AfterStep FAQ

Maintained by Diego Zamboni *Revision* : 1.3, *Date* : 1997/03/1815 : 17 : 03

Contents

1 General information

1.1 What is AfterStep?

AfterStep is a Window Manager for X that emulates the NEXTSTEP look and feel, which many adepts will tell you is not only the most visually pleasant interface, but also one of the most functional and intuitive out there.

1.2 What is its history?

From the man page:

> AfterStep is a continuation of the BowMan window manager which was originally put together by Bo Yang. BowMan was based on the fvwm window manager, written by Robert Nation. fvwm was based on code from twm. And so on... It is designed to emulate some of the look and feel of the NEXTSTEP user interface, while adding useful, requested, and neat features. The changes which comprise AfterStep personality were originally part of BowMan development, but due to a desire to move past simple emulation and into a niche as its own valuable window manager, the current designers decided to change the project name and move on. BowMan development may continue, but we will no longer be a part of it.

1.3 What are its main features?

Again quoting from the man page:

1. NEXTSTEP-alike title bar, title buttons, borders and corners.
2. AfterStep's *Wharf* is a much worked-out version of *GoodStuff*. To avoid copyright complications it is not called a 'dock.'
3. NEXTSTEP style menus. However the menus are not controlled by applications, they are more of pop-up service lists on the root window.
4. NEXTSTEP style icons. The default icons are consistent with those in the NEXTSTEP interface, but they are configurable.

However, the flexibility of *fvwm* was not traded off. The initiation file, `~/.steprc`, recognizes most of the fvwm 1.24r commands. Virtual screens and the pager are still intact. fvwm modules should work just fine.

1.4 Is it compatible with fvwm-2?

No. Compatibility with fvwm-2 is not planned.

1.5 Where can I get this FAQ?

The latest version is available at `<http://www.cs.purdue.edu/homes/zamboni/afterstep/FAQ.html>`.

1.6 Who contributes to this FAQ?

The initial version of the FAQ was written by Frank Fejes (frank@ssax.com) and Jonathan B. Leffert (j-leffert@uchicago.edu). Major additions were made by Kragen Sittler (kragen@tcsi.com). The FAQ is currently maintained by Diego Zamboni (zamboni@cs.purdue.edu). Most of the questions and answers have been provided by the people participating in the AfterStep mailing lists (`<http://www.eosys.com/mailing-list/AfterStep.html>`).

1.7 What are the AfterStep-related mailing lists?

AfterStep-Announce:

This is a low volume (moderated) list for announcements of general interest to all AfterStep users (e.g. new releases). You may submit announcements to be moderated via afterstep-announce@eosys.com.

AfterStep:

The purpose of this list is to provide a forum in which users of the AfterStep X11 window manager can discuss issues related to to using AfterStep. Appropriate topics include, but are not limited to, the installation and configuration of AfterStep and related modules and applications.

AfterStep-Digest:

This list contains the same messages as the AfterStep mailing list. However, the messages are saved up (not transmitted individually) and sent out as a bundle. This decreases the number of separate messages received from the list, but makes it more difficult to reply to a specific message.

AfterStep-Dev:

This list is a forum to discuss ongoing development issues related to AfterStep. If you want to participate in the development of AfterStep, please join this forum.

AfterStep-Dev-Digest:

This list contains the same messages as the AfterStep-Dev mailing list. However, the messages are saved up (not transmitted individually) and sent out as a bundle. This decreases the number of separate messages received from the list, but makes it more difficult to reply to a specific message.

For subscribing to any of these lists, send a message to `<listname>-request@eosys.com` containing:

```
subscribe
```

You can find more information, and archives of all the lists, at `<http://www.eosys.com/mailing-list/AfterStep.html>`, maintained by Ed Orcutt (edo@eosys.com), and from where these descriptions were taken.

2 Getting and installing AfterStep

2.1 Where do I get AfterStep?

The main AfterStep resources in the net are:

WWW Page:

The official WWW page is at `<http://afterstep.edoc.com>`.

FTP Site:

`<ftp://afterstep.foo.net/pub/AfterStep/>`.

Upload directory:

`<ftp://afterstep.foo.net/incoming/>`.

You can get AfterStep from either the WWW page or the FTP site.

2.2 Other important WWW pages

Alfredo Kojima's Page:

`<http://www.inf.ufrgs.br/~kojima/>`.

Matt Kramer's Page:

`<http://defiant.gmi.edu/afterstep/>`.

Kiwi's Page:

`<http://www.iis.ee.ethz.ch/~kiwi/AfterStep/>`.

On the above pages, you will find links to other interesting things that work nicely with AfterStep such as TkStep, TkDesk, lib-neXtaw, and nifty icons that were adapted from NEXTSTEP.

2.3 What is the latest version of AfterStep

The latest public version is 1.0pre4, released on March 13, 1997.

2.4 I've compiled AfterStep for my system but every time I try to use it I receive the message: Cannot open display. What should I do?

AfterStep is an X window manager and cannot be run from the terminal. It must be run through X. The easiest way to do that is to either create or edit your own `.xinitrc` file (which contains a list of the programs you wish to load upon startup) and add the line `exec afterstep` to the end. This last exec'd line is significant in that it says to shut down X when that program is terminated. Now that you have that file, simply startup X in your customary manner, most likely `startx` or `xinit`. Now you're off and running...good luck.

2.5 How do I enable sound in AfterStep?

First, make sure you have compiled the Linux kernel with sound support and that the sound works (try `cat <some au file> > /dev/audio`).

Then, edit your `.steprc` file. Near the bottom of the file, you should see (if you don't add it) lines like this:

```
Module Audio
*AudioPlayCmd /usr/bin/showaudio
*AudioDir /usr/X11/lib/X11/afterstep/sounds
*AudioDelay 1
```

If these aren't there, add them. Verify that the `AudioPlayCmd` is a valid program and that the sounds you want to play are in `/usr/X11/lib/X11/afterstep/sounds` (or set it to the appropriate directory).

Below that section, you sould see many lines like this:

```
#*Audio startup gong.au
```

Simply remove the comment (#) from the beginning of the line and if you wish, set the startup event to some other au file. The format is:

```
Audio <event> <sound>
```

Do that for the rest of the Audio events, and as one AfterStepper put it, you'll literally add new bells and whistles to AfterStep.

2.6 I grabbed TkStep and Tcl7.6 and tried to install TkStep, but it doesn't work

TkStep still doesn't work with Tcl7.6. Try Tcl 7.5 (see question 6.3 for information about TkStep).

2.7 Why doesn't ASCP run on my system?

ASCP needs TkStep, a version of Tk implemented by Alfredo Kojima (kojima@inf.ufrgs.br) that gives Tk the NEXTSTEP look-and-feel, and implements a few new widgets, like font and color choosers. You can download it from `<http://www.inf.ufrgs.br/~kojima/tkstep.html>`. See question 6.2 for information about ASCP.

2.8 How can I install AfterStep without being root?

This is fairly easy. You will have to install all the files under your home directory. The usual recommendation is to use the same directories as suggested in the installation procedure, but replacing `/usr/local` by your home directory. For example, if you home directory is `/home/bla` you would use directories like `/home/blah/bin`, `/home/blah/etc`, `/home/blah/lib`, etc.

Compile AfterStep following the manual installation procedure (i.e. do not use the `InstallMe` program), up to but not including the `make install` step. Then, do the following (make sure to create the destination directories first if they don't exist. All the source paths are relative to the AfterStep source directory):

1. Copy `afterstep/afterstep` to `$HOME/bin/`.
2. Copy `modules/asclock/asclock` to `$HOME/bin/`.
3. Copy `modules/Wharf/Wharf`, `modules/Pager/Pager` and all the other module binary files to `$HOME/lib/afterstep/`.
4. Copy the icons from `icons/` or `icons/8bit/` to `$HOME/include/X11/pixmaps/`.
5. Copy `sample.steprc` to `$HOME/lib/afterstep/`.
6. Take a look at `install/Xdefaults`, `install/xinitrc`, `install/xsession`, and copy or integrate them to your `.Xdefaults`, `.xinitrc` and `.xsession` as appropriate.
7. Copy `sample.steprc` to `$HOME/.steprc`.
8. Edit `$HOME/.steprc` to reflect the above paths in the lines starting with `ModulePath` and `PixmapPath`.
9. Put `$HOME/bin` in your path.

You should be set. Feel free to modify this procedure according to your particular needs or the particular setup of your machine/account.

3 Icons, graphics and pixmaps

3.1 Icons staying put

When I click on some of the icons they fan out and stay there until I restart Wharf. What's the deal?

In old versions of AfterStep, an icon to be used in Wharf must contain at least one transparent pixel, otherwise the symptoms you've mentioned will be prevalent. Simply add a transparent pixel and everything should work flawlessly (see question 3.4 for instructions on how to do this).

Newer versions of AfterStep fix this problem, allowing you to use icons without transparent pixels in the Wharf without problems. You should really upgrade to the latest version.

3.2 Colormap issues

When I run AfterStep some of the icons on the button bar don't show up. If I load them at the top they show up, but then the other ones don't. Also, when I use netscape, the colors get wacky. What's wrong?

Odds are you are using a 256 color (8bit) display. A quick explanation is that you can only have 256 colors on the screen at the same time, and the more colors you use in Wharf (the button bar), the less you can use for other applications and icons. I would suggest upgrading your video hardware or using more conservative (less colorful) icons. For netscape, an option is to run it with the netscape -install‘ command. This will insure that netscape gets a good deal of the color that it wants. However, this will result in the colors flashing whenever you move the mouse in or out the Netscape window. You decide if you can live with that.

You can find some help on configuring AfterStep for running on an 8-bit display in `<http://www.infinet.com/~gnosis/as.html>`. You can find a good collection of low-color icons (all of them together use only 21 colors) at `<http://www.iis.ee.ethz.ch/~kiwi/AfterStep/>`.

If you are using `asclock`, you can configure it to use much fewer colors. See question 4.3.

3.3 Icons disappear from Wharf. What's wrong?

You are most likely running out of colors. Either upgrade your hardware, switch to a higher color depth (i.e. 16 bpp or higher), or use icons that contain fewer colors. See question 3.2.

3.4 How do I create an icon with a transparent pixel?

Its beyond easy. An xpm is a simple text file. Therefore, the only image manipulation software you will need is `vi`. If you edit your xpm, you will become aware of the beauty and simplicity. At the bottom you will notice a character representation of your image. At the top there is a color listing corresponding to each pixel of the character representation.

You have two options to create a transparent pixel:

Change an existing pixel color to transparent:

Simply find the pixel character(s) you wish to become transparent, then go back up top and find that character in the listing. Change the color code (number beginning with a #) to `None`. Save, and you're all tootin'.

Create a new transparent pixel:

Edit the line near the top corresponding to the height/width/number of colors/chars per pixel. Increment the number of colors (third value) by one. Then in the list of pixels and color values add the line:

```
"c None",
```

Where ‘c’ should be a character that is not being used by any other color. From there save and take off.

If you're the slightest bit unsure, take a look at one of the xpm files in the AfterStep distribution's icons directory.

The ‘correct’ size for a Wharf icon is 48x48 pixels. However, if you use bigger icons, they will display correctly, up to 64x64, which is the default size for the Wharf buttons.

3.5 Why doesn't program 'xyz' work in 16bpp?

A lot of 8bpp programs don't work on displays without a PseudoColor visual available. A lot of PC X servers don't support PseudoColor visuals on displays running in TrueColor mode. You should buy an SGI. Or run two simultaneous X servers, if you're on Linux.

3.6 Why doesn't xv do 'xyz' in 16bpp?

`xv` doesn't cope well with 16bpp in three ways. First, it can't grab pieces of the screen. Second, if you grab pieces of the screen with `xwd` and try to display them with `xv`, it doesn't work well. `xwud` works. Third, if you display a 24bpp picture, it doesn't bother to dither it down to 16bpp, resulting in bad pictures.

3.7 Why don't icon names change when the application changes it?

I have some application creating a window and then changing its name to something special. I have told AfterStep to give the special window name a special icon. But I never see the icon. Why doesn't this work?

AfterStep assigns icons to windows when they are created, not when they are iconified, and later title or icon-name changes don't cause the icon to change. Perhaps this is a bug.

Emanuele Caratti (wiz@iol.it) has created a patch that supposedly fixes this, but I have not tried it, and it's not (yet) part of the official distribution. You can find it at
`<ftp://afterstep.foo.net/pub/AfterStep/mods/dynamic_icons.tar.gz>`.

3.8 Suddenly, some windows stay always on top. Why?

Sometimes, after I've been using AfterStep for some time, certain application windows stay always on top; they even stay on top of the Wharf and their own dialog boxes!

With the default `.steprc`, triple-clicking on a window titlebar toggles a window's always-on-top state. Triple-click again to remove it. If you want to remove this feature, locate the lines in your `.steprc` that look like this (there are several of them):

```
        PutOnTop        "TripleClick"
```

and delete them. Or better yet, just comment them out, in case you later decide you need the feature again.

3.9 Can you add 'xyz' to the Wharf?

You know, it would be really nice if the Wharf supported text titles/cascading menus/tabs on the side/plug-in modules/swallowing running applications in folders/scrollbars on folders/starting applications only if they're not already running. Why doesn't someone do it?

This is a holy war. You will be crucified at dawn. Unless you implement it yourself and post a patch.

No, seriously, there has been a lot of discussion about these topics. Many people believe that AfterStep should be kept as close as possible to the original NEXTSTEP interface, why others think it should be extended and be made as configurable as possible. Most probably the appropriate thing is some point in between, but then again, that is a personal issue. For now, we will let the developers decide the direction AfterStep should take.

4 Modules

4.1 How do I get multiple Wharfs/Pagers on the screen?

It's pretty easy. You just have to have the Wharf exist under several different names, and then configure each of them using its name. For example, if you make a link to `Wharf` called `MyWharf` (type `man ln` if you don't know how to make links), you would use lines like these in your .steprc:

```
Module MyWharf
*MyWharfAnimate
*MyWharf "label" Icon.xpm Exec "something" something
```

Same for the Pager.

Note: Apparently, due to the way the AfterStep configuration file parser works, links with names like `Wharf2` (i.e. the same original name with characters appended to it) will **not** work, the parser will think you are referring to the original module and will get confused. You have to give each link a distinctive name.

4.2 How can I get ASclock to properly appear in Wharf?

First, you need AfterStep 0.98 beta 4 or later. These version have the `.steprc` 'MaxSwallow' option. Then, add a command such as this to the Wharf section of your `.steprc`:

```
*Wharf asclock nil MaxSwallow "asclock" asclock -12 -shape &
```

You can omit the '-12' to be in 24 hour time.

4.3 How do I configure asclock to use fewer colors?

When installing, after executing `MakeMakefiles` but before `make install`, go to the `modules/asclock` directory and do the following:

1. Execute `sh configure`
2. Several menus will appear, asking for the default language for dates (yes, you can change it!) and the number of colors used. There is one option to use 2-bit color, resulting in an asclock that uses only 4 colors, but still looks pretty good.
3. Done. Now go and compile AfterStep as usual.

5 General usage, features and bugs

5.1 Why does AfterStep get slower and slower until I restart it?

Apparently there was a bug in versions up to 1.0pre3 (probably a memory leak) that caused this behavior. We know that setting your `TextureMaxColors` to something small, like '16 16 16 16' or '32 32 32 32', will stop this problem. It also seems to happen only with XFree86 in 32-bpp mode (or 16? Please give me confirmation), and if you're in 8-bpp or a different X server, it doesn't seem to cause a problem.

This problem was solved in 1.0pre4, as far as we know. Upgrade!

5.2 Click-to-focus dies

Sometimes, after I've been running AfterStep for a while in click-to-focus mode, I can't shift the focus from one window to another by clicking. I have to iconify and deiconify the window to shift focus, or pick it from the popup list.

This is a strange bug, that is (sometimes at least) caused by having the NumLock key activated. It is present up to 1.0pre4, so check your NumLock key.

This problem is solved in 1.0pre5.

5.3 What is this 'Shade' thing?

News: Shade was fixed in 1.0pre4. Upgrade now!

Shade is a window function that is often seen on the Macintosh system. In theory, it makes a window disappear except for the title bar. For example, an Xterm normally looks like this:

```
|------------------------------|
|             Xterm            |
|------------------------------|
|                              |
|                              |
|                              |
|                              |
|                              |
|------------------------------|
```

Shade is set by default to take effect when one double clicks on the title bar of the window. When shade takes effect, the Xterm looks like this:

```
|------------------------------|
|             Xterm            |
|------------------------------|
```

This is nice for saving desktop space and for window management purposes. Some prefer it to iconifying the windows.

Up to 1.0pre3, Shade didn't work correctly, because it worked by resizing the window to a height of 0 pixels, which some applications didn't like.

In 1.0pre4 and posterior versions, Shade works by making the application think that it is being iconified, so it works with all applications again. It has the problem, though, that shaded windows become 'sticky' and appear in all the pages in the virtual desktop.

5.4 When I restart AfterStep, it kills X. What gives?

This was a bug that occured in AfterStep betas. If you experience this bug, you are running an old release of AfterStep. Upgrade to v1.0pre4 or later to fix this. This is, incidentally, something you should probably do anyway, considering the wealth of features your are missing.

5.5 What is swallow-exec?

Is a feature introduced in the distribution in 1.0pre4 (it previously existed as a separate patch) that allows you to associate an action to an entry in the Wharf corresponding to a swallowed application. So for example you can have `asmail` in the Wharf, and have it configured so that when you click on it, it warps to your email reading window. If your email reader is `exmh`, the required lines would be:

```
*Wharf "asmail" nil Swallow     "asmail" asmail &
*Wharf "asmail" nil Warp        "-" exmh
```

Note how both lines have the same label 'asmail', which tells Wharf that those two go together. You can use any AfterStep function instead of 'Warp'. For example, if you want the `xload` icon to fire a `top` window when clicked, you can have something like this:

```
*Wharf "xload" nil Swallow      "xload" xload -geometry 48x48-1-1 &
*Wharf "xload" nil Exec "Top" xterm +sb -T Top -n Top -e top &
```

By the way, this feature is responsible for a strange bug. See question 5.6.

5.6 I upgraded to 1.0pre4 or later, and now the Wharf doesn't work. What happens?

This is not a bug, it's a feature `:-)`. No, really, this behavior was introduced due to the introduction of the 'Swallow-exec' capability in 1.0pre4. See question 5.5.

To fix it, do the following:

1. In your `.steprc`, locate the lines that start with

```
*Wharf "" ...
```

2. The could be also `nil`, or any other label that is the same for all the Wharf entries. These repeated labels are the ones causing the trouble. You have to give each Wharf entry a unique label there, like 'xload', 'asmail', 'Pager', etc.

3. Restart and it should be fixed.

6 Other AfterStep-related applications

6.1 What is this WindowMaker I keep hearing about in the list?

WindowMaker a new NeXT-like window manager that is being developed by Alfredo Kojima (kojima@inf.ufrgs.br) with the support of a lot of other people. It will support many OpenStep/GNUStep-ish features, and there is talk that it may be the 'next-generation _asnl', and even the window manager of choice for GNUstep. You can download it from `<ftp://afterstep.foo.net/pub/AfterStep/devel/>`.

However, be advised that WindowMaker is still in a very early stage of development, so don't plan on using it for real work for now unless you want to cope with a lot of unimplemented features. But it is advancing very fast, so you may also want to take a good look at it.

6.2 What is ASCP?

ASCP stands for 'AfterStep Control Panel', and is a program that allows you to configure AfterStep while imitating the NEXTSTEP control panel look and feel. It makes really easy to configure AfterStep without manually fiddling with the `.steprc` file. You can download it from `<http://www.inf.ufrgs.br/~kojima/ascp.html>`. Be sure to backup your `.steprc` file before using it, because it still has some bugs and problems.

WARNING: Due to changes introduced in AfterStep 1.0pre4 and posterior versions, the files written by ASCP cause AfterStep to behave very strangely, particularily the Wharf. So please **don't use** ASCP for configuring 1.0pre4 until this is fixed. If you accidentally did and you don't have a backup of your `.steprc`, do the following to fix it:

1. In your `.steprc`, locate the lines that start with

```
*Wharf "" ...
```

2. The empty double quotes are the ones causing the trouble. You have to give each Wharf entry a unique label there, inside the double quotes.

3. Restart and it should be fixed.

In case you are interested, this happens because 1.0pre4 introduced the 'swallow-exec' capability in the standard distribution (see question 5.5). This uses the labels to know which Wharf items have multiple meanings, so if all the labels are the same, Wharf superimposes all the icons on one.

6.3 What is TkStep and why do I want it?

TkStep is a modified version of Tk that implements the NEXTSTEP look and feel. If you use `wishstep` instead of `wish` to run your applications, all your Tcl/Tk programs will suddenly have a renewed and great new look!

You also want it because ASCP needs it. See question 6.2.

You can get it at `<http://www.inf.ufrgs.br/~kojima/tkstep.html>`. You need to have Tcl7.5/Tk4.1 to run it. **ASCP does not work with Tcl7.6 yet**.

7 Other AfterStep-unrelated applications

7.1 I have a problem with program 'xyz'

Please, please, don't post questions unrelated to AfterStep to the mailing lists. If you have a problem with some application not running, and you think AfterStep is the culprit, first try the following:

1. Read the documentation (manual pages, etc.) for the program.
2. Find out about its configuration parameters (not only command line, but also options in `.Xdefaults`, config files, etc.).
3. Ask other people who know about that specific program. Find a mailing list about that program and ask there.
4. Try running the program under some other window manager. If it doesn't work there either, it is **not** an AfterStep problem.

If you are **very** confident that it is an AfterStep problem, then send it to the mailing list, but try to give as much information as possible. Questions like 'Why doesn't blig-graphics work on my system?' do not contain any useful information that may help others in diagnosing your problem. Some data you may have to include is:

1. AfterStep version you are using.
2. Operating system version, machine architecture.
3. System configuration (color depth, memory, anything you think may help).
4. Problematic program.
5. Environment information (other programs running at the same time, etc.)
6. A **detailed** description of the problem. What happens (error messages, etc.), how replicable it is, how to replicate it, etc. The more information you provide, the easier it will be for others to find a solution.

7.2 Why am I having 'xyz' problem/how do I do 'xyz' with a terminal window?

Are you using plain vanilla xterm, color xterm, rxvt, rxvt-xpm, vanilla xterm with Xaw3d or Xaw-Xpm or neXtaw, dtterm, nxterm, hpterm, aixterm, cmdtool, shelltool, or something else?

See question 7.1.