

Lecture 11

Startup files

COP 3344 Introduction to UNIX
Fall 2007

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Initialization

- Commands in certain startup files are executed on logging in and on shell initialization
 - These commands assign values to some special variables, set the prompt, define aliases, etc
 - The example below shows the values of some important variables

```
asriniva@diablo:~> printenv
USER=asriniva
HOME=/home/faculty/asriniva
PATH=/usr/bin:/usr/bin/X11:.
SHELL=/bin/tcsh
TERM=xterm
DISPLAY=localhost:47.0
PWD=/home/faculty/asriniva
HOST=diablo
MANPATH=/usr/man:/usr/local/man:/opt/SUNWspro/man
```

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Important Variables

- USER User name
- HOME User's home directory
- PATH Directories where shell should search for executables
- SHELL Startup shell
- TERM Type of terminal
- DISPLAY Where windows should be opened
- PWD Current working directory
- HOST Host name
- MANPATH Directories where man pages may be found

```
asriniva@diablo:~> printenv
HOME=/home/faculty/asriniva
PWD=/home/faculty/asriniva
...
asriniva@diablo:~> cd temp
asriniva@diablo:~/temp> printenv
HOME=/home/faculty/asriniva
PWD=/home/faculty/asriniva/temp
```

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Setting Environment Variables

- C shell/TC shell
 - setenv TERM vt100
- Bourne shell family
 - export TERM=vt100
- Environment variables are available to subshells

```
asriniva@diablo:~> bash
[asriniva@diablo ~]$ export JUNK=asdf
[asriniva@diablo ~]$ junk=asdf
[asriniva@diablo ~]$ tcsh
asriniva@diablo:~> echo $JUNK
asdf
asriniva@diablo:~> echo $junk
junk: Undefined variable.
asriniva@diablo:~> exit
asriniva@diablo:~> exit
asriniva@diablo:~>
```

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Startup Files

- TC shell startup
 - A system cshrc files is executed
 - A system login file is executed
 - User's .tcshrc file is executed
 - User's .login file is executed
 - The order may vary on different systems
 - The examples below are on the machine diablo in the CS department

```
/etc/csh.login
limit coredumpsize unlimited
#limit coredumpsize 0 to save space
setenv HOSTNAME `bin/hostname`
```

```
~/.tcshrc
set path=(/usr/bin /usr/bin/X11 .)
set prompt= "%USER%"$HOST":%3> "
source ~/.alias
```

```
~/.login
alias ow "(set path=(/usr/openwin/bin $path);openwin)"
```

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The Prompt

- The %c3 causes only three directories to be shown

```
asriniva@diablo:~> cd research
asriniva@diablo:~/research> cd mg
asriniva@diablo:~/research/mg> cd spmg
asriniva@diablo:~/research/mg/spmg> cd SRC
asriniva@diablo:rmg/spmg/SRC>
```

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Alias

- An alias can be used as a shortcut for a long command name

```
.alias
alias a alias
a ll ls -l
```

```
asriniva@diablo:~> alias
a      alias
ll     (ls -l)
ow     (set path=(/usr/openwin/bin $path);openwin)
```