Using TFTP with Get Console (with or without Airconsole)

This note explains the operation of the Get Console TFTP Server feature, when used in conjunction with a wireless-wired bridge such as Airconsole.

Get Console has a built in TFTP Server. This server allows for a TFTP client to both download and upload files from the iPad/iPhone running Get Console.

Downloading Files from Get Console TFTP Server

The TFTP server is enabled by navigating to the File Manager and starting the server process. After starting the App will display the

Carrier 🔶	4:08 PM	Carrier		PM 0	Carr	ier 🔶	4:09 PM	
	File Manager	Done File M	anager TFTP	Server Setting	S	e Manager	TFTP Server Sett	ings
Local Fi	les	Stat	us	Not Running	s	tatus	Run	ning
	No files present		Start TFTP Server			Stop TFTP Server		
Remote	Files	Cture 1	. C			Listening	g on IP 192.168.1.75 (WiF	i)
	Download file list	Star	Allers Described a			Start Server on App Launch OFF		
Dropbox Files		Allo	Allow Downloads ON			Allow Downloads ON		
Download file list			woploads	ON	A	llow Upl	oads ON	
TFTP S	erver Not Runn	ing 🕨						

Once the TFTP Server is running it can serve files to TFTP clients that are saved in the **local** Get Console file storage sandbox. To get a file into this Local Get Console file area, the easiest way is to download from Dropbox. Alternatively you can download from your file area if you have an account on the <u>www.get-console.com</u> website, or upload a file via iTunes to the Get Console app. The below example uses Dropbox. Note that Get Console ONLY has access to the Dropbox/My Apps/Get Console/ folder, so ensure the files you want to download are in that folder within Dropbox.

Carrier 🗢 4:10 PM	Carrier 奈 4:10 PM	Carrier 🗢 4:10 PM 🔳		
File Manager Done	File Manager Done	File Manager Done		
Local Files	Dropbox Files	Local Files		
No files present	121.79.197.232.connection 979 bytes	2970-config.txt		
Remote Files	195-lines.txt 3 KiB	Remote Files		
Download file list	820-lines.txt 17 KIB	Download file list		
Dropbox Files	2821 Config Template.txt 21 KiB	Dropbox Files		
Download file list	2970-config.txt 11 KiB	121.79.197.232.connection 979 bytes 195-lines.txt 3 KiB 820-lines.txt 17 KiB		
TETD Conver	Download File to Local Store			
IF IF Server Running	6 KIB			
	Cancel	2821 Config Template.txt		
	console_2012-10-17_172421.txt			

Once the files you wish to be available to a TFTP client are in the Local File area they are automatically available for download when the TFTP server is running.

To download from a TFTP client, ensure the client is on the same WIFI network as the iPad/iPhone and invoke the download process of the TFTP client. The iPad/iPhone's IP address is shown on the TFTP server settings. Note that if the iPad/iPhone has multiple

IP addresses (for example if it is also connected via a VPN tunnel, and / or has an active 3G network connection) then all IP addresses can be used by the TFTP server.

The following example shows how to use Get Console in conjunction with Airconsole to download a Cisco IOS image to a router using Get Console TFTP server.



In this example, a Cisco router is connected to Airconsole via both its wired Ethernet port and via its serial console port. The iPad WIFI is joined to the Airconsole-XX wireless network.

The Get Console app is running on the iPad and has launched a serial console connection via Airconsole to the Cisco con0 port. In addition, the TFTP server has been enabled in Get Console File Manager, and the Cisco IOS image file is in the *local* Get Console file storage area.

III. Telecom NZ 3G 16:08	* 🖻	III. Telecom NZ 3G 16:08	* 🖻		
File Manager TFTP Serv	er Settings	File Man	ager Done		
Status	Running	Local Files			
Stop TFTP Server		c1841-broadband-mz.124-4.T 15 MiB			
Listening on IP 172.16.1 10.215.207.25 (Cel	6.8 (WiFi), Iular)	Remote Files			
		Download	file list		
Start Server on App Laund	h ON	Dropbox Files			
Allow Downloads ON		Download file list			
Allow Uploads	ON				
		TFTP Server	Running >		



- 1) From the serial console session, start the TFTP client running on the cisco router with the "copy tftp flash" command
- 2) Specify the iPhone/iPad IP address on the Airconsole WIFI (172.16.16.8 in this example)
- 3) Specify the file name on the TFTP server. This name is case sensitive and must match exactly the name of the file in the local file store in Get Console
- 4) Specify the destination file name and confirm to start download. Note in this example there is a warning as the test file we are downloading is not compatible with the router. In normal use there will not normally be a warning.
- 5) The copy process will start and indicate progress with "!!!" characters



Once complete, the router will return to its # prompt. The Get Console TFTP server can be disabled now if required.

Uploading Files to the Get Console TFTP Server

Uploading files to iPhone/iPad TFTP server running on the Get Console App requires the reverse process as downloading files, however in the current version of Get Console (v1.95), the user must first create a dummy file in the local file system with the same name as the file they are uploading. This restriction will be removed in future versions.

Ensure there are no other apps running on your iPhone/iPad that could be listening on the TFTP port (udp/69).

1) Create dummy file by launching Clipboard Editor, typing some text, then Save. Save the file name as the name of the file you will be uploading via TFTP

		Telecom NZ 3G 16:37 🛛 🛞 🎟
.∎ Telecom NZ 3G 16:36	III Telecom NZ 3G 16:36 3 III	Cancel Clipboard Editor Paste
	Clip 1 2 3 Save Close	Save File See
Command Shortcuts		sdmconfig-2811.cfg
Saved Passwords	dummy file	Cancel OK
Logging		
Clipboard Editor		
File Manager	QWERTYUIOP	
Run Script	A S D F G H J K L	ASDFGHJKL
	🕁 Z X C V B N M 💌	🕂 Z X C V B N M 🙁
Cancel	123 🌐 space return	123 🌐 space return

2) Verify the dummy file is in the Get Console Local file store



3) Use the same process on the tftp client to copy the file up to the iPhone's TFTP server.



The screen shot shows 2 attempts to upload the same file. The difference between the attempt that worked and the attempt that failed was:

a) stopping/starting the TFTP server in Get Console. Including disabling/enabling Uploads in TFTP

b) ensuring no other iPhone applications were listening on UDP/69 by shutting them down.

If your TFTP client can successfully ping the iPhone running Get Console, there is a valid file in the local storage with the same name as that which is to be uploaded and the TFTP upload still times out, try restarting the TFTP server in Get Console, and checking for competing apps that may be also listening on TFTP ports.