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Introduction

This document explains how to download a software image to a Cisco 2600 using Trivial File Transfer Protocol (TFTP) over the *first LAN port* using the ROMmon **tftpdnld** command.

Notes:

- The ROMmon TFTP transfer works on the first LAN port only; however, for the Cisco 2612, you can choose the Token Ring or Fast Ethernet port.
- You can only download files to the router. You cannot use ROMmon TFTP to get files from the router.
- The transfer does not support route bridging on Token Ring ports.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

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

The information presented in this document was created from devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If you are working in a live network, ensure that you understand the potential impact of any command before using it.

Conventions

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

Operation

First, you must set ROMmon environment variables prior to the TFTP download. All variable names are case sensitive.

You can view the ROMmon environment variables by using the **set** command, as shown here:

```
rommon 3 > set
    PS1=rommon ! >
    IP_ADDRESS=172.18.16.76
    IP_SUBNET_MASK=255.255.255.192
    DEFAULT_GATEWAY=172.18.16.65
    TFTP_SERVER=172.18.16.2
    TFTP_FILE=quake/rel22_Jan_16/c2600-i-mz
```

The variables to set for tftpdnld are shown here:

```
usage: tftpdnld [-ur]
  Use this command for disaster recovery only to recover an image via TFTP.
  Monitor variables are used to set up parameters for the transfer.
  (Syntax: "VARIABLE_NAME=value" and use "set" to show current variables.)
  "ctrl-c" or "break" stops the transfer before flash erase begins.

  The following variables are REQUIRED to be set for tftpdnld:
           IP_ADDRESS: The IP address for this unit
        IP_SUBNET_MASK: The subnet mask for this unit
     DEFAULT_GATEWAY: The default gateway for this unit
         TFTP_SERVER: The IP address of the server to fetch from
           TFTP_FILE: The filename to fetch

  The following variables are OPTIONAL:
         TFTP_VERBOSE: Print setting. 0=quiet, 1=progress(default), 2=verbose
    TFTP_RETRY_COUNT: Retry count for ARP and TFTP (default=7)
        TFTP_TIMEOUT: Overall timeout of operation in seconds (default=7200)
       TFTP_CHECKSUM: Perform checksum test on image, 0=no, 1=yes (default=1)

  Command line options:
   -r: do not write flash, load to DRAM only and launch image
   -u: upgrade the rommon, system will reboot once upgrade is complete
rommon 14 >
```

Note: As detailed in the bug identified in report CSCdk81077 (registered customers only) , for Cisco 2600 and 1720 Series Routers running the ROM monitor command **tftpdnld**, the command may report a bad checksum comparison when loading Cisco IOS software images of Release 12.0(2.2)T or later.

Note: As a workaround to this problem, set the ROM monitor variable TFTP_CHECKSUM to 0. This is done by defining the variable `TFTP_CHECKSUM=0` from the ROM monitor **set** command, and then proceeding with the **tftpdnld** procedure.

Token Ring

The variables to set for Token Ring are shown here:

TR_1E1R_PORT	TR_SPEED_MODE
On the Cisco 2612, this variable sets the Token Ring	For a Token Ring port, this variable sets the ring speed and

or Ethernet port. 0 = use Ethernet port 1 = use Token Ring port Default is 0	duplex mode. 0 = 4 Mbps half−duplex mode 1 = 4 Mbps full−duplex mode 2 = 16 Mbps half−duplex mode 3 = 16 Mbps full−duplex mode Default is 2

Fast Ethernet

The variables to set for Fast Ethernet are shown here:

FE_SPEED_MODE
0 = 10 Mbps half−duplex mode 1 = 10 Mbps full−duplex mode 2 = 100 Mbps half−duplex mode 3 = 100 Mbps full−duplex mode 4 = auto−negotiation Default is 4

You must use the **sync** command to save ROMmon environment variables to nonvolatile RAM (NVRAM).

Example

```
rommon 16 > IP_ADDRESS=171.68.171.0
     rommon 17 > IP_SUBNET_MASK=255.255.254.0
     rommon 18 > DEFAULT_GATEWAY=171.68.170.3
     rommon 19 > TFTP_SERVER=171.69.1.129
     rommon 20 > TFTP_FILE=c2600−is−mz.113−2.0.3.Q
     rommon 21 > tftpdnld

               IP_ADDRESS: 171.68.171.0
          IP_SUBNET_MASK: 255.255.254.0
         DEFAULT_GATEWAY: 171.68.170.3
             TFTP_SERVER: 171.69.1.129
               TFTP_FILE: c2600−is−mz.113−2.0.3.Q

     Invoke this command for disaster recovery only.
     WARNING: all existing data in all partitions on flash will be lost!
     Do you wish to continue? y/n:  [n]:  y

     Receiving c2600−is−mz.113−2.0.3.Q from 171.69.1.129 !!!!!.!!!!!!!!!!!!!!!!!!!!.!!
     File reception completed.
     Copying file c2600−is−mz.113−2.0.3.Q to flash.
     Erasing flash at 0x607c0000
```

```
program flash location 0x60440000
rommon 22 >
```

Related Information

- **Technical Support − Cisco Systems**