Title:
Cisco CCNA Exam Tutorial: Password Recovery Procedures

Word Count:
524

Summary:
Learn how to recover from a lost password on a Cisco router from Chris Bryant, CCIE #12933.

Keywords:
cisco, password, recovery, ccna, exam, tutorial, configuration, register, 2500, router, enable, ccie

Article Body:
It might happen on your CCNA exam, it might happen on your production network - but sooner or later, you're going to have to perform password recovery on a Cisco router or switch. This involves manipulating the router's configuration register, and that is enough to make some CCNA candidates and network administrators really nervous!

It's true that setting the configuration register to the wrong value can damage the router, but if you do the proper research before starting the password recovery process, you'll be fine.

Despite what some books say, there is no "one size fits all" approach to Cisco password recovery. What works on a 2500 router may not work on other routers and switches. There is a great master Cisco document out on the Web that you should bookmark today. Just put "cisco password recovery" in your favorite search engine and you should find it quickly.

The following procedure describes the process in recovering from a lost password on a Cisco 2500 router. As always, don't practice this at home. It is a good idea to get some practice with this technique in your CCNA / CCNP home lab, though!

The password recovery method examined here is for 2500 routers.

An engineer who finds themselves locked out of a router can view and change the password by changing the configuration register.

The router must first be rebooted and a “break” performed within the first 60

seconds of the boot process. This break sequence can also vary depending on what program is used to access the router, but <CRTL- BREAK> is the usual key combination.

The router will now be in ROM Monitor mode. From the rom monitor prompt, change the default configuration register of 0x2102 to 0x2142 with the o/r 0x2142 command. Reload the router with the letter i. (As you can see, ROM Monitor mode is a lot different than working with the IOS!)

This particular config register setting will cause the router to ignore the contents of NVRAM. Your startup configuration is still there, but it will be ignored on reload.

When the router reloads, you'll be prompted to enter Setup mode. Answer "N", and type enable at the router> prompt.

Be careful here. Type configure memory or copy start run. Do NOT type write memory or copy run start!

Enter the command show running-config. You'll see the passwords in either their encrypted or unencrypted format.

Type config t, then use the appropriate command to set a new enable secret or enable password.

Don't forget to change the configuration register setting back to the original value! The command config-register 0x2102 will do the job. Save this change with write memory or copy run start, and then run reload one more time to restart the router.

This process sounds hard, but it's really not. You just have to be careful, particularly when you're copying the startup config over the running config. You don't want to get that backwards! So take your time, check the online Cisco documentation before starting, get some practice with this procedure with lab equipment, and you'll be ready for success on the CCNA exam and in your production network!