

AINUX

— TASTE OF LINUX —

WELCOME TO THE WORLD OF
LINUX

DAY - 15

Controlling Services and Daemons

Daemons or Unit:

A daemon is a program which is used to start and stop any services without rebooting the machine. In Linux every service has its own daemons to manage it.

Introduction to systemd

Previous Linux versions worked on “init” process. This process was responsible for activating other services on the system. These systems have several limitations, which are addressed with “**systemd**”. **Systemd** is introduced in RedHat Enterprise 7.

Actually system start-up and server processes are managed by the “**systemd**”. A few new features provided by systemd includes:

- Parallel start-up of system services on boot time, Which increase the boot speed of a system.
- On demand activation of demons, without requiring a separate services.
- Support for System state snapshots.

In earlier versions, service scripts are located under
“**/etc/init.d**”

In RHEL7, service files located under
“**/lib/systemd/system**” - for permanent configuration
“**/etc/systemd/system**” - for customized configuration

Controlling Services and Daemons

What is systemctl:

The “**systemctl**” is the command which is used to manage different type of systemd objects, is called units. You can display the unit types with “**systemctl -t help**” command. Mostly used units are Service unit and Target unit.

List of some services and there daemons:

Services	Daemons
SSH	sshd
VSFTP	vsftpd
HTTP	httpd
Crontab	cornd
NTP	chronyd
DHCP	dhcpcd
Samba	smb

Controlling Services and Daemons

Available systemd Unit types:

Unit Type	File Extension	Description
Service Unit	.service	System Service
Target Unit	.target	A group of systemd units
Automount Unit	.automount	A file system automount point
Device Unit	.device	A device file recognised by the kernel
Mount Unit	.mount	A file system mount point
Path unit	.path	A file or directory in a file system
Timer Unit	.timer	A systemd timer
Swap Unit	.swap	A swap device or swap file
Snapshot Unit	.snapshot	A Saved state of the systemd manager
Socket Unit	.socket	An inter-process Communication socket

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can manage the services by two types:

1. **Temporary basis** – In that case after restring your machine the service will go back in previous state.
2. **Permanent basis** – In that case your changes will be intact even after restring your machine

Temporary	Permanent
<code>systemctl start/stop daemon of service</code>	<code>systemctl enable/disable daemon of service</code>

To display the status of a service

systemctl status daemon-name

i.e, # systemctl status sshd.service

[Or you can mention “# **systemctl status sshd**”]

To start a service temporarily.

systemctl start daemon-name

i.e, # systemctl start sshd.service

[Or you can mention “# **systemctl start sshd**”]

To stop a service temporarily.

systemctl stop daemon-name

i.e, # systemctl stop sshd.service

[Or you can mention “# **systemctl stop sshd**”]

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To start a service permanently.

systemctl enable daemon-name
i.e, # systemctl enable sshd.service

[Or you can mention “# **systemctl enable sshd**”]

To stop a service permanently.

systemctl disable daemon-name
i.e, # systemctl disable sshd.service
sshd”]

[Or you can mention “# **systemctl disable**

To verify only service unit's state.

systemctl --type=service

To display only active service unit's.

systemctl list-units --type=service

To display only failed service.

systemctl --failed --type=service

To reload configuration files of a running service.

systemctl reload daemon-name
i.e, # systemctl reload sshd.service

[Or you can mention “# **systemctl reload sshd**”]

To restart a running service.

systemctl restart daemon-name

i.e # **systemctl restart sshd service**

The top of the image features a decorative header with a wavy, flowing design. The colors transition from a bright yellow on the left, through orange and red, to a vibrant green and blue on the right. Below this, the background is a solid black.

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THANK YOU