

# Cisco 2600 and 3600 Hints and Tricks

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## Introduction

This document contains hints and tricks for the Cisco 2600 and 3600 Series Routers.

## Before You Begin

### Conventions

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

### Prerequisites

There are no specific prerequisites for this document.

### Components Used

The information in this document is based on the hardware versions below.

- Cisco 2600 Series Routers
- Cisco 3600 Series Routers

## Setting the Console Speed

You can set the console speed of the 2600 and 3600 Series Routers by using one of these standard methods:

- Using the Cisco IOS® Software **speed** Command
- Using the ROMmon **confreg** Utility

If these do not work, see Cisco 2600 and 3600 Console Baud Reset Jumper.

## Using the Cisco IOS Software speed Command

```
Router(config)#line con 0  
Router(config-line)#speed 115200
```

Once you get out of configuration mode by pressing `Ctrl-Z` or by issuing the **end** command, the console speed change is effective immediately. This means that the console connection is lost. You have to set up a new hyperterminal session on your PC with the new speed.

**Note:** If you change the console speed to 115200 baud to speed up the Cisco IOS Software image download using xmodem in ROMmon or issuing the Cisco IOS Software command **copy xmodem: flash:**, make sure you set it back to 9600 baud after the download is complete in case your terminal emulator defaults to 9600. Otherwise, always ensure that your router console speed matches that of the terminal emulator.

## Using the ROMmon confreg Utility

This procedure is valid for both the Cisco 2600 and 3600 Series Routers.

```
rommon 2 > confreg  
  
Configuration Summary  
enabled are:  
load rom after netboot fails  
console baud: 9600  
boot: image specified by the boot system commands  
      or default to: cisco2-C3600  
  
do you wish to change the configuration? y/n [n]: y  
enable "diagnostic mode"? y/n [n]:  
  
!--- Pressing "Enter" accepts the default (value between the brackets).  
  
enable "use net in IP bcast address"? y/n [n]:  
disable "load rom after netboot fails"? y/n [n]:  
enable "use all zero broadcast"? y/n [n]:  
enable "break/abort has effect"? y/n [n]:  
enable "ignore system config info"? y/n [n]:  
change console baud rate? y/n [n]: y  
enter rate: 0 = 9600, 1 = 4800, 2 = 1200, 3 = 2400  
            4 = 19200, 5 = 38400, 6 = 57600, 7 = 115200 [7]: 7  
change the boot characteristics? y/n [n]:  
  
Configuration Summary  
enabled are:  
load rom after netboot fails  
console baud: 115200  
boot: image specified by the boot system commands  
      or default to: cisco2-C3600  
  
do you wish to change the configuration? y/n [n]:  
  
You must reset or power cycle for new config to take effect
```

**Note:** Although the configuration summary shows the new speed, this speed is not in effect until the router has been reset or power-cycled.

**Note:** If you change the console speed to 115200 to speed up the Cisco IOS Software image download using xmodem in ROMmon, or using the Cisco IOS Software command **copy xmodem: flash:**, make sure you set it

back to 9600 after the download is complete in case your terminal emulator defaults to 9600. Otherwise, always ensure that your router console speed matches that of the terminal emulator. You can use the **confreg** command as above and select **0** for change console baud rate or **confreg 0x2102** followed by **reset** at the ROMmon prompt as follows:

```
rommon 12 >confreg 0x2102
```

You must reset or power cycle for the new configuration to take effect.

```
rommon 2 >reset
```

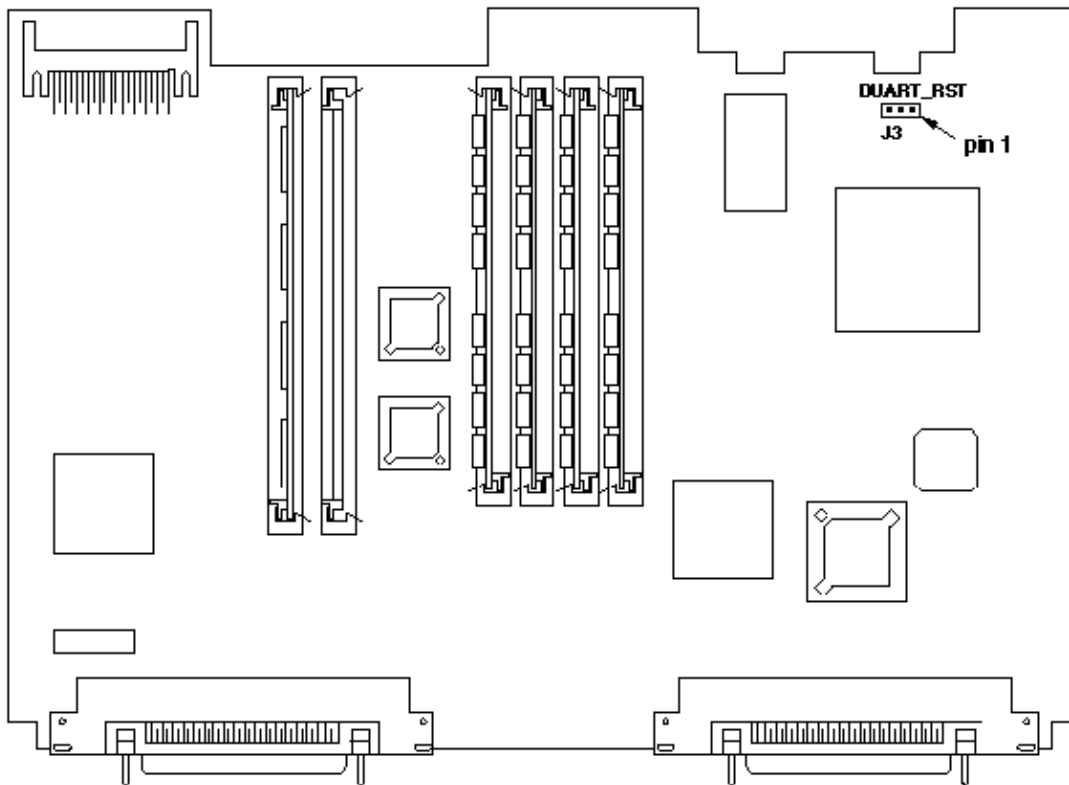
## Cisco 2600 and 3600 Console Baud Reset Jumper

From the Using the ROMmon **confreg** Utility example above, you see that there are eight possible console baud rates, namely, 9600 (default), 4800, 1200, 2400, 19200, 38400, 57600, and 115200 baud. If you do not know the console speed of the router, it is difficult to set up a hyperterminal session with the correct speed. A solution would be to just try the eight possible console speeds above and see which one works. Another solution would be to open up the box and move a jumper.

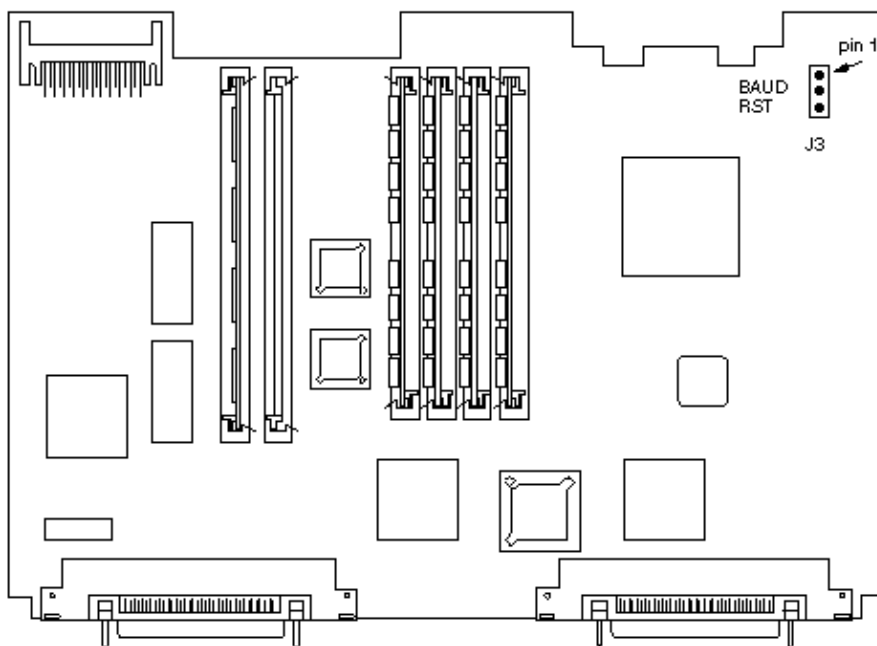
The Cisco 2600 and 3600 Series Routers have a jumper on the motherboard that resets the console baud rate to 9600. This can be used when the console baud rate is set to a speed that the attached terminal does not support, and you cannot use one of the standard methods to set the console speed.

Jumper J3 on the motherboard of the Cisco 2600 and 3600 Series Routers controls the speed reset. The factory default position of the shunt shorts pins 2–3. When the shunt is moved to pins 1–2, the console is reset to 9600 baud on the next power cycle. The following figures show the location of the console reset jumper, labeled DUART\_RST or BAUD\_RST.

### Cisco 3620 Motherboard Showing Console Baud Reset Jumper

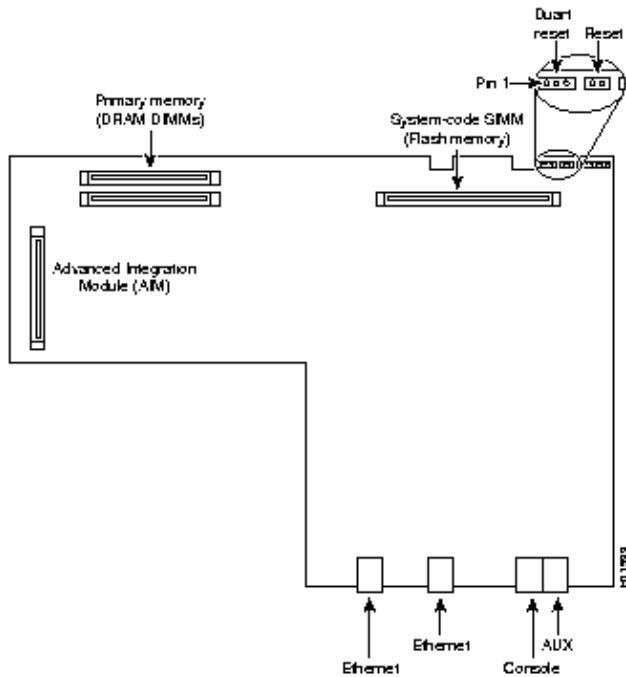


**Cisco 3640 Motherboard Showing Console Baud Reset Jumper**



On the Cisco 2600 Series Router main board, in addition to the three-pin jumper block, there is a two-pin jumper block labeled "Reset". This is for factory use only.

**Cisco 2600 Motherboard Showing Console Baud Reset Jumper**



## ROMmon Image Download via the Console Port Using Xmodem with Increased Console Speed

You can download an image to the Cisco 2600 and 3600 Series Routers using the console port as described in Xmodem Console Download Procedure Using ROMmon.

Xmodem is a slow transfer protocol. Increasing the console speed (which is possible for the Cisco 2600 and 3600 Series Routers) helps decrease the time it takes to do the xmodem file transfer. You also need to set up a new hyperterminal session on your PC with the new speed setting. To download an image to the Cisco 2600 and 3600 Series Routers using the console port and the ROMmon command prompt, issue the following command:

```
xmodem [-cyrx] [filename] <device-id><partition>:<filename>
```

### Notes:

- Use this procedure if it is not possible to use the normal Software Installation and Upgrade Procedure using TFTP.
- This procedure is used in disaster recovery situations where the router has no valid Cisco IOS Software or bootflash image to boot from, and therefore only boots up in ROMmon.
- The Xmodem or Ymodem transfer takes place only on the port from which you issue the command.
- If you download using the console, all console output is discarded for the duration of the transfer.
- You can only download files to the router. You cannot use Xmodem or Ymodem to get files from the router.
- Cisco recommends using the auxiliary port for Cisco IOS Software Xmodem or Ymodem downloads. The auxiliary port has hardware flow control and full modem control, and it does not tie up the system console.

For more details on how to get into ROMmon mode and download a Cisco IOS Software image in ROMmon, refer to Xmodem Console Download Procedure Using ROMmon.

# Cisco IOS Software Image Download via the Console or Aux Ports

Alternatively, if the router boots, but it is not possible to use the normal Software Installation and Upgrade Procedure using TFTP, you can issue the following command to download a Cisco IOS Software image into a Cisco 2600 or Cisco 3600 Series Router:

## Example:

```
Router#copy xmodem: flash:

      **** WARNING ****

x/ymodem is a slow transfer protocol limited to the current speed
settings of the auxiliary/console ports. The use of the auxiliary
port for this download is strongly recommended.

During the course of the download no exec input/output will be
available.

      ---- *~~~~* ----

Proceed? [confirm]y
Destination filename []? c3640-js-mz.122-10b
Erase flash: before copying? [confirm]y
Use crc block checksumming? [confirm]y
Max Retry Count [10]:
Perform image validation checks? [confirm]y
Xmodem download using crc checksumming with image validation
Continue? [confirm]y
Ready to receive file.....C

!--- Start the xmodem transfer in your terminal emulator.

4294967295 bytes copied in 2106.604 secs (0 bytes/sec)
```

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## Related Information

- [Cisco 3600 Series Routers](#)
- [ROMmon Recovery for the Cisco 3600 Routers](#)
- [ROMmon Recovery for the Cisco 2600 Routers](#)
- [Xmodem Console Download Procedure Using ROMmon](#)
- [Software Installation and Upgrade Procedure for the Cisco 2600 and 3600 Series Routers](#)
- [Technical Support – Cisco Systems](#)

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