

A+ installation under Mac OS X (10.3.1)

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This document describes the installation of the A+ interpreter under Mac OS X (10.3.1) and the setup of Xemacs under Apple's X11 (1.0) in order to run A+ in a comfortable way. It refers only to the installation of the pre-compiled binaries of version 4.18.

The basic instructions for downloading the A+ interpreter for Mac OS X (10.3.1) are available at <http://www.aplusdev.org> under 'Getting A+, Download' and you will be able to select the type of installation file you prefer, i.e., Mac OS X Gzip archive, Mac OS X Installer, or UDIF.

After downloading you should install the package (which is more or less automatic although it depends on the type of installation file you selected) and carry out the following steps in a Xterm (I will suppose hereafter that the `base directory` for the A+ interpreter is `/usr/local/aplus-fsf-4.18/`):

- Add the location of the A+ interpreter to your path in case you want to run it from the command line, namely, the location of the `a+` executable. You can simply type `export PATH=$PATH:[base directory]/bin/` or add the line `PATH=$PATH:[base directory]/bin` to your `.bash_profile` file in your home directory (if you do not have one then just create one!);
- Install the necessary fonts under X11 from the command line as follows (e.g., for use with Xemacs):

```
cp -f [base directory]/fonts/X11/pcf/* /usr/X11R6/lib/fonts/misc
cat Kapl.alias >> fonts.alias
mkfontdir
```

Now you should have an updated `alias.fonts` file as well as an updated `fonts.dir` file;

- Create a `.xemacs` directory (if you have none) using `mkdir .xemacs` under your home directory, create a file named `init.el` and add the following line to it:

```
(load "[base directory]/lisp.1/aplus")
```

This initializes Xemacs with the right options directly from the command line;

- Modify the file `[base directory]/lisp.1/aplus.el` so that line number 35 and line number 50 read, respectively:

```
'("[base directory]/lisp.1') load-path
```

and

```
(setq a-prog "[base directory]/bin/a+')
```

This sets the default paths for use in A+ (where the lisp files and the a+ executable are located);

- Modify the file [base directory]/lisp.1/keyb.el so that line number 142 reads:

```
(?\M-~ . ?\376) ; diamond
```

This is a workaround for the Meta-‘ (Meta-back tick or Meta-left quote) key sequence which keeps on switching between open windows under X11 instead of reproducing the correct metacharacter associated with it (if you find a better way to disable effectively this key sequence please let me know...). I have therefore enabled Meta-~ to reproduce the metacharacter associated with Meta-‘;

- Modify the file [base directory]/lisp.1/a.el so that line number 27 reads:

```
(defvar a+-font 'kaplgallant' 'Font used in A+ mode.')
```

This sets the default screen font to 17 pt kaplgallant (see Figure 1). If you feel this font is too big for you then do not change it and your default will be 14 pt kaplscreen-bold;

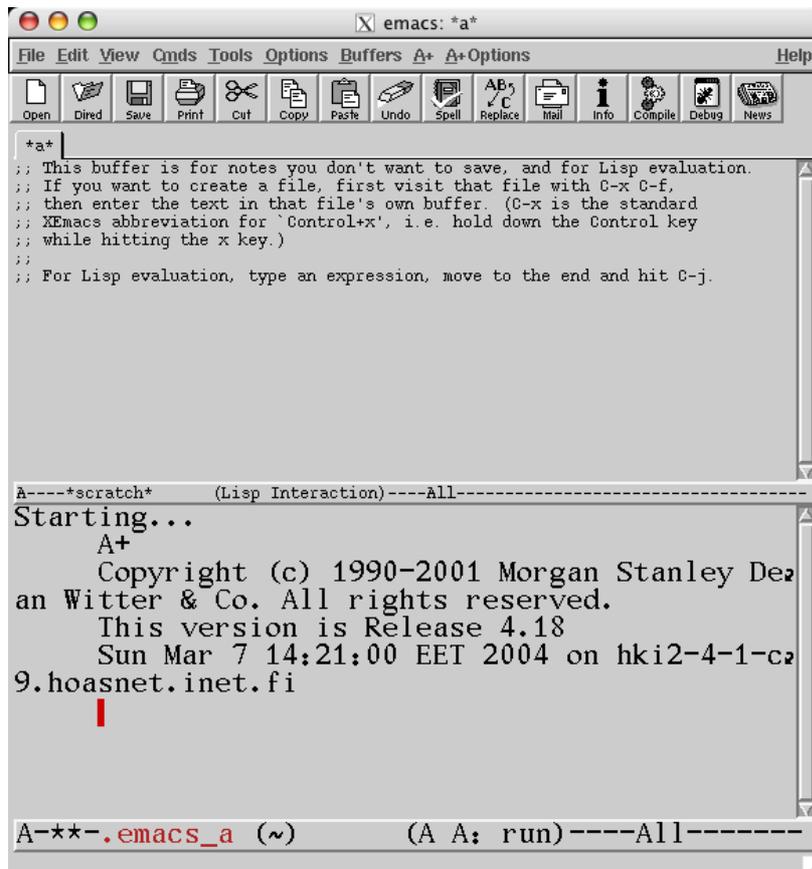


Figure 1: Grab of A+ running under Xemacs.

- Switch the Meta key to option simply by issuing the command:

```
defaults write com.apple.x11 swap_alt_meta -boolean true
```

In reality you are not obliged to do this (you can try to play with the shortcut keys in the System Preferences) but if you do change it then you do not have to disable several of the system's key sequences associated with different events that interfere while you type in Xemacs because Meta's default key is command;

- Disable key equivalents issuing the command:

```
defaults write com.apple.x11 enable_key_equivalents \  
-boolean false
```

This avoids getting key sequences passed on to Apple's X11 application as shortcuts.

If you wish to receiving more information on how to install the A+ interpreter under Mac OS X (10.3.1) do not hesitate in contacting me directly at aplustlist@aplustdev.net.