

# Reset a Cisco Router to Factory Default Settings

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## Introduction

This document describes how to restore a Cisco router to its original factory default settings.

## Prerequisites

### Requirements

In order to perform the procedures described in this document, you must have "*enable*" (also known as "*privileged EXEC*") access on the router.

```
Router# - Privileged EXEC mode
```

### Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

### Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

## Instructions to Reset a Cisco Router Back to Factory Defaults

There are two main methods to return a Cisco router to its original factory defaults. These two methods are described below.

## Method 1

This method uses the **config-register 0x2102** command in global configuration mode.

1. Check the configuration register on the router by issuing the **show version** command.

The configuration register setting is displayed in the last line of the **show version** command output and should be set to 0x2102. If this is not the case, enter the **config-register 0x2102** command once in global configuration mode.

```
router#configure terminal
router(config)#config-register 0x2102
router(config)#end
router#
```

If the **show version** command is issued again, the same line in the command output will have '(will be **0x2102 at next reload**)' appended to the current register setting.

2. Erase the current start-up configuration on the router with the **write erase** command.
3. Reload the router with the **reload** command. When prompted to save the configuration, **DO NOT** save.

```
router#reload
System configuration has been modified. Save? [yes/no]: n
Proceed with reload? [confirm]
```

Once the router reloads, the System Configuration Dialog appears.

```
--- System Configuration Dialog ---
Would you like to enter the initial configuration dialog? [yes/no]:
```

The router is now reset to the original factory defaults.

## Method 2

This method uses the **config-register 0x2142** command in global configuration mode.

1. Enter the **config-register 0x2142** command in global configuration mode.

```
router(config)#config-register 0x2142
```

This causes the router to ignore the start-up configuration on the next reload. If a **show version** is issued, the last line in the command output will have '(will be **0x2142 at next reload**)' appended to the current configuration register setting.

2. Reload the router using the **reload** command in enable mode. It is not necessary to save when prompted to save the system configuration.

```
router#reload
System configuration has been modified. Save? [yes/no]: n
Proceed with reload? [confirm]
```

After the router has reloaded, the System Configuration Dialog appears.

3. Enter **no** to the question "Would you like to enter initial configuration dialog?"
4. Change the configuration register setting to 0x2102 by entering the **config-register 0x2102** command once in global configuration mode.
5. Issue the **write memory** command in enable mode to overwrite the existing start-up configuration with the current running configuration.

6. Reload the router with the **reload** command in enable mode.

Once the router reloads, the System configuration Dialog appears.

```
--- System Configuration Dialog ---  
Would you like to enter the initial configuration dialog? [yes/no]:
```

The router is now reset to the original factory defaults.

**Note:** The configurations below are stored in ROMMON, and cannot be reset to Factory Default Settings by the **write erase** or **config-register 0x2142** commands.

- warm-reboot
- memory-size iomem <not default>

## Verify

This section provides information you can use to verify that your router has been returned to the factory defaults.

Certain **show** commands are supported by the Output Interpreter Tool (registered customers only) , which allows you to view an analysis of **show** command output.

- **show running-config** Used to verify that the previous running configuration has been erased. The user should be left with a skeleton configuration. For example, there should be no IP addresses configured under any interface on the router.
- **show version** Used to verify that the configuration register is set to the default value of 0x2102.

## Related Information

- **Technical Support – Cisco Systems**
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