

# Linux Directory Structure

The Filesystem Hierarchy

# What You Will Learn

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

# Common Directories

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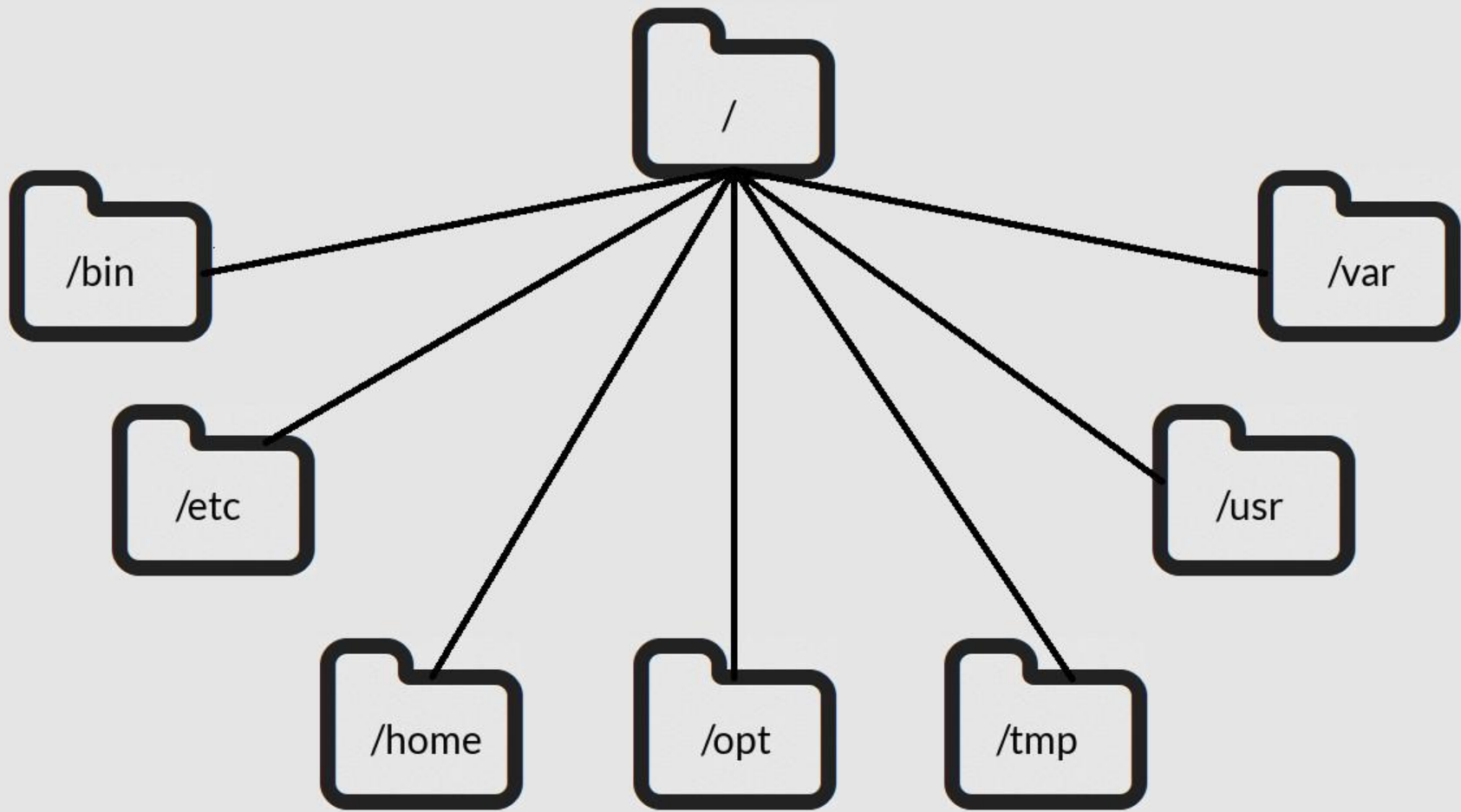
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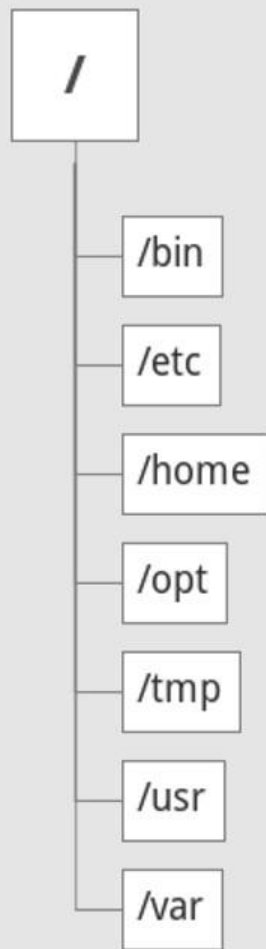
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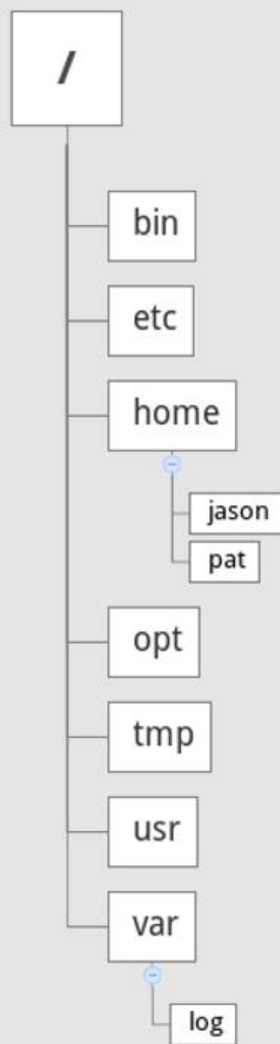
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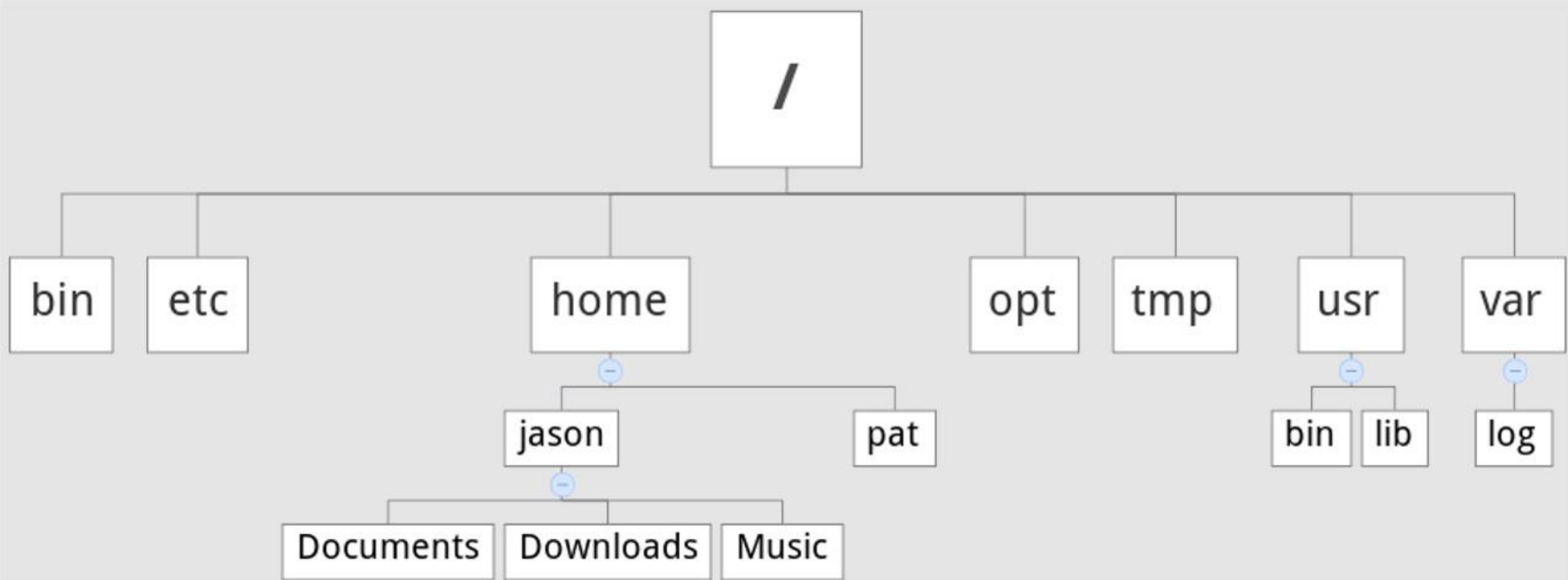
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- /usr User related programs.
- /var Variable data, most notably log files.









# Comprehensive Directory Listing

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- / “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.
- /cgroup Control Groups hierarchy.
- /dev Device files, typically controlled by the operating system and the system administrators.
- /etc System configuration files.

# Comprehensive Directory Listing

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- /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

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- /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

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- /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

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- /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

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- /usr/local/crashplan/bin
- /usr/local/crashplan/etc
- /usr/local/crashplan/lib
- /usr/local/crashplan/log

# Application Directory Structures

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- /opt/avg/bin
- /opt/avg/etc
- /opt/avg/lib
- /opt/avg/log

# Application Directory Structures

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- `/etc/opt/myapp`
- `/opt/myapp/bin`
- `/opt/myapp/lib`
- `/var/opt/myapp`

# Application Directory Structures

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

# Application Directory Structures

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



# Application Directory Structures

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

# Application Directory Structures

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

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# Summary

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

# Summary

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