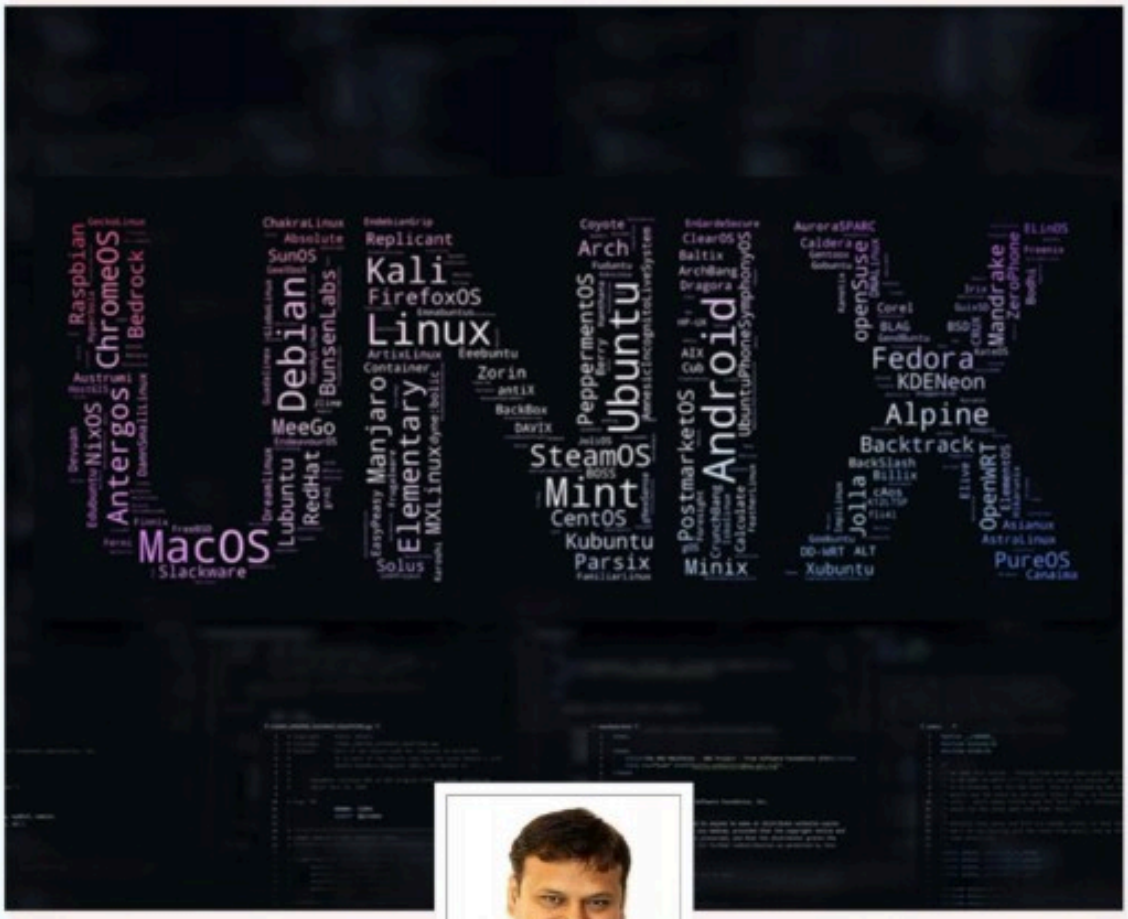
unix shell scripting

Jump2Learn
The Online Learning Place

UNIX
& SHELL PROGRAMMING

CHAPTER 5 - COMMUNICATION WITH OTHER USERS



AUTHOR

Mr. Manish Dolia

M.C.A.,Ph.D.(Pursuing)

DOLAT USHA INSTITUTE OF
APPLIED SCIENCES, VALSAD

WHO'S ON?

There are several commands for finding who else is logged in and what they're doing. These include:

FINGER

finger provide names of users currently on, when they logged in, and where they logged in.

users show a simple list of which usernames are logged in and what programs they're running The 'finger' command has far more uses than simply displaying a list of people logged in. It's more commonly used to learn more about an individual user of the system:

```
> finger demo
Login name: demo In real life: Demo Account
Directory: /nfs/harper/h2/demo Shell: /usr/local/bin/tcsh
Last login Tue Jan 26 10:18 on ttyp7 from somewhere.uchi
New mail received Wed Jan 27 16:51:02 1993;
unread since Tue Jan 26 17:50:41 1993
Project: Demos. What else.
Plan:
To figure out what a plan is.
```

chfn; .project/.plan files

To change your "finger name" -- the "In real life:" field above -- use the `chfn' command.

5.1 SENDING MESSAGES TO OTHER TERMINALS

WRITE

The 'write' utility is the simplest form of communication on a Unix system. If "friendsname" is logged in to the same machine you're on (also on harper, for instance), you can type

```
> write friendsname
```

then a single-line message, which you can end by pressing the return key and typing a Control-D. The person you've written to will see a message like this on their screen:

```
Message from example@harper on ttye1 at 0:01 ...
This is a simple 'write' message.
EOF
```

WALL COMMAND

Wall command in Unix system is used to write a message to all users. This command displays a message, or the contents of a file, or otherwise its standard input, on the terminals of all currently logged in users. The lines which will be longer than 79 characters, wrapped by this command. Short lines are whitespace padded to have 79 characters. A carriage return and newline at the end of each line is put by wall command always. Only the superuser can write on the terminals of users who have chosen to deny messages or are using a program which automatically denies messages. Reading from a file is refused when the invoker is not superuser and the program is suid(set-user-ID) or sgid(set-group-ID).

Syntax:

wall [-n] [-t timeout] [message | file]

Options:

- wall -n: This option will suppress the banner.
  wall -n
- wall -t: This option will abandon the write attempt to the terminals after timeout seconds. This timeout needs to be a positive integer. The by default value is 300 seconds, which is a legacy from the time when peoples ran terminals over modem lines.

Example:

wall -t 30

- wall -V : This option display version information and exit.

  wall -V

- wall -h : This option will display help message and exit.

  wall -h

5.1.2MSG COMMAND

The msg command is a Command Prompt command that's used to send a message to one or more users on the network using the Command Prompt. When the command is triggered, a prompt is displayed on the machine(s) that it was sent to that shows the message as well as the sender's username and the time that the message was sent.

It functions similarly to the net send command that was popular in Windows XP, but it's not a true replacement for it. See Using the Msg Command to Replace Net Send further down the page.

MSG COMMAND AVAILABILITY

The msg command is available from within the Command Prompt in Windows 10, Windows 8, Windows 7, Windows Vista, and Windows XP.

It's also available through the Command Prompt tool that's accessible in Advanced Startup Options and System Recovery Options.

The availability of certain msg command switches and other command syntax may differ from operating system to operating system.

MSG COMMAND SYNTAX

msg {username | sessionname | sessionid | @filename | *} [/server:servername] [/time:seconds] [/v] [/w] [message]

See How to Read Command Syntax if you're not sure how to interpret the msg command syntax as it's written above or described in the table below.

MSG COMMAND OPTIONS	
OPTION	**EXPLANATION**
username	Use this option to specify a username to send the message to.
sessionname	Specify sessionname to send a message to a specific session.
sessionid	The sessionid option can be used to send a message to a session using the session's ID.
@filename	Use the @filename option to send a message to the user names, session names, and session ID's listed in the specified file.
*	The * option is used to send a message to every session on the servername.
/server:servername	The servername is the server on which the username, sessionname, or sessionid, resides on. If no servername is specified, the message will be sent as directed to the server you're executing the msg command from.
/time:seconds	Specifying a time in seconds with the /time switch gives the msg command a length of time to wait for the receiver of the message to confirm receipt of it. If the receiver does not confirm the message in seconds number of seconds, the message will be recalled.
/v	The /v switch enables the command's verbose mode, which will display detailed information about the actions the msg command is taking.
/w	This option forces the msg command to wait for a return message after you send a message. The /w switch is really only useful with the /v switch.
message	This is the message you want to send. If you don't specify a message then you'll be prompted to enter one after executing the msg command.
/?	Use the help switch with the msg command to show information about the command's several options.

You can save the output of the command to a file using a redirection operator. See How to Redirect Command Output to a File for general instructions or check out our Command Prompt Tricks list for more tips.

MSG COMMAND EXAMPLES

msg @myteam The Melting Pot at 1pm, on me!

In this example, the msg command is being used to tell a select number of users contained in the myteam file [@filename] connected to the server that there should be a meeting at The Melting Pot for lunch [message].

MSG RODREGT /SERVER:TSWHS002 /TIME:300

Here, we've used the command to send a message to RODREGT [username], an employee that connects to the TSWHS002 [/server:servername] server. The message is very time-sensitive, so we don't even want him to see it if he hasn't seen it after five minutes [/time:seconds].

Since a message wasn't specified, the msg command will present a note at the prompt that says Enter message to send; end message by pressing CTRL-Z on a new line, then ENTER.

After entering a message for RODREGT, you'd press the Enter key, then CTRL+Z, then Enter again.

MSG * /V TEST MESSAGE!

In the above example, we're sending everyone connected to the server a test message [message]. We also want to see the specific tasks that the msg command is performing to do this [/v].

'MESG N'

Occasionally, you'll see the notation "(messages off)" when you finger someone. Or you'll attempt to use 'talk' or 'write' and get this response:

[Your party is refusing messages]

This means the person has issued the command 'mesg n', which prevents messages to a terminal. If you find yourself being constantly interrupted by such messages, you may want to use the command yourself. (To turn permission to your terminal back on, say 'mesg y'.)

Messages to a terminal from unknown users can be rather disturbing. If you're a stranger to someone, it's generally considered polite to send electronic mail before using 'talk' or 'write' to contact them.

5.2 MAIL, MOTD AND NEWS

ELECTRONIC MAIL

If the intended recipients of your messages are not currently logged in, you must use electronic mail (email) to communicate with them. Using email software, you can send, receive and read personal mail.

You may also use email to communicate with most of the shared systems which are connected to the campus network, and hundreds of thousands of computers outside of the uchicago.edu domain. For general information on email, please see the section on electronic mail in the Resource Guide.

MAIL

The simplest way to send mail to someone with the username "someone" is to type:

> mail someone

You can mail to several different people at the same time by specifying several usernames, separated by spaces.

When the `mail' utility starts up, you will be prompted for a subject line. Once you provide one (and press the return key), you can enter your message. When you have finished the message, you can exit mail in one of two ways: by issuing the end-of-file character (Control-D); or by typing a period ('.') as the first character of the last line. When you exit, you will be prompted for 'Cc:', at which point you can enter any usernames you forgot to include in the original command line, or your own username (for your very own personal "carbon copy").

can also use `mail' to read mail you have received. If you have received mail, you will be notified when you log in. You may then call up mail by entering

> mail

to read new incoming messages.

Reading old messages, stored in the file "mbox" in your home directory, is also easy:

> mail -f mbox

MOTD

If you log in using the command line, however, you will see the message of the day as defined by the /etc/motd file. Before continuing, remember that you can get back to this display by pressing Ctrl+Alt+F7.

To try it out press Ctrl+Alt+F1 at the same time. This will take you to a terminal login screen.

Enter your username and password and you will see the message of the day.

By default, the message says something

How to Add a Message to Message of the Day (motd)

You can add a message to the message of the day by adding content to the /etc/motd.tail file. By default, Unix looks in the /etc/motd file but if you edit this file it will be overwritten later when Unix is updated and you will lose your message.

Adding content to the /etc/motd.tail file will keep your changes permanently.

To edit the /etc/motd.tail file open a terminal window by pressing Ctrl+Alt+T at the same time.

In the terminal window type the following command:

SUDO NANO /ETC/MOTD.TAIL

5.2.3 NEWS

news - Writes system news items to standard output

Syntax

news [-a|-n|-s] | [item...]

The news command keeps you informed of news concerning the system.

OPTIONS

Displays all news items, regardless of the currency time. The currency time does not change. Reports the names of current news items without displaying their contents. The currency time does not change. Reports the number of current news items without displaying their names or contents. The currency time does not change.

DESCRIPTION

Each news item is contained in a separate file in the /usr/news directory. Anyone having read/write permission to this directory can create a news file.

If you run the news command without any options, it displays the current files in /usr/news, beginning with the most recent. You can also specify the items you want displayed.

Each file is preceded by an appropriate header. To avoid reporting old news, news stores a currency time. The news command considers your currency time to be the modification time of the file named $HOME/.news_time. Each time you read the news, the modification time of this file changes to that of the reading. Only news item files posted after this time are considered current.

Pressing the Interrupt key sequence during the display of a news item stops the display of that item and starts the next. Pressing the Interrupt key sequence again ends news.

Most users run news each time they log in by including the following line in their $HOME/.profile file or in the system's /etc/profile:

news -n

EXAMPLES

To display the items that were posted since you last read the news, enter: news To display all the news items, enter: news -a | pg

This displays all the news items a page at a time, regardless of whether you have read them yet. To list the names of the news items that you have not read yet, enter: news -n

Each name is a file in the /usr/news directory. To display specific news items, enter: news new users services.

This displays news about new users and services, which are names listed by news -n. To display the number of news items that you have not read yet, enter: news -s To post news for everyone to read, enter: cp schedule /usr/news This copies the file schedule into the system news directory (/usr/news) to create the file /usr/news/schedule.

To do this, you must have write permission for /usr/news.

FILES

System profile. News files. Indicates the last time news was read.