

Video - Testing the Interface Assignment (14 min)

In this demonstration, I need to verify that the IP addresses 192.168.1.2 and 192.168.1.3 have been assigned to switch S1 and switch S2. These IP addresses should be assigned to the default switched virtual interface interface VLAN 1 on both switches. To verify this, I'll use a console cable and I'll console in from PCA to switch S1 to begin with. I'll click on the console cable, click on PCA, attach it to the serial port, stretch the cable over to the switch, and attach it to the console port. I'll open PCA, click on the terminal emulation program, click OK, and you can see I now have a console connection command line interface. I'll type "enable," and I'll use the show command "show ip interface brief" to examine the switch's interfaces. I'll have to use the space bar to page down through the interfaces, and you can see that the last entry is the VLAN 1 switched virtual interface. It's been assigned the IP address 192.168.1.2 as I expected, but if I look over at this column, I can see that the interface is administratively down. In other words, it's in a shutdown state.

As a result, the line protocol is also down. I'll need to turn on this interface. I'll go to global config mode, go into interface VLAN 1, and type the command "no shutdown." Instantly I'm presented with output showing that the interface VLAN 1 has changed state to up. I'll press Enter, Ctrl+C, and then up arrow to cycle through my history of commands, and then I'll reissue the "show ip interface brief" command. You can see that the interface VLAN 1 is now up, physically up, and the line protocol is also now up. To do the same thing on switch S2, I simply click on the console cable to detach it, stretch it over to switch S2, and I can put it in the console port. Now I'll click back on PCA, I'll close the terminal, and then reopen it. On switch S2, I'll type the "enable" command and the "show ip interface brief" command. Page down, and you can see that interface VLAN 1 is still unassigned. It does not have an IP address, and it's administratively down. I'll go to global config mode with a "conf t" command. Enter interface VLAN 1 with an "int vlan 1" command, and put in the IP address 192.168.1.3 and the subnet mask. And finish it with a "no shut"-- short for "no shutdown"-- command. The interface is now up. I can verify it with my "show" command again. And you can see that interface VLAN 1 now has the IP address. It's physically up, and the line protocol is up.