

## Video - The Show Version Command (5 min)

I have a console connection to a Cisco 1941 router, and I'm using the Tera Term terminal emulation program to get to the console command line interface. Let's go into the router and issue a show version command to see information about this particular router. I'll press "enter" to get to the command prompt, type "enable" to get to privileged exec mode, and then issue the "show version" command. At the top of the show version command, I can see the IOS software version that we're running. I can see that it's the C1900-UNIVERSALK9, Version 15.4(3), extended maintenance, rebuild version 2. I can also see that the System Bootstrap software is version 15.0, and is located in raw memory. I can also see that this router has only been up for 33 minutes. Not only do I know the version of the Cisco IOS, I also know where the IOS file is located. It's located here, "System image file is" in Flash memory, and the filename is c1900-- this is our hardware platform, since it's a 1941 router. It's the universalk9 distribution. It runs in memory. It's compressed. It's digitally signed by Cisco. And this is the version: 15.4, minor rebuild version 3, extended maintenance release rebuild 2, and it's a .bin file. This whole filename is the Cisco IOS image file. If I press the space bar, we can see the next part of the show version command. We can see that there are 2 gigabit Ethernet interfaces on this router, 2 serial interfaces. We can see that the dynamic RAM configuration is 64 bits wide. There's 255 kilobytes of NVRAM to store our configuration files. There's 250 megabytes of compact flash memory to store our IOS image files. I'll press the space bar again to get to the next part of the output.

Here's our licensing information. The license UDI, or unique device identifier, is made up of the product ID, here, followed by the serial number, here. We can see the technology package that this router is using. Currently, the technology package that it's using is the IP base and security. We can see that right here, since it's the current technology package. Notice that the data package and the NtwkEss are set to "None." The licensing for both of these packages is a Permanent license and an evaluation RightToUse license. On next reboot, we'll have access to both packages. The security package gives us access to advanced cryptographic features like IPsec and intrusion prevention system technology. The last line is the configuration register. Currently you can see that it's written in hexadecimal format and it's set to 2102, which is the default. This lets us know that currently when the router boots it looks to flash memory for the IOS image file and then it attempts to load the configuration file from NVRAM. If you were to forget your password to your router, you could recover your router by altering the configuration register so the configuration file wouldn't load from NVRAM on boot-up. You can see that the show version command gives us basic information about the router, the IOS operating system running on the router, how long the router's been up. It also tells us the last reload type. You can see the last reload was a normal reload. And the reason for the last reload was that I issued the reload command. You can use this to find out why the system has started and stopped or restarted, and this can be useful in troubleshooting scenarios.