if other modes open `*...*` buffers, such as ESS opening an inferior R shell, which previously didn't even show in a separate window. One-Buffer-One-Frame-Mode is also better documented now and has customization options so you can decide which buffers are shown in new frames.
- Frame-Appearance-Themes reconfigure a frame only if just one window is present (or all windows show buffers in the same major mode). This should more effectively prevent appearance switching when a second window is shown temporarily.
- Frame-Appearance-Themes now allow the user to delete all mode-specific themes when a default is defined. Hints to select "Save Options" are more prominent.
- Options are saved automatically upon quitting Aquamacs (it'll ask you.) - customize 'aquamacs-save-options-on-quit' to configure.
- Quitting Aquamacs: you won't be asked any more whether to quit if modified buffers exist, because at that point you've always already been asked to save each modified buffer.
- Aquamacs-is-more-than-Emacs is a new customization group containing all customization variables whose defaults are changed in Aquamacs compared to GNU Emacs or the relevant package. This is useful for Emacs veterans who want certain behaviors to be more similar to GNU Emacs.
- Bug Reporting is handled fully in the system's default mail client again (unless you've set up a different 'send-mail-function') Suggested by Robert Sloan
- Mail composed with the Message package will now be routed through the mail client by default ('message-send-mail-function') and there is no "From" line. If you run postfix locally, you may want to do something like the following in your .emacs or Preferences.el:

```
(setq send-mail-function 'sendmail-send-it)
(setq message-send-mail-function 'sendmail-send-it)
(setq mail-setup-with-from t)
```

Alternatively do the same in customization buffers.

- Toolbar looks prettier now. Patch by Kim F. Storm
- ‘Frame-Appearance-Styles’ is the new name for the former ‘Frame Appearance Themes’, so they won’t be confused with GNU Emacs new customization themes. A global minor mode called ‘aquamacs-styles-mode’ is now used to switch them on/off.  
Some configuration variables have been renamed: ‘aquamacs-default-styles’ (was: ‘aquamacs-mode-specific-default-themes’) ‘aquamacs-styles-mode’ (was: ‘aquamacs-auto-frame-parameters-flag’) ‘aquamacs-buffer-default-styles’ (was: ‘aquamacs-buffer-specific-frame-themes’)
- A-Backspace deletes the whole logical line again, not just the visual line. A-Shift-Backspace deletes the visual line now.
- Tilde can now be input on German keyboards with the German emulation mode via Option-N.
- Frame-positions for individual files are now saved to/loaded from a file called frame-positions.el (in /Library/Preferences...)
- Help buffers (C-h f, C-h v) for certain Aquamacs functions could have links to source code at nonexistent paths.
- site-start.el files in the load path (plug-ins!) aren’t loaded any longer if there is a file named .ignore in the same path.
- Bugfix in version 0.9.9: customizations weren’t read if aquamacs-styles (the former “Frame Appearance Themes” were switched off.) Reported by Brendan Dixon
- Bugfix: Typing C-x C-f, then A-w made the newly opened frame go away, but not the “Find file” prompt, which was quite persistent, especially if you didn’t know about C-g and the minibuffer. That is fixed now. Reported by a number of people.
- Bugfix: Setting tool-bar-mode or changing the fringes via the Options menu will now affect the default frame style as well, so the setting will affect new frames (even if frame appearance styles are active). Note that if fringes or tool bar are set in .emacs, the customized and saved styles will override your settings.
- Bugfix: Aquamacs will not ask the user any longer whether to save direcd buffers and other non-file-buffers upon deleting the frame (killing the buffer). Reported by Carsten Bormann
- Bugfix: desktop-mode should be able to restore the desktop on startup appropriately. Reported by Rudi Schlatter

- Bugfix: page-wise scrolling (PgUp/PgDown) with long lines scrolls exactly one screen now
- Bugfix: page-wise scrolling (PgUp/PgDown) will remove the region as expected when the cursor moves. Shift-PgUp/PgDown will extend the region (and set the mark if necessary).
- Bugfix: completing-read-multiple didn't work (icomplete+ library updated)
- Bugfix: frames sometimes didn't open in one-buffer-one-frame-mode when the buffer shown was empty.
- Bugfix: In one-buffer-one-frame-mode, Apple-W deletes a window or kills a buffer and returns to the next buffer in the buffer list (i.e. the previously shown buffer) when the frame wasn't created for the particular window / buffer being killed. Think of it as a stack of buffers that are shown. Previously, Aquamacs always switched to \*scratch\*.
- Bugfix: Preview & Print now works with buffers in Tramp Mode, too. Reported by Tim Hodgson
- Bugfix: Fonts (not fontsets) set in default-frame-alist and similar variables are not filtered out any more after startup if they haven't been explicitly loaded (or applied to a frame, and thus, loaded). Reported by Konstantinos Efstathiou
- Bugfix: display copyright message at startup.
- Bugfix: Javascript-mode exchanged for the one borrowed from XEmacs. This one will hopefully work better now. Suggested by Tom Van Vleck
- Bugfix: ediff-directories interferes less with one-buffer-one-frame-mode.
- Compiling: Those who build Aquamacs themselves, note that the make-aquamacs script will now produce a complete app bundle located in (emacs-path)/mac/Aquamacs. The install-aquamacs script only moves the bundle to /Applications. If you make any changes to the Aquamacs source code (except for pre-loaded code in site-load.el), it is usually sufficient to run "copy-to-app -n". Remember to set the AQUAMACS\_ROOT and EMACS\_ROOT environment variables before using any of these scripts.
- A BIG THANKYOU goes to all users who have donated (<http://aquamacs.org/donate>) in the past months. I'd also like to thank all those who tested the beta versions, reported bugs and contributed ideas and server space: Nathaniel Cunningham, Peter Dybala, Terry Jones, José Figuera O'Farrill, Konrad Podczek, Robert Sloan and many others.

### 13.18 Changes—0.9.8

- Meta/Option key: New minor modes allow users of various keyboard layouts (German, French, Italian, GB/US) to use the Option key as Meta modifier under Emacs (as it is the default), but still be able to input characters such as [ ] — and @. This works for common characters (not all). Some rarely used Emacs



key bindings such as M-4 on Italian keyboards are overridden by these modes. Activate them via the Options menu ("Option Key"), or with M-x emulate-mac-french-keyboard-mode (substitute 'french' with a keyboard layout in lower case). The following keyboard layouts are known:

German, Italian, Italian-Pro, French, US, British

You may define your own mappings. (Please publish them.)

- Bug reporting: Use standard GNU Emacs bug reporting facility (but go through the mail client when necessary.)
- One-Buffer-One-Frame: Change in the decision-making process about when to show a buffer in a new frame. Generally, all buffers with names in \*'s (such as \*vc\*) will be shown in the same frame (as directed by 'obof-same-frame-regexps'), with the exception of Messages, Help and Customize buffers (as listed in 'obof-other-frame-regexps'). This means that more buffers will open as a "small" window inside the current frame. Please report back to us in case you have any unwanted results with this.
- Special-Display-Frames such as the one with the \*Help\* buffer can now show \*Completions\* buffers and other ones in a second window inside the frame, just like other frames can. ('unsplittable' property in 'special-display-frame-alist').
- Drag&Drop of files in buffers with HTML/LaTeX/C modes results in the appropriate code (such as <IMG SRC=...> or \includegraphics{...}) being inserted. Patches by Seiji Zenitani
- AUCTeX/PDF: TeX-PDF-mode is now the default via the default of its mode variable 'TeX-PDF-mode' rather than an entry in 'LaTeX-mode-hook', making configuring the default in the customization buffer (or in .emacs) easier. Updated to AUCTeX 11.82.
- DONATE: If you like the new version, please donate so we can keep the development efforts going throughout 2006. Have a great new year!

Bugfixes:

- Browsing a URL (as in Help menu functions, mouse clicks in Gnus etc. could fail in rare circumstances. Reported by Count László de Almásy
- Tcsh environments will be correctly imported into Aquamacs now. Reported by Michael Kohlhase
- AUCTeX and RSS documentation (info) are now included. Reported by Arthur Ogus and José Figueroa-O'Farrill
- Avoid the Dock when opening or automatically resizing frames in most situations.
- Up/down movements of the cursor: subtle tweak (jumping to temporary goal column only in series of up/down movements.)

- ‘mouse-save-then-kill’ for ‘osx-key-mode-mouse-3-behavior’ set to now works fine for double clicks (deleting the selected region) Reported by Konrad Podczeck
- Tcl-mode back in the “New Buffer” menu. Patch by Kevin Walzer
- CPerl mode is still the default for perl files, but perl-mode is not an alias any more for cperl-mode.
- Environment import (from the default login shell) works better now for users of tcsh, zsh and ksh.

### 13.19 Changes—0.9.7

- Summary: New functions: Mac-style printing, Export to PDF and HTML, Spelling suggestions, New buffer in mode / change major mode menus, a context menu (right mouse click), speed improvements, nXML and AUCTeX included text display improved (international characters and proportional fonts), “wrong command-p” bug fixed and much more.
- Printing: Aquamacs now supports full What-you-see-is-what-you-get printing. Choose ‘Preview and Print’ from the File menu, and the current buffer (or the current region, if one is marked) is typeset using the color theme and the syntax coloring that is active. You can then preview or print it with the standard Mac OS X printing dialogs, selecting a standard Mac printer. (Output to US Letter format only at this point. Sorry!)
- Export to PDF and HTML: The current buffer (or a region if selected) can now be exported to a PDF or HTML file. Syntax coloring (and the chosen color theme except for the background color) are respected.
- LaTeX: Aquamacs now comes with the latest version of AUCTeX, which will allow you to most comfortably edit LaTeX source code and even preview some of the results (e.g. formulas) directly in your document. No need to install an additional AUCTeX package. AUCTeX already works out-of-the box.  
It is recommended that you remove any previous installations of AUCTeX.
- nXML: Edit XML code more comfortably with the included nxml-mode. It validates the document as you type. If you don’t like the mode, the following in your Preferences.el file will bring the old XML mode back:

```
(assq-set-equal "<\\?xml " 'xml-mode
               'magic-mode-alist)
```

Suggestion from Tim Bray.

- Speed: Aquamacs is a little faster now when opening new frames, when frame appearance styles have been defined.
- Right-Mouse-clicks in text now bring up a context menu which allows you to copy/paste, search the word under the mouse in Google or look it up in the system dictionary and switch the buffer.

- Control-Mouse-click is always mapped to mouse-3 (right mouse button) now so Apple mouse and laptop users will consistently get the same functionality. To do mouse-2, just hold down the Command key while clicking. (This does mouse-yank-at-click, a useful functionality that you might be used to from Linux / X11 machines!)
- Alt-Mouse-click&drag allows you to select a secondary selection. (This used to be on Command-mouse-1-drag.)
- Spelling correction (flyspell) will make suggestions upon right-clicking on a misspelled word.
- Fonts/Display: Aquamacs Emacs can now display an even wider range of characters with any font available on OS X. Some characters will look nicer. Patches by Yamamoto Mitsuharu
- Text Display: Aquamacs now displays text in variable-width fonts with much better letter-spacing. It'll look like in other OS X apps, and reading and editing long texts is much more fun now. Patches by Yamamoto Mitsuharu
- Navigation in wrapped lines (not word wrap) is easier now: arrow keys will jump to the next visual line, not to the next buffer/file line. Also, navigation is visual now for variable width fonts like Lucida: jumping up or down moves to roughly the same place in the adjacent line going after what's displayed on the screen rather than counting characters (jumping to the same row number in the next line). If you don't like the behavior, you can turn it off with this code in your Preferences.el / .emacs file:

```
(define-key osx-key-mode-map [remap previous-line]
  'previous-line)
```

```
(define-key osx-key-mode-map [remap next-line]
  'next-line)
```

- Scrolling and setting the point with the mouse has improved: 'scroll-margin' defaults to 0 now, so scrolling won't happen until you've reached the first or last line in the window - except when you use the cursor up/down keys (and osx-key-mode is on). Then, scrolling takes place a few lines before you reach the boundary. You can configure this via Aquamacs' customization variable 'visual-scroll-margin'.
- Command-{ comments the line or the region (in programming modes)
- Command-} uncomments the line or the region (in programming modes)
- Command-' comments or uncomments (toggling) the line or the region (in programming modes)
- Command-Delete kills (erases) the rest of the current line. (Command-Backspace kills the whole line.)

- Filenames with spaces can now be entered without hassle.
- Modifier-Key configuration: Several previously deprecated variables have been removed: 'mac-reverse-ctrl-meta' and 'mac-command-key-is-meta'. Use the much simpler, yet equally powerful variables 'mac-command-modifier', 'mac-option-modifier', 'mac-control-modifier' and 'mac-function-modifier' (experimental) instead. Additionally, 'mac-pass-option-to-system' is deprecated now: instead, set 'mac-option-modifier' to nil to reach the same effect. The use of the Option menu is recommended.

To set the Apple key to Meta (not recommended), add this to your Preferences.el file:

```
tt (setq mac-command-modifier 'meta)
```

- Fn-key can act as Meta. If you have an Fn key on your laptop, you can use it as Meta key now. Add this to your Preferences.el file:

```
(setq mac-function-modifier 'meta)
```

Note that support of the Fn key is experimental. Rare combinations may fail on non-English keyboard layouts, and some keys will not work correctly in combination with Fn and Shift.

- Modifier keys such as Command or Shift show up correctly in the shortcuts (menu)
- New-Buffer menu contains many more modes now, such as modes for Fortran, ObjectiveC, C++, PHP, CSS, JavaScript... You can add your own in the customization variable 'aquamacs-known-major-modes'. The menu is updated automatically.
- Change-Buffer-Mode menu (in File menu) allows to change the mode of the current buffer to something hopefully more useful.
- Recently used major modes are now displayed in New-Buffer and Change-Buffer-Mode menus .
- M-w (kill-ring-save) will now deactivate the mark after saving the region, that is deselect the region, just like on standard Emacs. Apple-C will not deselect the region, just like it's done on the Mac.
- Run executables from within Emacs that lie in your PATH as set in shell init files. Aquamacs will set 'exec-path' automatically from PATH. We don't add paths to exec-path any more (except one default tetex path for AUCTeX).
- Questions like "Save to file before closing?" will be asked with a proper dialog and not with a menu appearing out of nothing - if the last action was carried out with the mouse.

Thanks to CarbonEmacsJP project for part of this.

- Info mode: C-h i will bring up not only up-to-date info nodes for Emacs, but also info on installed packages on the system. (unless you have an INFOPATH environment variable set)

- Mode-specific styles: With a new menu function, you can now apply the style assigned to some other mode, effectively copying it over.
- Mode-specific styles are not applied any more for the major-mode of buffers shown in temporary windows inside frames such as the
- Completions\* buffer. This prevents ugly font-switching etc. for the whole frame when just a small window is opened inside the frame.
- New Packages: findr, htmlize, ruby's friends, auctex (latex-mode), nxml-mode, matlab-mode, javascript-mode,
- Notable Updated external packages: ruby-mode, ruby-\*, carbon-font
- Apple/Command key is now called 'A-' internally because it looks like "Apple-" (while it's really the otherwise unused "Alt" key). It used to be "H-" (or: hyper), so change your configuration code in case you've defined your own shortcuts.
- One-Buffer-One-Frame is a minor mode now (called one-buffer-one-frame-mode). Use the Options menu (and Save Options) to turn it on/off, as before. In this minor mode, you have some additional key bindings now:  
C-x B, C-x C-B, C-x S-left, C-x S-right they all do the same as their corresponding functions without the Shift key, but they will show the buffer that they are switching to in the same window, even though one-buffer-one-frame-mode is on.  
The mode has been revised to open fewer extra windows when their content is related to a specific frame - for example version control checkin comments.
- Manual: The Emacs Manual that comes with Aquamacs (as an Apple Help document) has been updated to reflect the basis of Aquamacs, namely the upcoming Emacs 22.
- Command-p-Bugfix: For some users, Emacs locked up at random times, showing a message like (wrong command-p ...) in the echo area of a frame on every input. This bug in the underlying GNU Emacs should be fixed now. Patches by Yamamoto Mitsuharu, Richard Stallman, et al.
- Bugfix: Aquamacs now correctly remembers the positions of frames with specific files, so they open again on the same screen position if the file is re-loaded (in the same session, or after "Save Options" in the next session).
- Bugfix: Bookmarks did not work with 'one-buffer-one-frame' turned on.
- Bugfix: Some Show/Hide options weren't saved by "Save Options".
- Bugfix: links from describe-variable/function help buffers to the source files are correct now for the Aquamacs-specific objects
- Bugfix: Aquamacs works fine now on systems where, in the default shell (e.g. via .bash profile), functions have been defined and exported. Reported by Terry Jones
- Bugfix: RefTeX mode doesn't give constant audio signals (errors) any more in certain situations

- Bugfix: Allout mode should work again (saving files) Reported by Gerry Brush Patch by Ken Mannheimer

### 13.20 Changes—0.9.6

- Aquamacs now provides extended input methods for Korean, Japanese and Chinese (GB/BIG5). You can select them in the Options menu, under "Aquamacs Multilingual Environment" / "Set Language Environment" - everything is integrated with Mule.

In order to load more fixed-width fonts suitable for use with Asian languages, you may want to load the carbon-font package, which is included (but not activated) in Aquamacs. Just add the following to the file `/Library/Preferences/Aquamacs Emacs/Preferences.el`:

(require 'carbon-font)

(maintained by Mahn-Soo Choi.)

- CSS-Mode fixed. (First reported by Kris Khaira and Michael Jakl.)
- Dual-head setups (two screens) with one screen on the left, the system menu on the right and Aquamacs frames on the left caused problems. (reported by Otto Karl Florian Diesenbacher)
- `osx-key-mode-map` can now be changed to modify key assignments, in particular those of Apple Command keys (implemented in Emacs as Hyper = H- keys.) (reported by William Ziemer)
- "font-lock-keywords ... void" message used to appear when attempting to load a new file. This bug in the underlying GNU Emacs has been fixed.
- Apple-Q and iconized frames: When all frames were iconized and one attempted to quit Aquamacs, the application seemed to hang (because it was showing a minibuffer prompt in an iconized frame.)

### 13.21 Interface/Usability Improvements—0.9.5

- The application is now called Aquamacs Emacs.
- The menu of Recent Files will abbreviate long paths now.
- Renamed "Option key produces only special characters" to "Option key for Meta (not for extra characters)."
- `C-x C-f` (find-file) will bring up a window first before asking for the name of the file to be loaded.
- Files saved with Aquamacs have a nice file icon now.
- Text is now nicely shown a little to the right in windows. In the left "fringe", you can see small dots indicating the end of the buffer, and a small triangle indicating continued lines. If you cannot see them, your Frame / default style overwrites it. Select "Options / Frame Appearance Styles / Reset all styles" to make the fringes appear.

- The “frame appearance styles” system has been revised. \*Messages\* now has a distinctive colored background. To change this background (or the one for \*Help\* buffers), customize the variable ‘aquamacs-buffer-specific-frame-styles’. Also, you can turn Frame Appearance Styles on and off with a menu item.
- Setting the frame font gives a warning now (that the font is only set for the current frame), or sets it as default if Frame Appearance Styles are off.
- Frame-related functions from File menu are now in Buffers menu.
- 1on1-\* customization variables are gone—most of them were not in working order (in Aquamacs) anyways due to the way we were using the Oneonone package. This gets rid of quite a bit of doubly implemented functionality.
- You can switch the Option key from its Emacs-specific Meta meaning to its Mac typical use (composing keys such as ü (Engl. keyboard) or the backslash (German keyboard) by typing Apple-; – this is equivalent to the Options menu entry “Option key for Meta.”
- The customization variable aquamacs-auto-frame-parameters allows you to turn off mode-specific styles—your frames stay the same, no matter what major mode you switch to.
- Frame Appearance Styles have a better menu structure now in the Options menu. Also, there is a new function “Delete all mode-specific styles”.
- Many menu items are now greyed out (cannot be selected) when no frame is visible.
- Help (Aquamacs Manual) has been revised.
- (Even) speedier startup.
- Every Aquamacs frame has a toolbar-button now. Use it to turn the toolbar in the given frame on and off.
- Improvement when working with multiple frames: when no frame is visible, Aquamacs no longer raises some other frame as soon as a file is loaded.
- Mode-specific styles revised: the full set of parameters coming from color themes is now supported, in addition to the font and toolbar setting.
- Menu item to delete the mode-specific style for the current major mode.

### 13.22 New and Updated Major Modes—0.9.5

- Better support for editing HTML: HTML-Helper-Mode is included.
- Emacs Speaks Statistics is included. (Minor glitches with toolbar and info files are known and will be addressed.)
- Auctex configuration now turns on abbrev-mode and flyspell-mode when latex-mode is started (instead of toggling them). (reported by Robert Sloan)

- Page-wise scrolling is more reliable—that is, it is really page-wise and you can always return to the same line. (Pager package)

### 13.23 Bug Fixes—0.9.5

- Font “Bitstream Vera Sans” works again.
- Exiting view mode (e.g. help) with ‘q’ deletes the frame instead of iconifying it.
- The (Apple Help) manuals work now on systems where tcsh is the default shell. (Reported by Arthur Ogus)
- Startup with arguments -nw (tty / in terminal) revised.
- You can now redefine Aquamacs keys like this:  

```
(define-key osx-key-mode-map [end] 'end-of-line)
```

(Thanks for reporting: Andreas Hess.)
- If the user changes mac-command-modifier, it may be advisable to call  

```
(osx-key-reset-mode-map)
```

This will ensure that the keymap is updated and Aquamacs installs its Mac-like keyboard commands (provided you want this).
- New frames will not open behind the Dock any more.
- An error message (harmless) when clicking on “Finish” in customize is gone.
- Error message during version check on startup removed (occurred in certain cases where users had upgraded their system.)
- In particular in TeX mode, Aquamacs tended to give audio signals all the time when there were internal exceptions (internal errors signaled) with parsing the TeX code. Therefore, we do not ring the bell any more, i.e. aquamacs-ring-bell-on-error-flag is nil by default. (Reported by Ken Bloom and Andreas Hess)
- Speedbar works when one-buffer-one-frame (“Open Buffers in Separate Frames”) is turned off.
- Option-up/down (if Option is meta) now scrolls page-wise.
- Other bug-fixes.

### 13.24 Bug Fixes—0.9.4

- Bug reports contain the subject line that the user entered.
- No more (delay due to) tramp mode on startup in cases where tramp mode had been used before (recentf).
- Files on externally mounted volumes are not checked for readability any more for exclusion from recent files list. (Reported by Bill Clementson)



- No more warnings when fonts are missing (on startup).
- Drag and Drop while in minibuffer works again.
- Mouse-2 works again.
- default-major-mode and initial-major-mode are respected now. initial-frame-alist is not modified any more. Note that other than in any standard Emacs, mode-specific settings always take precedence over default-frame-alist (but not over initial-frame-alist). (Reported by Rick Zaccone, Joe Davison and Peter Dyballa)
- No more warnings in customization buffers that the values have been changed outside customize (for certain variables).
- Gnus articles (newsreader) open in same frame now.
- Gnus has a useful (free) nntp server set so you can start right away.
- Send Email with Sendmail is gone from menu (doesn't usually work on OS X).
- Fonts corrected: Some glyphs in some fonts turned out wrong when in bold or italic. Also, font sizes are correct again (Lucida 14 is Lucida Grande 14, not 12 or so). The default font size for text-mode (and similar ones) is set to Lucida 13 to make up for the change. Apologies for any inconvenience this may cause with your default settings. (Reported by William Henney)
- Better customization for aquamacs-mode-specific-default-themes
- The customizations file (customizations.el) doesn't grow any more. (Reported by Alastair Rankine.)
- Various corrections in the Aquamacs Manual.
- Plugin support: All files named site-start.el anywhere in the load-path are loaded at startup, before the user's init files are loaded. For example, such a file may be placed in /Library/Application Support/Aquamacs Emacs/myPlugin. This feature enables support for easily installable plugins.
- We anticipate shorter startup times in the next release. Stay tuned.

### 13.25 Bug Fixes—0.9.3a and 0.9.3b

- Fixed “wrong argument type” problem (version check), which could occur in new installations or those updated from 0.9.1.
- Monaco 18 font present (suggestion: David M. Cook).
- Emacs Manual available again.
- Save mac-pass-option-to-system when saving options.

### 13.26 Bug Fixes, Features and Changes—0.9.3

- Initial-frame-alist is respected. (Reported by Alastair Rankine)
- When saving a buffer and the Finder is not running, the Finder is not opened any more. (Reported by George W. Gilchrist.)
- Using dead-keys (like Option-u or Option-n on most keyboards) works again. (Reported by Howard Melman and Pierre Albaredo)
- When modified files existed, but no frame was visible and one tried to quit Aquamacs, the application seemed to hang while prompting for keyboard input (Save file? y/n) in an invisible window. This has been fixed.
- If no frame is visible and you input text, the frame is made visible so you can see what you are doing.
- Closing windows consistently with the mouse now works properly.
- Clicking on links to source files in help buffers properly opens a new frame (if “open buffers in separate frames” is on).
- When the buffer shown in a frame changes, sometimes the color theme and font were not set correctly; this has been addressed. This could happen when “Show Buffers in Separate Frames” was off, and one killed a buffer. (Reported by Peter Dyballa.)
- When “Show Buffers in Separate Frames” was off, and one killed a buffer (kill-buffer, C-x k), the frame was deleted.
- You have the option to save newly created buffers (Command-N) that have not been saved yet when you quit Aquamacs.
- Less frame-dancing (resizing) on startup.
- AUCT<sub>E</sub>X uses the standard commands again. The menu is unstructured for this reason. (Reported by Robert Sloan.)
- No frames could be opened when using a two-screen setup with the menu bar on the right screen, and a currently selected frame on the left screen. This has been addressed. (Reported by George W. Gilchrist.)
- Customizing a style for a special display frame (e.g. help or customization) works now.
- Recent Files/Clear Menu works again.
- Paths and other environment variables are now derived from the shell when you start Aquamacs.
- Your settings for highlight parens, “Blinking Cursor,” etc. are now persistent. The function Options/Save Options (menu-bar-option-save) now correctly saves such settings. This should include most customization settings except some that Aquamacs relies on for proper clipboard copy/paste functionality.

- The font menu (Options) no longer includes non-existent fonts.
- Option/Show-Hide/Menu Bar is gone because you cannot turn off the menu bar on OS X.
- “Send Emacs Bug Report” now uses the OS X default mail program to compose a message. This ensures that bug reports actually go through. Before, they did not, unless you were running a local SMTP server (sendmail/postfix), which is not enabled by default.
- Fixed loading of files when file names contain certain Kanji characters, due to a bug in AppleScript.
- The menu shortcut entries were corrected.

- Characters that require the use of the option key work again. For example, Alt-3 produces the pound sign (£) on a US keyboard, Alt-L the ‘at’ sign @ and Alt-Shift-7 the backslash \ on a German one. Inputting the Euro sign works, too. *However, that means that the option key is not used to emulate the ‘meta’ modifier; you will have to use Esc to do that.* Alternatively, you can map the option key to meta in your .emacs file:

```
(setq mac-option-modifier 'meta)
```

- Improvements in the fontset selection allow you to display the Euro sign with the default font.

- We have moved Aquamacs to <http://aquamacs.org>.

The Aquamacs wiki is now at <http://www.emacswiki.org/cgi-bin/wiki/AquamacsEmacs/>.

The Aquamacs bug reporting address is now <mailto:aquamacs-bugs@aquamacs.org>. This can be accessed from directly within the Aquamacs Help menu.

The general Aquamacs mailing list is still <mailto:macosx-emacs@email.esm.psu.edu>; e-mail <mailto:macosx-emacs-on@email.esm.psu.edu> to subscribe.

- Slightly faster startup.
- Runs on OS X 10.3.9, 10.4.0 and 10.4.—tested.
- Aquamacs automatically checks for updates and notifies the user if there is something new. This function communicates with an internet server; it does not transmit any information identifying the user. If you would like to know more about what is transmitted, use M-x aquamacs-check-version-information. If you like to turn this check off, add this to your file /Users/yourname/Library/Preferences/Aquamacs Emacs/Preferences.el:

```
(setq aquamacs-version-check-url nil)
```

- Adding Emacs packages is easier now: Emacs automatically finds packages in subdirectories within the /Library/Preferences—Application Support/Emacs—Aquamacs Emacs/ paths.

- Aquamacs now sets the file creator information of files it writes. This helps to open the file from Finder with Aquamacs when you double-click it. Feature can be turned off via customization option “aquamacs-set-creator-codes-after-writing-files.” Also, Emacs will appear in the Finder’s context menu under “Open With” for a lot of files that it is commonly used to edit.
- You can start Aquamacs in a terminal (by running `/Applications/ Emacs.app /Contents/ MacOS/ Emacs`) with parameter `-nw` and will show up in the terminal rather than as a Carbon application. Basic file editing and all traditional commands work. However, Aquamacs-specific keyboard commands (with the Command key) will not work and other functionality may be limited, too. *Warning:* This mode of use, which may break in future versions, is not supported by the Aquamacs team.
- We make sure that the `*Completions*` buffer (and similar things) open as a window inside the frame directly above the Minibuffer, and not in a new frame.
- All newly opened frames open in a somewhat useful position, so they are not in the way. (If you do not like this, we suggest you set your own static frame positions via “set current style as default” and also add this to your file `/Users/yourname/Library/Preferences Emacs/Preferences.el`:

```
(setq smart-frame-positioning-enforce nil)
```

Or, if you would like to go with the default position all the time, turn the global minor mode off:

```
(smart-frame-positioning-mode nil)
```

## Fonts

- Aquamacs should not complain about missing fonts any more when you have upgraded from earlier versions and set scalable fonts as default fonts for modes or all frames. They get filtered automatically.
- Users with certain setups (cyrillic Lucida Grande) should not get a “default font not found” error any more.
- “Recursive Minibuffers” are enabled.
- “Subscribe to mailing list” in Help menu.
- PHP-Mode included (`M-x php-mode`).
- Ruby-Mode included (`M-x ruby-mode`).
- `yes-or-no-p` is customizable now. Use the new customization variable `aquamacs-quick-yes-or-no-prompt`. (Thanks: Pavel Hlavnicka.)
- Soft word wrap (`longlines-mode`) is available from the Options menu. To make it the default, add this to your preferences file: `(set-default 'longlines-mode t)`
- Case-insensitive search option has gone into “search” submenu (in “Edit”).

- If you are in an empty frame (i.e. a frame with an empty buffer) and you load (find) a file, Aquamacs will not open an additional frame. This is useful also for drag and drops, when a scratch frame is open.
- The secondary selection is back: use the Command (Apple) key together with clicking/dragging the mouse cursor over text in order to select text that is not related to the point (cursor). This way, you can select text and then scroll somewhere else. Extend your selection with shift-command-mouse1. To copy/cut the text in the secondary selection to the clipboard, use Shift-Command-C/X, respectively.
- Some key-bindings are more like the original Emacs ones—in particular M-w, which does kill-ring-save again. (Idea: Joe Davison) Also, Home and End keys work as expected.
- No more annoying system “ding” (bell ringing) all the time. The bell is turned off completely, until Emacs developers eliminate the use of the bell on user-initiated abort actions (such as ESC ESC ESC when in minibuffer, or pressing Cancel in the file selection dialog).
- The toolbar is only displayed in normal frames, but not in frames that show help/info buffers. (tool-bar+ and aquamacs-tool-bar packages). Turn such tool-bars on/off in Options/Show/Hide menu.
- The “About Emacs” dialogue has been improved.
- Key combinations with the option key that involve another modifier (that is, ctrl or command) will now work, even though simple option combinations are handled by the system to produce special characters.
- The Speedbar is back. Activate in Options/ Show/Hide.
- The redo function is in the Edit menu now.
- New buffers (File / New) open in Text Adapt Fill mode now.
- .save-places and customizations.el do not show up in the recent files list any more.
- auto-save-files (in / Users / yourname /.emacs.d) are now saved to / Users / yourname/Library/Preferences.
- “Save Place in Files in between sessions” will not generate files in the user’s home folder any more. Instead, the file goes into / Users / yourname/Library/Preferences/Aquamacs Emacs/ where it belongs.
- Command-’ now cycles between different windows (suggested by Joseph Kiniry.)
- Option is mapped to Meta by default, allowing you to enter key combinations such as C-M- easily. If you’d like to map it to alt instead, just add this to your .emacs:

```
(setq mac-option-modifier 'alt)
```

- Color Themes: The color-themes package has been integrated in Aquamacs. Use the Option/Color Theme... menu command to choose a set of predefined colors for editing source code or writing texts. This applies to the current frame only, but you can make it the default for all new frames or for all frames in a specific mode with the according menu commands.
- There is a new customization group called “Aquamacs” that allows you to modify the customizations introduced by Aquamacs. This is fairly untested - unexpected results may occur. If so, try to locate and fix the bug and send us a patch. If you couldn’t find the problem, please report via Help/Send Bug Report... PLEASE NOTE that a lot of customization variables have changed their names—usually, you just need to prepend `1on1` to them.
- Aquamacs will load your configuration files not just from `/ Users / yourname / .emacs`, but also from the location that is appropriate for a Mac OS X installation:  
`/ Library / Preferences / Aquamacs Emacs / Preferences.el`  
`/ Users / yourname / Library / Preferences / Aquamacs Emacs / Preferences.el`  
`/ Library / Preferences / Emacs / Preferences.el`  
`/ Users / yourname / Library / Preferences / Emacs / Preferences.el`

It is recommended to use these instead of `/ Users / yourname / .emacs` on OS X-only installations. The first two files should be used for the host-wide and user-specific Aquamacs configs, the latter two for general Emacs configurations.

- There is a new configuration option that gives you more fine-grained control over how the option modifier key is handled.
- If `mac-pass-option-to-system` is `nil`, your Aquamacs will get all key combinations. If you press option-3, Aquamacs will see “M-3” (or, depending on `mac-option-modifier` “A-3”). If it is non-`nil`, you will simply get the pound sign on a US keyboard.
- TeXniScope support in LaTeX mode (if installed in `/ Applications`).
- We have two great manuals available comfortably via Apple Help now, directly from within Aquamacs Emacs (Help menu). There is a brand-new Aquamacs manual, and there is Richard Stallman’s original Emacs manual. They can be searched (e.g. via Spotlight on OS X 10.4). We also provide direct access to the online configuration Wiki, which has been filling up with content nicely. Please contribute; everybody has write access.