EdgeLens® Focus

Inline Security Packet Broker

User Guide By Garland Technology
INT10G12MSBP / INT10G12ESBP



Garland Technology: Integrated Bypass System
Firmware Rev Level: 1.1.11

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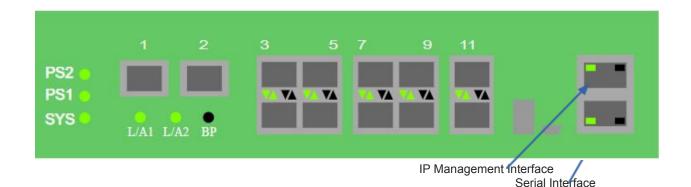
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1. INT10G12xxBP DashBoard



LED

PS2 - Power Supply 2 LED
PS1 - Power Supply 1 LED
SYS - System LED

L/A1 - Link/Activity LED Network Port 1, TAP 1
L/A2 - Link/Activity LED Network Port 2, TAP 1

BP - Bypass LED Tap 1

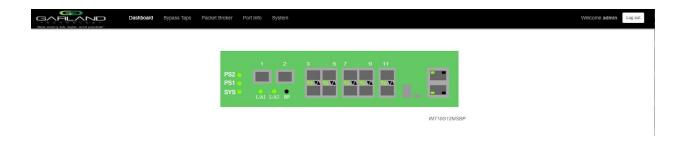
Up Arrow SFP Port 3 - Link/Activity LED Bypass Port TAP 1
Down Arrow SFP Port 4 - Link/Activity LED Bypass Port TAP 1

Up Arrows SFP Ports 5-11 - Link/Activity LEDs
Down Arrows SFP Ports 6-12 - Link/Activity LEDs





2. INT10G12xxBP 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

- 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 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 -

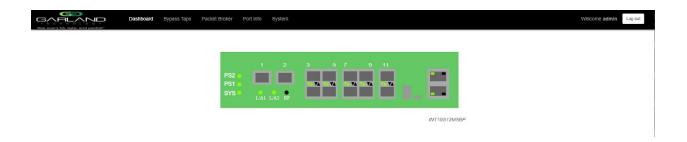
Provides the ability to reboot the unit. This will affect traffic for @ 15 seconds.

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

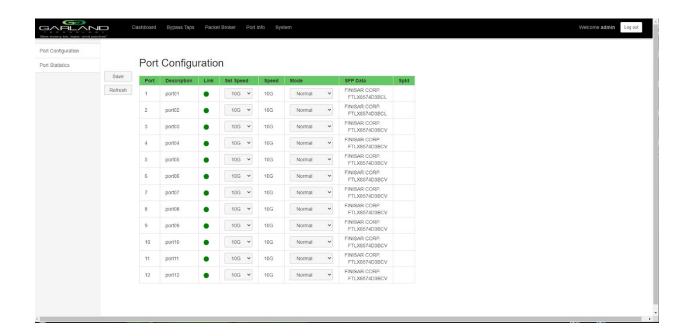




3. INT10G12xxBP Port Info



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 port12 - select port 01-12 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 description

Cancel - select to cancel and return to port configurations
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.

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, Listen Only and Force Link.

SFP Data - displays the manufacturer and part number of a SFP

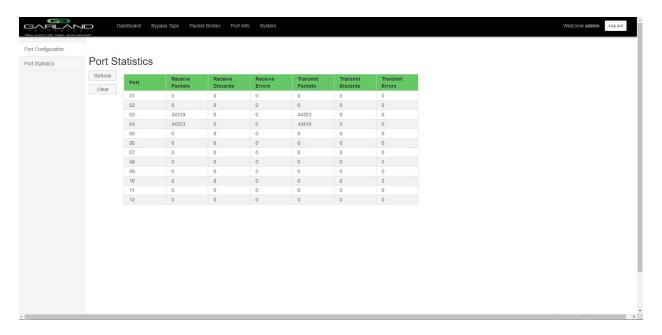
inserted into the unit. Not all SFPs support this function.

Split - N/A

Save - select to save any changes

Refresh - select to refresh the port configurations





Port Statistics -

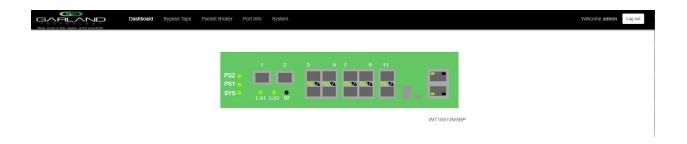
Displays the current port statistics. The statistics do not automatically refresh. Select Refresh to update the statistics.

Port - displays the physical port number Receive Packets - displays the number of receive packets Receive Discards - displays the number of receive packets discarded - displays the number of receive packet errors Receive Errors **Transmit Packets** - displays the number of transmit packets - displays the number of transmit packets discarded Transmit Discards **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





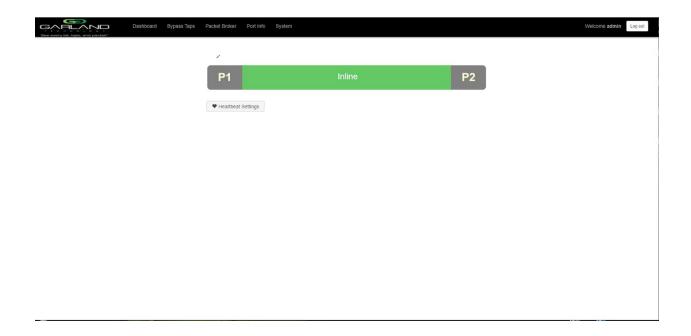
4. INT10G12xxBP Bypass Taps



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 - Network Port 1, Tap 1 P2 - Network Port 2, Tap 1

Tap 1 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 for the tap.

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, default 10.

Heartbeats per second (10-500) - defines the number of heartbeats that are sent per second,

default 10.



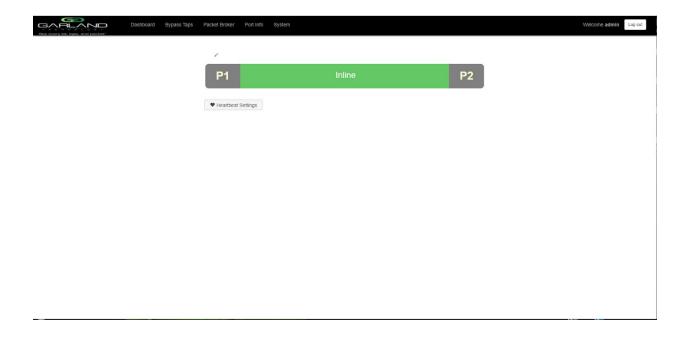


Tap Settings -

Changes to the tap may be made. The settings include:

Tap Modes Active, Force Bypass, Force inline

Fail Mode Open, Closed LFP enable/disable Reverse Bypass enable/disable

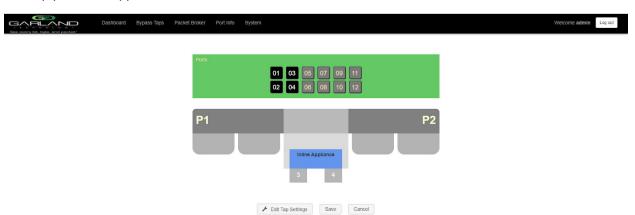


Change the tap's settings, place the cursor on the tap and double press the left mouse button.





The tap panel will appear.



Ρ1 - Network Port 1, Tap 1 P2 - Network Port 2, Tap 1

3 - Inline Appliance (bypass) Port, Tap 1 - Inline Appliance (bypass) Port, Tap 1 4

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

- select to save changes to the tap settings Save

- select to disregard changes to the tap settings and Cancel

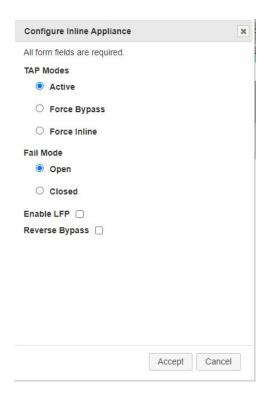
return to bypass tap

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 to 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 tap changes or keep original settings

and return to the tap display



Monitor Ports -

Monitor ports may be added to the tap. The tap may have up to two monitor ports per network port, total of four monitor ports. The monitor ports may be added to monitor the traffic on one or both network ports, to monitor the ingress or egress.



Create a monitor port by placing the cursor on the desired port above the tap. Press the left mouse button and hold to select the port. Drag the port to the desired network port. The default of any monitor port is ingress. Change the monitor port traffic by placing the cursor on the ingress panel and press the left mouse button. Additional monitor ports may be added using the same procedure.



Save - select to change the

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

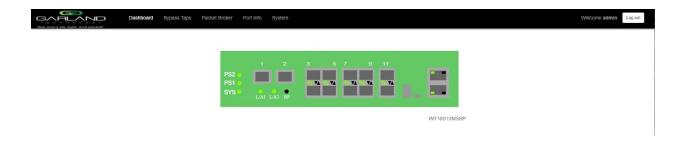
Cancel

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





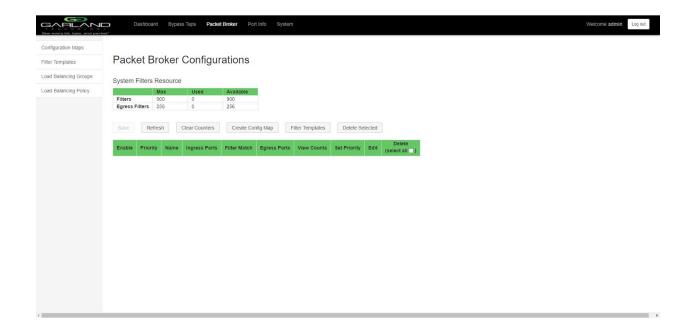
5. INT10G12xxBP Packet Broker



Packet Broker

- select Packet Broker

Provides access to create, display or change, Filter Templates, Load Balance Groups, Load Balance Policy, Config Maps, Filters, Egress Filters or Stats.



Displays the current packet broker configurations.



System Filters Resource -

Filters Max
- displays the maximum number of filters for the unit, 900
- displays the number of filters assigned to config maps, 0-900
Filters Available
- displays the number of filters available for the unit, 900-0

Egress Filters Max - displays the maximum number of egress filters for the unit, 256
Egress Filters Used - displays the number of egress filters assigned to config maps,

0-256

Egress Filters Available - displays the number of egress filters available for the unit,

256-0

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

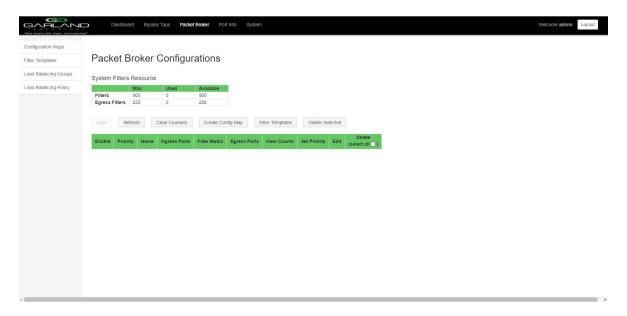


Navigation Options -

Filter Templates Load Balance Groups Load Balance Policy

- select to navigate to the filter template display
- select to navigate to the load balance display
- select to navigate to the load balance policy display

Filter Templates -



Any previously created filter templates will be displayed.

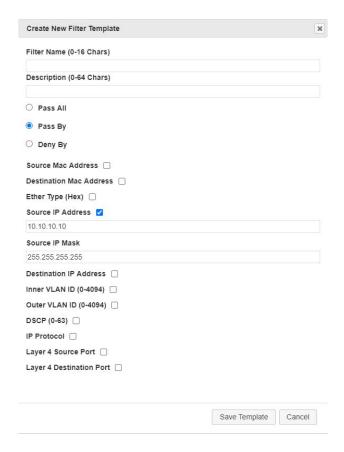




Create Template

- 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

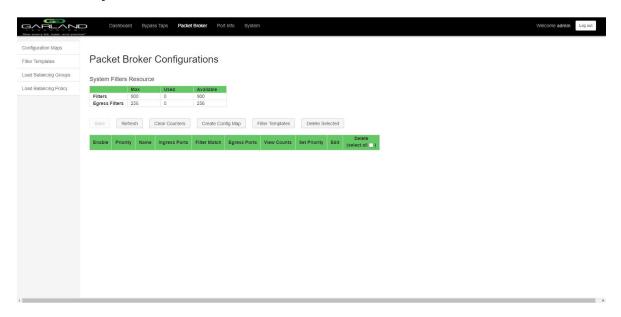
Cancel - select to disregard changes and return to filter templates

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

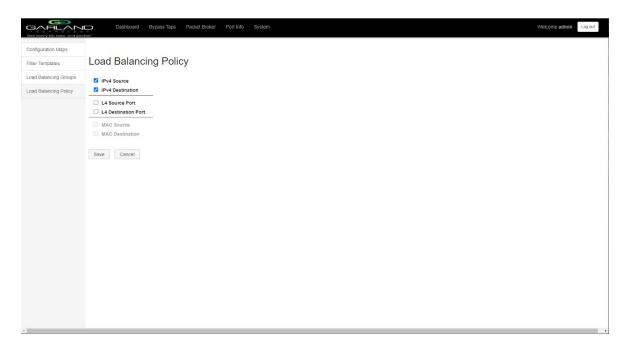
The filter template will also be presented on the create config map display.



Load Balance Policy -



The current load balance policy is displayed.





IPv4 Source- select to load balanceIPv4 Destination- select to load balanceL4 Source Port- select to load balanceL4 Destination- select to load balanceMAC Source- select to load balanceMAC Destination- select to load balance

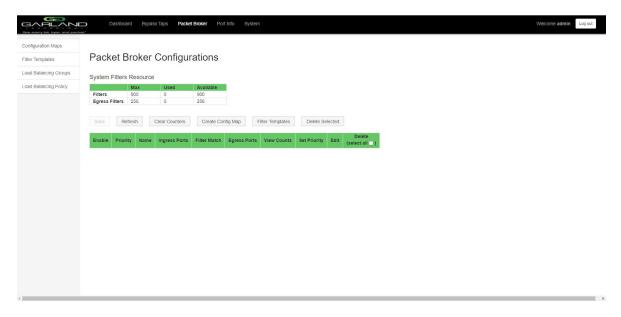
Save - select to save the load balance policy

Cancel - select to disregard changes

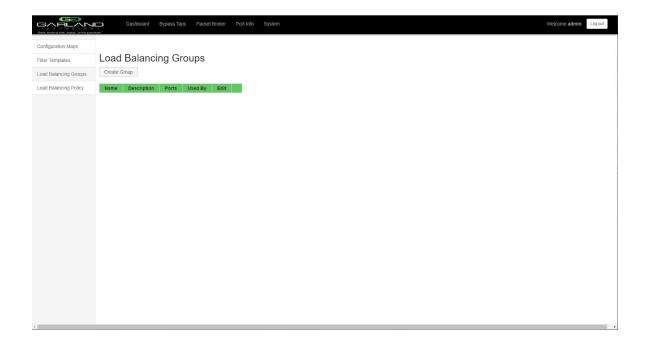




Load Balance Groups -



Any previously created load balance groups will be displayed.

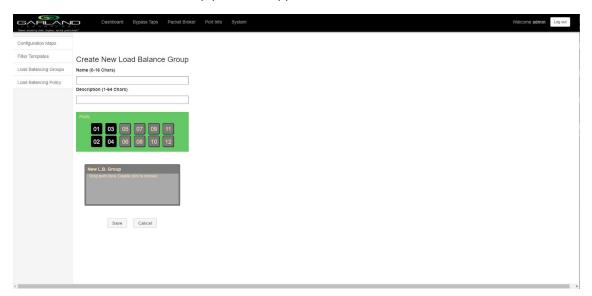


Create Group

- select to create a load balance group



The Create New Load Balance Group panel will appear.



Name - enter the load balance group name, 0-16 characters
Description - enter the load balance group description, optional, 0-64 characters

Add ports to the load balance group by placing the cursor on the desired port above the new load balance group panel. Press the left mouse button and hold to select the port. Drag the port into the load balance group panel and release. To remove a port from the load balance group, place the cursor on the desired port and double press the left mouse button.

Save - select to save the load balance group

Cancel - select to disregard changes and return to load balance groups

The load balance group will appear on the load balance group display.

Name- displays the name of the load balance groupDescription- displays the description of the load balance groupPorts- displays the ports assigned to the load balance group

Used By - displays the name of the config map the load balance group is

assigned

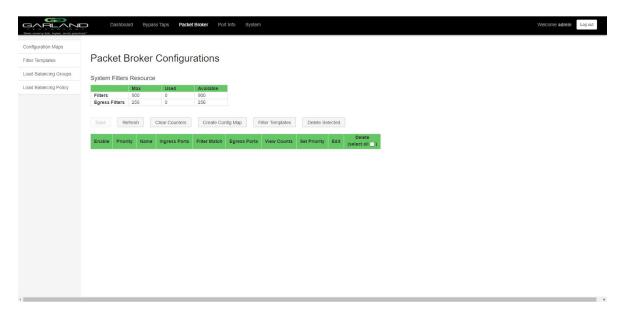
Edit - select the make changes to the load balance group

RED X - select to delete the load balance group

The load balance group 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 Description

Load Balance Groups

- enter the config map name, 0-16 characters

- enter the config map description, optional, 0-64 characters

 previously created load balance group template(s) are displayed and may be selected for the egress port. New may be selected for the egress port and created with the config map. If a previously created load balance group template is selected, port(s) may be added or removed from the template if desired. This will change the original load balance group

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

- select to remove any changes on a new config map

Save - select to save changes

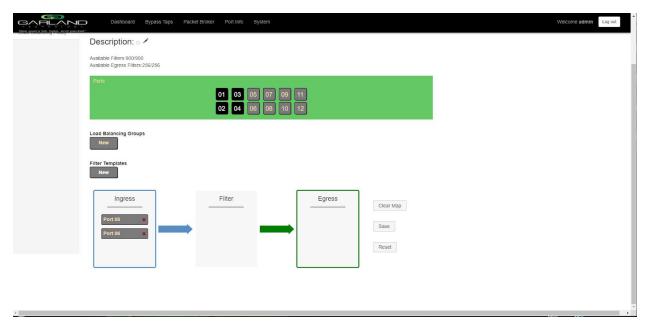
Reset - if editing an existing config map, select reset to reset

changes back to original config map

Ingress Ports -

Map

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) or load balance group.



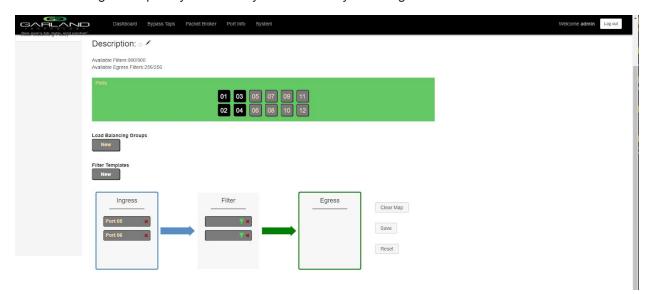


TECHNOLOGY

See every bit, byte, and packet

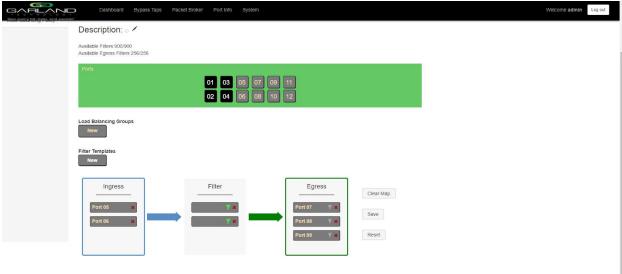
Filters -

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) or load balance group to the config map by placing the cursor on the desired port or load balance group above. Press the left mouse button and hold to select. Drag the port or load balance group into the Egress panel and release. To remove a port or load balance group 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. Separate egress port(s) may be combined with a load balance group. In this case the traffic from the ingress port(s) will be load balanced to the load balance port(s) and a copy will be sent to each egress port.

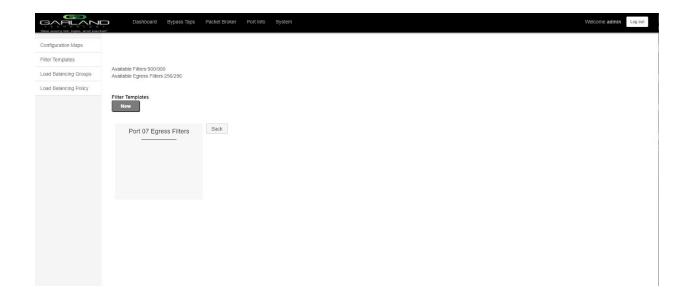




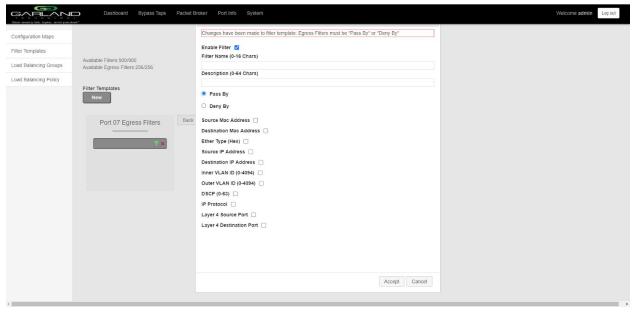


Egress Filters -

Each egress port may have a seperate egress filter(s). To add an egress filter select the gray egress filter icon for the desired port. The egress filter panel will appear. Existing filter templates or a new filter may be used as an egress filter. Add egress filter(s) by placing the cursor on the desired filter. Press the left mouse button and hold to select. Drag the filter to the Egress Filter panel and release.



If new is selected the Edit Filter panel will appear. Egress filters must be pass by or deny by.





Filter Name - enter the filter name, 0-16 characters

Description - enter the filter description, optional, 0-64 characters
Pass By - select if the filter is to pass specific traffic defined by

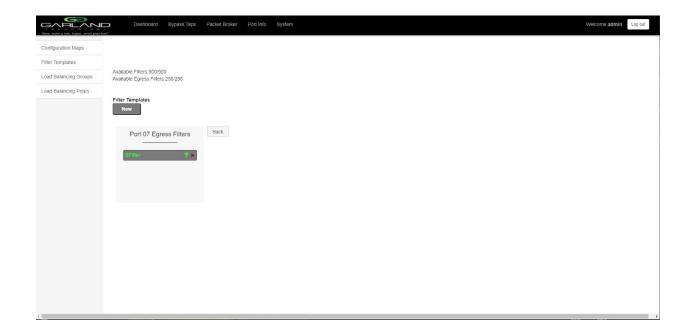
the filter

Deny by - select if this filter is to deny specific traffic defined by

the filter

Accept - select to save the filter

Cancel - select to disregard changes and return to egress filter

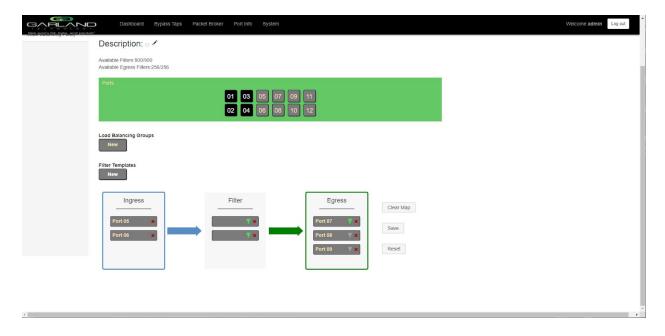


The filter(s) will appear on the egress filter display. If multiple egress filters are added the traffic will consider the filters by priority. The top filter is the highest priority. The filters will be considered as the first or the second or the third, etc. Filters may be selected and moved up or down to change their priority.

Back - select after the egress filter(s) have been assigned







The config map will be displayed.

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