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Software configuration meanings

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Bit	Hex	Description
0-3	0x0000-0x000F	Boot field (see Table 16.4).
6	0x0040	Ignore NVRAM contents.
7	0x0080	OEM bit enabled.
8	0x101	Break disabled.
10	0x0400	IP broadcast with all zeros.
5, 11-12	0x0800-0x1000	Console line speed.
13	0x2000	Boot default ROM software if network boot fails.
14	0x4000	IP broadcasts do not have net numbers.
15	0x8000	Enable diagnostic messages and ignore NVRAM contents.

Boot Field	Meaning	Use
00	ROM monitor mode	To boot to ROM monitor mode, set the configuration register to 2100. You must manually boot the router with the b command. The router will show the rommon> prompt.
01	Boot image from ROM	To boot the mini-IOS image stored in ROM, set the configuration register to 2101. The router will show the Router(boot)> prompt. The mini-IOS is not available in all routers and is also referred to as RXBOOT.
02-F	Specifies a default boot filename	Any value from 2102 through 210F tells the router to use the boot commands specified in NVRAM.

Checking the current config register value

- The current value of the configuration register can be identified by using the `show version` command in user mode.

```
Router>sh version
Cisco IOS Software, 2800 Software (C2800NM-ADVSECURITYK9-M),
Version 15.1(4)M6, RELEASE SOFTWARE (fc2)
[output cut]
Configuration register is 0x2102
```

Recovering Passwords (Cont...)

- **Reloading the Router and Entering Privileged Mode**

- The router will reload and ask if you want to use setup mode (*because no startup-config is used*). Answer no to entering setup mode, press Enter to go into user mode, and then type **enable** to go into privileged mode.

- **Viewing and Changing the Configuration**

- Now you have bypassed the password prompt
- Copy the startup-config file to the running-config file

```
copy startup-config running-config
```