

# Misc. linux/bash tidbits

- An assortment of linux/bash commands and programs that may be handy
- Most of these have many many options, use the man pages or (probably better/clearer) do a quick online search [caveat: options and behaviour vary somewhat across different flavours of linux]

# Finding files and content

- Use the “find” command to search a directory for files with a specific name: “find *dirname* -name *filename* -print” (it will show you where in the directory it found the file(s), and wildcards are ok)
- Use the “grep” command to search one or more text files for lines that contain a particular pattern: “grep *pattern filename*”
- Use the “diff” command to compare two text files to find differing lines: “diff *file1 file2*”

# Zippping/unzipping files

- Often we want to compress a file or group of files, or uncompress one
- To compress use the gzip command: “gzip *filename*” (the compressed file will have .gz added to the filename)
- To uncompress use the gunzip command (e.g. gunzip foo.gz)

# Archiving files

- To group a directory of files together into a single file (e.g. before compressing) use the tar command: “tar -cvf *newarchivename dirname*”
- To extract files from an archive, use the command “tar -xvf *archivename*”
- Note that tarred files typically use the .tar extension, so if you tar and zip one it will wind up with .tar.gz as extensions (very very common)

# Disk utilization

- Often we want to know how much space the files in a directory are using, or which ones are the biggest
- The “du” program lets us specify the directory to analyze, e.g. “du *somedir*” lists the sizes of all the files in the directory, whereas “du -s *somedir*” just gives total size
- If you’re looking for the “big” files, pipe the results of du into a numeric sort, e.g. “du -s *somedir* | sort -n”