

# Duke Office of Information Technology

## Disk Usage Monitoring

While our new file server for the DSCR has significant disk capacity, we are always asking that users make the most effective use of the space possible. To monitor your disk usage, you can use the `df` and `du` commands.

### `df` Command:

```
jbp@head1 [ 1 ] % df -h ~ Filesystem Size Used Avail Use% Mounted on  
filer1:/vol/compeb 400G 76G 325G 19% /home/compeb
```

The output shows several columns of information. The first column is the file-system that your home directory (actually everyone in your group's home directories), in this case user 'jbp' is on the `/vol/compeb` file-system. The second column shows the current size, or quota, for the listed file-system, 400GB in this case. The third column is the actual amount used, 76GB here. Next is the available disk space on the file-system, 325GB. Obviously, one thing to note is that the granularity of these computations is not perfect:  $76+325 = 401\text{GB}$ . The next column shows the percent of the file-system that is currently in use ( $76/400 = 19\%$ ). The last column is the mount-point for the file-system. Generally, this is your group's shared directory (one level up from your home directory).

### `du` Command:

If you are getting close to the file-system limit and you want to find the "biggest" directories where you might be able to remove some files, try the `du` command:

```
jbp@head1 [ 3 ] % du -s * 24 bin 6288172 bme 24313688 cf_vent 19896 csem 5396  
cwave 332268 vis 317160 msi
```

This outputs the amount of disk-space used by each sub-directory in the current directory (this is what the '-s' option provides). Given the above totals, one might first want to look in the 'cf\_vent' subdirectory, since it is currently occupying the most disk-space on the file-system.

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