# RedHat Certified System Administrator (RHEL 9)

## SUMMARY

## Systemd

- Systemd works with "unit" files.
- Unit files are stored in /usr/lib/systemd/system/ and /etc/systemd/system/.
- Unit files end in .service, .target, .mount, .automount, .device, .path, .scope, .slice, .snapshot, .socket, and .swap.
  - You can list the unit files with `systemctl -t help`.
- The most unit files that an RHCSA will work with are .service files.

## Systemd Targets

- Targets are a group of services that are controlled together.
- You can list the targets with `systemctl list-units --type=target`.
- Most important targets for an RHCSA are:
  - `graphical.target`: Graphical login screen.
  - `multi-user.target`: Text login screen.
  - `rescue.target`: Single user mode.
  - `emergency.target`: Emergency mode.
- You can change the default target with `systemctl set-default <target>`.
- You can change the target for the current boot with `systemctl isolate <target>`.
- You can see the current target with `systemctl get-default`.
- Other good to know targets are:
  - `poweroff.target`: Shut down the system.
  - `reboot.target`: Reboot the system.

# Systemd Services

- You can list the services with `systemctl list-units --type=service`.
- You can start a service with `systemctl start <service>`.
- You can stop a service with `systemctl stop <service>`.
- You can restart a service with `systemctl restart <service>`.
- You can reload a service with `systemctl reload <service>`.
  - Reload is used when you change the configuration of a service.
- You can enable a service with `systemctl enable <service>`.
  - Enable is used to start a service at boot.
- You can disable a service with `systemctl disable <service>`.
  - Disable is used to stop a service from starting at boot.
- Enable and start a service with `systemctl enable --now <service>`.
- Disable and stop a service with `systemctl disable --now <service>`.
- You can display the status of a service with `systemctl status <service>`.
- You can display the content of a service unit file with `systemctl cat <service>`.