EdgeSafe™

Bypass Network TAP

Quick Start Guide By Garland Technology

P10GMSBPE / P10GSSBPE

Garland Technology: Bypass System
Firmware Rev Level: 1.1.11

Office: 716-242-8500
garlandtechnology.com/support
garlandtechnology.com

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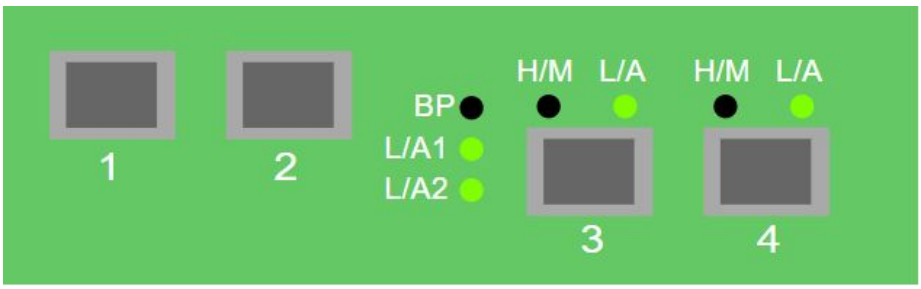
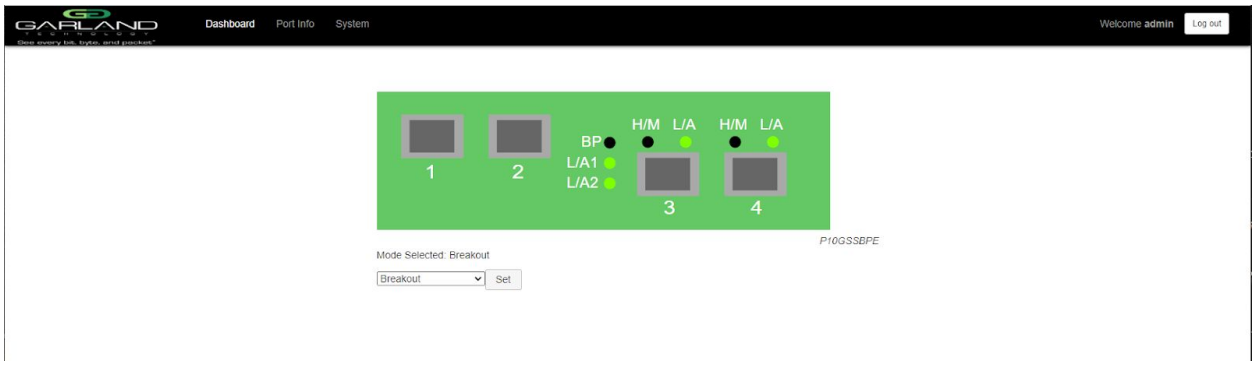
P10GxxBPE Dashboard



L/A1	- Link/Activity LED Network Port 1
L/A2	- Link/Activity LED Network Port 2
BP	- Bypass LED if placed in bypass mode
L/A Port 3	- Link/Activity LED Port 3
L/A Port 4	- Link/Activity LED Port 4
H/M Port 3	- Heartbeat missed if placed in bypass mode
H/M Port 4	- Heartbeat missed if placed in bypass mode

P10GxxBPE System



Select System to display or change the system options.

General -

Displays the current general system configuration.

General	- select to display the current chassis name and key press timeout
Edit Configuration	- select to change the chassis name or key press timeout
Chassis Name	- enter 1 to 32 characters
Key Press Timeout	- enter 60 to 3600 seconds, default 300
Save	- select to save any changes
Cancel	- select to return to general system settings

User Settings -

Displays the current user configuration.

Username & Password	- select to change the local GUI and serial port username and password (default=admin/gtadmin1). Cannot change if logged in via TACACS
Authentication Settings	- select to change the login authentication settings
Local Authentication	- enabled by default, may be disabled if TACACS authentication is enabled
TACACS Authentication	- select to enable TACACS authentication
IP Address	- enter the TACACS server IP address
Secret Word	- enter to use a key on the TACACS server (3-20 characters)
Save	- select to save any changes
Cancel	- select to return to user settings
TACACS Test	- select to test the TACACS authentication
Username	- enter the username defined in the TACACS server
Password	- enter the password defined in the TACACS server
Test	- select to verify username/password authentication to the TACACS server
TACACS Ping	- select to ping the TACACS server IP address

Network Settings -

Displays the current network configuration.

Edit Settings	- select to change the network settings
Enable DHCP	- select to enable DHCP
IP Address	- displays the management IP address defined at turn up. If desired a new management IP address may be entered
Mask	- displays the mask defined at turn up. If desired a new mask may be entered
Gateway	- displays the gateway defined at turn up. If desired a new gateway may be entered
DNS1	- enter the desired DNS1 server
DNS2	- enter the desired DNS2 server
Save	- select to save any changes
Cancel	- select to return to network settings

Date & Time -

Displays the current date and time configuration.

Edit Settings	- select to change the network settings
Timezone	- displays the current timezone. May be changed by using the pull down panel
UTC	- displays the utc. May be changed by using the pull down panel
NTP	- select to enable NTP timing
Use Pool	- select to use a pool for NTP timing
IP Address	- enter the IP address for the NTP server used for NTP timing
Save	- select to save any changes
Cancel	- select to return to date & time settings

Syslog -

Displays the current syslog configuration.

Edit Settings	- select to change the syslog configuration
Enable Syslog Config	- select to enable syslog
Unit ID	- enter the unit ID for syslog messages, optional
Protocol	- displays the current protocol, default UDP. May be changed to TCP by using the pull down panel
IP Address	- displays the current syslog server. If desired a new syslog server may be entered
Port	- displays the current udp/tcp port, default 514. If desired a new port number may be entered
Save	- select to save any changes
Cancel	- select to return to syslog configuration

Snmp -

Displays the current SNMP configuration.

Edit Configuration	- select to change the snmp configuration
Enable SNMP Config	- select to enable snmp
Access Port	- displays the current access port, default 161. If desired a new port number may be entered
Trap Port	- displays the current trap port, default 162. If desired a new port number may be entered
Trap IP Address	- displays the current snmp server. If desired a new snmp server may be entered
Protocol	- displays the current protocol, default V2 Read/Write. If desired the protocol may be changed to V2 Read Only or V3 by using the pull down panel
V2 Community Password	- the default is gtpublic, but not visible. If desired a new V2 community password may be entered

If the protocol was changed to V3 the following options will appear. The unit supports snmp V3 MD5 and DES.

V3 User	- enter the snmp V3 username, 8-20 characters
V3 Auth Pass	- enter the snmp V3 authentication password, 8-20 characters
V3 Priv Pass	- enter the snmp V3 privacy password, 8-20 characters
Save	- select to save any changes
Cancel	- select to return to snmp configuration

Export Configuration -

Provides the ability to download the unit's configuration. The date/time and network settings are excluded. The download path is determined by the browser.

Export Configuration	- select to to download the current configuration.
GREEN Export	- select to start download

Import Configuration -

Provides the ability to upload a new configuration file to the unit. This will overwrite the unit's current configuration excluding the date/time and network settings.

Import Configuration	- select to upload a configuration file to the unit
Choose File	- select to choose the configuration file
Upload	- select to upload the configuration file
Restart Import	- select to choose a different configuration file or cancel
Configure	- select to load the configuration file on the unit

Software Upgrade -

Provides the ability to upgrade the unit's firmware. All of the existing configurations will be saved to the new firmware.

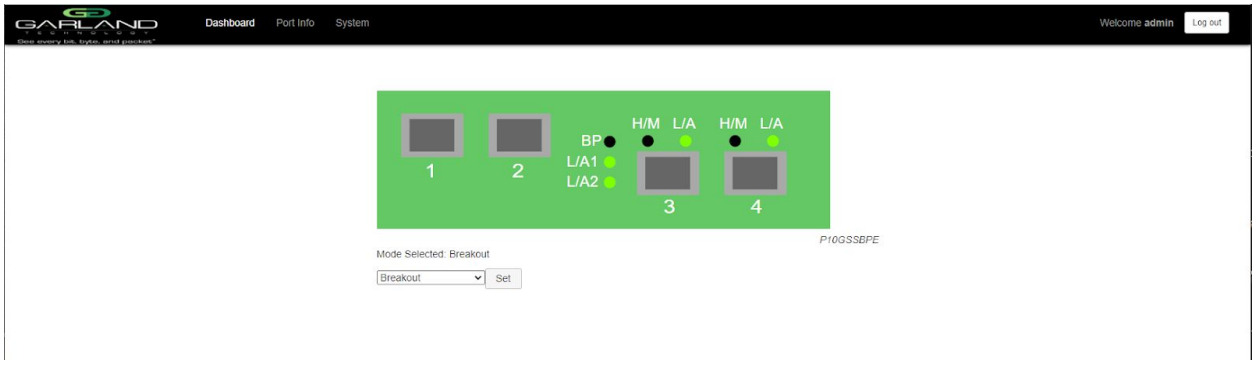
Software Upgrade	- select to upgrade the unit's firmware
Choose File	- select to choose the firmware
Reset	- select to choose a different firmware or cancel
Upload	- select to load the firmware on the unit.

Reboot -

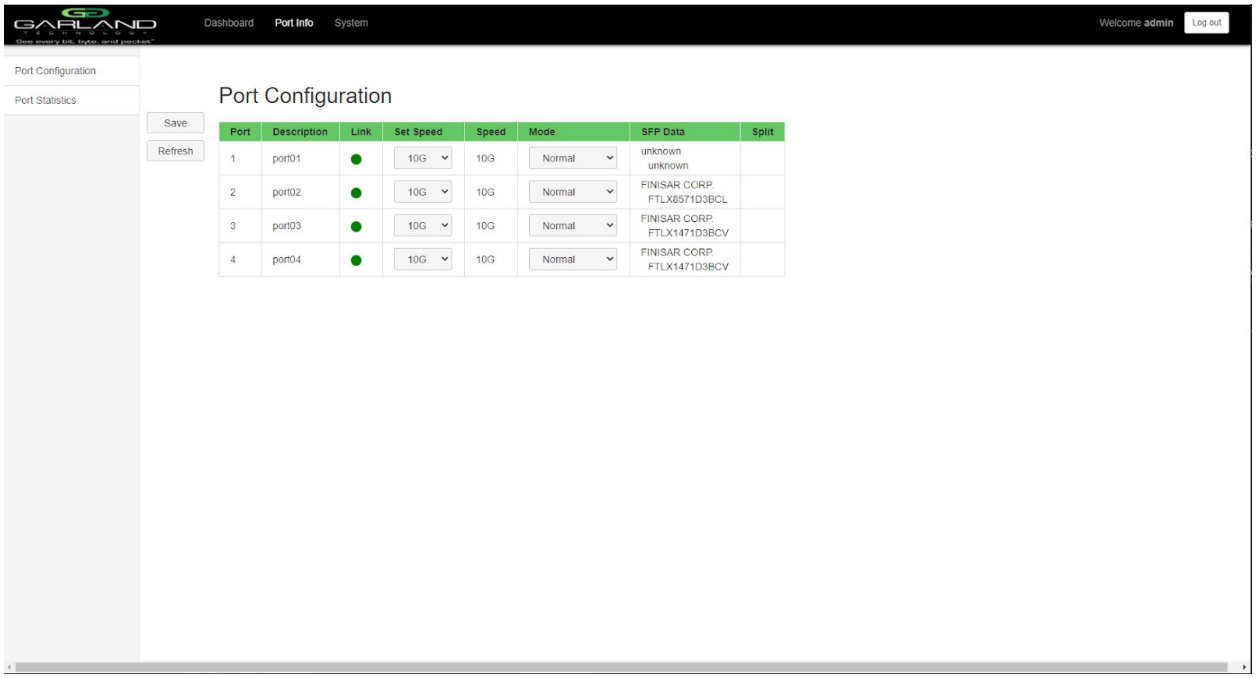
Provides the ability to reboot the unit. This will affect traffic for @ 15 seconds.

Reboot	- select to reboot the unit
Reboot	- select to reboot the unit

P10GxxBPE Port Info



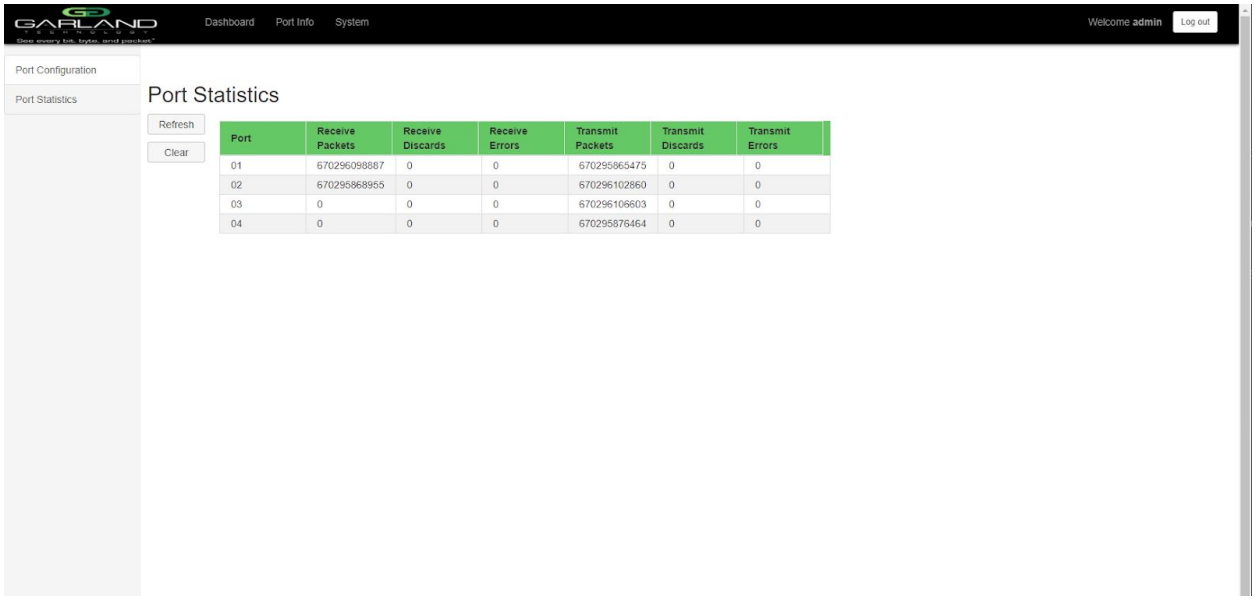
Select Port Info to display or change port configuration and display port statistics.



Port Configuration -

Displays the current port configurations.

Port	- displays the physical port number
Description	- displays the current port descriptions, default port01 to port04
port01-port04	- select port 01-04 in the description column to change the port's description.
Edit Description	- enter the new port description (1 to 32 characters)
Set	- select to save the new port description
Cancel	- select to cancel and return to port configuration
Link	- displays the current port link status. GREEN port has link. RED port does not have link.
Set Speed	- displays the current port speed, default 10G. Use the pull down panel to change the port speed to 1G, Auto is non-functional
Speed	- displays current port speed
Mode	- select the pull down panel to change the port mode, default=Normal. The port mode options include: Nornal, Loopback and Listen Only. Force Link in non-functional.
SFP Data	- displays the manufacturer and part number of a SFP or QSFP inserted into the unit. Not all SFPs or QSFPs support this function
Split	- non-functional
Save	- select to save any changes
Refresh	- select to refresh the port configurations

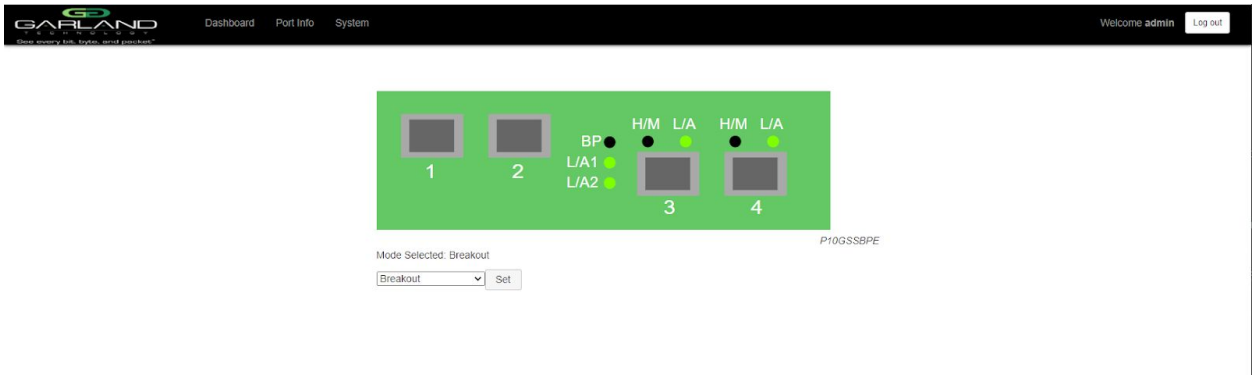


Port Statistics -

Displays the current port statistics. The statistics do not automatically refresh. Select Refresh to update the statistics.

Port	- displays the physical port number
Receive Packets	- displays the number of receive packets
Receive Discards	- displays the number of receive packets discarded
Receive Errors	- displays the number of receive packet errors
Transmit Packets	- displays the number of transmit packets
Transmit Discards	- displays the number of transmit packets discarded
Transmit Errors	- displays the number of transmit packet errors
Refresh	- select to update the port statistics
Clear	- select to clear and refresh the port statistics

INT10G8xx56 Modes

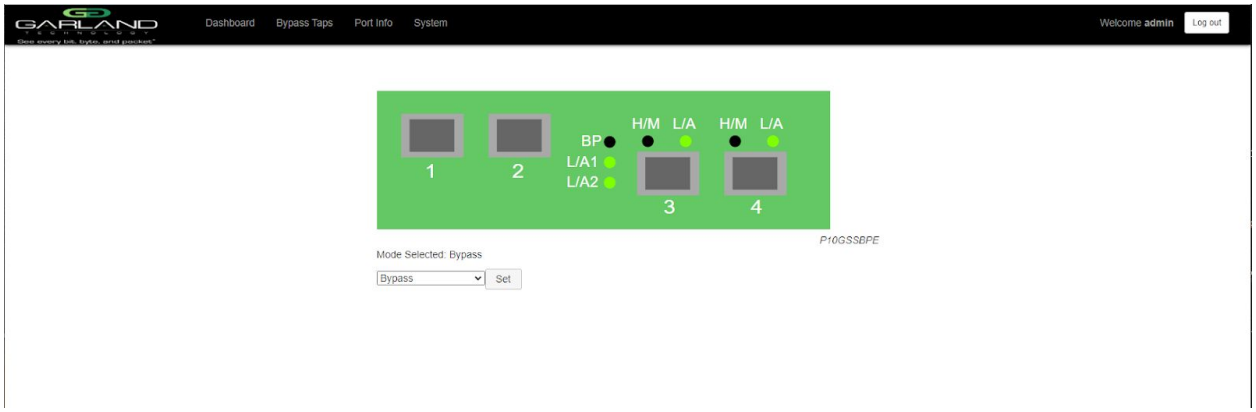


Select Bypass Taps to display or change the bypass tap settings.

Displays the current mode.

The P10GxxBPE supports the following modes, Bypass, Span, Span (Packet Inject), Breakout, Filter and Aggregate.

Bypass Mode -



Mode	- use the mode pull down panel select Bypass
Set	- select to set the unit in the bypass mode
Bypass Taps	- select Bypass Taps

Provides access to display or change the bypass tap settings, the Heartbeat per second rate and the number of lost heartbeats

Displays the current tap status.

P1	- Tap Network Port 1
P2	- Tap Network Port 2
Tap Colored Area	- displays the current tap status. The tap status conditions include, GREEN Inline, RED Bypass, GREEN Inline (Forced), RED Bypass (Forced)
Edit Pencil	- select to add a description for the tap
Description box	- enter the desired tap description, 1-15 characters
Check	- select to save the new tap description
No	- select to discard changes and close tap description
Heartbeat Settings	- select to display or change the heartbeat settings. The heartbeat settings control taps 1-4
No. Of Lost HB Packets (10-500)	- defines the number of heartbeats that must be lost for the tap to switch from inline to bypass
Heartbeats per second (10-100)	- defines the number of heartbeats that are sent per second

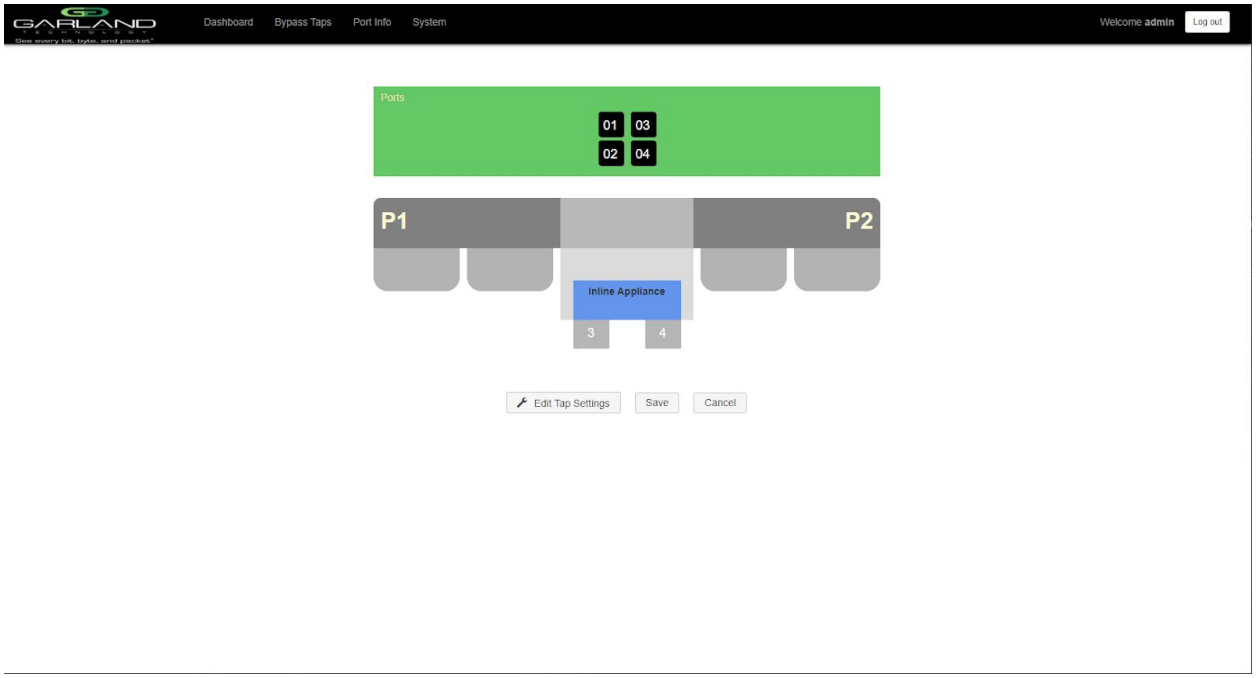
Tap Settings -

Changes to the tap include:

Tap Modes	Active, Force Bypass, Force inline
Fail Mode	Open
LFP	enable/disable
Reverse Bypass	enable/disable

To change the tap's settings, place the cursor on the tap and double press the left mouse button.

The tap panel will appear.



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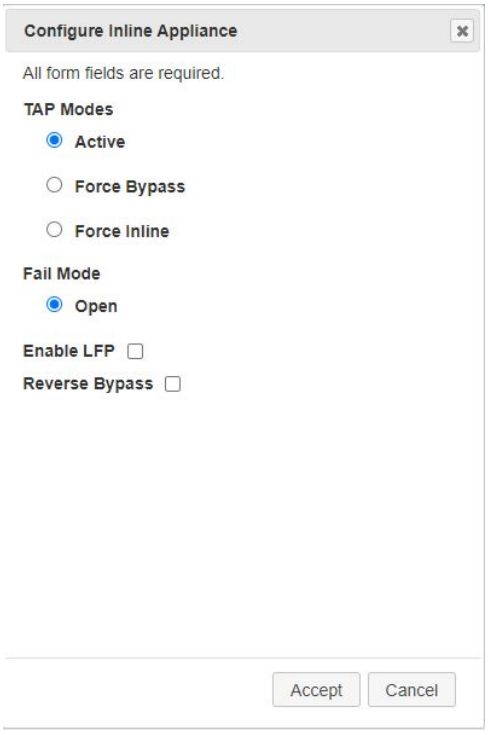
P1	- Tap Network Port 1
P2	- Tap Network Port 2
3	- Inline Appliance (bypass) Port
4	- Inline Appliance (bypass) Port
Edit Tap Settings	- select to display or change the current tap settings
Save	- select to save changes to the tap settings
Cancel	- select to disregard changes to the tap settings and return to bypass tap

Edit Tap Settings - select to display or change the current tap settings

The default settings:

TAP Modes - Active
Fail Mode - Open
Enable LFP - disabled
Reverse Bypass - disabled

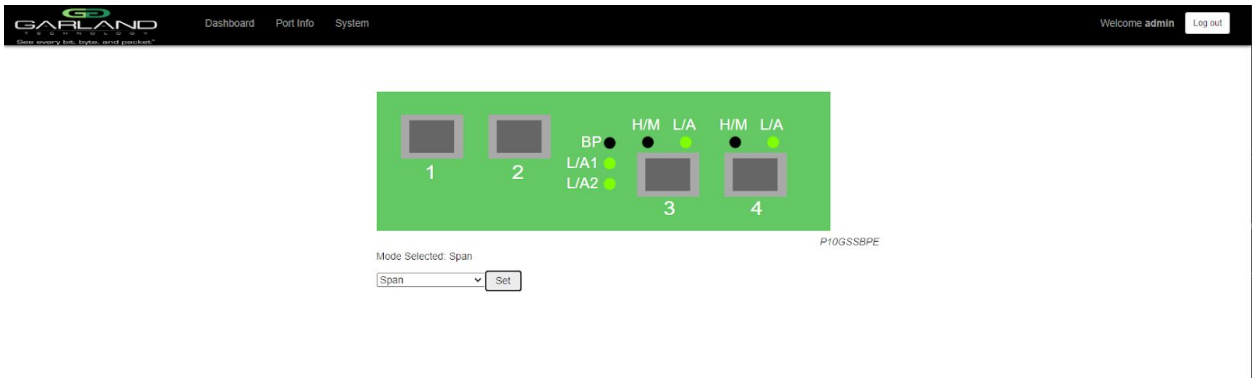


Change the tap by selecting the new setting(s).

Accept - select to change the tap with the new settings. After selecting accept the tap display will appear. Save must be selected on tap display for the new tap settings to be saved

Cancel - select to disregard changes or keep original settings and return to the tap display

Span Mode -

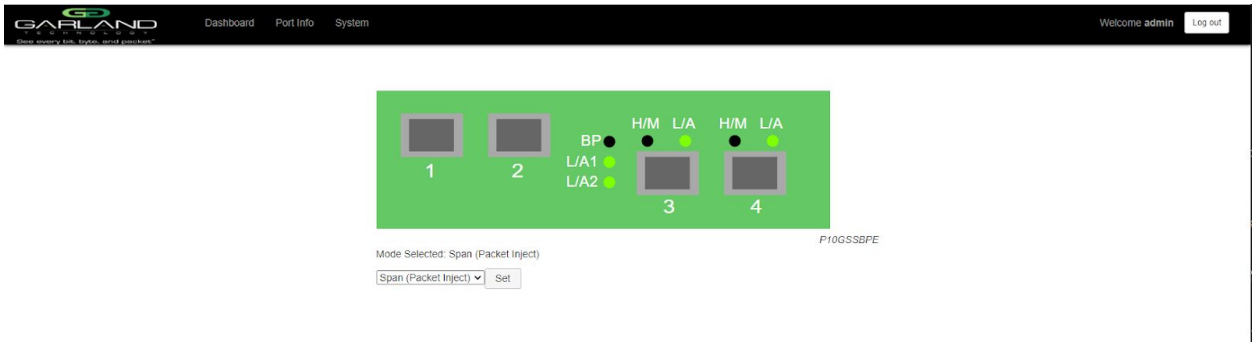


Mode	- use the mode pull down panel select Span
Set	- select to set the unit in the span mode

1	- Network Port
2	- Span Port
3	- Span Port
4	- Span Port

In this mode ingress traffic into network port 1 is sent to span ports 2, 3 and 4. In a loss of power condition, traffic from network port 1 is sent to span port 2, but not span ports 3 and 4.

Span (Packet Inject) Mode -

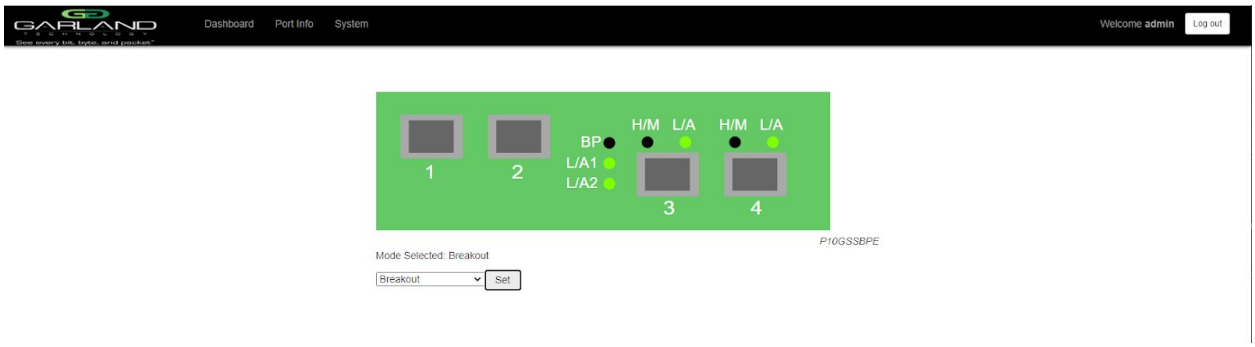


Mode	- use the mode pull down panel select Span (Packet Inject)
Set	- select to set the unit in the span (packet inject) mode

1	- Network Port
2	- Span (Packet Inject) Port
3	- Span (Packet Inject) Port
4	- Span (Packet Inject) Port

In this mode ingress traffic into network port 1 is sent to span ports 2, 3 and 4. Ingress traffic from packet inject ports 2, 3 and 4 are sent to network port 1. In a loss of power condition, traffic from network port 1 is sent to span port 2, but not span ports 3 and 4. Traffic from packet inject port 2 is sent to network port 1, but not from packet inject ports 3 or 4.

Breakout Mode -

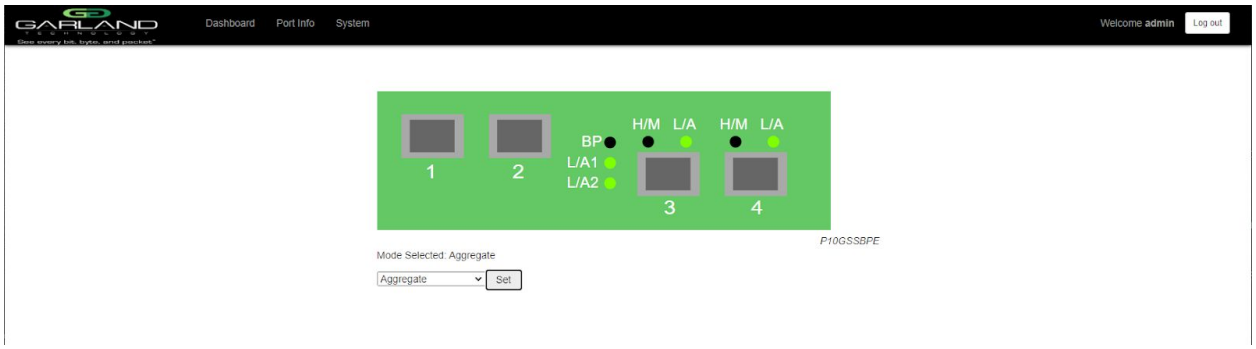


Mode	- use the mode pull down panel select Breakout
Set	- select to set the unit in the breakout mode

1	- Network Port
2	- Network Port
3	- Breakout Port (ingress traffic from network port 1)
4	- Breakout Port (ingress traffic from network port 2)

In this mode ingress traffic into network port 1 is sent to network port 2 and breakout port 3. Ingress traffic into network port 2 is sent to network port 1 and breakout port 4. In a loss of power condition, ingress traffic from network port 1 is sent to network port 2 and ingress traffic from network port 2 is sent to network port 1, but there will be no breakout traffic to ports 3 or 4.

Aggregate Mode -

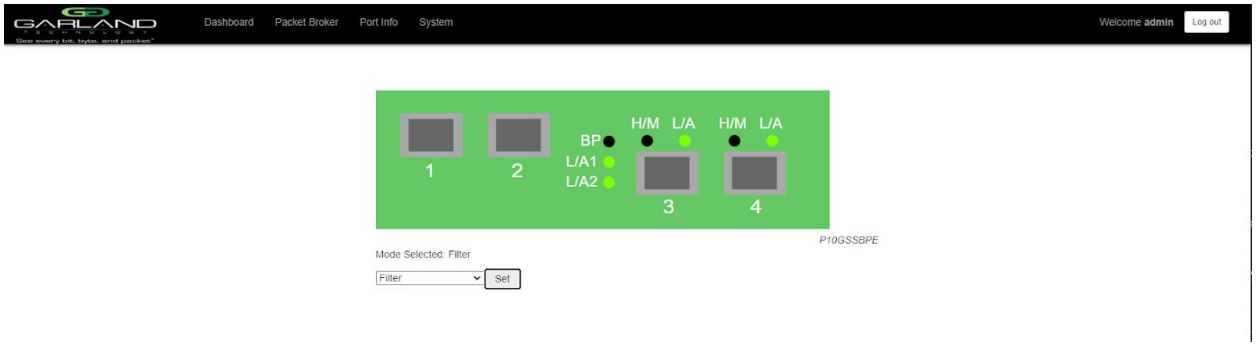


Mode	- use the mode pull down panel select Aggregate
Set	- select to set the unit in the aggregate mode

1	- Network Port
2	- Network Port
3	- Aggregate Port
4	- Aggregate Port

In this mode ingress traffic into network port 1 is sent to network port 2 and aggregate ports 3 and 4. Ingress traffic into network port 2 is sent to network port 1 and aggregate ports 3 and 4. In a loss of power condition, ingress traffic from network port 1 is sent to network port 2 and ingress traffic from network port 2 is sent to network port 1, but there will be no aggregate traffic to ports 3 or 4.

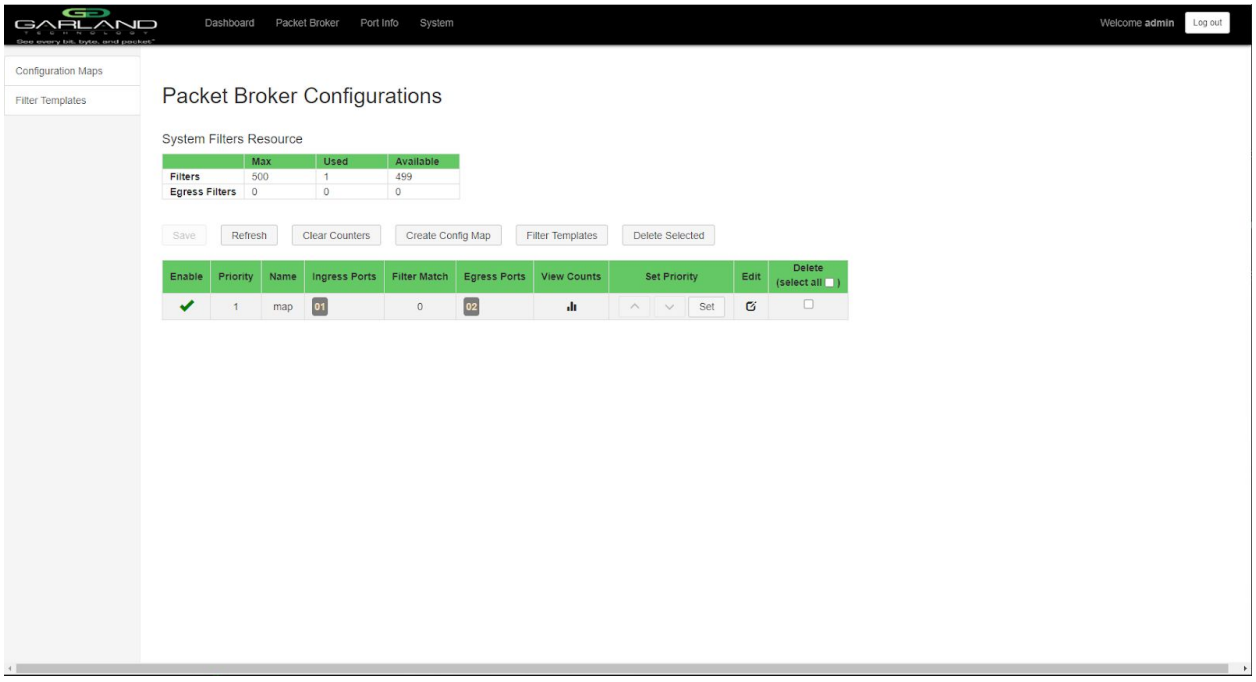
Filter Mode -



Mode	- use the mode pull down panel select Filter
Set	- select to set the unit in the filter mode

Packet Broker	- select Packet Broker

Provides access to create, display or change, Filter Templates, Config Maps, Filters or Stats.



Displays the current packet broker configurations.

System Filters Resource -

Filters Max	- displays the maximum number of filters for the unit, 500
Filters Used	- displays the number of filters assigned to config maps, 0-500
Filters Available	- displays the number of filters available for the unit, 500-0
Egress Filters Max	- N/A
Egress Filters Used	- N/A
Egress Filters Available	- N/A

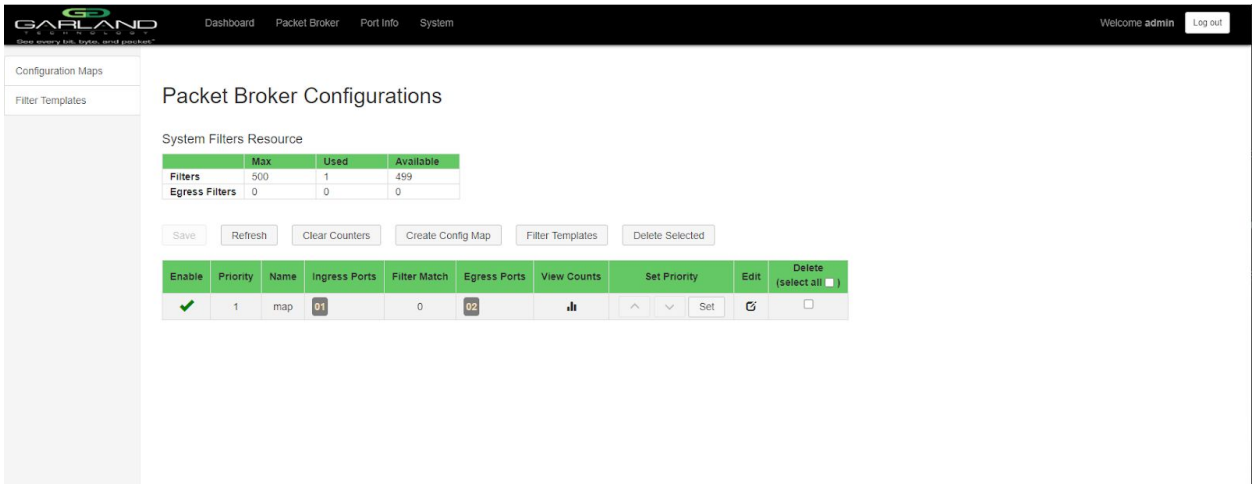
Configuration Map Options -

Save	- select to save config maps in enabled/disabled state
Refresh	- select the update filter match stats
Clear Counters	- select to clear and update filter match stats. Also clears and updates port stats
Create Config Map	- select to create a new config map
Filter Templates	- select to navigate to the Filter Templates display
Delete Selected	- select to delete selected config map(s)
Enable	- select to change a config map status, enable/disable. The save must be selected to save the status
Priority	- displays the config map priority. 1 is the highest priority.
Name	- displays the config map name
Ingress Ports	- displays the ingress port(s) for the config map
Filter Match	- displays the numbers of packets that have matched the filter applied to the config map
Egress Port	- display the egress port(s) for the config map
View Counts	- select to display the packet counts for the ingress port(s), filter(s), egress port(s), egress filter(s) and load balance port(s) for the config map
Set Priority	- select the up arrow to change the config map to a higher priority. Use the down arrow to change the config map to a lower priority. Select the set to enter a priority number for the config map
Edit	- select to add/change/remove the config map name, add/change/remove the config map description, add/remove load balance group(s) on the config map, add/remove ingress port(s) on the config map, add/change/remove filter(s) on the config map, add/remove egress port(s) on the config map or add/change/remove egress filter(s) on the egress port(s) on the config map
Delete (select all)	- select to delete selected config maps

Navigation Options -

Filter Templates - select to navigate to the filter template display

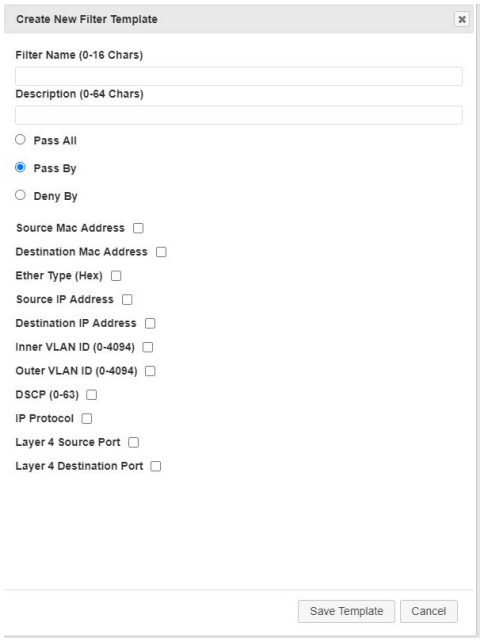
Filter Templates -



Any previously created filter templates will be displayed.

Create Template - select to create a new filter template

The Create New Filter Template panel will appear. Filter templates may be created as pass all, pass by or deny by.

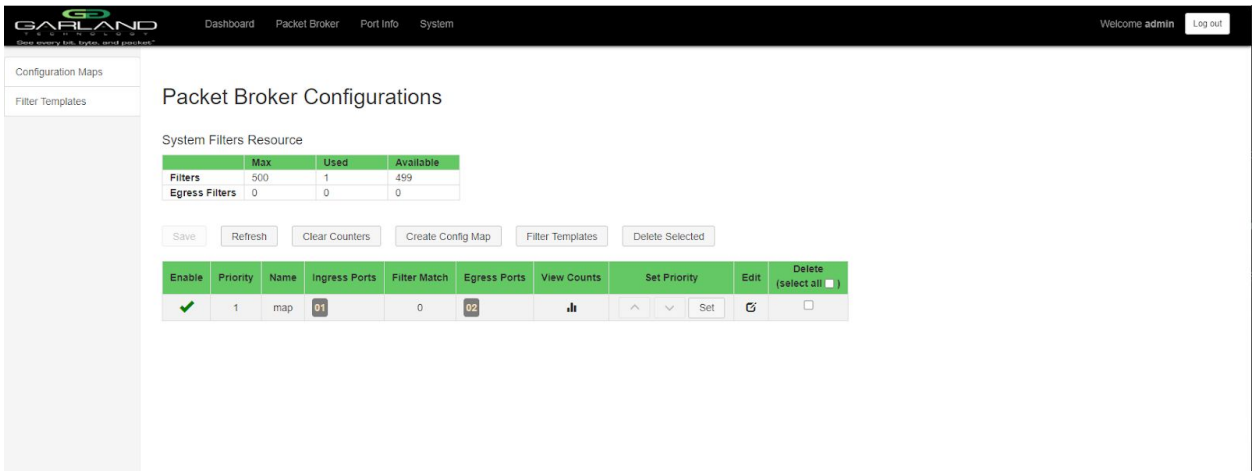


Filter Name	- enter the filter name, 0-16 characters
Description	- enter the filter description, optional, 0-64 characters
Pass All	- select if the filter template is to pass all traffic
Pass By	- select if the filter template is to pass specific traffic defined by the template
Deny by	- select if this filter template is to deny specific traffic defined by the template
Filter parameters	- select and enter all of the parameters for this filter template
Save Template	- select to save the filter template
Cancel	- select to disregard changes and return to filter templates

The filter template will appear on the filter template display. Select the filter template to make changes or select the RED X to delete.

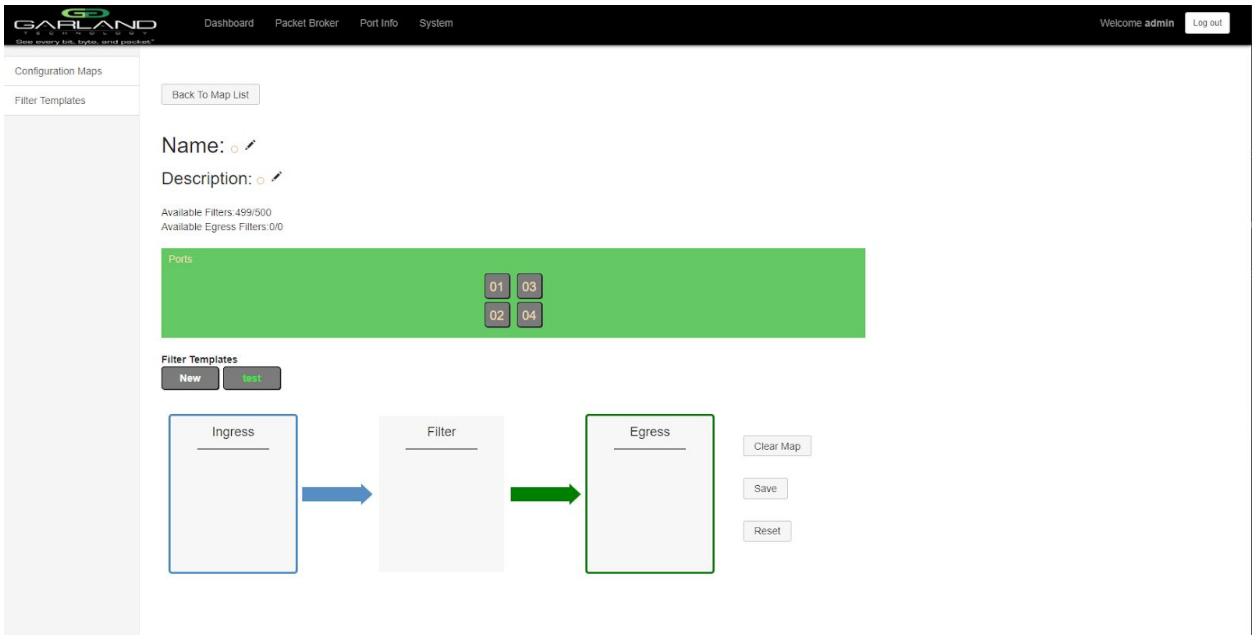
The filter template will also be presented on the create config map display.

Create a Config Map -



Any previously created config maps will be displayed.

Create Config Map - select to create a config map

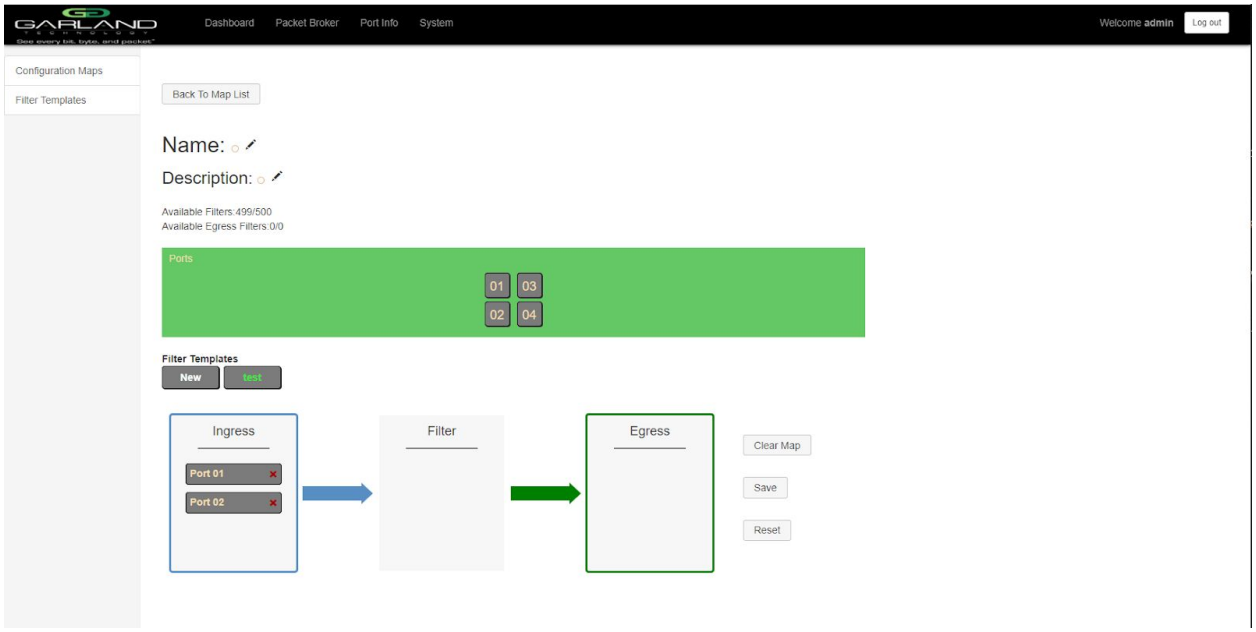


The create config map panel will appear.

Name	- enter the config map name, 0-16 characters
Description	- enter the config map description, optional, 0-64 characters
Filter Templates	- previously created filter template(s) are displayed and may be selected for the config map. New may be selected for the filter and created with the config map. If a previously created filter template is selected, the filter for the config map may be changed from the template. This will not change the original filter template. Is is advisable to rename the filter if a template was originally used so it can be distinguished from the template
Clear Map	- select to remove any changes on a new config map
Save	- select to save changes
Reset	- if editing an existing config map, select reset to reset changes back to original config map

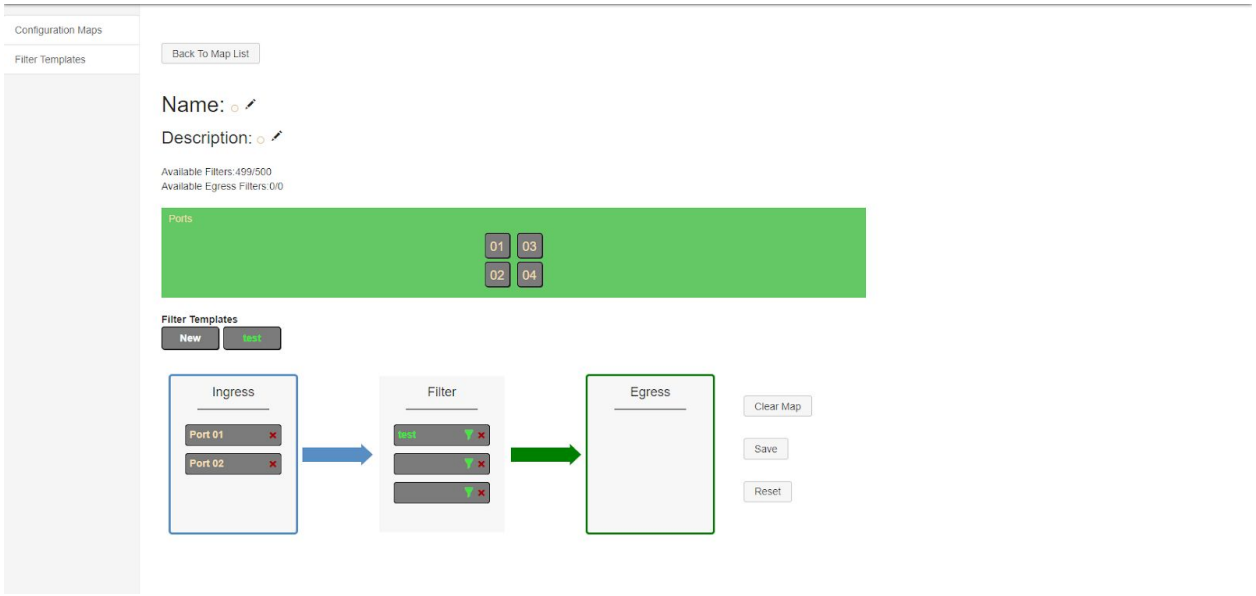
Ingress Ports -

Add ingress port(s) to the config map by placing the cursor on the desired port above. Press the left mouse button and hold to select the port. Drag the port into the Ingress panel and release. To remove a port from the Ingress panel select the RED X. If more than one port is selected the traffic will be aggregated to the egress port(s).



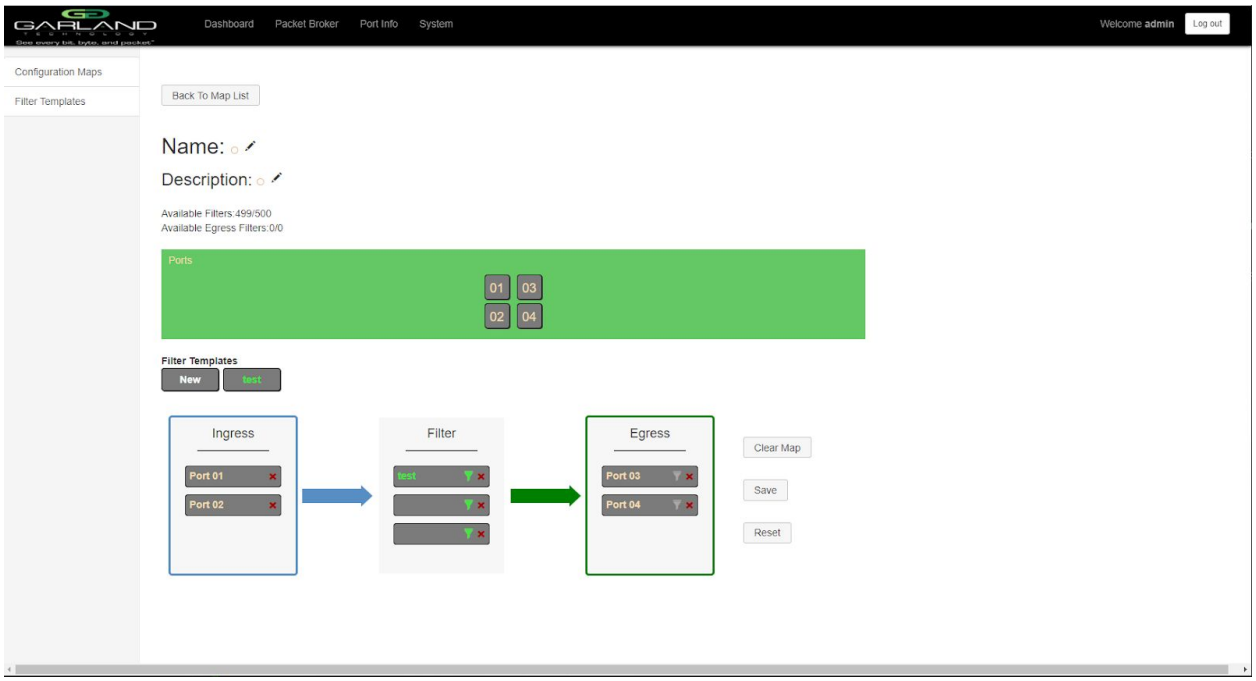
Filters -

Add filter(s) to the config map by placing the cursor on the desired filter, a filter template or new. Press the left mouse button and hold to select the filter. Drag the filter into the Filter panel and release. To remove a filter from the Filter panel select the RED X for the desired filter. If multiple filters are added the traffic from the ingress port(s) will consider the filters by priority. The top filter is the highest priority. The filters will be considered as the first or the second or the third, etc. Filters may be selected and moved up or down to change their priority. Filters may be modified by selecting the GREEN filter icon.



Egress Ports -

Add egress port(s) to the config map by placing the cursor on the desired port above. Press the left mouse button and hold to select. Drag the port into the Egress panel and release. To remove a port from the Egress panel, select the RED X. If more than one port is selected for the egress a copy of the traffic from the ingress port(s) will be sent to each egress port.



Save - select to save the config map

For questions, please contact Garland Technology Support at:
8AM-9PM (CST) Monday - Friday (Except for observed US Holidays)
Tel: 716.242.8500 Online: garlandtechnology.com/support