CST-221 File System

Week 6

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**Directories**

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| **Directory** | **Purpose** |
| / | This is the root directory. All other directories in the system will fall under this section. |
| /bin | The bin directory stores all of the essential user binaries or programs. This includes things such as IDEs, the bash shell terminal, and web browser. |
| /dev | The dev directory stores special “files” that represent system devices. While they aren’t technically folders, they do represent the purpose, layout, and functionality of devices such as hard drives. It also contains other useful non-hardware devices such as the random number generator. |
| /etc | The etc directory contains configuration files for the system which can be edited by the user. One thing to note is that all config files stored here are considered system-wide and will affect all users. If a user wants to adjust a setting just for themselves, it must be done under the user’s config file. |
| /lib | The lib directory contains any libraries that are essential for use by the binaries stored in the bin directory. These files are system-wide. |
| /boot | The boot directory stores all of the static boot files needed for the system to launch such as the loader files and Linux kernels. The config files for the bootloader are stored in the etc directory. |
| /home | The home directory contains subfolders specific to each user in the system which contains that user’s data and user configuration files. Each user only has access to their own files without elevated permissions. |
| /mnt | The mnt directory contains temporary mount points. I do not know much about this directory but it seems that it is normally used by admins when performing temporary tasks on a file system. |
| /proc | The proc directory is similar to the dev directory because it does not store traditional files, but rather special “files” that represent the system and the different processes it uses to execute actions. |
| /tmp | The tmp directory is used to store temporary files. These files are normally kept on the system for a set period of time before being deleted (such as when the computer is restarted. |
| /usr | The usr directory is used to store user programs and data. It is kept separate from the bin directory because these are only user-specific. Any program the user installs just for themself is stored here along with their user-specific configuration files. The files stored here are considered read-only. |
| /var | The var directory is used to store variable data files. This is considered the counterpart to the user directory because it stores similar files, but all of the files stored here are able to be written to. |
| /sbin | The sbin directory stores system administration binaries. These are essential programs that are used by the root user to perform system administration. |
| /kernel | The kernel directory is used to store essential Linux kernels that the system uses to boot manage the systems. |