

Linux Directory Structure

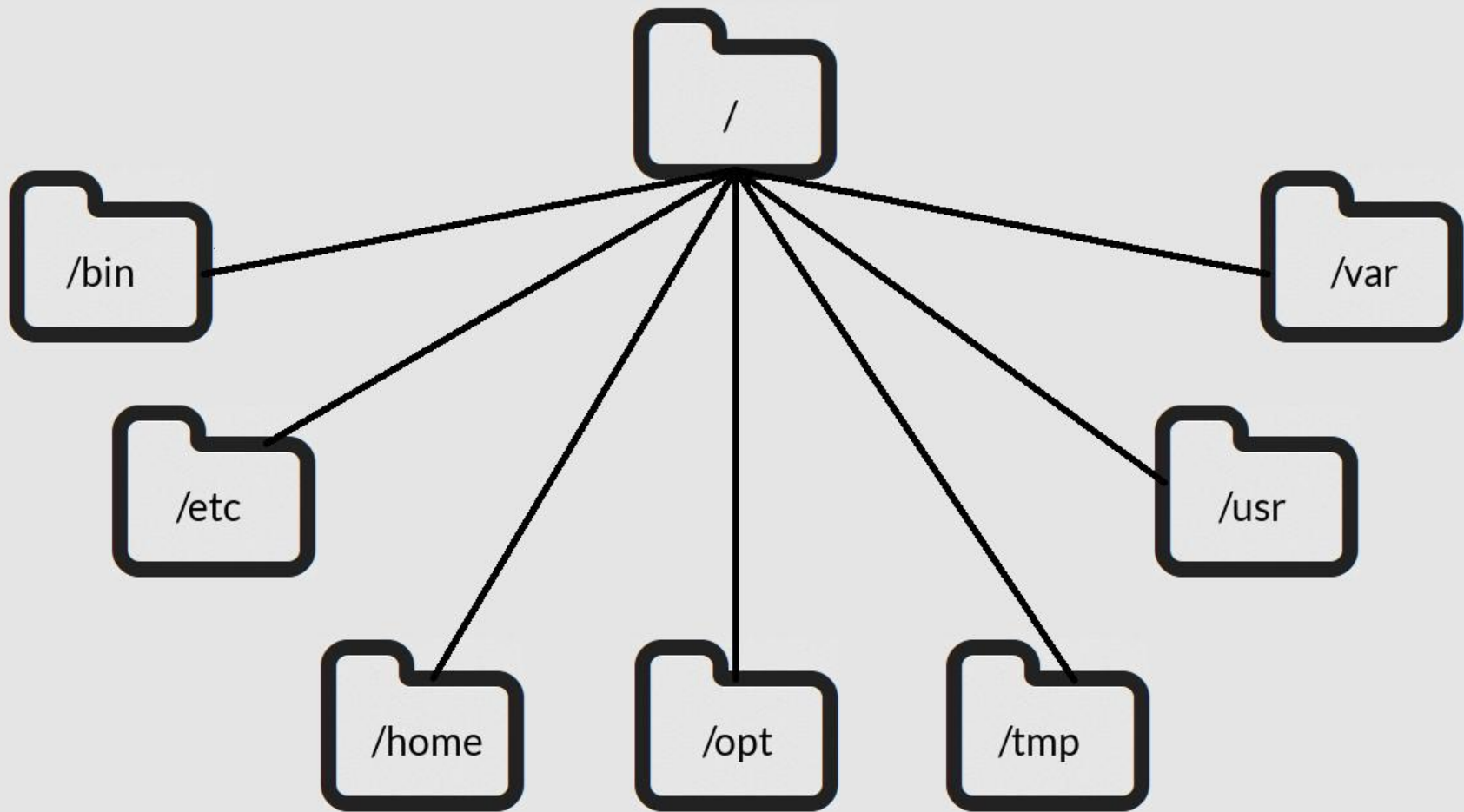
The Filesystem Hierarchy

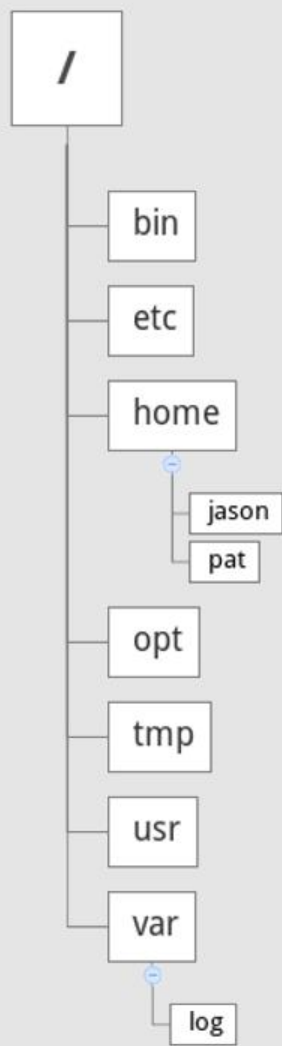
What You Will Learn

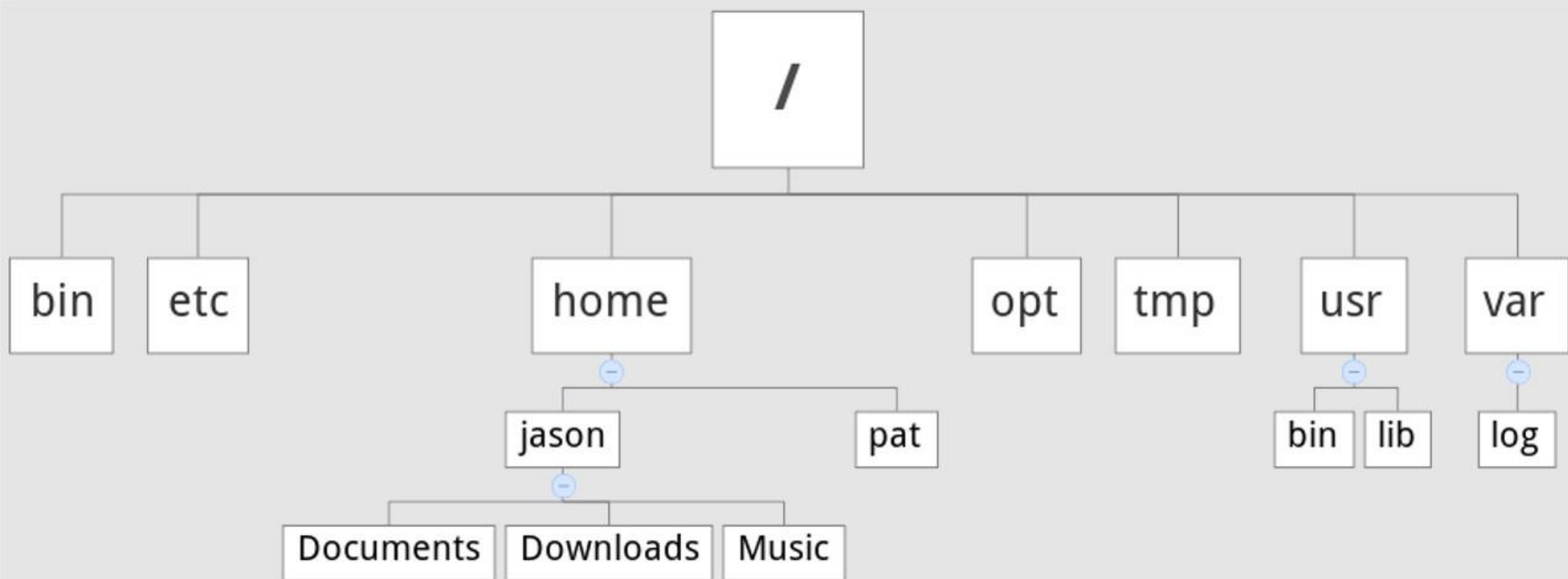
- Linux directory structure
- Location of operating system components
- Application directory structures

Common Directories

- / “Root,” the top of the file system hierarchy.
- /bin Binaries and other executable programs.
- /etc System configuration files.
- /home Home directories.
- /opt Optional or third party software. [e.g. Google Earth](#)
- /tmp Temporary space, typically **cleared on reboot**.
- /usr User related programs.
- /var Variable data, most notably **log files**.







Comprehensive Directory Listing

- / “Root,” the top of the file system hierarchy.
- /bin Binaries and other executable programs.
- /boot Files needed to boot the operating system.
- /cdrom Mount point for CD-ROMs. [Debian: /media](#)
- /cgroup Control Groups hierarchy.
- /dev Device files, typically controlled by the operating system and the system administrators.
- /etc System configuration files.

Comprehensive Directory Listing

- /export Shared file systems.
- /home Home directories.
- /lib System Libraries.
- /lib64 System Libraries, 64 bit.
- /lost+found Used by the file system to store recovered files after a file system check has been performed.
- /media Used to mount removable media like CD-ROMs.

Comprehensive Directory Listing

- /mnt Used to mount external file systems.
- /opt Optional or third party software.
- /proc Provides info about running processes.
- /root The home directory for the root account.
- /sbin System administration binaries.
- /selinux Used to display information about SELinux.

Comprehensive Directory Listing

- `/srv` Contains data which is served by the system.
- `/srv/www` Web server files.
- `/srv/ftp` FTP files.
- `/sys` Used to display and sometimes configure the devices known to the Linux kernel.
- `/tmp` Temporary space, typically cleared on reboot.

Comprehensive Directory Listing

- /usr User related programs, libraries, and docs.
- /usr/bin Binaries and other executable programs.
- /usr/lib Libraries.
- /usr/local Locally installed software that is not part of the base operating system.
- /usr/sbin System administration binaries.
- /var Variable data, most notably log files.
- /var/log Log files.

Application Directory Structures

- /usr/local/crashplan/bin crashplan: backup software
- /usr/local/crashplan/etc
- /usr/local/crashplan/lib
- /usr/local/crashplan/log

Application Directory Structures

- /opt/avg/bin AVG: anti-virus software
- /opt/avg/etc
- /opt/avg/lib
- /opt/avg/log

Application Directory Structures

- `/etc/opt/myapp` config file for myapp
- `/opt/myapp/bin`
- `/opt/myapp/lib`
- `/var/opt/myapp` log file for myapp

Application Directory Structures

- `/usr/local/bin/myapp`
- `/usr/local/etc/myapp.conf`
- `/usr/local/lib/libmyspp.so`

Application Directory Structures

- /opt/acme
- /opt/acme/bin
- /opt/acme/etc

acme: company name

Application Directory Structures

- /opt/google
- /opt/google/chrome
- /opt/google/earth

Application Directory Structures

- /opt/web-team
- /opt/acme/web-team
- /usr/local/acme/web-team

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Summary

- The most common directories to know are:
 - /
 - /bin
 - /etc
 - /home
 - /opt
 - /tmp
 - /usr
 - /var

Summary

- Applications that are not part of the base OS can be installed in:
 - /usr/local
 - /opt