AfterStep Applets

Docked

AfterStep users have come to appreciate the applets that accompany their

favorite window manager. What most people do not realize is that these

applets will run on other desktops. **BY ANDREA MÜLLER**

Most window managers support applets that provide their users with clock, system monitor and similar iconized tools. AfterStep has a really neat collection of applets, but users are unlikely to consider moving to a different window manager just because of a bunch of tools. Luckily, this drastic step is unnecessary, as most AfterStep applets can run in dock mode in a similar way to Windowmaker [1] dock applets. This allows you to run AfterStep applets on WindowMaker, Blackbox, Fluxbox, Waimea [2], Kahakai, and even on KDE.

The major desktop environment provides a special application bar for WindowMaker applets. To access the bar, right-click the KDE panel and select *Panel menu / Add / Extension / Dock Application Bar* in the dropdown menu that appears (see Figure 1).

A memory monitor, a dialer, and a volume control are basic applets that no desktop should be without. Before you can install the applets, you will need to compile them. After ensuring that you have installed the developer packages for *XFree86*, *libxpm*, and *libpng*, you can

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enter *./configure* ; *make* ; *su -c make install* to complete this task in most cases.

Contemporary

The variable *asclock* allows you to keep an eye on the time. The *./configure* script prompts you to choose a theme. Figure 2 shows the available themes, and removes the guesswork. Avoid selecting *Newstone*, as this variant is a bit too big for a dock mode applet. If you select the *shaped* theme, you are next prompted to select a language. An *asclock* with English weekdays and months is the default. Also by default, *make install* will install the clock in */usr/X11R6/bin* – if you are not happy with the standard settings, replace the following *configure* lines in the *Makefile*:

```
BINDIR = /usr/X11R6/bin
MANPATH = /usr/X11R6/man
```

with the following

```
BINDIR = /usr/local/bin
MANPATH = /usr/local/man
```

After calling *make install*, you can go on to enter *make install.man* to copy the documentation. Unfortunately, the manpages are not state-of-the-art, and thus do not support the *-d* parameter that assigns the applet to the dock. You can type *asclock -h* to display your options. Assuming you have administrative privileges, you can use the

following commands to copy the themes supplied with the package to */usr/local*:

```
mkdir /usr/local/share/asclock
cp -r themes/* /usr/local/⤾
share/asclock/
```

This removes the need to supply the full path when selecting a theme later.

Asclock assumes the default search directories */usr/local/share/asclock*, */usr/share/asclock*, and the *themes* directory below the current working directory. Some manual steps are required if you want to store the themes below your home directory. You will need to change to the parent directory of *themes* – before launching asclock.

You can launch the applet by typing *asclock -d &* in a terminal. The *-d* parameter tells the clock to dock to the application bar. If you prefer a 12 hour clock, don't forget to specify the *-12* parameter. *-noblink* will stop the colon between the hour and minute displays blinking once a second. If you get tired of the default theme, try *asclock -d -t Orb* for a futuristic looking *asclock*.
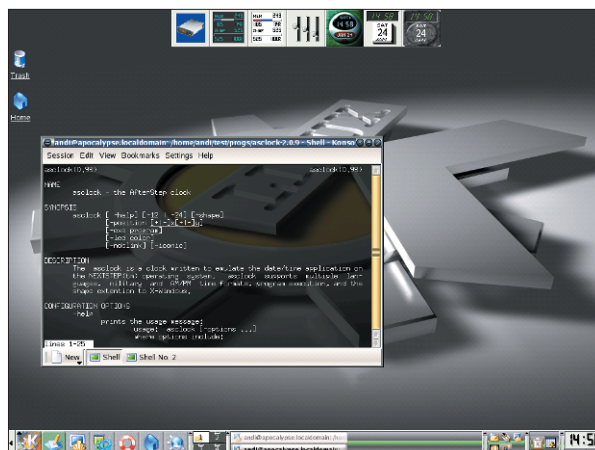

Figure 1: KDE provides a special application bar for AfterStep applets.

Volume Control

Having to launch an audio mixer each time you want to adjust the volume, can become tiresome. The *asmixer* applet puts an end to the drudgery. Compiling and installing the program gives you a volume control. *asmixer -w &* sends the program to the dock (*-w* is short for withdrawn). The three controls shown in Figure 3 allow you to set the master volume, the CD, and wave channels (from left to right). The parameters *-1*, *-2*, and *-3* followed by the required function allow you to assign different tasks to the controls.

```
asmixer -w -2 MIC -3 LINE &
```

assigns microphone volume to the center controller, and line in on the sound card to the right. Type *man asmixer* for the range of input and output ports. You can specify the volume for the first controller – *-v value_between_0_and_100*, where *0* means mute.

By default, *asmixer* uses the */dev/mixer* device file, which is assigned to the first (or only) soundcard. If you have more than one soundcard, you can tell the mixer device which one to use by setting the *-d* flag. The second card will typically be referred to as */dev/mixer1*.

Monitored

For the memory status, you might like the *asmem* applet. You can dock the tool by typing *asmem -withdrawn &*. The two level indicators represent your machine's main and swap memory. The top bar indicates both the current memory usage in blue, and **cache** memory use in white.

If you prefer precise figures, you can use the numeric memory usage display. As the default unit is KBytes, you might prefer to specify *-mb* to improve the readability by displaying the value in MBytes. (see Figure 4).

Figure 2: The asclock themes: shaped, beats, classic, Orb, Stone, and Newstone.

You can individually color the memory monitor elements. These parameters are: *-bg* (background), *-fg* (foreground), *-memory* (RAM display), *-cache*, and *-swap*. Each of these flags expects the name of a color, or a color value in hex, as an argument. In contrast to color names, hex codes such as *#000000* (black) have to be entered in quotes. You can achieve a thermometer effect with:

```
asmem -withdrawn -bg white -fg
"#000000" -memory DarkRed
-cache blue -swap DarkRed &
```

(see Figure 5). If you do not know the value for your favorite color, you can
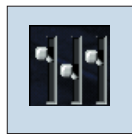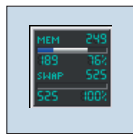

Figure 3: asmixer for volume control.

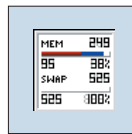**Figure 4: 189 MBytes free memory.**

Figure 5: Each element of asmem can be colored.

Figure 6: asmodem can control your connection

either use a graphics tool such as the Gimp, or the KDE *kcolorchooser* to discover it. *showrgb | less* will display valid color names to supplement the obvious choices such as *red*, *green*, and *blue*.

Well-Connected

If you require a dialup connection, you can launch *asmodem* to establish a connection simply by clicking. You will need to enter *make install.man* once more, if you need the manpage. When you launch the tool, provide the details of your dialup connection and where the **lockfile** for your modem is stored. The

program uses the lockfile to recognize the connected and disconnected states. The *asmodem* command for a Suse Linux system could contain:

```
asmodem -w -m /var/lock
/LCK..ttyS0 -d "cinternet -i
ppp0 --start" -h "cinternet -i
ppp0 --stop" &
```

-m specifies the lockfile. If your modem is attached to your second serial port, simply replace *ttyS0* with *ttyS1*.

-d tells *asmodem* what to do on mouse click assuming a disconnected status. Our example launches *cinternet*, the character-based variant of the GUI-based *kinternet* tool on Suse. *-i* refers to the network interface. This is *ippp0* for ISDN connections, for example. The *--start* option starts dialing. *man cinternet* displays the full range of options. The *-p provider_name* parameter tells the tool to dial an entry from a list of pre-configured Internet service providers. Debian users will need to specify *pon provider_name* for *-d*. The quotes surrounding the dialup command are only required if the command contains space characters. *-h* specifies the hangup command. Debian users need the *poff* command.

Click on the applet to connect. The virtual modem LEDs light up to indicate traffic flow (see Figure 6). Click again to disconnect. *-r command* tells *asmodem* what to do on disconnecting, to beep for example.

The program does not perform too well on KDE as it cannot parse the command that launches the tool. Instead, a dialog box is shown. Enter your *asmodem* command to tell the dialer to launch automatically, the next time you try.

Let's hope that this article has whetted your appetite for more applets. If so, why not surf to [3] to help yourself to a whole bunch of desktop dainties? ∎

GLOSSARY

Cache: *Used generically, this simply means a fast memory area that temporarily stores data from a slower medium. Viewed more specifically, Linux stores hard disk data blocks that have been used recently in the main memory. If a program wants to read one of these data blocks, the operating system does not need to access the disk. This equates to a*

performance boost. Linux uses a similar approach for write operations.
Lockfile: *Some programs create lockfiles to avoid other entities attempting to use the same resource, such as the serial port. These files are typically empty. Their mere existence indicates that a program is currently using the resource.*

INFO

[1] WindowMaker:
   http://www.windowmaker.org/

[2] Waimea:
   http://sourceforge.net/projects/waimea/

[3] AfterStep applets:
   http://tigr.net/afterstep/long.php