

See every bit, byte, and packet®

EdgeSafe Bypass TAP P10GxxBPE | 1.19.3

User Manual



Introduction	3
Additional Specifications	3
1 Dashboard	4
1.1 Bypass	4
1.2 Span	5
1.3 SPAN (Packet Injection)	5
1.4 Breakout	6
1.5 Filter	6
1.6 Aggregate	7
1.7 Filter TAP	7
1.8 Bypass Filter	8
2 System	9
2.1 System Info	10
2.2 General	10
2.3 Admin	10
2.3.1 Groups	11
2.3.2 Users	11
2.3.3 Authentication	12
2.4 Network Settings	13
2.5 Date & Time	14
2.6 Syslog	14
2.7 SNMP	15
2.8 Export Configuration	15
2.9 Import Configuration	16
2.10 Software Upgrade	16
2.11 Reboot	17
3 Port Information	18
3.1 Port Configuration	18
3.2 Port Description	18
3.3 Set Speed	19
3.4 Mode	19
3.5 Port Statistics	19
4 Breakout Mode	20
4.1 Port Configuration	22
4.1.1 Port Description	22
4.1.2 Set Speed	22
4.1.3 Mode	22
4.1.4 Port Statistics	22



5 Bypass Mode	23
5.1 Bypass Name	24
5.2 Heartbeat Settings	25
5.3 TAP Settings	25
6 Aggregate Mode	28
6.1 Port Configuration	29
6.1.1 Port Description	30
6.1.2 Set Speed	30
6.1.3 Mode	30
6.1.4 Port Statistics	30
7 Filter Mode	31
7.1 Filter Templates	33
7.2 Config Maps	34
7.2.1 Config Maps	35
7.2.2 Ingress	35
7.2.3 Filter	36
7.2.4 Egress	36
7.2.5 Config Map Save	37
7.2.6 Modify a Config Map	37
7.2.7 Config Map Statistics	38
7.2.8 Delete Config Map	38
7.2.9 Config Map Priority	39
7.2.9.1 Method 1	39
7.2.9.2 Method 2	39
7.2.10 Enable and Disable Config Map	40
7.2.10.1 Disable Config Map	40
7.2.10.2 Enable Config Map	40
8 Filter Tap Mode	41
8.1 Filter Templates	43
9 Bypass Filter Mode	44
9.1 Bypass Tap Name	45
9.2 Heartbeat Settings	46
9.3 TAP Settings	46
10 Span Mode	50
11 Span Packet Inject Mode	52



Bypass TAP EdgeSafe Bypass TAP | P10GxxBPE | 1.19.3

Introduction

Garland's 1/10G EdgeSafeTM Bypass TAPs, are purpose-built to provide the ultimate failsafe device that eliminates single points of failure, reducing network downtime, without compromising the network.

Bypass TAP "Inline lifecycle management" allows you to sandbox new tool deployments, manage updates, install patches, perform maintenance or troubleshooting and validate out-of-band, without impacting the network.



Additional Specifications

Voltage: 5V DC +/-5% Current: < 6 Amps Max. Power Consumption (Fiber SFP): < 15 Watts Max Power Consumption (Copper): < 22 Watts Ambient Temperature: 0C to +40C / +32F to +104F Operating Re. Humidity: 90% non-condensing

Dimensions (HxWxD): 1.3" x 3.9" x 9.43" 33.02mm x 99.06mm x 239.552mm Weight: 1.0 lbs 0.4539592 kg



1 Dashboard

The P10GXXBPE supports the following modes of operation:

Breakout
Bypass
Span
Span Packet Inject

Filter Aggregate Filter Tap Bypass Filter

The dashboard, specifically the port function, menu bar options, and LED operation will vary based on the mode selected as described below.

1.1 Bypass



Port 1 - L/A1 Port 2 - L/A2 BP Port 3 - L/A Port 3 - H/M Port 4 - L/A Port 4 - H/M	Network Port Link/Activity LED Network Port Link/Activity LED Bypass LED Inline Appliance Link/Activity LED N/A Inline Appliance Link/Activity LED
Port 4 – H/M	N/A



1.2 Span

Biee every lift, hyte, and packet*	Dashboard Port Info System		Welcome admin Log out
		Mode Selected: Span P10GMSBPE	

Network Port Link/Activity LED
Span Port Link/Activity LED
N/A
Span Port Link/Activity LED
N/A
Span Port Link/Activity LED
N/A

1.3 SPAN (Packet Injection)

Ban every list, byte, and packat*	Dashboard Port Info	System							Welcome admin Log out
			1	2	BP● L/A1 L/A2	H/M L/A	H/M L/A		
			Mode Selected: Spar Span (Packet Inje	(Packet Inject) ct) v Set				P10GMSBPE	

Port 1 - L/A1 Port 2 - L/A2	Network Port Link/Activity LED
BP	N/A
Port 3 – L/A	Span Packet Inject Port Link/Activity LED
Port 4 – L/A	Span Packet Inject Port Link/Activity LED
Port 4 – H/M	N/A

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1.4 Breakout

Dashboard Port Info System		Welcome admin Log out
	Image: Brown of the second	
	Mode Selected: Breakout ProGMSBPE Breakout Set	

Port 1 - L/A1	Network Port Link/Activity LED
Port 2 - L/A2	Network Port Link/Activity LED
BP	N/A
Port 3 – L/A	Breakout Port Link/Activity LED
Port 3 – H/M	N/A
Port 4 – L/A	Breakout Port Link/Activity LED
Port 4 – H/M	N/A

1.5 Filter



Port 4 – L/A Filter Port Link/Activity LED Port 4 – H/M N/A	Port 1 - L/A1 Port 2 - L/A2 BP Port 3 – L/A Port 3 – H/M	Filter Port Link/Activity LED Filter Port Link/Activity LED N/A Filter Port Link/Activity LED
Port 4 – H/M N/A	Port 3 – H/M Port 4 – L/A	N/A Filter Port Link/Activity LED
	Port 4 – H/M	N/A



1.6 Aggregate

Dashboard Port Info Sy Time overy the topic well persons	stem	Welcome admin Log out
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
	Mode Selected: Aggregate PloGMSBPE	
Port 1 - L/A1	Network Port Link/Activity LED	

Port 1 - L/A1	Network Port Link/Activity LED
Port 2 - L/A2	Network Port Link/Activity LED
BP	N/A
Port 3 – L/A	Aggregate Port Link/Activity LED
Port 3 – H/M	N/A
Port 4 – L/A	Aggregate Port Link/Activity LED
Port 4 – H/M	N/A

1.7 Filter TAP



Port 1 - L/A1	Network Port Link/Activity LED
Port 2 - L/A2	Network Port Link/Activity LED
BP	Bypass LED
Port 3 – L/A	Inline Appliance Link/Activity LED
Port 3 – H/M	N/A
Port 4 – L/A	Inline Appliance Link/Activity LED
Port 4 – H/M	N/A

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1.8 Bypass Filter

Bors sourcy lise, liyete, and packet*	Dashboard	Bypass Taps	Filters F	Port Info System							Welcome admin	Log out
				1	2	BP L/A1 ● L/A2 ●	H/M L/A • • 3	H/M L/A				
				Mode Selected: Bypass Filter	▼ Set				P10GMSBPE			

Network Port Link/Activity LED
Network Port Link/Activity LED
Bypass LED
Inline Appliance Link/Activity LED
N/A
Inline Appliance Link/Activity LED
N/A



2 System

The following configuration options may be displayed, modified, enabled, or disabled under the System panel.

System Info General Admin Network Settings Date & Time Syslog SNMP Export Configuration Import Configuration Software Upgrade Reboot

See every tat, tryte, and packet	Dashboard	Bypass Taps	Port Info	System							Welcome admin Log out
				1	2	BP L/A1 ● L/A2 ●	H/M L/A • • 3	H/M L/A			
				Mode Selected: Bypa	v Set				P10GM	ISBPE	

1. Select System on the Dashboard Menu bar.

GARLAN	Dashboard Bypass Taps Port Info System	Welcome ad
System Info		
General	System Information	
Admin	Chassis Name Chassis Model P10GMS8PE	
Network Settings	Chassis Serial 23690020020 MAC Address 10:93:c5:f2:2e:f4	
Date & Time	Software Version 1.19.3	
Syslog		
Snmp		
Export Configuration		
Import Configuration		
Software Upgrade		
Reboot		
Software Upgrade Reboot		

The System panel will be displayed. The system configuration options will be displayed on the left side of the panel.



2.1 System Info

The System Information panel displays the following.

Chassis Name Chassis Model Chassis Serial Number MAC Address Software Version

2.2 General

The following configuration options may be displayed or modified.

Chassis Name Key Press Timeout

1. Select General.

The panel will display the current configuration.

- 2. Select Edit Configuration.
- 3. Enable, disable or modify the desired options.
- 4. Select Save to save updates.
- 5. Select Cancel to return to the General System Settings panel.

2.3 Admin

The following configuration options may be displayed, modified, enabled, or disabled.

Groups Users Local Authentication TACACS Authentication

1. Select Admin.

The panel will display the current configuration.

The default user is "admin/gtadmin1". The "admin" user privileges are defined by the default group "admin". Changes to the default user "admin" and group "admin" are allowed. However, the "admin" user or group "admin" may not be deleted.



2.3.1 Groups

The group defines the authorization for a user or group of users. A group may be used for local or TACACS authorization. In Use "true" means that there is at least one local user assigned to the group. If a group is used by TACACS, the In Use will indicate "false".

1. Select Groups + to create a new group.

The Create New Group panel will be displayed.

- 2. Enter the Group Name.
- 3. Select the privileges for the new group.
- 4. Select Save to save updates.
- 5. Select Cancel to return to the Admin Settings panel.

The new group will be displayed on the Admin Settings panel.

6. Edit the group privileges by selecting the pencil.

7. Deleted the group by selecting the Red X. If a group has at least one local user assigned it cannot be deleted.

2.3.2 Users

Users displayed on the Admin Settings panel are for local authentication only.

1. Select Users + to create a new user.

The Create New User panel will be displayed.

- 2. Enter the Username.
- 3. Enter the Password.
- 4. Select the group the user will be assigned.
- 5. Select Save to save updates.
- 6. Select Cancel to return to the Admin Settings panel.

The new local user will be displayed on the Admin Settings panel.

- 7. Edit the username, password, or assigned group by selecting the pencil.
- 8. Delete the local user by selecting the Red X.



2.3.3 Authentication

Authentication allows for two options, Local or TACACS. Local or TACACS Authentication may be enabled or disabled independently and at least one option must be enabled.

1. Select Authentication Settings.

The Authentication Settings panel will be displayed. Local Authentication is enabled by default.

- 2. Select TACACS Authentication to enable.
- 3. Enter the TACACS Server IP Address.
- 4. Enter the TACACS Server Secret Word, optional.
- 5. Select Save to save updates.
- 6. Select Cancel to return the Admin Settings panel.
- 7. TACACS Test

This option may be used to verify the authentication of a TACACS user and password. The TACACS Test option will be active only if TACACS Authentication has been enabled.

The TACACS Test panel will appear.

- 7.1 Enter the Username.
- 7.2 Enter the Password.
- 7.3 Select Test.

The GUI will display the results of the authentication of the user and the password entered.

8. TACACS Ping

This option may be used to verify the network connectivity from the unit to the TACACS server. The TACACS Ping option will be active only if TACACS authentication has been enabled.

The GUI will display the results of the ping test.



2.4 Network Settings

The following configuration options may be displayed, modified, enabled, or disabled. Any change made to any network, setting option could cause network connectivity disruption for about 60 seconds.

DHCP	DNS 1
IP Address	DNS 2
Mask	SSL Certificate Loaded
Gateway	Using Uploaded SSL Certificate

1. Select Network Settings. The Network Settings panel will be displayed with the current configuration.

- 2. Select Edit Settings. The Network Settings panel will appear.
- 3. Enable, disable or modify the desired options.
- 4. Enable or disable Using Uploaded SSL Certificate.

This option may be enabled if an SSL cert.pem and key.pem files have been uploaded to the unit using the Add SSL Certificate option on the Network Settings panel.

- 5. Select Save to save updates.
- 6. Select Cancel to return the Network Settings panel.
- 7. Add SSL Certificate.

Uploading a custom SSL certificate involves two files. The cert.pem file and key.pem file. The unit will consider these files during the upload. If the files do not match or one of the files are corrupted, the unit will abort the upload. The Result Messages will be displayed in the GUI. Adding an SSL certificate will cause the GUI to restart. This could take up to 90 seconds. It may be required to refresh or restart the web browser.

8. Select Add SSL Certificate.

The Select Certificate and Select Key File panel will appear.

- 9. Select Choose File for Select Certificate.
- 10. Select the desired cert.pem file.
- 11. Select Open.
- 12. Select the Choose File for Select Key File.
- 13. Select the desired key.pem file.
- 14. Select Open.
- 15. Select Upload.
- 16. Select Restart Import to select a different cert.pem or key.pem file.
- 17. Select Cancel to return to the Network Settings panel



2.5 Date & Time

The following configuration options may be displayed, modified, enabled, or disabled.

Timezone Time UTC Date NTP IP Address NTP Pool

1. Select Date & Time.

The Date & Time Settings panel will be displayed with the current configuration.

2. Select Edit Settings.

The Date & Time Settings panel will be displayed.

- 3. Enable, disable or modify the desired options.
- 4. Select Save to save updates.
- 5. Select Cancel to return the Date & Time Settings panel.

2.6 Syslog

The following configuration options may be displayed, modified, enabled, or disabled.

Unit ID	Syslog Server IP Address
Protocol	Protocol Port Number

1. Select Syslog.

The Syslog Configuration panel will be displayed with the current configuration.

- 2. Select Edit Settings.
- 3. Enable Syslog Config.
- 4. Enable, disable or modify the desired options.
- 5. Select Save to save updates.
- 6. Select Cancel to return the Syslog Configuration panel.
- 7. Sys Log Test may be selected to send a test message to the server.



2.7 SNMP

The following configuration options may be displayed, modified, enabled, or disabled.

V2 Read/Write	V2 read Only	V3 MD5/DES	V3 SHA/AES
Access Port	Access Port	Access Port	Access Port
Trap Port	Trap Port	Trap Port	Trap Port
Trap IP Address Trap IP	Address Trap IP Address	sTrap IP Address	
Community Password	Community Password	User	User
	•	Auth Password	Auth Password
		Priv Password	Priv Password

1. Select SNMP.

The SNMP Configuration panel will be displayed with the current configuration.

2. Select Edit Configuration.

The SNMP Configuration panel will be displayed.

- 3. Select Enable SNMP Config.
- 4. Enable, disable or modify the desired options.
- 5. Select Save to save updates.
- 6. Select Cancel to return the Syslog Configuration panel.
- 7. SNMP Test may be selected to send a test trap to the server.

2.8 Export Configuration

This option creates a configuration file (exportCfg.json) that may be used to recover a unit. The exportCfg.json file may be renamed if desired. The exportCfg.json file does not contain Usernames, Passwords, Groups, or Network Settings.

1. Select Export Configuration.

The Export Configuration panel will be displayed.

2. Select Export.

The exportCfg.json file will be downloaded to the default download destination of the browser.



2.9 Import Configuration

This option allows a previously created configuration file (exportCfg.json) to be uploaded to the unit. The Chassis Model is the only option that is considered and must match, otherwise, the unit will reject the exportCfg.json file.

1. Select Import Configuration.

The Import Configuration panel will be displayed.

- 2. Select Choose File.
- 3. Select the desired exportCfg.json file.
- 4. Select Open.
- 5. Select Upload.

The unit will automatically verify the selected exportCfg.json file.

6. Select Configure.

The unit will import and load the exportCfg.json. An "import done" message will be displayed when complete. A reboot is not required.

2.10 Software Upgrade

This option allows the unit's firmware to be upgraded. The existing unit configuration will not be affected and maintained during the upgrade. It may be required to refresh or restart the web browser after the firmware upgrade is complete.

1. Select Software Upgrade.

The Update Firmware panel will be displayed.

- 2. Select Choose File.
- 3. Select the desired firmware file.
- 4. Select Open.

The new firmware file will be displayed.

5. Select Upload.

The unit will validate the firmware file.

The unit will install the firmware file.

The unit will reboot.

6. After the upgrade is complete. The GUI will refresh to the Login panel.



2.11 Reboot

This option allows the unit to be rebooted. The traffic will be affected for up to 3 minutes.

1. Select Reboot.

The Reboot Device panel will be displayed.

2. Select Reboot.

The unit will present an "Are you sure?" message.

3. Select OK.

A "rebooting" message will be displayed.

- A "Session timed out. Go to Login screen" message will be displayed.
- 4. Select Go.

The Login panel will be displayed.



3 Port Information

The following configuration options may be displayed, modified, cleared, or refreshed under the Port Info panel.

- 1. Port Number
- 2. Port Description
- 3. Link
- 4. Set Speed

- 7. SFP Data
- 8. Split
 9. Port Statistics

6. Mode

- 5. Speed
- Dashbard
 Bypass Taps
 Port Info
 System
 Welcome admin
 Log out

 Image: Image
- 1. Select Port Info on the Dashboard menu bar.

Ļ)ashboard	Bypass Taps	Port Info	System					
	_								
	Port	Configura	ation						
Save	Port	Description	Link	Set Speed	Speed	Mode		SFP Data	Split
Refresh	1	port description	•	10G 🗸	10G	Normal	~	GARLAND TECH SFP+SR	
	2	port description	•	10G 🗸	10G	Normal	~	GARLAND TECH SFP+SR	
	3	port description	•	10G 🛩	10G	Normal	~	FINISAR CORP. FTLX8574D3BCV	
	4	port description	•	10G 👻	10G	Normal	~	FINISAR CORP. ETLX8574D3BCV	
	Save	Save Port Refresh	Dashboard Bypass Taps Save Port Configura Save Port Description 1 port description 2 port description 3 port description 4 port description	Dashboard Bypass Tapo Port Into Port Configuration Interview Save Port Description Link 1 port description Interview Interview 2 port description Interview Interview 3 port description Interview Interview 4 port description Interview Interview	Dashboard Bypass Tape Port Info System Port Configuration Info Info Info Save Port Description Link Set Speed Info Info	Dashboard Bypass Taps Pot Info System Port Configuration Info System Save Port Description Link Set Speed 1 port description 106 106 2 port description 106 106 3 port description 106 106 4 port description 106 105 106	Dashboard Bypass Taps Pod Info System Port Configuration Info Normal Save Port Description Link Set Speed Speed Mode Refresh 1 port description 10G v 10G Normal 2 port description 10G v 10G Normal 3 port description 10G v 10G Normal 4 port description 10G v 10G Normal	Dashboard Pypass Tape Port Info System Port Configuration Info Normal Save Port Description Link Set Speed Mode 1 port description Info 10G 10G Normal V 2 port description Info Info Normal V 3 port description Info Info Normal V 4 port description Info Info Normal V	Dashboard Bypass tops Pott Info System Port Configuration Info Speed Mode SFP Data Save Port Description Link Set Speed Mode SFP Data 1 port description 10G 10G Normal GARLAND TECH 2 port description 10G 10G Normal GARLAND TECH 3 port description 10G 10G Normal FINISAR CORP 4 port description 10G 10G Normal FINISAR CORP

3.1 Port Configuration

The port configuration is displayed by default. The Port Description, Set Speed, and Mode may be modified. All other options are displayed only. However, they may be updated by selecting Refresh.

3.2 Port Description

1. Modify the port description by placing the cursor on Port Description for the desired port and pressing the left mouse button. The Edit Description panel will be displayed.

- 2. Place the cursor in the Description field and enter the new description.
- 3. Select Set to save updates.
- 4. Select Cancel to return to the Port Configuration panel.



3.3 Set Speed

- 1. Modify the port speed by selecting the pull-down panel for the desired port.
- 2. Select the desired speed.
- 3. Select Save to save updates.

3.4 Mode

- 1. Modify the port mode by selecting the pull-down panel for the desired port.
- 2. Select the desired mode. The available port modes are Normal, Loopback, Listen Only and Force Link.
- 3. Select Save to save updates.

3.5 Port Statistics

The following statistics may be displayed on the Port Statistics panel.

Port number	Receive Errors	Transmit Errors
Receive Packets	Transmit Packets	
Receive Discards	Transmit Discards	

1. Select Port Statistics on the Port Configuration panel.

The Port Statistics panel will be displayed.

- 2. Update the statistics by selecting Refresh.
- 3. Clear and refresh the statistics by selecting Clear.



4 Breakout Mode

In this mode, the network ports 1 and 2 and breakout ports 3 and 4 are defined by the system. LFP is supported on the network ports in this mode.



If a link is lost on one of the network ports. The TX will be disabled on the other network port. The RX for both network ports remain on.



The following configurations may be displayed, modified, cleared, or refreshed under the Port Info panel.

Port Number Port Description Link Set Speed Speed Mode SFP Data Port Statistics

Bas every bil, byte, and packet*	Dashboard	Port Info	System								Welcome admin	Log out
				1	2	BP • L/A1 L/A2	H/M L/A	H/M L/A				
				Mode Selected: Break Breakout	v Set				P10GMSBPE			

1. Select Port Info on the Dashboard Menu bar.

General bills bytes, and pack	, , oct⁺	Dashboard	Bypass Taps	Port Info	System				
Port Configuration									
Port Statistics		Port	Configura	ation					
	Save	Port	Description	Link	Set Speed	Speed	Mode	SFP Data	Split
	Refresh	1	port description	•	10G ¥	10G	Normal 🗸	GARLAND TECH SFP+SR	
		2	port description	•	10G ¥	10G	Normal 🗸	GARLAND TECH SFP+SR	
		3	port description	•	10G 🛩	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV	
		4	port description	•	10G 🛩	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV	

The Port Configuration panel will be displayed.



4.1 Port Configuration

The port configuration is displayed by default. The Port Description, Set Speed, and Mode may be modified. All other options are displayed only. However, they may be updated by selecting Refresh.

4.1.1 Port Description

1. Modify the port description by placing the cursor on Port Description for the desired port and pressing the left mouse button. The Edit Description panel will be displayed.

- 2. Place the cursor in the Description field and enter the new description.
- 3. Select Set to save updates.
- 4. Select Cancel to return to the Port Configuration panel.

4.1.2 Set Speed

- 1. Modify the port speed by selecting the pull-down panel for the desired port.
- 2. Select the desired speed.
- 3. Select Save to save updates.

4.1.3 Mode

- 1. Modify the port mode by selecting the pull-down panel for the desired port.
- 2. Select the desired mode. The available port modes are Normal, Loopback, Listen Only and Force Link.
- 3. Select Save to save updates.

4.1.4 Port Statistics

The following statistics may be displayed on the Port Statistics panel.

Port number Receive Packets Receive Discards Receive Errors Transmit Packets Transmit Discards Transmit Errors

- 1. Select Port Statistics on the Port Configuration panel. The Port Statistics panel will be displayed.
- 2. Update the statistics by selecting Refresh.
- 3. Clear and refresh the statistics by selecting Clear.



5 Bypass Mode

In this mode, the network ports 1 and 2 and inline appliance ports 3 and 4 are defined by the system. The network ports are typically connected to network devices such as a server or router. The inline appliance ports are typically connected to an inline appliance or tool to monitor the network traffic. Heartbeat packets are transmitted bi-directionally from the inline appliance ports on the tap through the inline appliance or tool to monitor the health of the device



Port 1 (Network) Port 2 (Network) Port 3 (Inline Appliance) Port 4 (Inline Appliance)



Figure 1 Bypass Mode



The following configuration options may be displayed, modified, enabled, or disabled under the Bypass Taps panel.

Bypass Taps Panel Bypass Tap Name Tap Settings Heartbeat Settings

Bons novery like, layter, and packast'	Dashboard	Bypass Taps	Port Info	System							Welcome admin Log out
				1	2	BP● L/A1 L/A2	H/M L/A	H/M L/A			
				Mode Selected: Bypass Bypass	✓ Set				P10GMSBPE		

1. Select Bypass Taps on the Dashboard Menu bar

Date every bit, byte, and packet*	shboard Bypass Taps Port Info System			Welcome admin Log out
	,			
	P1	Inline	P2	
	✓ Settings			
	Heartbeats per second: 10			

The Bypass Taps panel will be displayed.

5.1 Bypass Name

- 1. Select the Pencil icon for the desired tap. The Tap Name panel will be displayed.
- 2. Enter the name.
- 3. Remove the name by placing the cursor in the name panel, backspace, or delete the current name.
- 4. Select the Check to save updates.
- 5. Select Cancel to return the Bypass Taps panel.



5.2 Heartbeat Settings

The following configuration options may be displayed or modified.

No. Of Lost HB Packets Heartbeats per Second

1. Select Settings on the Bypass Taps panel.

The Configure Heartbeat Settings panel will be displayed with the current configuration.

2. Enter the No. Of Lost HB Packets. Default is 10.

This is the number of heartbeats that must be lost on the inline appliance ports before any tap will switch to bypass.

3. Enter the Heartbeats per Second. Default is 10.

This is the number of heartbeats per second applied to the inline appliance ports for all taps.

- 4. Select Save to save updates.
- 5. Select Cancel to return the Bypass Taps panel.

5.3 TAP Settings

The following configuration options may be displayed, modified, enabled, or disabled.

Tap Modes Fail Mode LFP Reverse Bypass

1. Edit the Tap Settings, by placing the cursor on the tap and double-press the left mouse button. The Tap panel will be displayed.

2. Select Edit Tap Settings. The Configure Inline Appliance panel will be displayed.



3. Select the Tap Mode.

Active

Allows the tap to automatically switch from inline to bypass if an issue occurs with the inline appliance port(s), loss of link, or heartbeats. When the issue with the inline appliance port(s) is resolved, link, and heartbeats restored, the tap will automatically switch back to inline.





Force Bypass If selected, the tap will switch the traffic between the network ports with no regard for the inline appliance port(s), link, or heartbeats. Typically used during maintenance activities.



Figure 5 Bypass Mode (Force Inline)



Force Inline If selected, the tap bypass option is disabled. If an issue occurs with the inline appliance port(s), loss of link, or heartbeats, the traffic will go down.



4. Select the Fail Mode.

Open If power is lost to the unit. The traffic will switch between the network ports.

5. LFP If enabled and the link is lost on one of the network ports. The TX will be disabled on the other network port. The RX for both network ports remain on.

Figure 6 Bypass Mode (LFP)



6. Reverse Bypass If enabled and the inline appliance port(s) fail, loss of link, or heartbeats. The TX will be disabled on both of the network ports. The RX for both network ports remain on.

Figure 7 Bypass Mode (Reverse Bypass)



- 7. Select Accept to save updates. Save must additionally be selected on the Bypass Taps panel.
- 8. Select Cancel to return the Bypass Taps panel.



6 Aggregate Mode

In this mode, the network ports 1 and 2 and aggregate ports 3 and 4 are defined by the system. LFP is supported on the network ports in this mode.









If a link is lost on one of the network ports. The TX will be disabled on the other network port. The RX for both network ports remain on.



The following configurations may be displayed, modified, cleared, or refreshed under the Port Info panel.

Port Number	Speed
Port Description	Mode
Set Speed	Port Statistics

Bore every bie, byte, and packet	Dashboard Port Info Sy		Welcome admin Log out
		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
		Mode Selected Aggregate P10GMSBPE Aggregate Set	

1. Select Port Info on the Dashboard Menu bar.

	↓ v	Dashboard	Bypass Taps	Port Info	System						
Port Configuration											
Port Statistics Port Configuration											
	Save	Port	Description	Link	Set Speed	Speed	Mode	SFP Data	Split		
	Refresh	1	port description	•	10G 🗸	10G	Normal 🗸	GARLAND TECH SFP+SR			
		2	port description	•	10G 🗸	10G	Normal 🗸	GARLAND TECH SFP+SR			
		3	port description	•	10G 🗸	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV			
		4	port description	•	10G 🗸	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV			
								PTEX6574D3BCV			

The Port Configuration panel will be displayed.

6.1 Port Configuration

The port configuration is displayed by default. The Port Description, Set Speed, and Mode may be modified. All other options are displayed only. However, they may be updated by selecting Refresh.



6.1.1 Port Description

1. Modify the port description by placing the cursor on Port Description for the desired port and pressing the left mouse button.

The Edit Description panel will be displayed.

- 2. Place the cursor in the Description field and enter the new description.
- 3. Select Set to save updates.
- 4. Select Cancel to return to the Port Configuration panel.

6.1.2 Set Speed

- 1. Modify the port speed by selecting the pull-down panel for the desired port.
- 2. Select the desired speed.
- 3. Select Save to save updates.

6.1.3 Mode

- 1. Modify the port mode by selecting the pull-down panel for the desired port.
- 2. Select the desired mode. The available port modes are Normal, Loopback, Listen Only and Force Link.
- 3. Select Save to save updates.

6.1.4 Port Statistics

The following statistics may be displayed on the Port Statistics panel.

Port number	Receive Errors	Transmit Errors
Receive Packets	Transmit Packets	
Receive Discards	Transmit Discards	

- 1. Select Port Statistics on the Port Configuration panel. The Port Statistics panel will be displayed.
- 2. Update the statistics by selecting Refresh.
- 3. Clear and refresh the statistics by selecting Clear.



7 Filter Mode

In this mode, the unit functions as a 4 port packet broker. The traffic that is passed between the ports is determined by the config map(s) and filter(s) created. Config maps may be created between all four ports as desired.



Port 1 (Packet Broker) Port 2 (Packet Broker) Port 3 (Packet Broker) Port 4 (Packet Broker)







The following configuration options may be displayed, modified, enabled, or disabled under the Packet Broker panel.

Filter Templates Config Maps Statistics

Base every bit, hype, and packet."	Dashboard	Packet Broker	Port Info	System							Welcome admin Log out	
				1	2	BP O L/A1 L/A2	H/M L/A	H/M L/A				
			M	ode Selected: Filter Filter	▼ Set				P10GM	ISBPE		

1. Select Packet Broker on the Dashboard Menu bar.

Bee every bit, byte, and pack	Dashboard	Packet Broker	Port Info System										Welc	ome admin	Log out
Configuration Maps Filter Templates	Packet Br	oker Cont	figurations												
	Filters Egress Filters	Max Used 500 0 0 0	d Available 500 0												
	Save Refresh Clear Counters Create		Unters Create Co	fig Map F	Filter Templates	ected									
	Enable Priority	Name Ingress	s Ports Filter Match	Egress Ports	View Counts	Set Priority	Edit (select	te III 🗌)							



7.1 Filter Templates

Filter templates may be created as a pass-all, pass-by, or deny-by. Pass by or deny by templates may include multiple matching options to filter traffic. The options are considered by the system as (and) options. Thus, for traffic to pass it must match all defined options. Once a template is created it will appear on the Create Config Map panel and may be used to create an ingress filter. Template options may be modified when applied to a config map. Any option modification made will not change the original template. It is advisable to rename a filter applied to a config map if the original template options were modified.

1. Select Filter Templates on the Packet Broker Configurations panel. The Filter Templates panel will be displayed.

- 2. Select Create Template. The Create New Filter Template panel will be displayed.
- 3. Enter the template name. If no name is entered the system will automatically apply a name as follows, tmplt, tmplt(2), tmplt(3), etc.
- 4. Enter the description, optional.
- 5. Select the Template Type, Pass All, Pass By or Deny By.
- 6. If pass by or deny by was selected in Step 5, the options will be displayed as follows.

Source MAC Address / Source MAC Mask Destination MAC Address / Destination MAC Mask Ether Type Source IP Address / Source IP Mask Destination IP Address / Destination IP Mask Inner VLAN ID Outer VLAN ID DSCP IP Protocol L4 Source Port or Range L4 Destination Port or Range

- 7. Select Save Template once all desired option modifications have been completed.
- 8. The new filter template will appear on the Filter Templates panel.
- 9. The filter template may be modified by selecting the template name.
- 10. The filter template may be deleted by selecting the red X.



7.2 Config Maps

Config maps are unidirectional connections between an ingress port to an egress port(s).

1. Select Create Config Map on the Packet Broker Configurations panel.

These every life, and pairs	Cashboard Packet Broker Port Into System	Welcome admin Log out
Configuration Maps Filter Templates	Back To Map List	
	Name: . Z	
	Description: • 🖍	
	Available Filters 500 500 Available Egress Filters 00	
	Parts 01 08 02 04	
	Filter Templates New	
	Ingress Filter Egress Clear Map	

The Create Config Map panel will be displayed. Any previously created filter templates will be displayed along with the new options. Any port shaded gray can be used for a config map, any port shaded black may not be used.

2. Select the Name pencil icon to apply a name, optional. If no name is entered the system will automatically apply a name to the config maps as follows, map, map(1), map(2), etc.

- 3. Place the cursor in the Name panel and enter the name.
- 4. Select the Check to apply.
- 5. Select the Description pencil to apply a description, optional.
- 6. Place the cursor in the Description panel and enter the description, optional.
- 7. Select the Check to apply updates.



7.2.1 Config Maps

Config maps are unidirectional connections between an ingress port to an egress port(s).

1. Select Create Config Map on the Packet Broker Configurations panel.

	Dashboard Packet Broker Port Info System	Welcome admin Log out
Configuration Maps Filter Templates	Back To Map List	
	Name: 🗸	
	Description: • 🖌	
	Available Filters 500600 Available Egress Filters 00	
	Ports 01 03 02 04	
	Filter Templates New	
	Ingress Filter Egress Save Reset	

The Create Config Map panel will be displayed. Any previously created filter templates will be displayed along with the new options. Any port shaded gray can be used for a config map, any port shaded black may not be used.

2. Select the Name pencil icon to apply a name, optional. If no name is entered the system will automatically apply a name to the config maps as follows, map, map(1), map(2), etc.

- 3. Place the cursor in the Name panel and enter the name.
- 4. Select the Check to apply.
- 5. Select the Description pencil to apply a description, optional.
- 6. Place the cursor in the Description panel and enter the description, optional.
- 7. Select the Check to apply updates.

7.2.2 Ingress

1. Add an ingress port(s) 1 and/or 2 by placing the cursor on the desired port. Select with the left mouse button. Drag the port to the Ingress panel and release. Ports may be added in any combination. If ports 1 and 2 are added, then the traffic from the ports will be aggregated.



2. Remove a port by selecting the red X.

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7.2.3 Filter

1. Add filters by placing the cursor on the desired filter template. A previously created filter template or the new filter template option may be selected. Select with the left mouse button. Drag the filter template to the Filter panel and release it. The filter template will become an actual filter once the config map is saved. Filters may be added in any combination. If multiple filters are added, then the top filter is the highest priority. The filters are considered from top to bottom. A filter may be selected and moved up or down depending on priority preference.



2. Filter templates may be modified by selecting the green filter icon for the desired template.

The Edit Filter panel will be displayed.

Any option modification made will not change the original template. It is advisable to rename a filter if the original filter template options were modified.

3. Enter the filter name, optional. If no name is entered the system will automatically apply a name to the filter as follows, iFlt, iFlt(2), iFlt(3), etc.

4. Select Accept once all desired options have been modified.

5. Remove a Filter Template by selecting the red X.

7.2.4 Egress

1. Add an egress port(s) by placing the cursor on the desired port. Select with the left mouse button. Drag the port to the Egress panel and release. Ports may be added in any combination. If multiple ports are added, then 100% of the traffic will be sent to each port.

Figure 5 Egress Port(s)



2. Remove a port by selecting the red X.

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7.2.5 Config Map Save

1. Select Save to save the current configuration.

The "Save this configuration? (May take a few seconds.)" panel will be displayed.

- 2. Select OK to save the Config Map.
- 3. Select Cancel to disregard.

Been every list, byte, and packet	Dashboard Packet Broker Port Info System	Welcome admin Log out
Configuration Maps Filter Templates	Packet Broker Configurations	
	System Filters Max Used Available Filters 500 3 497 Egress Filters 0 0 0	
	Save Refresh Clear Counters Create Config Map Filter Templates Delete Selected	
	Image Image <t< td=""><td></td></t<>	

7.2.6 Modify a Config Map

1. Modify a config map by selecting the Edit icon. Modifications may be made using the create sections previously discussed.

Base sovery life, byte, and packet	Dashboard Packet Broker Port Info System	Welcome admin Log out
Configuration Maps Filter Templates	Packet Broker Configurations	
	Visc Visc Available Piters 500 3 497 Egress Filters 0 0 0	
	Save Refresh Clear Counters Create Config Map Filter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (select all)	
	✓ 1 map 13 0 13 14 ∧ ∨ Set 13 □	



7.2.7 Config Map Statistics

Config map statistics are displayed in the filter match column for each config map. The number displayed represents all packets that have passed through the config map.

- 1. Select Refresh to refresh the config map statistics.
- 2. Select Clear Counters to clear and refresh the config map statistics.
- 3. Select the View Counts icon to display individual statistics.

Map State	S: map		Close[x]
Clear Counts			Refresh Counts
Ingress	Filters	Egress	^
Port 01	0 Filter_1	0 Port 03	0
	Filter_2	0 Port 04	0
	Filter_3	0	
			•
			×

- 4. Select Refresh Counts to refresh the statistics.
- 5. Select Clear Counts to clear and refresh the statistics.
- 9. Select Close to return to the Packet Broker Configurations panel.

7.2.8 Delete Config Map

1. Select the Delete in the Delete column for the desired config map(s).

and the second second											
on Maps	Packet	Broker	Configur	ations							
plates	T donot	DIORCI	Connigun	ations							
	System Filte	ers Resource									
		Max	Used	Available							
	Filters	500	3	497							
	Lyress ritter		0	0							
	Save	Refresh	Clear Counters	Create Config	Map	er Templates		Delete S	Selected		
	Save Enable Pr	Refresh Iority Name	Clear Counters	Create Config	Map Filte	er Templates View Counts	S	Delete S et Prior	Selected	Edit	Delete (select all □)
	Save Pr	Refresh	Clear Counters	Create Config	Map Filte Egress Ports	View Counts	SI	Delete S et Prior	selected	Edit	Delete (select all)
	Save Pr	Refresh Iority Name 1 Traffic_ 2 Traffic	Clear Counters Ingress Ports A 01 B 01	Create Config Filter Match 0 0	Map Filte Egress Ports 03 04 03	View Counts du	Si A	Delete S et Prior	rity Set Set	Edit Cí	Delete (select all)

- 2. The Select All option may be selected to delete all config maps.
- 3. Select Delete Selected.



7.2.9 Config Map Priority

The config map priority needs to be considered when the same ingress port(s) is used in multiple config maps to send traffic to multiple egress ports. In this case, the config map with the highest priority will be considered first. In the following example, there are three config maps with ingress port 1. The Traffic_A config map is the highest priority 1, the Traffic_B config map is the next priority 2 and finally, the Traffic_C is the next priority 3.

	Dashboard Packet Broker Port	nfo System					Welcome admin Log	i out
Configuration Maps								
Filter Templates	Packet Broker Configur	ations						
	System Filters Resource							
	Max Used Filters 500 3	Available 497						
	Egress Filters 0 0	0						
	Save Refresh Clear Counters	Create Config Map Filte	r Templates	Delete Selected				
	Enable Priority Name Ingress Port	Filter Match Egress Ports	View Counts	Set Priority	Edit	Delete (select all)		
	✓ 1 Traffic_A 01	0 03 04	di	∧ ✓ Set	Ø			
	✓ 2 Traffic_B 01	0 03	di	∧ ∨ Set	ø			
	✓ 3 Traffic_C 01	0 04	di	∧ ∨ Set	Ø			
1								

Figure 7 Config Map System Considerations

Priority 1	1	1	Traffic_A	01	0	03 04	- at -	∧ v Set	ø		Config Map options (and)
						(or)					
Priority 2		2	Traffic_B	01	O	03	di	A V Set	G	0	Config Map options (and)
						(or)					
Priority 3	*	3	Traffic_C	01	0	04	di	A V Set	Ø		Config Map options (and)

The Priority of a config map may be changed to a higher or lower value using two methods.

7.2.9.1 Method 1

- 1. Select the up or down arrow for the config map.
- 2. Select Save to save updates.

7.2.9.2 Method 2

1. Select Set.

The Set Priority panel will be displayed.

- 2. Enter the priority in the Set New Priority panel.
- 3. Select Set to accept the priority value.
- 4. Select Cancel to disregard.
- 5. Select Save to save updates.

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7.2.10 Enable and Disable Config Map

Config maps may be enabled or disabled as desired. If a config map is enabled, it is in the database and available for traffic. If a config map is disabled, it is in the database and not available for traffic. If the config map has a green check, then it is enabled. If the config map has a red dash, then it is disabled.

	Dashboard	Packet Broker Port Ir	nfo System								Weico	me admin Log ou
Configuration Maps												
er Templates	Packet Brok	er Configura	ations									
	System Filters Reso	urce										Welcome admin Log out
	Max Filters 500 Egress Filters 0	Used 3 0	Available 497 0									
	Save	Clear Counters	Create Config	Map	r Templates		Delete S	elected				
	Enable Priority I	lame Ingress Ports	Filter Match	Egress Ports	View Counts	s	et Prior	ity	Edit	Delete (select all 🗌)		
	🖌 1 TI	affic_A	0	03 04	di	^	~	Set	Ø			
	- 2 T	affic_B 01	0	03	di	^	~	Set	ø			
		_								_		

7.2.10.1 Disable Config Map

1. Select the green check for the config map in the Enable column.

The green check will change to a red dash.

2. Select Save.

7.2.10.2 Enable Config Map

1. Select the red dash for the config map in the Enable column.

The red dash will change to a green check.

2. Select Save.



8 Filter Tap Mode

In this mode, the network ports 1 and 2 and filter tap ports 3 and 4 are defined by the system, however, there are no default config maps created between network ports 1 and 2 and filter tap ports 3 and 4. The traffic that is passed to the filter ports is determined by the config map(s) and filter(s) created. Config maps may be created from network port 1 to filter tap port(s) 3 and/or 4 as well as, network port 2 to filter tap port(s) 3 and/or 4. LFP is supported on the network ports in this mode.



If a link is lost on one of the network ports. The TX will be disabled on the other network port. The RX for both network ports remain on.



Filter Templates Config Maps Statistics

The following configuration options may be displayed, modified, enabled, or disabled under the Packet Broker panel.

GARAND A DEC DATA AND A DEC DATA See every list, inter, and packet*	Dashboard Pao	ket Broker Port Info	System						Welcome admin
			1	2	BP● L/A1 L/A2	H/M L/A	H/M L/A		
			Mode Selected: Filter Tap	▼ Set				P10GMSBPE	

1. Select Packet Broker on the Dashboard Menu bar.

Configuration Maps itter Templates Packet Broker Configurations System Filters Resource System Filters Resource Retrest Clear Counters Create Config Map Filter Templates Delete Selected Retrest Clear Counters Filter Match Egress Ports View Counts Set Priority Edit Delete Selected (Select all)	idmin Lo	Welcome admin	W																stem	o Syste	Port Inf	Broker Port	Packet	i P	ashboard	Das) (h N O L A		- 10
r Templates Packet Broker Configurations System Filters Resource Filters 500 0 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0																												tion Maps	figurat	Π
System Filters Resource Max Visad Pilters Sove Refresh Clear Counters Create Count Map Pilter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports Delete Selected																			S	ations	ura	Configu	er (ok	et Bro	ke	Pack	plates	Temp	er
System Filters Resource Max Used Available Filters 500 0 500 Egress Filters 0 0 0 Save Refresh Clear Counters Create Config Map Filter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (select all =)																														
Max Used Available Filters 500 0 600 Egress Filters 0 0 0 Save Refresh Clear Counters Create Config Map Filter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Sat Priority Edit Delete (select all 1)																							ource	Resou	ilters Re	n Fil	System			
Egress Filters 0 0 Save Refresh Clear Counters Create Config Map Filter Temptates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (select all -)																			e	Available 500		Used 0		Max 500	M		Filters			
Save Refresh Clear Counters Create Contg Map Filter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (gelect all)																				0		0		0	ilters 0	s Filt	Egress I			
Save Refresh Clear Counters Create Config Map Filter Templates Delete Selected Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (select all)																														
Enable Priority Name Ingress Ports Filter Match Egress Ports View Counts Set Priority Edit Delete (select all 1)												ected	Delete Sele		nplates	Iter Tem	Fil	Мар	e Config	Create C	rs	lear Counters	C	esh	Refres		Save			
										ete all 🗌)	Di (selec	Edit	Priority	Set	Counts	View	orts	Egress Por	tch E	Filter Matc	rts	Ingress Ports	lame	Na	Priority	e f	Enable			

The Packet Broker Configurations panel will be displayed.



8.1 Filter Templates

Filter templates may be created as a pass all or pass by. Pass by templates may include multiple matching options to filter traffic. The options are considered by the system as (and) options. Thus, for traffic to pass it must match all defined options. Once a template is created it will appear on the Create Config Map panel and may be used to create an ingress filter. Template options may be modified when applied to a config map. Any option modification made will not change the original template. It is advisable to rename a filter applied to a config map if the original template options were modified.

1. Select Filter Templates on the Packet Broker Configurations panel. The Filter Templates panel will be displayed.

- 2. Select Create Template. The Create New Filter Template panel will be displayed.
- 3. Enter the template name. If no name is entered the system will automatically apply a name as follows, tmplt, tmplt(2), tmplt(3), etc.
- 4. Enter the description, optional.
- 5. Select the Template Type, Pass All, or Pass By.
- 6. If pass by was selected in Step 5, the options will be displayed as follows.

Source MAC Address / Source MAC Mask Destination MAC Address / Destination MAC Mask Ether Type Source IP Address / Source IP Mask Destination IP Address / Destination IP Mask Inner VLAN ID Outer VLAN ID DSCP IP Protocol L4 Source Port or Range L4 Destination Port or Range

- 7. Select Save Template once all desired option modifications have been completed.
- 8. The new filter template will appear on the Filter Templates panel.
- 9. The filter template may be modified by selecting the template name.
- 10. The filter template may be deleted by selecting the red X.



9 Bypass Filter Mode

In this mode, the network ports 1 and 2 and inline appliance ports 3 and 4 are defined by the system, however, there are no default config maps created between network port 1 and inline appliance port 3 or between network port 2 and inline appliance port 4. The traffic that is passed to the inline appliance ports is determined by the config map(s) and filter(s) created. Config maps may be created from network port 1 to inline appliance port 3 as well as, network port 2 to inline appliance port 4.







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The following configuration options may be displayed, modified, enabled, or disabled under the Bypass Taps panel.

Bypass Taps Panel Bypass Tap Name Tap Settings Heartbeat Settings

Sine every bill, lyte, and jacket	Dashboard	Bypass Taps	Filters Port I	nfo System						Welcon	ne admin	Log out
				1	2	BP L/A1 L/A2	H/M L/A	H/M L/A				
			м	ode Selected: Bypass Filter	▼ Set				P10GMSBPE			

1. Select Bypass Taps on the Dashboard Menu bar.

Bee every bit, byte, and packet*	Dashboard Bypass Taps	Filters Port Info System			Welcome admin Log out
		/			
		P1	Inline	P2	
		✓ Settings			
		No. Of Lost HB Packets: 10 Heartbeats per second: 10			
1					

The Bypass Taps panel will be displayed.

9.1 Bypass Tap Name

1. Select the Pencil icon for the desired tap.

The Tap Name panel will be displayed.

- 2. Enter the name.
- 3. Remove the name by placing the cursor in the name panel, backspace, or delete the current name.
- 4. Select the Check to save updates.
- 5. Select Cancel to return the Bypass Taps panel.



9.2 Heartbeat Settings

The following configuration options may be displayed or modified.

No. Of Lost HB Packets Heartbeats per Second

1. Select Settings on the Bypass Taps panel.

The Configure Heartbeat Settings panel will be displayed with the current configuration.

2. Enter the No. Of Lost HB Packets. Default is 10.

This is the number of heartbeats that must be lost on the inline appliance ports before any tap will switch to bypass.

3. Enter the Heartbeats per Second. Default is 10.

This is the number of heartbeats per second applied to the inline appliance ports for all taps.

- 4. Select Save to save updates.
- 5. Select Cancel to return the Bypass Taps panel.

9.3 TAP Settings

The following configuration options may be displayed, modified, enabled, or disabled.

- Tap Modes Fail Mode LFP Reverse Bypass
- 1. Edit the Tap Settings, by placing the cursor on the tap and double-press the left mouse button.

The Tap panel will be displayed.

2. Select Edit Tap Settings.

The Configure Inline Appliance panel will be displayed.



3. Select the Tap Mode.

Active Allows the tap to automatically switch from inline to bypass if an issue occurs with the inline appliance port(s), loss of link, or heartbeats. When the issue with the inline appliance port(s) is resolved, link, and heartbeats restored, the tap will automatically switch back to inline.



Figure 3 Bypass Filter Mode (Bypass)





Force Bypass If selected, the tap will switch the traffic between the network ports with no regard for the inline appliance port(s), link, or heartbeats. Typically used during maintenance activities.



Force Inline If selected, the tap bypass option is disabled. If an issue occurs with the inline appliance port(s), loss of link, or heartbeats, the traffic will go down.



4. Select the Fail Mode.

5.

Op	en If powe	r is lost to the unit. The	traffic will switch betwe	een the network port	S.
LFP	If enabl on the	ed and the link is lost o other network port. The	n one of the network p RX for both network p	orts. The TX will be o orts remain on.	disabled
		Figure 6 Bypass Fil	ter Mode (LFP)		
	Loss of Link Network Port 1	TX is Disabled	TX is Disabled	Loss of Link Network Port 2	

6. Reverse Bypass If enabled and the inline appliance port(s) fail, loss of link, or heartbeats. The TX will be disabled on both of the network ports. The RX for both network ports remain on.

Figure 7 Bypass Filter Mode (Reverse Bypass)



- 7. Select Accept to save updates. Save must additionally be selected on the Bypass Taps panel.
- 8. Select Cancel to return the Bypass Taps panel.



The following configuration options may be displayed, modified, enabled, or disabled under the Filters panel.

Filter Templates Config Maps Statistics

See every bill, byte, and packet	Dashboard	Bypass Taps	Filters	Port Info	System							Welcome admin	Log out
				1	1	2	BP L/A1 L/A2	H/M L/A	H/M L/A				
				Mode Se Bypas	lected: is Filter	▼ Set				P10GMSBPE			

1. Select Filters on the Dashboard Menu bar.



The Filter Configurations panel will be displayed.

For instructions on Filter Templates, click here for <u>Chapter 7.1: Filter Templates</u>

For instructions on Config Maps, click here for Chapter 7.2: Config Maps



10 Span Mode

In this mode, the network port 1 and span ports 2, 3, and 4 are defined by the system.





Figure 1 Span Mode





The following configuration options may be displayed, modified, cleared, or refreshed under the Port Info panel.

Port Number Port Description Link Set Speed Speed Mode SFP Data Port Statistics

Bea awary bit, byte, and packet*	Dashboard Port Info	System								Welcome admin	Log out
			1	2	BP● L/A1 L/A2	H/M L/A	H/M L/A				
		Mo	ode Selected: Span Span	♥ Set				P10GMSBPE			

1. Select Port Info on the Dashboard Menu bar.

	D [Dashboard	Bypass Taps	Port Info	System					
ort Configuration		Dort	Configur	otion						
ort Statistics										
	Save	Port	Description	Link	Set Speed	Speed	Mode		SFP Data	Split
	Refresh	1	port description	•	10G ¥	10G	Normal	~	GARLAND TECH SFP+SR	
		2	port description	•	10G ¥	10G	Normal	~	GARLAND TECH SFP+SR	
		3	port description	•	10G 🛩	10G	Normal	~	FINISAR CORP. FTLX8574D3BCV	
		4	port description	•	10G 🛩	10G	Normal	~	FINISAR CORP. FTLX8574D3BCV	

The Port Configuration panel will be displayed.

For instructions on Port Configuration, click here for Chapter 3.1: Port Configuration



11 Span Packet Inject Mode

In this mode, the network port 1 and span packet inject ports 2, 3, and 4 are defined by the system.











The following configuration options may be displayed, modified, cleared, or refreshed under the Port Info panel.

Port Number	
Port Description	
Link	
Set Speed	

Speed Mode SFP Data Port Statistics

Dashboard Port In	fo System							Welcome admin Log out
		1 2	BP● L/A1 ● L/A2 ●	H/M L/A	H/M L/A	PIOGMSBPE		
		Span (Packet Inject) V Set						

1. Select Port Info on the Dashboard Menu bar.

Base every be, byte, and pack		Dashboard	Bypass Taps	Port Info	System				
Port Configuration			0 5						
Port Statistics		Port	Configur	ation					
	Save	Port	Description	Link	Set Speed	Speed	Mode	SFP Data	Split
	Refresh	1	port description	•	10G ¥	10G	Normal 🗸	GARLAND TECH SFP+SR	
		2	port description	•	10G ¥	10G	Normal 🗸	GARLAND TECH SFP+SR	
		3	port description	•	10G ¥	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV	
		4	port description	•	10G ¥	10G	Normal 🗸	FINISAR CORP. FTLX8574D3BCV	
								112X0374D3DCV	

The Port Configuration panel will be displayed.

For instructions on Port Configuration, click here for Chapter 3.1: Port Configuration