

## 4.4.5 Managing Runlevels

---

Click one of the buttons to take you to that part of the video.

### Managing Runlevels 0:00-1:37

On Linux distributions that still use SysVinit, Linux can be booted into different runlevels. A runlevel is the preset operating state or mode a system uses when it starts.

In this demonstration, we're going to cover how to manage the runlevels on SysVinit. I'll show you how to view the current runlevel and how to change which runlevels are used temporarily and permanently.

Only the root user can make changes to the runlevel, so let's switch to that account.

The first thing I want to do is to see which runlevel we're using right now.

We'll do that with the runlevel command.

As you can see, the output consists of two values. The first value is the previous runlevel (if it's known). Since this system doesn't know what the previous runlevel is, it's showing us the letter N, for null.

The second value is the current runlevel being used, which, in this case, is 5.

On most Linux system, there are seven different runlevels.

First, we have runlevel 0. If you switch to runlevel 0, your system is halted or shut down.

And if you switch to runlevel 6, your system is rebooted.

In between these two run levels, we have runlevels 1 through 5.

Runlevel 1 runs the system in single-user mode, with no networking and no graphical user interface.

Runlevel 2 runs in multi-user mode with networking disabled and no GUI.

Runlevel 3 runs in multi-user mode with networking enabled, but still no GUI.

Runlevel 4 is not defined; it's user-definable.

And runlevel 5 runs the system in full multi-user mode with networking enabled and a graphical user interface.

---

### Configure the Default Runlevel 1:38-2:37

There are many cases where you'll want to configure a default runlevel for a system.

We can configure this default runlevel by editing the `/etc/inittab` file, so let's change to that directory.

To view how this file is currently configured, you can use a command, such as `'less'`.

If we scroll to the bottom of the file, we see the parameter that's used to configure the default runlevel. In this example, it's `id:5:initdefault`.

To change the current default runlevel, all I need to do is edit this file. I'll use `vi` and change the runlevel value to runlevel 3, and then save my changes.

Now, when I reboot my system, it'll use runlevel 3.

Now that my system is restarted, you can see I have no GUI because I'm using runlevel 3.

I'll log back in as the root user.

---

### Temporarily Change the Runlevel 2:38-3:14

There may be times when you want to switch to a different runlevel temporarily. That's what the telinit command is for.

The syntax is simple. Just type telinit and the value of the new runlevel, and you're done.

Since I'm currently in runlevel 3, I'll type 'telinit 5' and press Enter. And, almost instantly, I'm now using runlevel 5. No reboot was required.

But notice that if we look at the /etc/inittab file, it's still configured to use the default runlevel, 3. This means that, even though I've changed to runlevel 5, the next time I reboot this system, it will start in runlevel 3.

---

#### Summary 3:15-3:31

That's it for this demonstration.

In this demonstration, we discussed how to manage your SysVinit runlevels by viewing the current runlevel using the runlevel command. We also looked at how to manage which runlevel is used by default by editing the /etc/inittab file. And finally, we temporarily changed our runlevel using the telinit command.

---

**Copyright © 2022 TestOut Corporation All rights reserved.**