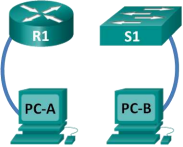
**Lab - Initializing and Reloading a Router and Switch This lab has been updated for use on NETLAB+**

**Topology**

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**Objective**

**Part 1: Initialize the Router and Reload**

**Part 2: Initialize the Switch and Reload**

**Background / Scenario**

Before starting a CCNA hands-on lab that makes use of either a Cisco router or switch, ensure that the devices in use have been erased and have no startup configurations present. Otherwise, the results of your lab may be unpredictable. This lab provides a detail procedure for initializing and reloading a Cisco router and a Cisco switch.

**Note**: The routers used with CCNA hands-on labs are Cisco 1941 Integrated Services Routers (ISRs) with Cisco IOS Release 15.2(4)M3 (universalk9 image). The switches used are Cisco Catalyst 2960s with Cisco IOS Release 15.0(2) (lanbasek9 image). Other routers, switches, and Cisco IOS versions can be used. Depending on the model and Cisco IOS version, the commands available and output produced might vary from what is shown in the labs.

**Part 1: Initialize the Router and Reload**

**Step 1: Connect to the router.**

Click on **R1** in the network diagram and enter privileged EXEC mode using the **enable** command. Router> **enable**

Router#

**Step 2: Erase the startup configuration file from NVRAM.**

Type the **erase startup-config** command to remove the startup configuration from nonvolatile random access memory (NVRAM).

Router# **erase startup-config**

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**Initializing and Reloading a Router and Switch**

Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] **[ENTER]**

[OK]

Erase of nvram: complete

Router#

**Step 3: Reload the router.**

Issue the **reload** command to remove an old configuration from memory. When prompted to Proceed with reload, press Enter to confirm the reload. Pressing any other key will abort the reload.

Router# **reload**

Proceed with reload? [confirm]**[ENTER]**

\*Nov 29 18:28:09.923: %SYS-5-RELOAD: Reload requested by console. Reload Reason: Reload Command.

**Note**: You may receive a prompt to save the running configuration prior to reloading the router. Respond by typing **no** and press Enter.

System configuration has been modified. Save? [yes/no]: **no**

**Step 4: Bypass the initial configuration dialog.**

After the router reloads, you are prompted to enter the initial configuration dialog. Enter **no** and press Enter. Would you like to enter the initial configuration dialog? [yes/no]: **no**

**Step 5: Terminate the autoinstall program.**

You will be prompted to terminate the autoinstall program. Respond **yes** and then press Enter. Would you like to terminate autoinstall? [yes]: **yes**

Router>

**Part 2: Initialize the Switch and Reload**

**Step 1: Connect to the switch.**

Click on **S1** in the topology and enter privileged EXEC mode.

Switch> **enable**

Switch#

**Step 2: Determine if there have been any virtual local-area networks (VLANs) created.** Use the **show flash** command to determine if any VLANs have been created on the switch. Switch# **show flash**

Directory of flash:/

2 -rwx 1919 Mar 1 1993 00:06:33 +00:00 private-config.text 3 -rwx 1632 Mar 1 1993 00:06:33 +00:00 config.text

4 -rwx 13336 Mar 1 1993 00:06:33 +00:00 multiple-fs

5 -rwx 11607161 Mar 1 1993 02:37:06 +00:00 c2960-lanbasek9-mz.150-2.SE.bin 6 -rwx 616 Mar 1 1993 00:07:13 +00:00 vlan.dat

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**Initializing and Reloading a Router and Switch**

32514048 bytes total (20886528 bytes free)

Switch#

**Step 3: Delete the VLAN file.**

a. If the **vlan.dat** file was found in flash, then delete this file.

Switch# **delete vlan.dat**

Delete filename [vlan.dat]?

You will be prompted to verify the file name. At this point, you can change the file name or just press **Enter** if you have entered the name correctly.

b. When you are prompted to delete this file, press **Enter** to confirm the deletion. (Pressing any other key will abort the deletion.)

Delete flash:/vlan.dat? [confirm] **[Enter]**

Switch#

**Step 4: Erase the startup configuration file.**

Use the **erase startup-config** command to erase the startup configuration file from NVRAM. When you are prompted to remove the configuration file, press **Enter** to confirm the erase. (Pressing any other key will abort the operation.)

Switch# **erase startup-config**

Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] **[ENTER]**

[OK]

Erase of nvram: complete

Switch#

**Step 5: Reload the switch.**

Reload the switch to remove any old configuration information from memory. When you are prompted to reload the switch, press **Enter** to proceed with the reload. (Pressing any other key will abort the reload.)

Switch# **reload**

Proceed with reload? [confirm] **[Enter]**

**Note**: You may receive a prompt to save the running configuration prior to reloading the switch. Type **no** and press **Enter**.

System configuration has been modified. Save? [yes/no]: **no**

**Step 6: Bypass the initial configuration dialog.**

After the switch reloads, you should see a prompt to enter the initial configuration dialog. Type **no** at the prompt and press **Enter**.

Would you like to enter the initial configuration dialog? [yes/no]: **no** Switch>

**Reflection**

1. Why is it necessary to erase the startup configuration before reloading the router?

The startup configuration file is loaded into memory and becomes the running-config after the router reloads. Erasing this file allows the router to return to its basic configuration after a reload

**Initializing and Reloading a Router and Switch**

2. After saving the running configuration to the startup configuration, you locate some mistakes in the original command entered and make the necessary changes to fix the mistakes. If you were to reload the device now, what configuration would be restored to the device after the reload?

The configuration at the time of the last save is restored to the device after a reload. Any changes made to the running configuration after the last save would be lost.

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