

Dynamically Updating Xterm Title using Ksh93

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While it is easy to dynamically set your shell prompt and the title of your terminal window if you are using the *bash* shell, it is far more difficult to do so in the Korn Shell.

Typically, as in Rich Lister's [How to change the title of an xterm](#), the offered solution is something like the following:

```
HOST=`hostname`  
HOST=${HOST%%.*}  
PS1='^[[0;${USER}@${HOST}: ${PWD##${HOME}/}^Gksh$ '
```

The problem with such a solution is that it sets the prompt and the xterm window title only once.

If you wish to dynamically set the xterm title and the shell prompt, you must use a Korn shell *get* discipline function on the *PS1* variable. Here is an example of such a discipline function:

```
# set ksh prompt and xterm title  
_PSX='$( p="${PWD/~(E|)${HOME}/\~}"  
    printf "%s@%s:%s" "${LOGNAME}" "$(hostname -s)" "${p}"  
)'  
  
function PS1.get  
{  
    .sh.value="^[[0;${_PSX}^G${_PSX}$ "  
}
```

Disciple functions have a number of defined internal compound variables, all starting with *.sh*. See the *ksh93* manpage for more information about disciple functions and compound variables. The code to change the xterm window title is `^[[0;${_PSX}^G`. Instead of the embedded escape and bell, you could use octal values.

Here are two screenshots of the above code in action after being saved to `~/kshrc`:

A screenshot of a terminal window titled 'fpm@centos:~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal content shows the user running 'cat .kshrc' to view the configuration of the PS1 prompt. The configuration sets the prompt to include the current directory, the user's name, the hostname, and the current directory. A function 'PS1.get' is defined to update the prompt. The user then runs 'ksh', which updates the prompt to 'fpm@centos:~\$'. The user then runs 'mv .kshrc kshrc' and 'exit', and finally runs 'ksh' again, which updates the prompt to '\$'.



```
fpm@centos:/var/run X
File Edit View Search Terminal Help
[fpm@centos ~]$ ksh
fpm@centos:~$ cd /var/run
fpm@centos:/var/run$
```

Note - this solution only works for *ksh93*. It does not work for *ksh88*, *pksh* or *mirsh*.

In a future post, I will show you how to have *bash*-like custom prompts.

Enjoy!