# Desktopia COMMAND LINE

**It's not only graphical user interfaces that can be themed. Patricia Jung embarks on an adventure into the world of themed shells**

## Desktopia

Only you can decide how your Linux desktop looks. With deskTOPia we regularly take you with us on a journey into the land of window managers and desktop environments, presenting the useful and the colourful, viewers and pretty toys.

The Linux command line may be powerful but for anyone who is striving for more than mere efficiency on the GUI desktop, the words "console" and "shell" are often synonymous with "unimaginative" and "boring". Some X terminal programs, such as *Eterm*, do offer options for beautifying the command line window and *xtermset* or the *ls*-option *––color* provide a solitary splash of colour amidst the black and white allsorts. All the same, these customisations pale into insignificance in comparison to the theme manager of a desktop environment.

## Themes for the console

It is possible to add a light relief, even to the console, in the form of the *bashish* theme engine. This offers the option to stoke your nostalgic fires by simulating the command line appearance of OS2, the Amiga Workbench or VMS (Figure 1).

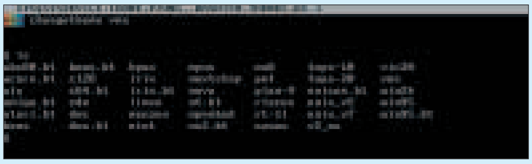

**Figure 1: Changing from Technicolor to the VMS theme**

If a non-root user unpacks the bashish-DR7.8.tar.gz archive via *tar –xzvf*, change to the newly-created directory, *bashish-DR7.8*, type *./InstallBashish* and press Enter to copy almost everything you require to *~/.bashish*. The main *bashish* script itself still needs to be copied to a location in the search path, ideally *~/bin*, a directory which usually has to be added to the variable *PATH*.

If, on the other hand, a root user calls up the installation script, *bashish* ends up by default in */usr/local/bin*, and the help files in */usr/local/share/bashish*.

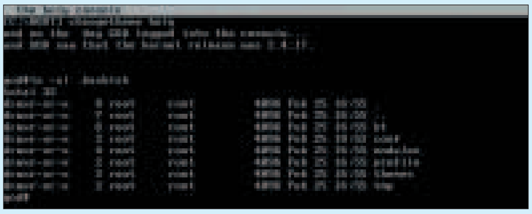

**Figure 2: Root is greeted in accordance with its standing, if you veer over to the Holy theme**

So long as the root does not force unprivileged users to log into *bashish* using */etc/passwd* (Listing 1), the *bashish* tool will be invoked. Under X there then opens a new terminal window (Figure 3), and the current shell is "replaced" on the console. A new command, *changetheme*, will also become available, which enables the appearance on the shell and other details to be changed.

For all theme files located under *~/.bashish/themes* or */usr/local/share/bashish/themes*, all you need specify as argument is the name (leaving out any file name ending *.bt*) (Figure 1 lists the operating system themes from the directory *themes/os*, as an example). Should themes installed from elsewhere (such as from the archive *themes-base7.tar.gz*) be used, the respective path specification will be needed.

When testing out the various themes it's quite likely that you'll stumble across an error or two. To make up for this, the README that accompanies the tool explains, amongst other things, how to compile your own scenarios.

## Shell in adventureland

Anyone disappointed by the fact that *bashish* doesn't seriously alter the user philosophy of the command line, needs harder drugs. As a matter of fact, ten years ago and more, little programs such as the ever-nagging Marvin shell were popular gimmicks distributed via Usenet newsgroups. Many of these splendid examples are now missing, presumed dead, but nevertheless the Adventure shell from the popular "Text Adventure" branch has survived in two versions.

## Listing 1: bashish and the Adventure shell are also possible as login shells

```
trish:x:1000:1000:Patricia Jung,,,:/home/trish:/bin/bash
test:x:1001:100::/home/test:/usr/local/bin/ash
pjung:x:1002:1000::/home/pjung:/usr/local/bin/bashish
```

/usr/local/share/bashish/shexec/
Eterm Font Background Terminal

```
**** COMMODORE 64 BASIC V2 ****

64K RAM SYSTEM  38911 BASIC BYTES FREE

READY.
```

Figure 3: bashish in Eterm

Unfortunately, the C implementation, *advsh.tar.Z*, cannot compile under Linux without major adjustments and the shell script variant, *advshell.shar.Z* (unpacked with *gunzip* and *unshar*), also demands a few corrections. This is why on the CD you'll find a tar archive together with *advshell_LU042002.tar.gz*, which firstly corrects a bug and secondly adapts some path specifications in *Makefile* and in the code of the Adventure shell, *ash.sh*, to common Linux defaults.

After unpacking with *tar –xzvf advshell_LU042002.tar.gz* and changing to the newly-created *advshell* directory, a *make*, entered as *root*, should serve for installation in the */usr/local* branch of the file tree.

Provided */usr/local/bin* lies in the search path, all you need now is a simple *ash* on the command line to find a discarded, empty rucksack (line 1, listing 2), in which files will next be transported (lines 9-22). If you reply to the question about help with *yes*, you will receive a small introduction, otherwise the shell immediately issues location information (in line 3 we find ourselves in our own home directory), shows possible ways out (*exits*, thus directories) and also a passage overhead (line 7), and names the objects lying around (alias files).

The Adventure shell will list all the available commands via *help*. For example, if you want to go through the passage into the room above, enter *up* – this takes you into the parent directory. Files can be picked up with *get* (line 9), which can also be used to put them down elsewhere (line 21). Unix Monster alias commands can steal your treasures (line 23): the file created when this happens, *size*, contains the outputs of the command *wc -c form1.ui* and can be read with *open*.

Even with these commands in your repertoire, you still need to be a bit careful: for example, anyone who bombards the printer daemon with an object (as in line 28) should not be surprised if the daemon simply throws the object away. In line 33 the room contains precisely one object fewer. Feeding a Unix Monster (*feed file to command*) is also not without hazard – at this point one should select only those commands that read from the standard input. Editors, GUI programs and other monsters, which come with their own user interface, can be brought to life with the *wake* command: in line 37 for example *vi* awakes to edit the file *text*. KDE, GNOME and other X programs, however, impose the pre-requisite that one has access rights from the Adventure to the respective X server.

**Virtual desktop:** Most window managers offer several "screens", which can be filled with windows or applications. You can switch between these without having to close an application, but you can only see those applications that were started on the current desktop.

## Listing 2: Adventure in the shell

```
 1  You find a discarded empty rucksack.
 2  Welcome to the Adventure shell!  Do you
need instructions?no
 3  You are in your own home.  This room
contains:
 4  Telephone.tif advshell_LU042002.tar.gz and
cc_3.png
 5  There are exits labelled:
 6  applications article example
 7  as well as a passage overhead.
 8  There are shadowy figures in the corner.
 9  ->  get cc_3.png
10  cc_3.png: taken
11  ->  inventory
12  Your rucksack contains:
13  cc_3.png
14  ->  go example
15  You squeeze through the passage.
16  You have entered /home/trish/example.  This
room contains:
17  Makefile form1.ui form1.ui.h computerhex.db
computerhex.pro
18  There are exits labelled:
19  images
20  as well as a passage overhead.
21  ->  drop cc_3.png
22  cc_3.png: dropped.
23  ->  steal size from wc -c form1.ui
24  The wc monster drops the size.
25  ->  open size
26  Opening the size reveals:
27      3756 form1.ui
28  ->  throw computerhex.pro at daemon
29  The daemon catches the computerhex.pro,
turns it into paper,
30  and leaves it in the basket.
31  ->  look
32  The room contains:
33  Makefile cc_3.png form1.ui form1.ui.h size
computerhex.db
34  There are exits plainly labelled.
35  images
36  ... and a passage overhead.
37  ->  wake vi text
38  You awaken the vi monster:
39  The monster slithers back into the
darkness.
40  ->  exit
41  Do you really want to quit now?yes
42  See you later!
```

## Info

bashish homepage: *http://bashish.sourceforge.net/*

Adventure shell homepage: *http://www.ifarchive.org/indexes/if-archiveXshells.html*