

4.5.4 Shutdown Facts

Turning off the power without executing the proper shutdown procedure to a computer can result in data loss and file system corruption. Linux provides several different shutdown options.

This lesson covers the following topics:

- Shutdown process
- Common shutdown commands

Shutdown Process

When using the **shutdown** command to shut down the computer, the system does the following:

- Sends a SIGTERM message to open programs to allow them to close.
- Notifies logged on users that the shutdown process has initiated and the length of time before shut down.
- Blocks users from logging into the system.
- Shuts down all running processes and then the system.

Common Shutdown Commands

The table below shows common commands for shutting down the system:

Command	Function	Examples
shutdown -h now halt init 0 systemctl isolate poweroff.target systemctl isolate runlevel0.target	Shuts the system down immediately. For the shutdown command: <ul style="list-style-type: none"> ▪ -h specifies that the system halt or power off after shutdown. ▪ now forces the system to shut down without a delay. Any of these commands shuts the system down immediately.	
shutdown -r now reboot init 6 systemctl isolate reboot.target systemctl isolate runlevel6.target	Shuts the system down immediately and reboot. Any of these commands reboots the system immediately.	
shutdown -h time <i>message</i> shutdown -r time <i>message</i>	Shuts the system down in the designated amount of time and send a message.	shutdown -h +5 System is going down sends a message and shuts the system down in five minutes. shutdown -h 22:00 shuts the system down at 10:00 p.m. shutdown -r +15 reboots the system in 15 minutes. shutdown -r 24:00 System is going down at Midnight sends a message and reboots the system at midnight.
shutdown -c Ctrl+c	Cancels a pending shutdown.	
shutdown -rf time	The -r parameter issues the reboot command. The -f parameter stands for reboot fast and skips the fsck utility on reboot.	shutdown -rf reboots the system and skips fsck . shutdown -r +15 reboots the system in 15 minutes and uses fsck .
shutdown -k message	Sends a warning message, but does not shut down the system.	shutdown -k Please log out of the system sends the message to logged in users, but does not actually shut the system down.