Upload/Download Files Using WebUI Method: No USB, TFTP or SCP Required

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Introduction

This document describes a non-traditional file transfer method on Catalyst switches. Using Web GUI as a modern solution alleviates these file transfer issues.

Problem

In networking environments, there is a notable challenge when using traditional methods like TFTP for file transfer. Specifically, when a TFTP server is connected through a Multiprotocol Label Switching (MPLS) link, the throughput is significantly reduced, leading to inefficiencies and delays in data transfer. This low throughput poses operational challenges and demands an alternative solution in order to ensure timely and efficient file transfers.

Pre-requisites

Basic understanding of Catalyst 9k series switches and connectivity methods.

Configuration

1. IP HTTP

a. By default this must already be configured.

b. You can verify by issuing the #show run | in http command.

```
Switch(config)#ip http server
Switch(config)#ip http authentication local
Switch(config)#ip http secure-server
```

2. IP Address to Access the WebUI

a. You can configure an IP address on the management interface.

```
interface GigabitEthernet0/0
vrf forwarding Mgmt-vrf
ip address 192.168.2.1 255.255.255.0
speed 1000
negotiation auto
```

b. You can also configure an IP address on a Switch Virtual Interface (SVI).

```
interface Vlan1
ip address 192.168.1.1 255.255.255.0
```

3. Local Authentication

a. Since ip http authentication local is used, a local username and password must be configured in order to access the device.

b. Example configuration of a local authentication user: Switch(config)#username cisco privilege 15 secret cisco .



Note: Privilege 15 gives you access to monitoring and configuration. Privilege 1 - 14 (or omit privilege option) allows access to monitoring only.



Note: The default username (Cisco/WebUI) and password (serial number of the switch) are only used for the day zero configuration.

4. Setting up the Client

a. Ensure your client is within the same subnet of the WebUI IP address you are trying to access or have reachability to the management interface (with the default gateway set).

b. If you are using the management interface to connect on a redundant setup, ensure the connection is through the active member.

c. Here is an example of statically configuring a client for a Windows device.

Internet Protocol Version 4 (TCP/IPv4)	Properties	Х										
General												
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.												
Obtain an IP address automatically												
Use the following IP address:												
IP address:	192.168.1.3											
Subnet mask:	255.255.255.0											
Default gateway:	192.168.1.1											
Obtain DNS server address autom	natically											
Use the following DNS server add	resses:											
Preferred DNS server:												
Alternate DNS server:												
Validate settings upon exit	Advanced											
	OK Cance	I										

5. Login to WebUI

a. After configuring this, you have all the necessary configurations in order to log in to the WebUI of the device.

b. Access your internet browser and type the IP address you have configured for the WebUI.

c. In this example, 192.168.1.1 is used.



d. After entering the IP address and the login credentials configured earlier, you see this:



e. You must have full access to the WebUI at this point. The login page is:



6. Download/Upload Files

 $a. \ Click \ {\rm Administration} > {\rm Management} > {\rm File} \ {\rm Manager}.$

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Cisco Cisco C95	500-24Y4C					Welci	ome <i>cisco</i>			2° (+
Q. Cequicit Menu Items Image: Dushboard Image: Output Dushboard	Command Line Interface Comman	x Graph d DPU Utilization (% Crub are spending heat x 100% CPU (%) 60% 0.39 40% 0.19 20% 99.40 0%	060140 060 — User —	vs Device Time 2:11 06:02-43 06:03:12 2:11 06:02-44 06:03:12 - System — Idle	Slot: RP0 Memory Details Total Used Free Committed Committed	Mem Size (KB) 1599364 4418388 11575276 6288088	100% 100% 75% 55% 0% 0% 0%	Memory Used (%) vs Dev 28% 28% 28 60140 06/02:11 06/0 — Used — Critical (H	ice Time 5. 295 2243 06:03:12 55.)	×
avasoriat toxid409		1 100 100 100 100 100 100 100 1		System Information Ubdied 174/7020, 1114/25 AM Hostiane: 9900-40X Device Uptime: 1 veels, 21 hours, 8 minutes System Time: 06:00:10.360 UTC Mon Dec 4 Device Type: 05:00:10.360 UTC Mon Dec 4 Device Type: 05:	2023 4a.SPA.bin	×				

b. The landing page looks like this (click Flash):



c. The contents of the boot flash are displayed:

Cisco Cisco CS	9500-24Y4C										Welcom	e cisco 🛛 📾	# 8	0000	2.0
Q. Search Menu Items	Administration	+ > Managem	ent -> File M	lanager											
Dashboard	# ← C bootflash:						Go								
Monitoring >							_							SNew Folder	±upload
Configuration														Search here	Q
Administration			È	L	L					È	Ŀ	Ľ	Ŀ	>	
C Licensing	dope_hist	rdope_out.tx 1	rdope.log	svi_ipc.tol	memleak.tcl	tp_cc_crash	dc_profile_di f	tech_support	moelog.txt	boofloader_ evt_handL	boothelper.lo g	boothelper.lo g.old	mode_event _log	SHARED- IOX	
X Troubleshooting	cark, loans 17,00.04.	onep	Tool	sys_report	sad	core	62894.Josse. 17.03.05.								
	21 Items														

d. In order to download any file, navigate to **file** and there is an option to download.

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Q. Search Menu Items	Administratio	n • > Managem	ent -> File M	Aanager											
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	21 Items														

e. In order to upload files from the PC, use the upload button on the right top side.

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Q. Search Menu Items	Administration	r+> Managem	ent - > File N	lanager											
Dashboard	# + C bootfash:						Go								
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Administration Licensing	> dope_Nat	ndope_out.tx	ndope-log	w/_ipc.tol	memleak.tcl	tp_cc_crash	dc_profile_di	tech_support	mcelog.txt	boolioader_ evt_handl_	boothelper.lo g	boothelper.lo g.old	mode_event _log	SHARED- IOX	
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f. Choose the file that you want to upload from the PC and click **open** so that the file is loaded to the boot flash.



