



11-01-2020

https://youtu.be/UxK_uzWrc10

Runlevels

Runlevel is a operating state of a system

```
[root@zmpt01 ~]# who -r
run-level 3 2020-11-01 15:22
[root@zmpt01 ~]# runlevel
N 3
[root@zmpt01 ~]# systemctl get-default
multi-user.target
```

Linux has 7 runlevels

Runlevel 0	Shutdown mode	Init 0
Runlevel 1	Rescue, Emergency Mode – No Network	Init 1
Runlevel 2	Multi-UserMode – No NFS	Init 2
Runlevel 3	Mult-UserMode with NFS – default	Init 3
Runlevel 4	Not Used	
Runlevel 5	Graphical User Mode – GUI	Init 5
Runlevel 6	Reboot	Init 6

Unless you the default runlevel, the system will boot into whatever default runlevel is

Set the default run level

systemctl set-default

- This command is used for changing default run level
- Whenever you use this command
- The symbolic link for the file `/etc/systemd/system/default.target`
- Is changed to the the file associated with the desired runlevel file
- Runlevel files are sitting in this location
- Most of the time you are only setting default either Multi-User or Graphical
- Runlevel 3 or Runlevel 5

During the system boot process



/etc/systemd/system/default.target

This file is actually a symlink of the targeted runlevel file

Most common is either 3 or 5

Main file read during system boot	/etc/systemd/system/default.target
Systemctl set-default	This command will chaged the symlink to either one fo the file
Multi-user.target	/usr/lib/systemd/system/multi-user.target
Graphical.target	/usr/lib/systemd/system/graphical.target.

Set the default to graphical

```
[root@zmpt01 ~]# systemctl set-default graphical.target
```

Removed symlink /etc/systemd/system/default.target.

Created symlink from /etc/systemd/system/default.target to /usr/lib/systemd/system/graphical.target.

```
[root@zmpt01 ~]# systemctl get-default
graphical.target
```

```
[root@zmpt01 ~]# stat /etc/systemd/system/default.target
File: '/etc/systemd/system/default.target' -> '/usr/lib/systemd/system/graphical.target'
Size: 40      Blocks: 0      IO Block: 4096  symbolic link
Device: fd00h/64768d  Inode: 2965052  Links: 1
Access: (0777/lrwxrwxrwx)  Uid: ( 0/  root)  Gid: ( 0/  root)
Context: system_u:object_r:systemd_unit_file_t:s0
Access: 2020-11-01 16:05:23.881107580 -0600
Modify: 2020-11-01 16:05:23.702105238 -0600
Change: 2020-11-01 16:05:23.702105238 -0600
Birth: -
```

Set the default to multi-user



```
[root@zmpt01 ~]# systemctl set-default multi-user.target
```

Removed symlink /etc/systemd/system/default.target.

Created symlink from /etc/systemd/system/default.target to /usr/lib/systemd/system/multi-user.target.

```
[root@zmpt01 ~]# systemctl get-default  
multi-user.target
```

```
[root@zmpt01 ~]# stat /etc/systemd/system/default.target
```

File: '/etc/systemd/system/default.target' -> '/usr/lib/systemd/system/multi-user.target'

Size: 41 Blocks: 0 IO Block: 4096 symbolic link

Device: fd00h/64768d Inode: 2965067 Links: 1

Access: (0777/lrwxrwxrwx) Uid: (0/ root) Gid: (0/ root)

Context: system_u:object_r:systemd_unit_file_t:s0

Access: 2020-11-01 16:10:03.827399630 -0600

Modify: 2020-11-01 16:10:03.645397251 -0600

Change: 2020-11-01 16:10:03.645397251 -0600

Birth: -