IMPLEMENTATION GUIDE FOR GLOBALSCAPE® ENHANCED FILE TRANSFER™ (EFT™) v7.1 AND F5 BIG-IP® LTM® v11.x INTEGRATION

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For other versions:

- Globalscape help documentation can be accessed from http://help.globalscape.com/help/.
- F5 BIG-IP LTM documentation is available at https://support.f5.com/



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Introduction

Globalscape's Quality Assurance team has integrated and tested the F5 BIG-IP Local Traffic Manager™ (LTM) with Globalscape® Enhanced File Transfer™ (EFT™) and DMZ Gateway® in an active-active, high availability cluster. The purpose of the test was to define parameters for and to certify interoperation between the F5 and Globalscape devices to provide load balancing in an active-active, high availability cluster configuration.

This document describes the test setup and testing criteria, then describes specific settings in the F5 BIG-IP LTM and Globalscape Enhanced File Transfer (EFT) and DMZ Gateway devices necessary for successful interoperability.

This document does not describe how to install the software for the F5 BIG-IP LTM, Globalscape EFT, or Globalscape DMZ Gateway. Please refer to the relevant help documentation for those procedures.

- Globalscape help documentation can be accessed from http://help.globalscape.com/help/.
- F5 BIG-IP LTM documentation is available at https://support.f5.com/

Test Setup

The test setup for the (virtual) devices illustrated below included:

- 12 virtual machine images
- 4 networks
- 2 F5 BIG-IP LTM instances
- 2 EFT servers in active-active HA configuration
- 2 DMZ Gateways, externally facing
- 2 internal clients
- 2 external clients
- 1 HA file server/database server
- 1 external FTP/SFTP server



Once communication between networks was verified, the following tests were run using EFT automation rules:



Testing Criteria

The table below describes the functions that were used to determine solution validation and how success was measured. All tests passed successfully.

Function	Success Measurement
2 nodes handle client connectivity, connected with the DMZ Gateways	With both EFT/DMZ Gateway nodes up, external clients can upload and download files using any supported EFT protocol. This was confirmed by logging into the EFT Admin UI on one of the nodes, clicking the Report tab and viewing an "Activity – All File Transfers" report, and verifying that the files appear in the transaction log. Additionally, when either EFT node is set to offline in the F5 BIG-IP LTM, the external client can continue to upload/download files just as before.
2 nodes handle the naturally distributed On File Upload Rules reacting to incoming data	With both nodes up, an internal user can to upload a file and see the file automatically renamed when it is uploaded to the user folder. The file is renamed to include the username prepended to the filename. (The client may need to refresh the directory listing to verify this.)
2 nodes handle Scheduled Tasks	A scheduled task is configured to create a compressed archive of all processed files. For testing, this is setup to run every minute. After files have been uploaded (by either internal or external clients), a zip file (with a timestamp name) appears in the Archive directory as configured in EFT. This task can always run as long as at least one EFT node is up.
2 nodes handle Folder Monitors	When an external user uploads a file, a Folder Monitor rule is configured to do OpenPGP encryption on the file and offload a copy of the file to an external SFTP server. This tests whether EFT is able to go out through the F5 BIG-IP LTM using DMZ Gateway as a proxy. This functionality is working; demonstrated by file (with .pgp extension) being successfully copied to the external server.
2 systems configured to handle AWE tasks	This test environment is setup with two AWE tasks: A Rename task for files sent by internal users. A Scheduled (Timer) task that creates the archive zip files. Successful completion of the Event Rules indicates use of the AWE engine.
2 systems configured to handle processing the more resource- intensive workflows	The Scheduled (Timer) task for creating the zip archive (see above) in particular is a very resource-intensive operation. When a large file (> 250 MB) is uploaded and compressed into the zip archive, this indicates that the devices can handle resource-intensive workflows.

F5 BIG-IP LTM – Required Configuration

Described below are the necessary configuration steps to configure the F5 BIG-IP LTM to interoperate with Globalscape DMZ Gateway and Enhanced File Transfer (EFT) platform.

Obviously, for all configuration, use the addresses and ports that are used in your network. The following configuration is described:

- 1. Create VLANS
- 2. Create Self IPs
- 3. Create nodes for each DMZ Gateway
- 4. Define the Pools and virtual servers for the following protocols:
 - HTTP
 - HTTPS
 - SFTP
 - FTP (and not FTPS Explicit)
 - FTPS implicit
 - FTP and FTPS Explicit

Create VLANs

The F5 BIG-IP LTM has multiple physical (or virtual if using the virtual appliance) network adapters. At least one will point internally and one will point externally so that all traffic passing between the two networks goes through the F5 BIG-IP LTM. If VLANs do not already exist for the internal network (EFT/DMZ) and external (e.g. internet) traffic create them by going to Network > VLANs.



Create Self IPs

Next, you can specify the network for each VLAN by creating a Self IP. A Self IP associates an IP Address/mask combination with a VLAN. In our example, our internal VLAN is associated with 172.10.1.1 and mask 255.255.255.0 and our external VLAN is associated with 10.10.10.1 and mask 255.255.255.0.



Create Nodes for each DMZ Gateway box

You can now define nodes for the DMZ Gateway box by going to Local Traffic > Nodes. In our example we have defined two DMZ Gateway nodes named "DMZ1" and "DMZ2" with IP Addresses 172.10.1.101 and 172.10.1.102 respectively.

BIG-IP® - bigip1.local.net X	BIG-IP® - bigip2.	local net X							Jeren	<u>w</u> — =
← → C (* b+tos://192.16	3.100.147/xui/									st 🐴 🔒
🗄 Apps 🛨 Bookmarks 🚥 G 🌘	🕨 🔔 Drive 👼	News 🗊 Te	chnology » 🔀 TFS	🛛 🕜 vCenter	Client 🕒 Pay	com 🧕 Dasi	hboard [Jen	kins]	>>	Other bookma
Hostname: bigip1.local.net Date:	Nov 30, 2015	User: admin						Partition:	Common 🔻	Log out
I ONLINE (ACTIVE) Standalone										
Main Help About	Local Traf	ffic » Nodes:	Node List				_			
Statistics	÷¢r → Nor	de List	Default Monitor		2					
(Apps	*			Search						Create
😚 dns	🗹 💌 St	tatus 🔺 Name			Application	Address		Ephemeral	Description	Partition / Path
D Local Traffic		DMZ1				172.10.1.101		No		Common
		DMZ2				172.10.1.102		No		Common
Network Map	Enable	Disable For	ce Offline Delete							
Virtual Servers	•									
Policies) - C									
Profiles	2									
iRules	¥									
Pools	÷									
Nodes	3									
Monitors (+										
Traffic Class										
Address Translation	3									
Acceleration										
Device Management										
Network										
A Sustam										

The last steps in F5 BIG-IP LTM configuration are creating Pools and Virtual Servers for the protocols. Be aware that there are some subtle differences between each protocol.

HTTP

To add configuration for handling HTTP traffic:

- 1. Create a pool named HTTP.
- 2. Add the two DMZ Gateway nodes and service port 80.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create a virtual server named HTTP. A virtual server creates a listening socket on the F5 BIG-IP LTM for a specific port. For this server use port **80**.
- 5. For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example we have selected 10.10.10.11.
- 6. For the HTTP Profile select "http" and set the FTP Profile to "None".
- 7. For Source Address Translation select "Auto Map".
- 8. For the Default Pool select "HTTP".
- 9. For the Persistence profile select source_addr.
- 10. All other default settings are OK.

			Jeremy 💻 🗆 🗙
VSphere Web Client × 🕅 😮 BIG	3-IP® - bigip1.local.net 🗙 🗸 🕼 E	IG-IP® - bigip2.local.net ×	
← → C 🕼 bttps://192.168.10	00.147/xui/		ය 🚸 🖸 🔳
🔛 Apps 🛧 Bookmarks 🚥 G 🔵	🝐 Drive 👼 News 👼 Techno	logy » 🛃 TFS 💋 vCenter Client 🕒 Paycom 🧕 Dashboard [Jenkins]	» 📋 Other bookmarks
Hostname: bigip1.local.net Date: Dec IP Address: 192.168.100.147 Time: 8.38	1, 2015 User: admin 3 AM (CST) Role: Administrator	Partition. Common	▼ Log out
Standalone			
Main Help About	Local Traffic » Pools : Pool	List » New Pool	
Statistics	Configuration		
iApps	Name	HTTP	
	Description		
U DAS	Description		
Local Traffic		Active Available	
Network Map	Health Monitors	inband https_head_f5	
Virtual Servers		tcp_half_open	
Policies			
Profiles	Resources		p
iRules	Load Balancing Method	Round Robin	
Pools	Priority Group Activation	Disabled v	
Nodes		O New Node O New FQDN Node Node List	
Monitors 🛞		Address: DMZ2 (172.10.1.102)	
Traffic Class		Add	
Address Translation	New Members	R:1 P:0 C:0 DMZ1 172.10.1.101:80	
Device Management		Edit Delete	
Network	Cancel Repeat Finished]	
System			

HTTP Pool

🖉 vSphere Web Client 🛛 🗴 🕞 BIG	-IP® - bigip1.local.net 🗙 🚯 BIG-	JPS - bigip2.local.net ×
← → C 🕼 b#tps://192.168.10	0.147/xui/	☆ 💠 0 🗉
🛄 Apps ★ Bookmarks 🚥 G 🔵 (🍐 Drive 🗊 News 🗊 Technolog	y » 🛃 TFS 💋 vCenter Client 📋 Paycom 🙎 Dashboard [Jenkins] 🧼 📋 Other bookmark
Hostname: bigip1.local.net Date: Dec IP Address: 192.168.100.147 Time: 9.01	1, 2015 User: admin AM (CST) Role: Administrator	Partition: Common.
Main Help About	Local Traffic » Virtual Servers	: Virtual Server List » New Virtual Server
Statistics		
iAnns	General Properties	
Too where	Name	HTTP
S DNS	Description	Virtual Server for EFT HTTP traffic
Local Traffic	Туре	Standard
Network Man	Source Address	
Virtual Servers	Destination Address	10.10.11
Policies	Service Port	80 HTTP V
Profiles	Notify Status to Virtual Address	
iRules +	State	Enabled V
Pools +	Configurations Basic T	
Nodes >	Protocol	TCP
Monitors 🕞	Protocol Profile (Client)	
Traffic Class 🕞	Protocol Profile (Server)	(I lse Client Profile)
Address Translation >	HTTP Profile	
Acceleration	FTP Profile	
	RTSP Profile	None V
Device Management		Selected Available
Network	SSL Profile (Client)	Concord Common Central Common Central Cen
	SSL Profile (Server)	Vom-default-clientssl Selected Available Image: Common april default-serverssl crypto-client-default-serverssl crypto-cli

HTTP Virtual Server

HTTPS

To add configuration for handling HTTPS traffic:

- 1. Create a pool named HTTPS.
- 2. Add the two DMZ Gateway nodes and service port 443.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create a virtual server named HTTPS.
- 5. For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example we have selected 10.10.10.11. For this server use port **443**.
- 6. Make sure the HTTP and FTP profiles are set to "None".
- 7. For Source Address Translation select "Auto Map".
- 8. For the Default Pool select "HTTPS".
- 9. For the Persistence profile select **source_addr**.
- 10. All other default settings are OK as is.

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SFTP

To add configuration for handling SFTP traffic:

- 1. Create a pool named SFTP.
- 2. Add the two DMZ Gateway nodes and service port 22.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create a virtual server named SFTP.
- 5. For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example we have selected 10.10.10.11. For this server use port **22**.
- 6. Make sure the HTTP and FTP profiles are set to "None".
- 7. For Source Address Translation select "Auto Map".
- 8. For the Default Pool select "SFTP".
- 9. For the Persistence profile select "None".
- 10. All other default settings are OK.

FTP (and not FTPS Explicit)

If the F5 BIG-IP LTM will only handle FTP and not FTPS Explicit traffic then you can use the built-in FTP profile for the Virtual Server. If you need to handle both FTP AND FTPS traffic, see below.

- 1. Create a pool named FTP.
- 2. Add the two DMZ Gateway nodes and service port 21.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create a virtual server named FTP.
- 5. For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example we have selected 10.10.10.11. For this server use port **21**.
- 6. Set the FTP profile to "ftp" and the HTTP profile to "None".
- 7. For Source Address Translation select "Auto Map".
- 8. For the Default Pool select "FTP".
- 9. For the Persistence profile select "None".
- 10. All other default settings are OK.

FTPS Implicit

FTPS Implicit typically runs on port 990 rather than the standard FTP port 21.

- 1. Create a pool named FTPS-IMPLICIT.
- 2. Add the two DMZ Gateway nodes and service port 990.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create a virtual server named FTPS-IMPLICIT.
- 5. For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example we have selected 10.10.10.11. For this server use port **990**.
- 6. Make sure the HTTP and FTP profiles are set to "None".
- 7. For Source Address Translation select "None".
- 8. For the Default Pool select "FTP-IMPLICIT".
- 9. For the Persistence profile select "None".
- 10. All other default settings are OK.

FTP and FTPS Explicit

If the F5 BIG-IP LTM will handle FTP and FTPS Explicit traffic then you cannot use the built-in FTP profile for the Virtual Server. FTP and FTPS Explicit use the same port (21 by default) and if you use the built-in FTP profile the F5 BIG-IP LTM cannot inspect the FTPS traffic because it is encrypted and it will be blocked. To make this work requires another way of handling both types of traffic.

- 1. Create a pool named FTP.
- 2. Add the two DMZ Gateway nodes and service port 21.
- 3. Add a health monitor (if you do not know which to select you may use "inband". See F5 BIG-IP LTM documentation for more information).
- 4. Create another pool named FTPS_EXPLICIT.
- 5. Add the two DMZ Gateway nodes but with a service port of **0**. This creates a "wildcard" pool that can service traffic on whatever data port FTP needs.

iRules®

Create a new iRule (Local Traffic > iRules > iRule List) named "WILDCARD_PROTECT" with the following script:

```
when CLIENT_ACCEPTED {
    if {([TCP::local_port] >= 28005)
    && ([TCP::local_port] <=
        28010) } { pool FTPS-
        EXPLICIT</pre>
```

In the iRule 28005 and 28010 represent the port range configured for PASV connections in EFT. This rule will be attached to the Virtual Server will we create.

Persistence profile

- 1. Create a new persistence profile (Local Traffic > Profiles > Persistence) named "FTPS_EXPLICIT".
- 2. Create it as type "Source Address Affinity" with a parent profile "source_addr".
- 3. Select a custom configuration and enable "Match Across Services" and "Match Across Virtual Servers."



Protocol profile

- 1. Create a new protocol profile (Local Traffic > Profiles > Protocol > FastL4) named "FTPS_EXPLICIT".
- 2. Select fastL4 as the parent profile.

Statistics		o - Properties		
a lânne				
2 webba		General Properties		
ONS		Name	FTPS-EXPLICIT	
		Partition / Path	Common	
Cocal Traffic	[] Local Traffic		fastL4 •	
Network Map		(Inclusion)	Custom	
Virtual Servers		Peret on Timesult	2 Easterd	00000
Policies	18	Resector Imeout	a Enabled	
Profiles	56	Reassemble IP Pragments	* Enabled	
Rules		Idle Timeout	Specify • 300 seconds	e
Pools		TCP Handshake Timeout	Specify	*
Nodes		Maximum Segment Size	Disabled •	
Monitors	()	Dr/A Officed Concerns	Easting -	
Trafic Class	0	PVA Official Dynamic	Enapled	
Address Translation		PVA Dynamic Client Packets	1 Packets	
		PVA Dynamic Server Packets	0 Packets	8
Acceleration		IP ToS to Client	Pass Through •	8
Device Management		IP ToS to Server	Pass Through .	9
E Device Management		Link QoS to Client	Pass Through •	8
Network		Link QoS to Server	Pass Through •	
• System		TCP Timestamp Mode	Preserve •	8
		TCP Window Scale Mode	Preserve •	
		Generate Initial Sequence Number	0	
		Strip Sack OK	0	
		RTT from Client	0	8
		RTT from Server	6	8
		Loose Initiation	0	9
		Loose Close	0	
		TCP Close Timeout	Specify	ii
		TCP Keep Alive Interval	Disabled •	8
		Hardware SYN Cookie Protection	Enabled	9
		Software SYN Cookie Protection		9
		SYN Cookie White List	0	
		Server Sack	0	8
		Server Timestamp		8
		Receive Window	0 bytes	6
		Late Rinding		9

Virtual servers

- 1. Create a virtual server named "FTP-FTPS_EXPLICIT".
- For the Destination Address of the virtual server enter an external IP address the F5 BIG-IP LTM will listen on. This is the IP address that clients will connect to from outside the organization. In our example, we have selected 10.10.10.11. For this server use port 21.
- 3. Make sure the HTTP and FTP profiles are set to "None".
- 4. For Source Address Translation select "None".
- 5. For the Default Pool select "FTP".
- 6. For the **Persistence Profile**, select "FTPS_EXPLICIT".
- 7. All other default settings are OK.
- 8. Create another virtual server named "FTP-FTPS-PASV"
- 9. Make the type "Performance (Layer 4)"
- 10. Again, make the **Destination address** 10.10.10.11 (same as previous virtual server) and make the port 0 (for all ports).
- 11. For the Protocol Profile (Client) select the FTPS_EXPLICIT Protocol profile previous created.
- 12. For Source Address Translation select "None".
- 13. For the Default Pool select "None".
- 14. For the Persistence Profile, select "FTPS_EXPLICIT."
- 15. Add the "WILDCARD_PROTECT" iRule (see image).
- 16. All other default settings are OK as is.

BIG-	IP® - bigip1.local.net × 🗸 (j	BIG-IP® ×	🔾 StickyMinds Th	ne Impact ×				
← →	C & https://192.16	58.100.147/xui/						☆ 🚸 0 ≡
🔢 Apps	🛧 Bookmarks 🚥 G	🔵 👍 Drive 🗊 News 🗊 Teo	:hnology » 🔀 TF	S 🕜 vCenter C	lient 🗋 Paycom	Dashboard (Jenkin	s]	» 📋 Other bookmarks
Hostnam IP Addre	ne: bigip1.local.net Date ss: 192.168.100.147 Time	Dec 1, 2015 User: admin 3:40 PM (CST) Role: Administr	ator				Partition: Common	▼ Log out
6	ONLINE (ACTIVE)							
Main	Help About	Local Traffic » Virtual S	ervers : Virtual Se	erver List » FTP	-FTPS-PASV			
Sta	tistics	🔅 🗸 Properties	Resources	Statistics				
iAp	ps	Load Balancing						
S DN	S	Default Pool	None	•				
Loc	al Traffic	Default Persistence Profil	e None	•				
1	Network Map	Fallback Persistence Prot	ile None	¥				
Ň	virtual Servers	Update						
	Policies	iRules						Manage
	Profiles	Name						
	iRules	WILDCARD_PROTECT						
	Pools	•						
	Nodes	2						
ŀ	Monitors (Ð						
1	Traffic Class	Ð						
4	Address Translation							

Address Translation SNAT

- 1. Create a SNAT List entry (Local Traffic > Address Translation > SNAT List) for the IP Address of the Virtual Server (10.10.10.11 in our example).
- 2. Add the IP addresses of the DMZ Gateway nodes to and address list of the SNAT entry.

4	-> C & but !!!	192,168.10	00.147/xui/		ናን 🐴 🗛 🖬
	nos 🛨 Bookmarks	G	🔔 Drive 🔲 News 🗊 Techr	nology » 🕅 TES 💋 vCenter Client 🕒 Pavcom 🚱 Dashboard Llenkins]	» Other bookmar
Hos	tname: bigip1.local.net	Date: Dec	:1,2015 User: admin		
IP A	ddress: 192.168.100.147	Time: 3:43	3 PM (CST) Role: Administration	or Partition.	Common Log out
6		E)			
4					
N	lain Help	About	Local Traffic » Address Tr	ranslation : SNAT List » FTPS-EXPLICIT-SNAT	
	Statistics		🕁 🚽 Properties	Statistics 🗵	
-	54413003				
-	iApps		General Properties		
0	DNS		Name	FTPS-EXPLICIT-SNAT	
			Partition / Path	Common	
(j)	Local Traffic		Description	(Î.	
	Network Map				
	Virtual Servers	*	Configuration		
	Policies	- Sec	Translation	□ P Address ▼ 10.10.11	
	Profiles		Origin	Address List •	
	iRules	(B)		Address:	
	Pools	18.		Add 172 10 1 101	
	Nodes	÷	Address List	172.10.1.102	
	Monitors	()			
	Traffic Class	(+)		Edit Delete	
	Address Translation	1.6	VI AN / Tunnel Traffic	* All	
	Acceleration		Auto Last Hon	Default •	
Acceleration			Auto Last hop	D'oldun A	

Ensure that Address Translation and Port Translation are enabled on every virtual server.

Connection Rate Limit	0
Connection Rate Limit Mode	Per Virtual Server
Address Translation	C Enabled
Port Translation	C Enabled
Source Port	Preserve T
Clone Pool (Client)	None

DMZ Gateway – Required Configuration

In order for EFT to use DMZ Gateway as a proxy (useful when using Event Rules to copy/move files), DMZ Gateway must have the F5 BIG-IP LTM configured as its default gateway. This is also required if you want to use FTP/FTPS in Active mode. When EFT needs to get out to the Internet, it goes through DMZ Gateway, which then must go through the F5 BIG-IP LTM.

In our example, the default gateway of our DMZ Gateway box is set to the Internal Network Self IP that <u>we</u> <u>previously created</u> on our F5 BIG-IP LTM.

88	GlobalSCAPE DMZ Gateway - Version 3.3.0 build 8
Profile Server Help	
Connect	et - Start - Star - W. Bastart - Wew Brafile - M Delate Brafile - ab Dename Brafile - ab Apply Chapters
All Profiles	Network Connections
Profile	Network Connections
()	🍥 👻 🛧 😰 🕨 Control Panel 🕨 Network and Internet 🕨 Network Connections 🕨
Qu	asnize 💌 Dicable this network device Disanose this connection Rename this connection »
	HA Network Properties
	Networking Out
	L Gigabit Network C Intel
	Internet Protocol Version 4 (TCP/IPv4) Properties
	General
	T 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: 172 . 10 . 1 . 101
	Subnet mask: 255 . 255 . 0 . 0
	Default gateway: 172 . 10 . 1 . 1
	Obtain DNS server address automatically
	Use the following DNS server addresses:
	Preferred DNS server:
	Alternate DNS cerver:
	Validate settings upon exit Advanced
21	
DMZ Gateway is running.	OK Cancel
and outerray to rentiling	

EFT – Required Configuration (for external F5 BIG-IP LTM)

You must configure EFT to use the DMZ Gateway. Obviously, for all configuration, use the addresses and ports that are used in your network.

LocalHost [127.0.0.1:1100] - Connected as	Local computer\Administrator [Started] - Globalscape — EFT Server Enterprise 7.1	_ 🗆 🗙
File Edit View Configuration Tools Reports Windo	w Help	
File Edit View Configuration Tools Reports Windo	W Help W Help MZ Gateway DMZ Gateway Connection PMZ Gateway as a proxy* DMZ Gateway address: 192.180.1.101 Port: 44500 Status: Connected Reconnect Protocols Specify the protocols and ports that can be routed through the DMZ Gateway. PFTP FTPS (SSL/TLS) 21 FTPS (SSL/TLS) 21 FTPS (SSL/TLS) 21 FTPS (SSL/TLS) 22 FTPS (SSL/TLS) 1mplicit mode SFTP (SSL/TLS) 22 MHTTP Note: HTTP/S is also used for AS2 and Web Transfer Client connections MTTPS Gateway licensed separately MATC Gateway licensed separately MATC Gateway licensed separately	
Ready	EET Server started on Dec 02, 2015, 09:37:35 AM	Isers connected: 0

If you want to support FTP PASV you must configure the PASV settings for DMZ Gateway and enter the <u>Destination IP Address for the Virtual Server</u> previously created in the F5 BIG-IP LTM for FTP.

Also, the <u>port range previously used</u> in the "WILDCARD_PROTECT" iRule must be the same port range used here:

Fi	rewall / NAT Routing
Assign PASV mode IP add IP: 10.10.10.11 Port Range: From: 280	(If you want to use the same address as this Site's home IP, leave 0.0.0.0 here) To: 28010
	OK Cancel

EFT Event Rules Going through DMZ Gateway and F5 BIG-IP LTM

If your Event Rule has a copy/move offload action and the destination is a server external to your organization, you must configure DMZ Gateway to be used as a proxy. This will ensure that it goes through DMZ Gateway and the F5 BIG-IP LTM.

Configure DMZ Gateway as a proxy in the Event Rule's Offload Action Wizard (copy/move action).

	Offload Action Wizar	d	x
File Offload Configurat	tion		
File Offload Configu Welcome to the Offloa	ration d Action wizard. Choose the offi	oad method below.	
Offload method:	SFTP using SSH2 (Secure	: Shell) 🗸	
Host address:	10.10.150	Port: 22	
Username:	testuser		
Password:	•••••		
Site-wide Secu	I dient's login credentials to auth rity settings to allow this option) File Path:	ienticate (refer to	
SFTP Key Passphr	Socks Advanced		
< Back	Next >	Cancel Help	

	Offload Action Wizard	x
File Offload Configu	Iration	
	Proxy Settings	
General tran ✓ Use pro: Proxy ty Host na Port: Usernan Passwor	sfer options xy settings below when connecting to remote host pe: Use EFT Server's DMZ Gateway as the proxy FTP proxy HTTP proxy IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
	OK Cancel	

EFT Support for External F5 BIG-IP LTM and Internal F5 BIG-IP LTM

A single EFT site is able to operate connected to two F5 BIG-IP LTMs on two different networks. This setup may be necessary when one network handles external traffic and another handles internal traffic. For this to work correctly for all protocols, the external traffic must go through DMZ Gateway as shown in the previous section, and the internal traffic cannot go through DMZ Gateway. If you require internal traffic to also go through DMZ Gateway, it will require a separate site.

To use a single site with 2 F5 BIG-IP LTMs, you must configure the internal F5 BIG-IP LTM exactly as the external one. Since this second one exists on an internal network it should be on a different subnet than the external F5 BIG-IP LTM. This means the IP addresses used for the internal F5 BIG-IP LTM (e.g., for nodes, Self IPs, Virtual Servers, etc.) will be different; however, the basic configuration of the internal F5 BIG-IP LTM will be the same as the external F5 BIG-IP LTM.

Another small difference is that the internal F5 BIG-IP LTM nodes will point to the EFT machines themselves rather than DMZ Gateway machines.

Assuming you have a second F5 BIG-IP LTM configured for the internal network:

1. To use FTP/FTPS in Active mode set the default gateway of the EFT machine to point to the internal F5 BIG-IP LTM.

÷.			Network and Sharing Center	•
6	P		Network Connection	s
		 The second second	d Internet 🔸 Network Connections	
	Organiz A	Disable this network device Diagnose InternalClientNetwork Properties	e this connection Rename this connection	ection V
	Netv	vorking Sharing	4L Gigabit Network C	
		Internet Protocol Version 4 (TCP,	P/IPv4) Properties	
		General		
	T	You can get IP settings assigned automatically if this capability. Otherwise, you need to ask your for the appropriate IP settings.	f your network supports r network administrator	
		Use the following IP address:		
		IP address: 172 .	11 . 1 . 101	
		Subnet mask: 255 . 2	255.255.0	
		Default gateway: 172 .	11 . 1 . 1	
		Obtain DNS server address automatically		
	• Use the following DNS server addresses:			
		Preferred DNS server: .		
		Alternate DNS server: .	· ·	
		Validate settings upon exit	Advanced	
	3 items		OK Cancel	

 In the main site configuration (not the gateway configuration for the site) you must configure the FTP PASV setting. Here you will use the Destination IP Address you configured for your FTP <u>Virtual Server</u> and you must also have the same port range as configured in your internal F5 BIG-IP LTM <u>iRule</u>.

🤊 🐨 🔍 * 🔍 * 🔍 🖉 🔢 🗱	8) 4: 8 8 7 × 5 5 5 5 5 6 1 8	
🗋 Report [I Status 🏠 VFS 🗐 Server	FTP Settings	
report Status VrS Server Default Server Group LocalHost Source SAuthSite Source Groups Commands Commands Source Advanced Workflows Event Rules OntxternalUpload OntxternalUpload OntxternalUpload Office Gateway Event (Ctrl+F)	FTP Settings FTP Options Encoding: UTF-8 Auto-detect Allow site-to-site transfer (FXP - may place server at risk to 'bounce' attacks) Allow FTP client anti-timeout measures Allow FTP client anti-timeout measures Allow multi-part transfers (COMB command) Allow multi-part transfers (COMB command) Allow integrity checking (XCRC command) Allow integrity checking (XCRC command) Allow integrity checking (XCRC command) Passign Passive mode IP address IP: [11.11.11.11 (If you want to use the same address as this Site's home IP, leave 0.0.0.0 here) Port range from: 28005 To: 28010 V Message override Connection (banner) message: V User limit reached message: V V Quit session message: V V OK Cancel V	est practices re protocols. re nfig nfig sunt management transactions e peaccount rvices and AS2)

Conclusion

If you have configured the F5 BIG-IP LTM, EFT, and DMZ Gateway as described in this document, your system should be able to pass the same testing criteria as used in our testing.

If you need assistance with this configuration, please contact your Globalscape account manager or Globalscape Support at <u>https://www.globalscape.com/support</u>.