

This Quick Start Guide provides the standard installation processes for either an FX Series ADC or Remote.

## 1.1 Unpacking

- Inspect shipping containers for damage. If shipping containers are damaged, keep them until the contents of the shipment have been carefully inspected and checked for normal operation.
- The FX Series appliance is packaged in pre-formed, reusable, cardboard cartons containing foam spacing for maximum shipping protection.
- Unpack the appliance as follows:

<u>Step</u> <u>Procedure</u>

- 1 Remove the appliance, power cord and cables from the carton.
- 2 Save the packing material for storage or reshipment purposes.
- 3 Inspect the appliance for any damage incurred during shipment.
- 4 Check the equipment and accessories against the packing list to ensure the shipment is correct.

#### 1.1.1 Packing List

Acceleration Appliance

Read Me First Guide

- 1 Power Cord
- 2 Cat5e Blue 7ft UTP Snagless Cable
- 1 Cat5e Crossover Orange 7ft UTP Snagless Cable
- 1 Null Modem 6ft Cable
- 4 Cage Nuts 10-32
- 4 Screws, 10-32 3/4 in

# **1.2** User Interfaces and Installations Patterns

#### 1.2.1 User Interfaces

The FX Series supports a basic menu-driven interface, which is accessible using the console port (eth0) or a web-based graphical user interface (GUI). Initial network configurations are managed thru the console connection, and the optimization and general operations functions are managed via the GUI. The PASSWORD is only configurable via the console connection for security reasons.

- a) There are three alternate methods to connect to the FX Series Appliance
  - a. Attach a Monitor, keyboard and mouse to device.
  - b. Connect the supplied serial cable with a setting of (19200,N,8,1)
  - c. Attach a cross-over cable to the eth1 interface which has a static IP address of 169.254.55.55
- b) To connect to the GUI, use any PC with a Web Browser to access:

http://yourFxRemoteHostname:10000 The default USERID and PASSWORD are "comtech" and "comtech" for both the console and the GUI.

### **1.2.2** Standard Installation Patterns

Depending on the environment, there are these specific installations that can be used.

- a. Bridged ("In-Path") The FX Series will inspect traffic sent and received on the bridged interface ports.
- b. Routed The FX Series will have request and response traffic redirected to it from an external source, such as a router.
- c. WCCP Allows you to configure the settings for support of the Cisco "Web Cache Communication Protocol" (WCCP).

# 1.3 Documentation Availability

Before you try to install the FX Series appliance on your network, please read this documentation and also refer to the *Installation Patterns Section* of the Admin Guide.

Current Documentation for this appliance can be found on these locations.

#### On the Comtech EF Data web site:

http://www.comtechefdata.com/stampedeDocs.asp

www.comtechefdata.com

- 1 Under Support Information, Click on Manuals
- 2 Under RAN & WAN Optimization, click on Stampede FX Series

#### On the appliance:

To connect to the GUI, use any PC with a Web Browser to access:

- 1 Attach a cross-over cable to the eth1 interface which has a static IP address of 169.254.55.55
- 2 Login using the USERID and password of "comtech" and "comtech"
  - a. Using the web GUI
  - b. Click on the FX Series Appliance Administration link for the Main Index

**NOTE:** The FX Series Remote Main Index is functionally identical with the FX ADC Main Index shown here.



Click on Documentation from the Main Index To view a document, click on the link in the left column of each row of the table. You can right click on the link and choose "Save target as" to save a copy of the ".pdf" file to your desktop.

## 1.4 Configure Appliance Management Address – All Installation Patterns

Log into the appliance via console or SSH session using the username: comtech and password: comtech

- 1 Select option 1 "Configure appliance"
- 2 Select option 1 "Configure network settings"
- 3 Select option 4 "Configure TCP/IP for eth0 Ethernet Port"
- 4 Select option 1 "Configure DHCP"
  - a. Enter no and press Enter key (disable DHCP for this interface)
- 5 Select option 2 "Configure IP Address"
  - a. Enter the IP address of the appliance and press enter
- 6 Select option 3 "Configure Netmask"
  - a. Enter the subnet mask and press the Enter key
- 7 Select option 0 "Return to previous menu"
- 8 Select option 3 "Configure Default Gateway"
  - a. Enter the default gateway IP address and press the Enter key

After the cabling step identified in the specific pattern below, verify network connectivity by doing a ping of the appliance address from an external device.

•Support Information	- 1
Manuals	
•Stampede FX Series Documentation - 🛱	<b>GPEDE</b>
Manuals	_
Current Version To view a manual, click an icon below. To download a manual, right click o choose "Save Target As"	the icon and
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# 1.5 FX Series Installation Pattern (In-Path Bridged)

### 1.5.1 Cable the Appliance

The eth2 (LAN) and eth3 (WAN) ports both need to be connected to a switch or router in which:

- 1. The eth2 (LAN) port is on the link closest to the:
  - a. Backend servers if the appliance is an FX-ADC.
  - b. Clients if the appliance is a FX-Remote.
- The eth3 (WAN) port is on the link closest to the satellite modem.

### 1.5.2 Configure the Appliance

Login to the appliance through the browser interface at: http://{IP\_address\_of\_the\_appliance}:10000
1. Enter the default user name "comtech" and the default

- password "comtech".
  - a. Click Login.
- 2. Click Configuration -> General Settings
  - a. Change "Traffic interception mode" to "Bridged". Iraffic Interception
  - b. Click Save. Traffic interception mode Bridged
- 3. Click In-Path Interfaces
  - a. Click the Add button to add a new in-path interface.
    - Enter the VLAN ID of 0. If no VLAN tagging is to be used. Use the VLAN ID of the VLAN if traffic is to be VLAN tagged
    - Enter the IP Address.
    - Enter the Netmask.
    - Enter the Gateway.
    - Enter any static routes needed in the "Routes" field.
  - b. Click "Add In-Path Interface".
  - c. Click the "Return to Configuration" link.
- 4. Click on LAN Interfaces.
  - a. Click on the "Add" button to add a new LAN interface.
    - Select "eth2" in the "Physical interface" selection box.
    - In the "In-Path Interface(s)" selection box, click the IP address of the in-path interface \*from above\*.
    - In the "Untagged in-path interface" selection box, select the IP address of the in-path interface \*from above\*. Select "None" if the VLAN tag is to be propagated across the WAN.
  - b. Click "Add LAN Interface".
  - c. Click the "FX Series Administration Index" link at the top of the page.

Configuration->In-Path Interface->Edit				
In-Path Interface Definition	n			
VLAN ID				
Status	Disabled Enabled			
Address				
Netmask				
Gateway				
Routes				
Router poining Boll address	Ulsabled Ulsabled			
SNMP version	0 20 0 3			
Poll community	0 20 0 5			
Poll interval (seconds)				
In-band management	Disabled Enabled			
Change requires restart				
Comment				
Add In-Path Interface				
Return to In-Path Interface				
total to in r dir mondeo				

Series Administration Index Help..

Active Physical interface Comment	© No © Yes eth2 ▼	
Speed MTU	Auto  1500	
In-Path interface(s)	192.168.4.40 VLAN 400 192.168.3.30 VLAN 300 192.168.2.20 VLAN 200 192.168.1.10 VLAN 500	
Untagged in-path interface	None	
Untagged choice must be a selected		
In-Path interface		
Add LAN Interface		
Deturn to LAN Inter	facas	

Configuration->LAN Interfaces->Edit

5. Click "Status", then click "Real-Time Monitor", then click "Restart Service".



# 1.6 FX Series Installation Pattern (Routed)

### **1.6.1** Cable the Appliance

Connect the eth3 (WAN) port to a switch or a router.

## 1.6.2 Configure the Appliance

Login to the appliance through the browser interface at: http://{IP\_address\_of\_the\_appliance}:10000

- 1. Enter the default user name "comtech" and the default password "comtech".
  - a. Click Login.
- 2. Click Configuration -> General Settings
  - a. Change "Traffic interception mode" to "Routed" Traffic Interception
  - b. Click Save Traffic interception mode Routed
- 3. Click In-Path Interfaces
  - a. Click the Add button to add a new in-path interface.
    - Enter the VLAN ID of 0, if no VLAN is to be tagged. Use the VLAN ID of the VLAN if traffic is to be VLAN tagged.
    - Enter the IP Address.
    - Enter the Netmask
    - Enter the Gateway
    - Enter any static routes needed in the "Routes" field.
  - b. Click "Add In-Path Interface"
  - c. Click the "Return to Configuration" link
- 4. Click on LAN Interfaces.
  - a. Click on the "Add" button to add a new LAN interface.
    - Select "eth3" in the "Physical interface" selection box.
    - In the "In-Path Interface(s)" selection box, click the IP address of the in-path interface \*see above\*.
    - In the "Untagged in-path interface" selection box, select the IP address of the in-path interface \*see above\*. Select "none" if the VLAN tag is to be propagated across the WAN.
  - b. Click "Add LAN Interface".
  - c. Click the "FX Series Administration Index" link at the top of the page.

Configuration->In-Path Interface->Edit				
In-Path Interface	Definition			
VLANID				
Status	Disabled			
Address				
Netmask				
Gateway				
Routes				
Router polling	Disabled			
Poll address				
SNMP version	© 2c © 3			
Poll community	(aba.			
Foil Interval (seco	nius)			
In-band managem Change requires re	Disabled C Enabled			
Comment				
Comment Add In-Path Interface				
Comment Add In-Path Interface				
Comment Add In-Path Interface Return to In-Path Ir eries Administration Configurat	Index Help Lindex Help Lion->LAN Interfaces->Edit			
Comment Add In-Path Interface Return to In-Path Ir eries Administration Configurat AN Interface Defin ctive	Index Help Lindex Help Lion->LAN Interfaces->Edit			
Comment Add In-Path Interface Return to In-Path Ir eries Administration Configurat AN Interface Defin ctive hysical interface	tterface Index Help tion->LAN Interfaces->Edit tion No Yes oth2 ~			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defin ctive hysical interface omment	tterface Index Help tion->LAN Interfaces->Edit tion © No © Yes cth2 ▼			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defini ctive hysical interface omment peed	Iterface Index Help tion->LAN Interfaces->Edit ition No Yes oth2 Auto			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defini ctive hysical interface omment peed TU	Iterface Index Help tion->LAN Interfaces->Edit ition No Yes oth2 Auto 1500			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defin ttive hysical interface omment peed ITU -Path interface(s)	Index         Help           tion->LAN Interfaces->Edit           ition           No         Yes           cth2			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defin ctive hysical interface omment peed ITU h-Path interface(s) ntagged in-path	Index       Help         tion->LAN Interfaces->Edit         iiion->LAN Interfaces->Edit         iiion         No       Yes         oth2         192:168.4 40 VLAN 400         192:168.3 30 VLAN 300         192:168.1 10 VLAN 400         192:168.1 10 VLAN 500			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defin ctive hysical interface omment peed ITU -Path interface(s) ntagged in-path iterface	Index       Help         tion->LAN Interfaces->Edit         ition         No       Yes         cth2         Iso         192.168.30 VLAN 300         192.168.30 VLAN 300         192.168.30 VLAN 300         192.168.10 VLAN 400         192.168.20 VLAN 200         192.168.10 VLAN 500			
Comment Add In-Path Interface Return to In-Path Interface eries Administration Configurat AN Interface Defin ctive hysical interface omment peed ITU Path interface(s) ntagged in-path iterface intagged choice wist be a colorated	Interface         Index       Help         tion->LAN Interfaces->Edit         ition         Interface         No       Yes         cth2         192       168.3 0 VLAN 300         192       168.3 0 VLAN 300         192       168.3 0 VLAN 300         192       168.2 VLAN 200         192       168.1 10 VLAN 500			

5. Click "Status", then click "Real-Time Monitor", then click "Restart Service".

Return to LAN Interfaces



# 1.7 FX Series Installation Pattern (WCCP)

### 1.7.1 Cable the Appliance

Connect the eth2 (LAN) port to a switch or a router.

## 1.7.2 Configure the Appliance

Login to the appliance through the browser interface at:  $\label{eq:http://{IP_address_of_the_appliance}:10000$ 

- 6. Enter the default user name "comtech" and the default password "comtech".
  - a. Click Login.
- 7. Click Configuration -> General Settings
  - c. Change "Traffic interception mode" to "WCCP" Traffic Interception d. Click Save Traffic interception mode WCCP

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- 8. Click In-Path Interfaces
  - a. Click the Add button to add a new in-path interface.
    - Enter the VLAN ID of 0.
    - Enter the IP Address.
    - Enter the Netmask
    - Enter the Gateway
    - Enter any static routes needed in the "Routes" field.
  - b. Click "Add In-Path Interface"
  - c. Click the "Return to Configuration" link

#### 9. Click on LAN Interfaces.

- a. Click on the "Add" button to add a new LAN interface.
  - Select "eth3" in the "Physical interface" selection box.
  - In the "In-Path Interface(s)" selection box, click the IP address of the in-path interface \*see above\*.
  - In the "Untagged in-path interface" selection box, select the IP address of the in-path interface \*see above\*.
- b. Click "Add LAN Interface".
- c. Click the "FX Series Administration Index" link at the top of the page.
- d. Review and complete the configuration for WCCP as shown on the next page.

**NOTE:** More information is available in the WCCP Section of the FX Series Administration Guide v6.0.1 Section 5.3.

In-Path Interface I VLAN ID	Definition
Status	Disabled C Enabled
Address Netmask Gateway	
Routes	
Router polling Poll address SNMP version Poll community Poll interval (seco	© Disabled © Enabled © 2c © 3
In-band managem Change requires re	nent
Comment Add In-Path Interface	Iterface
Comment Add In-Path Interface Return to In-Path Interface Series Administration Configurat AN Interface Defin Active Physical Interface	tterface Index Help_ tion>LAN Interfaces->Edit ition © No © Yos ett2 ▼
Comment Add In-Path Interface Return to In-Path Interface Series Administration Configurat AN Interface Defin Active Physical Interface comment	tterface Index Help_ tion->LAN Interfaces->Edit ition No ♥ Yos eth2 ▼
Comment Add In-Path Interface Return to In-Path Interface Series Administration Configurat AN Interface Defini Active Physical interface Comment Speed ATU	tterface Lindex Help_ tion->LAN Interfaces->Edit ition No ○ Yos eth2 ▼ Auto ▼ 1500
Comment Add In-Path Interface	Index         Help_           Lindex         Help_           tion->LAN Interfaces->Edit           Ifion         No           No         Yos           eth2
Comment Add In-Path Interface Return to In-Path Interface Series Administration Configurat AN Interface Defin Active Physical interface Comment Speed MTU n-Path interface(s) Jutagged in-path nterface Untagged choice must be a selected in-Path interface	Index       Help_         Lindex       Help_         tion->LAN Interfaces->Edit         Ifion       No         No       Yos         eth2          Auto       ▼         1500          192 168.4 40 VI AN 400       192 168.330 VLAN 300         192 168.2 20 VLAN 200       192 168.1.10 VLAN 500         None



- 10. Click "WCCP"
  - a. Click "Add WCCP Definition"
  - Select the IP address of the interface that will send the WCCP messages to the router in the "Source IP address" selection box.
  - c. Enter the routers IP address in the "Router address" field.
  - d. Select the local interface that will receive the GRE traffic if using GRE redirection. If using L2 redirection leave blank.
  - e. If using GRE redirection enter the router identifier of the router in the "Remote GRE tunnel address" field. If using L2 redirection leave blank.
  - f. Use default value for "Enablement".
  - g. Use default value for "Critical".
  - h. Select Redirection method.
  - i. Select the same value used for Redirection method.

Source IP address	192.168.4.40 VLAN 400	•		
Router address				
Local GRE tunnel address	▼			
Remote GRE tunnel				
Enablement	Disabled Enabled	Enabled		
Critical	Disabled Finabled	Disabled		
Redirect method	🔘 L2 🔘 GRE	GRE		
Return method	🖲 L2 🔘 GRE	GRE		
Assignment scheme	🔘 Mask 🔘 Hash	Hash		
Password				
Service group number			96	
Redirect based on	Source IP Dest IP	Dest IP		
Accept traffic for:	Specific ports	rts Specific po	orts	
Ports		80		
Ports refer to	Dest Source	Source		
Use additional service group	$\bigcirc$ Disabled $\bigcirc$ Enabled	Disabled		
User-facing service	group number			99
Redirect based on	Source IP Dest IP	Source IP		
Comment				
Add WCCP Definition				

- j. For L2 use Mask Assignment scheme. For GRE use Hash Assignment scheme. \* This may differ on highest end Cisco equipment.
- k. Leave the password field blank, unless one was configured for WCCP on the Cisco device.
- I. If using "web-cache" WCCP redirection (no source IP address preservation) enter 0 in the "Service group number" field. If using source IP address preservation use the default value.

NOTE: See FX Series Admin Guide v6.01 Section 5.3 for details and difference.

- m. Use the default values for "Redirect based on", Accept traffic for", and "Ports".
- n. If using source IP address preservation select "Enabled" for "Use additional service group". If using "web-cache" default this value.
- o. Click "Add WCCP Definition"
- 11. Click "Status", then click "Real-Time Monitor", then click "Restart Service".