

## Loading IOS Image with Xmodem when TFTP is unavailable

```
Router#show version
Cisco Internetwork Operating System Software
IOS (tm) C2600 Software (C2600-D-M), Version 12.0(7), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-1999 by cisco Systems, Inc.
Compiled Wed 13-Oct-99 22:08 by phanguye
Image text-base: 0x80008088, data-base: 0x80716F70
```

```
ROM: System Bootstrap, Version 11.3(2)XA4, RELEASE SOFTWARE (fc1)
```

```
Router uptime is 1 hour, 52 minutes
System restarted by power-on
System image file is "flash:2600.12.0.7.bin"
```

```
cisco 2600 (MPC860) processor (revision 0x101) with 26624K/6144K bytes of memory.
Processor board ID JAB040201FX (665154444)
M860 processor: part number 0, mask 49
Bridging software.
X.25 software, Version 3.0.0.
32K bytes of non-volatile configuration memory.
8192K bytes of processor board System flash (Read/Write)
```

```
Configuration register is 0x2102
```

```
Router#sho int
```

**No interfaces are listed**

```
Router#
Router#show capabilities
Router#show controllers ?
  async Async UART internal info
  <cr>
```

```
Router#show interface ?
  Null Null interface
  accounting Show interface accounting
  crb Show interface routing/bridging info
  fair-queue Show interface Weighted Fair Queueing (WFQ) info
  irb Show interface routing/bridging info
  mac-accounting Show interface MAC accounting info
  precedence Show interface precedence accounting info
  random-detect Show interface Weighted Random Early Detection (WRED) info
  rate-limit Show interface rate-limit info
  <cr>
```

System Bootstrap, Version 11.3(2)XA4, RELEASE SOFTWARE (fc1)  
Copyright (c) 1999 by cisco Systems, Inc.  
TAC:Home:SW:IOS:Specials for info

## Issue Break command during the first 60 seconds of router reload

PC = 0xffff0a530, Vector = 0x500, SP = 0x680127b0  
C2600 platform with 32768 Kbytes of main memory

PC = 0xffff0a530, Vector = 0x500, SP = 0x80004864

monitor: command "boot" aborted due to user interrupt

rommon 1 > PC = 0xffff0a0e4, Vector = 0x500, SP = 0x80004ddc  
PC = 0xffff0a0e4, Vector = 0x500, SP = 0x80004ddc

rommon 1 > ?

alias	set and display aliases command
boot	boot up an external process
break	set/show/clear the breakpoint
confreg	configuration register utility
cont	continue executing a downloaded image
context	display the context of a loaded image
cookie	display contents of cookie PROM in hex
dev	list the device table
dir	list files in file system
dis	display instruction stream
dnld	serial download a program module
frame	print out a selected stack frame
help	monitor builtin command help
history	monitor command history
meminfo	main memory information
repeat	repeat a monitor command
reset	system reset
set	display the monitor variables
stack	produce a stack trace
sync	write monitor environment to NVRAM
sysret	print out info from last system return
tftpdnld	tftp image download
unalias	unset an alias
unset	unset a monitor variable
xmodem	x/ymodem image download

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-C2600

do you wish to change the configuration? y/n [n]: **y**

enable "diagnostic mode"? y/n [n]: **n**

enable "use net in IP bcast address"? y/n [n]: **n**

disable "load rom after netboot fails"? y/n [n]: **n**

enable "use all zero broadcast"? y/n [n]: **n**

enable "break/abort has effect"? y/n [n]: **y**

enable "ignore system config info"? y/n [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 [0]: **7**

change the boot characteristics? y/n [n]: **n**

### Configuration Summary

enabled are:

load rom after netboot fails

break/abort has effect

console baud: 115200

boot: image specified by the boot system commands  
or default to: cisco2-C2600

do you wish to change the configuration? y/n [n]: **n**

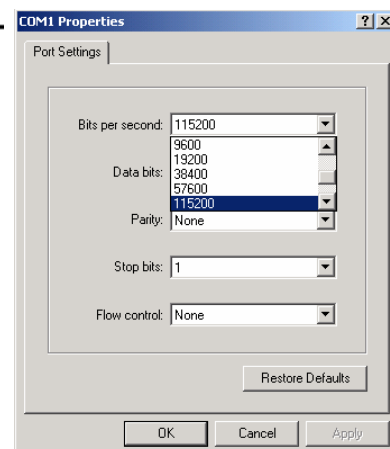
You must reset or power cycle for new config to take effect

rommon 3 > **reset**

"\_nR!1bCE>R ←

**HyperTerminal Setting need to reflect new console speed of 115200, instead of 9600 baud. Using 115200 will decrease the transfer time of the IOS image.**

**Power off router and issue Break sequence:**



System Bootstrap, Version 11.3(2)XA4, RELEASE SOFTWARE (fc1)

Copyright (c) 1999 by cisco Systems, Inc.

TAC:Home:SW:IOS:Specials for info

PC = 0xffff0a530, Vector = 0x500, SP = 0x680127c8

C2600 platform with 32768 Kbytes of main memory

PC = 0xffff0a530, Vector = 0x500, SP = 0x80004374

monitor: command "boot" aborted due to user interrupt

rommon 1 > PC = 0xffff0a0e4, Vector = 0x500, SP = 0x80004ddc

PC = 0xffff0a0e4, Vector = 0x500, SP = 0x80004ddc

PC = 0xffff0a530, Vector = 0x500, SP = 0x80004ddc

rommon 1 > ?

alias	set and display aliases command
boot	boot up an external process
break	set/show/clear the breakpoint
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sync	write monitor environment to NVRAM
sysret	print out info from last system return
tftpdnld	tftp image download
unalias	unset an alias
unset	unset a monitor variable
<b>xmodem</b>	<b>x/ymodem image download</b>

rommon 2 > **xmodem**

usage: xmodem [-cyrx] <destination filename>

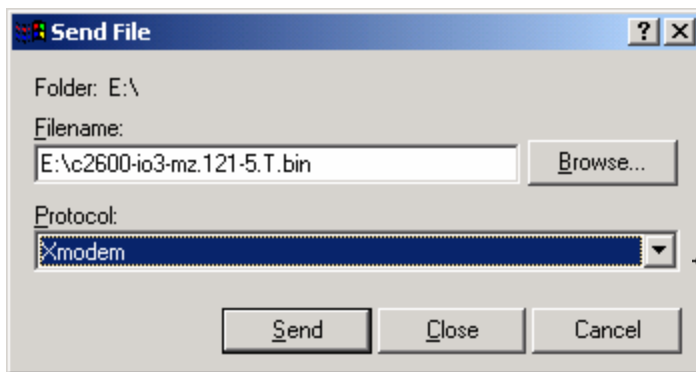
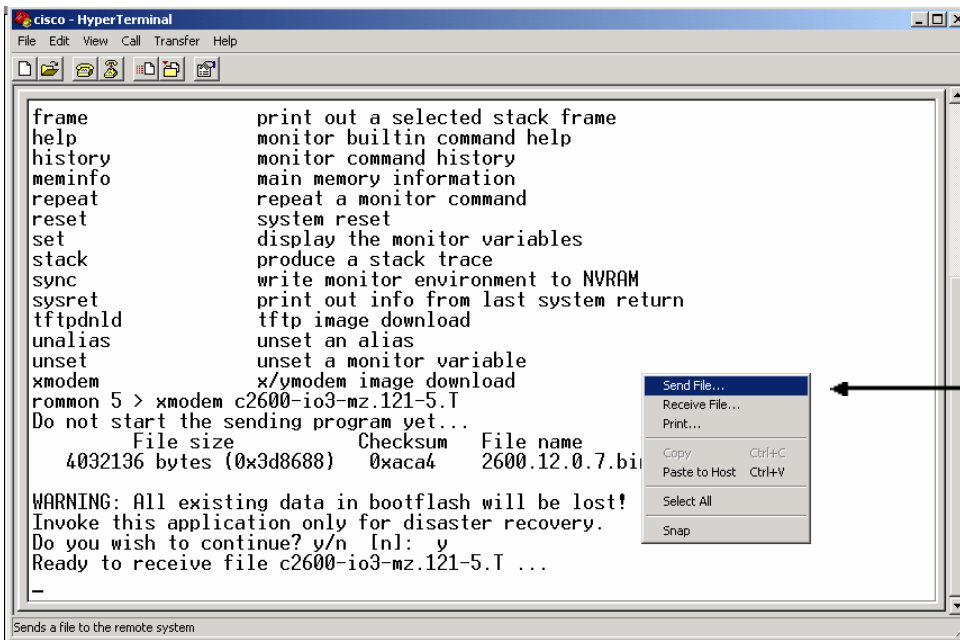
-c CRC-16

-y ymodem-batch protocol

-r copy image to dram for launch

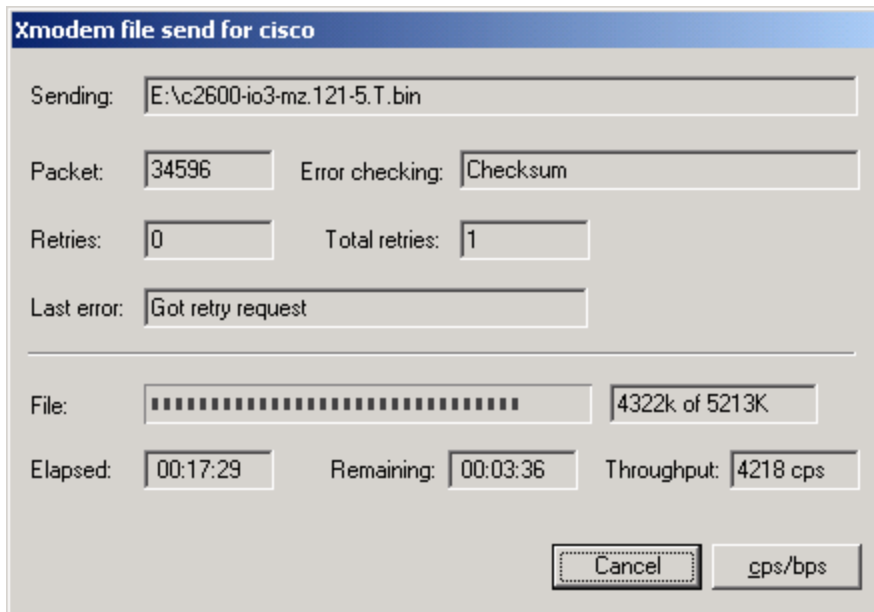
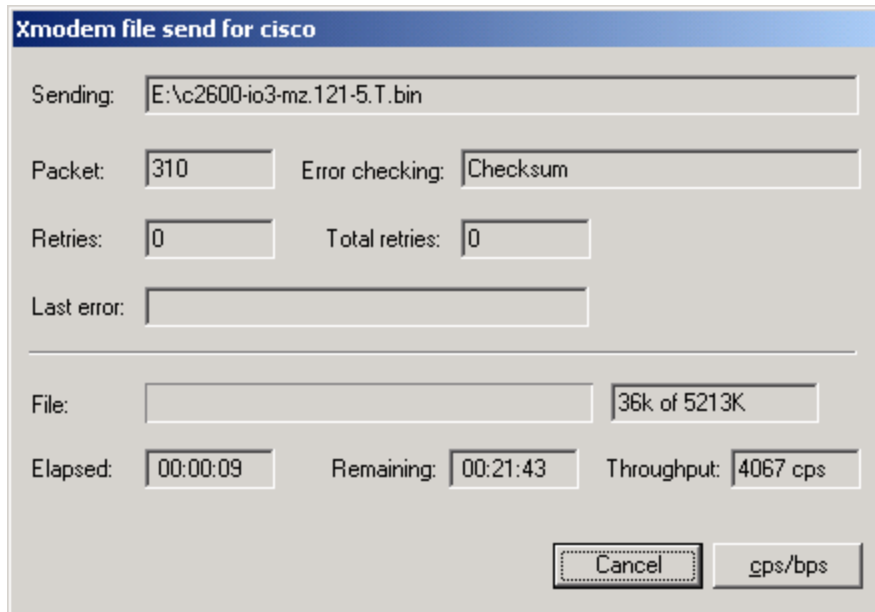
-x do not launch on download completion  
rommon 3 > **xmodem c2600-io3-mz.121-5.T**  
Do not start the sending program yet...  
File size Checksum File name  
4032136 bytes (0x3d8688) 0xaca4 2600.12.0.7.bin

WARNING: All existing data in bootflash will be lost!  
Invoke this application only for disaster recovery.  
Do you wish to continue? y/n [n]: **y**  
Ready to receive file c2600-io3-mz.121-5.T ...



Right Click and Select 'Send File..'

Change Protocol to Xmodem



Erasing flash at 0x607c0000  
 program flash location 0x60510000  
 Download Complete! ←  
 program load complete, entry point: 0x80008000, size: 0x517174

**Wait until confirmation of File Transfer**

## Reload Router

Cisco Internetwork Operating System Software  
 IOS (tm) C2600 Software (C2600-IO3-M), Version 12.1(5)T, RELEASE SOFTWARE  
 (fc1)

Copyright (c) 1986-2000 by cisco Systems, Inc.  
Compiled Sat 11-Nov-00 16:30 by ccai  
Image text-base: 0x80008088, data-base: 0x809BBB88

cisco 2620 (MPC860) processor (revision 0x101) with 28672K/4096K bytes of memory

Processor board ID JAB040201FX (665154444)

M860 processor: part number 0, mask 49

Bridging software.

X.25 software, Version 3.0.0.

Basic Rate ISDN software, Version 1.1.

1 FastEthernet/IEEE 802.3 interface(s)

1 Serial network interface(s)

**Notice that all router interfaces are accessible.**

1 ISDN Basic Rate interface(s)

32K bytes of non-volatile configuration memory.

8192K bytes of processor board System flash (Read/Write)

--- System Configuration Dialog ---

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

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#confi

Router(config)#**config-register 0x2102**

**Change Config-Register back to 0x2102**

Router(config)#exit

Router#show flash

System flash directory:

File Length Name/status

1 5337744 c2600-io3-mz.121-5.T

[5337808 bytes used, 3050800 available, 8388608 total]

8192K bytes of processor board System flash (Read/Write)

**New file has been stored in flash**

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#line con 0

Router(config-line)#speed 9600

**Return console port speed to 9600 baud**

**HyperTerminal will stop responding. Reconnect to Router with hyperterminal using 9600 Baud, 8-N-1.**

```
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```

```
ROM: System Bootstrap, Version 11.3(2)XA4, RELEASE SOFTWARE (fc1)
```

```
Router uptime is 1 hour, 6 minutes
System returned to ROM by power-on
System image file is "flash:2600.12.0.7.bin"
```

```
cisco 2620 (MPC860) processor (revision 0x101) with 28672K/4096K bytes of memory.
Processor board ID JAB040201FX (665154444)
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1 FastEthernet/IEEE 802.3 interface(s)
1 Serial network interface(s)
1 ISDN Basic Rate interface(s)
32K bytes of non-volatile configuration memory.
8192K bytes of processor board System flash (Read/Write)
```

**With the baud rate returned to 9600 baud, config-reg will now indicate 0x2102 at next reload.**

```
Configuration register is 0x3822 (will be 0x2102 at next reload)
```

```
Router#copy run start
```

**Don't forget to save your changes**