

Tip of the Week

Tuesday, October 21st, 2014

October 20, 2014

Dotfiles

Huh?

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Dotfile

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 - ▶ `.vimrc`

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- ▶ http://hacktux.com/bash/bashrc/bash_profile

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 - ▶ shell prompts
 - ▶ functions

NOT a dotfile

Did you know GEO/SCC file system keeps snapshots of your work?

```
ls -l .snapshots/
```

Tips

Aliases

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- ▶ `alias topu='top -u $(id -un)'`
- ▶ check out default SCC/GEO alias for `rm`

Sun Grid Engine

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- ▶ `alias qshv='qsh -V -l h_rt=24:00:00'`

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- ▶ `alias cms='cd /projectnb/landsat/projects/CMS/'`

Modules

Modules

Not necessarily recommended (why?), but...

```
host=$(hostname)
if [[ "$host" == "geo" || "$host" == "scc1" || "$host" == " "
    . /usr/local/Modules/default/init/bash
    source ~/.module
fi
```


Modules

And ~/.module:

```
module load python/2.7.5
```

```
module load gdal/1.10.0
```

```
module load R_earth/3.1.0
```

```
module load CCDCTools/_beta
```

PATH

PATH

Call your own scripts or programs:

```
if [ -d "$HOME/bin" ]; then
    PATH="$PATH:$HOME/bin"
fi
```

Shell Prompts

Shell Prompts

Current prompt:

```
ceholden@ceholden-lhome:~/Documents/ceholden.github.io/pres  
\[\e]0;\u@\h: \w\a\]${debian_chroot:+($debian_chroot)}\u@\h
```

Shell Prompts

```
export PS1="\[$(tput setaf 2)]\u@\h:\w\\$ \[$(tput sgr0)]\
```

Shell Prompts

See <http://bashrcgenerator.com/> or
<https://www.kirsle.net/wizards/ps1.html> for generators.

Functions

Functions

“abusers”

```
function abusers() {  
    qstat | awk 'NR > 2 { if ($5 == "r") print $4 " " $9 }'  
    awk '{ sums[$1] += $2} END \  
    { for (i in sums) printf("%s %s\n", i, sums[i])}' |  
    sort -k2 -n -r  
}  
export -f abusers
```

Functions

Cluster job ID matching pattern...

```
function jidof() {  
  
    pattern=$1  
  
    jid=""  
    for j in $(qstat -u $USER | grep $pattern | awk '{ print $1 }')  
        jid="$jid $j"  
    done  
    echo "$jid"  
}  
export -f jidof
```

Functions

GDAL - from <https://github.com/dwtkns/gdal-cheat-sheet>

```
function gdal_extent() {  
    if [ -z "$1" ]; then  
        echo "Missing arguments. Syntax:"  
        echo "  gdal_extent <input_raster>"  
        return  
    fi  
    EXTENT=$(gdalinfo $1 |\  
        grep "Upper Left\|Lower Right" |\  
        sed "s/Upper Left  //g;s/Lower Right  //g;s/).*/g"\  
        tr "\n" " " |\  
        sed 's/ *$//g' |\  
        tr -d "[]" | tr ", " " "  
    echo -n "$EXTENT"  
}  
export -f gdal_extent
```

Git

After doing so much work, why not back up your dotfiles?

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- ▶ Backup and track
- ▶ Share with others

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3. Symlink (`ln -s`) the files to previous locations
4. Git add, commit, and push

“Homeshick” - makes symbolic linking of dotfiles easy!

<https://github.com/andsens/homeshick>

Dotfiles

`https://github.com/ceholden/dotfiles`

Yours?

If you think of any neat dotfile tricks for GEO, please let me know.