

Unix / Linux - Shell Output Redirections

Most Unix system commands take input from your terminal and send the resulting output back to your terminal. A command normally reads its input from the standard input, which happens to be your terminal by default. Similarly, a command normally writes its output to standard output, which is again your terminal by default.

Output Redirection

The output from a command normally intended for standard output can be easily diverted to a file instead. This capability is known as output redirection.

If the notation `> file` is appended to any command that normally writes its output to standard output, the output of that command will be written to file instead of your terminal.

Check the following who command which redirects the complete output of the command in the users file.

```
$ who > users
```

Notice that no output appears at the terminal. This is because the output has been redirected from the default standard output device (the terminal) into the specified file. You can check the users file for the complete content –

```
$ cat users
```

```
oko    tty01  Sep 12 07:30
ai     tty15  Sep 12 13:32
ruth   tty21  Sep 12 10:10
pat    tty24  Sep 12 13:07
steve  tty25  Sep 12 13:03
$
```

If a command has its output redirected to a file and the file already contains some data, that data will be lost. Consider the following example –

```
$ echo line 1 > users
```

```
$ cat users
```

```
line 1
```

```
$
```

You can use >> operator to append the output in an existing file as follows –

```
$ echo line 2 >> users
```

```
$ cat users
```

```
line 1
```

```
line 2
```

```
$
```