

# **Linux Administration**

## **Finding and identifying files**

Xavier Belanger

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# Finding files

- You can use the *find* command to search files.
- Various options are available to filter what type of files you are looking for.
- Additional options are also available to run commands against the resulting files. Another option is to use *xargs* with the find output.
- *find* <starting point> <options>

# find examples

- files or directories: *find -type f*  
*find -type d*
- name: *find -name <pattern>*  
*find -iname <pattern>*
- owner or group: *find -user <user>*  
*find -group <group>*
- size: *find -size <n>c*  
*find -size <n>k*  
*find -empty*
- time modified: *find -mtime <n>*

# Processing find results

- To run specific command against the files located with find you can use one of the following options:
  - *find -exec <command> {} \;*
  - *find | xargs <command>*
- Depending on the command that you need to execute, one way may be easier than the other.

# Locating files

- If installed, the *locate* package will let you use the eponymous command to find files that would be indexed.
- The *updatedb* command is scheduled to run once a day, and re-index all files.

# Locating commands

- To confirm that a command is available you can use the following command:  
*which <command>*
- This will search for that command in all available directories defined as part of your path (\$PATH variable).

# Identifying files

- Various file types can be identified with specific values in their header, also known as a “magic number”.
- The *file* command uses that principle to identify a file that you can't recognize.
- *file <file>*
- Note: accuracy is not guaranteed.