PacketMAX™

Advanced Aggregator

User Guide By Garland Technology

AA1G52ACV2, AA10G54AC, AA100G32AC and AA100G64AC

Garland Technology: Advanced Aggregator System
Firmware Rev Level: 3.2.1

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

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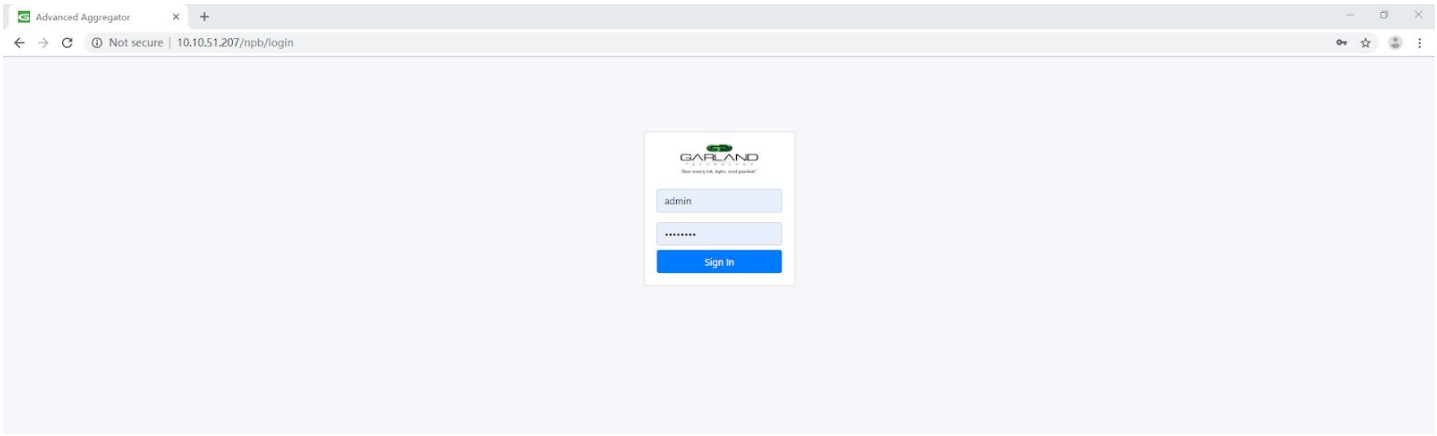
1 Login and Logout

1: The port number is 80.

2: With the username and password, there are three ways to login:

1) Admin

Login:



Logout:

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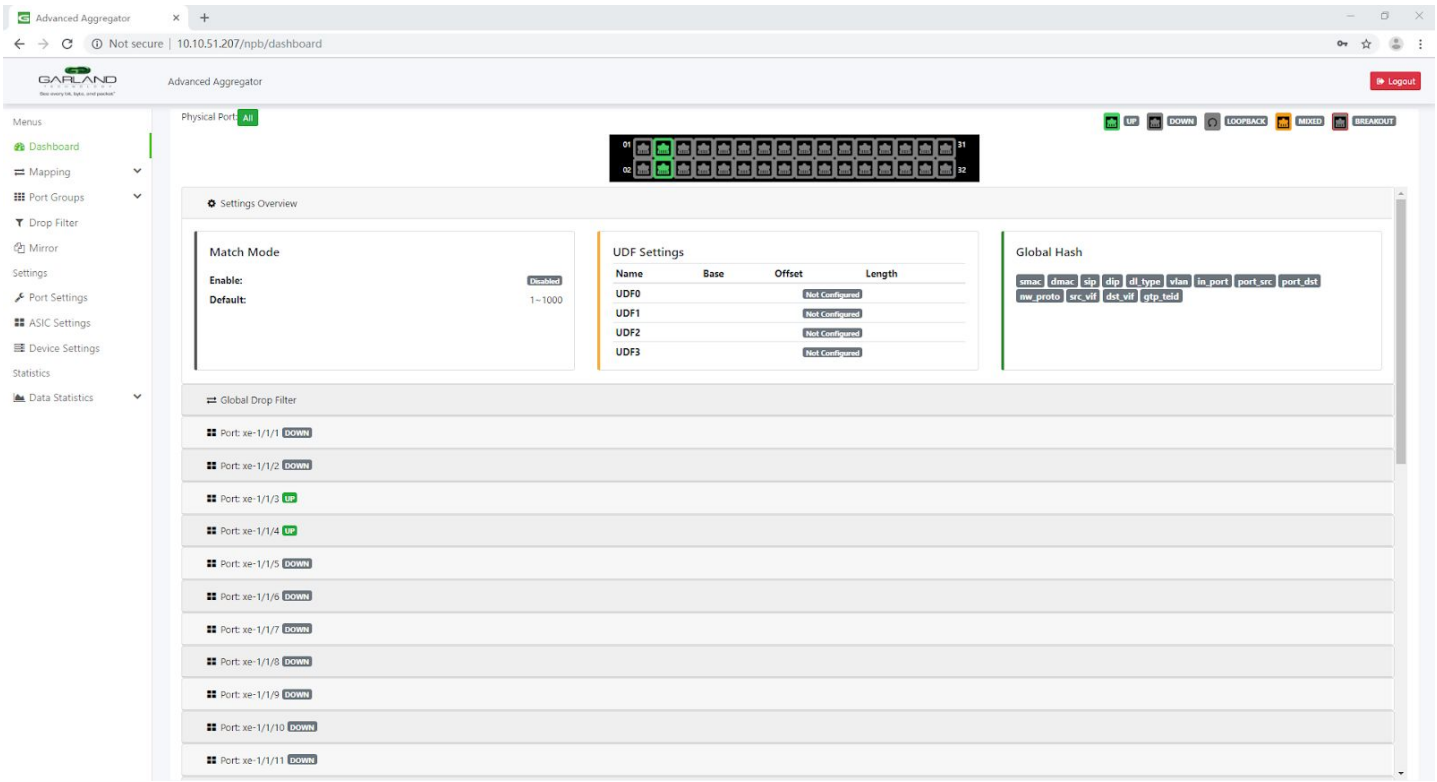
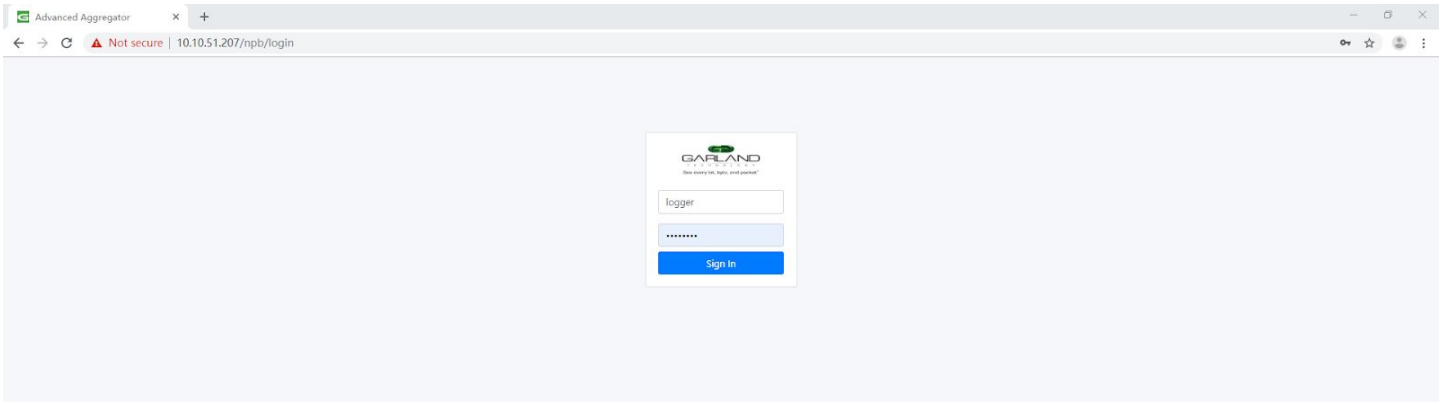


2) Logger

Login:



Logout:

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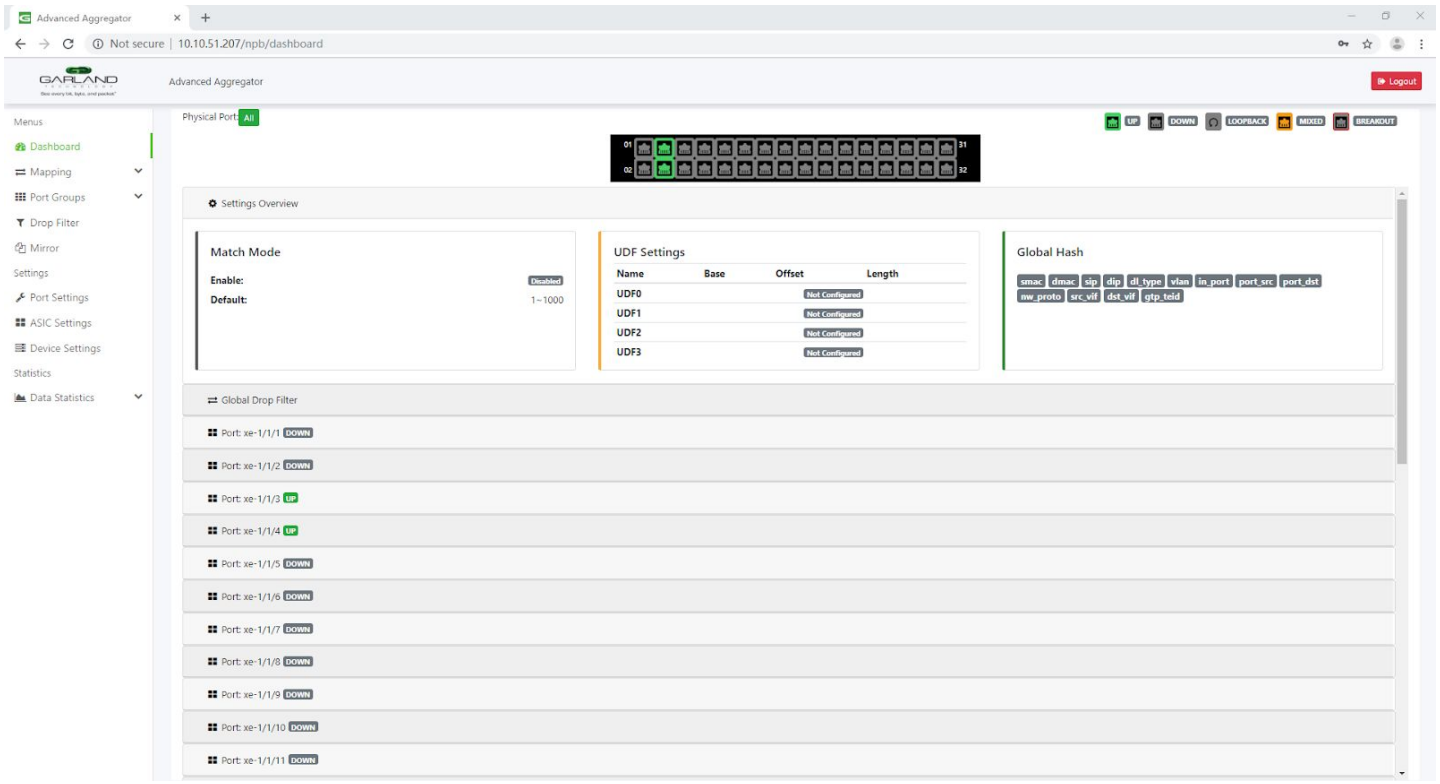
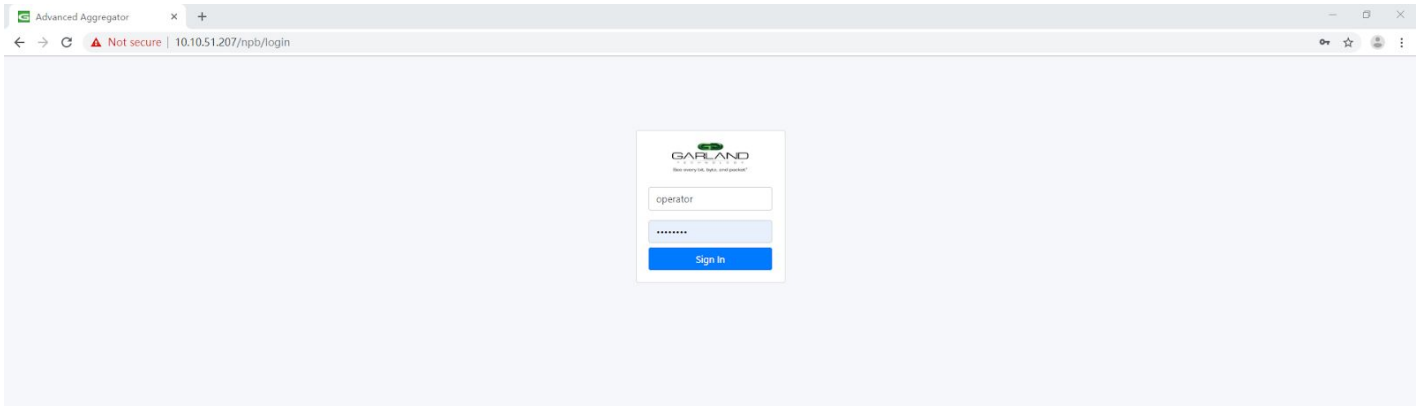


3) Operator

Login:



Logout:

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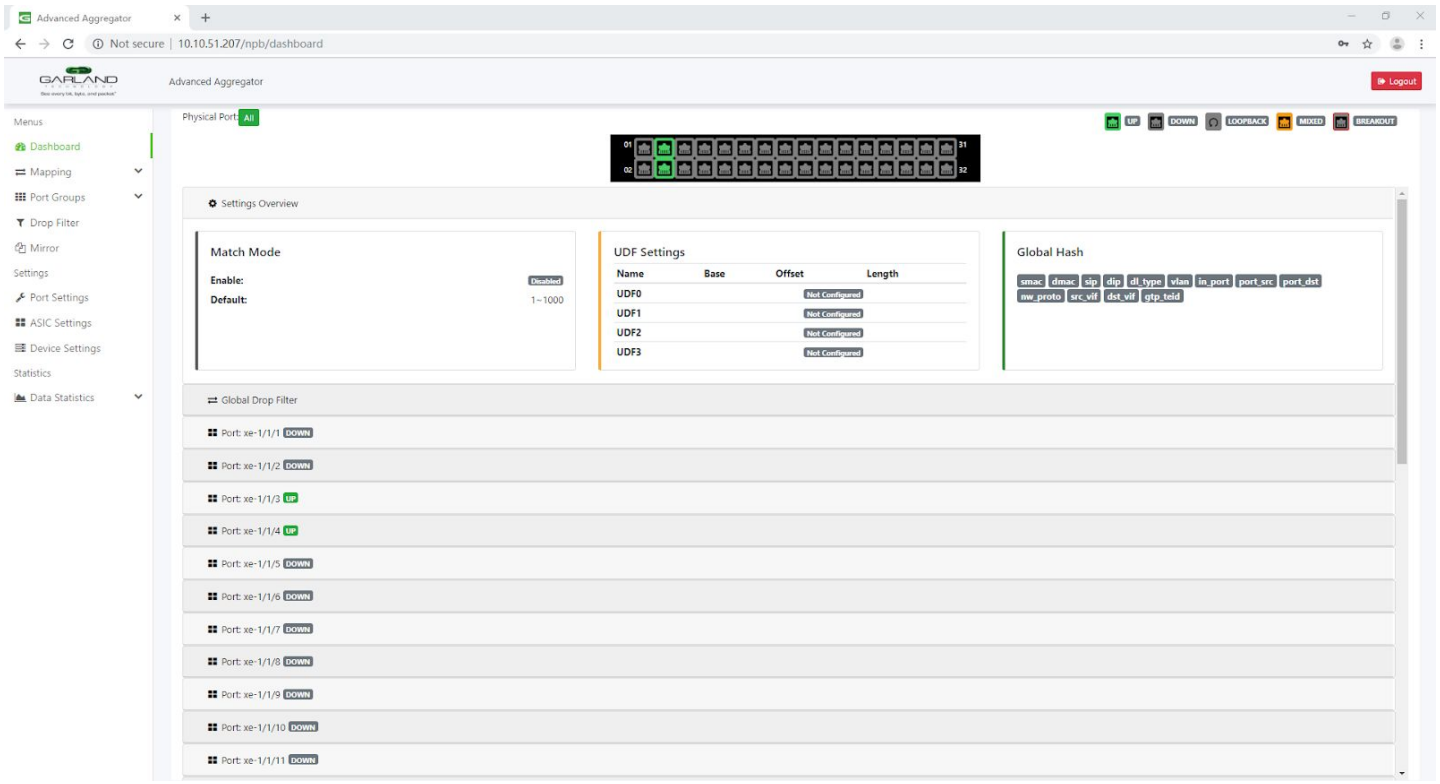
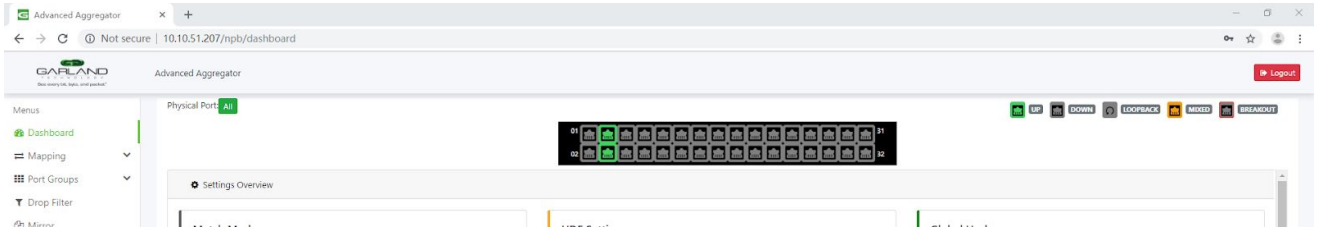


2 Dashboard

1) Display physical ports

In the default mode, the ports “up” and “down” status will be displayed on the Dashboard.



2) Global Drop Filter

Click “Global Drop Filter”, it will show the drop filter which matches all ingress ports

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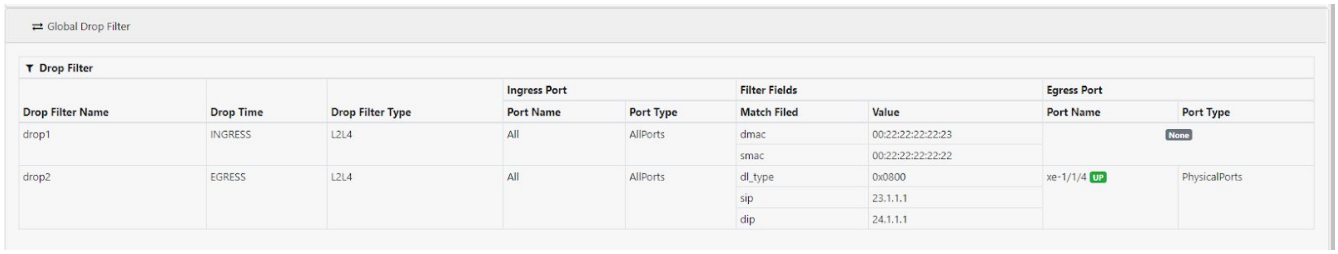
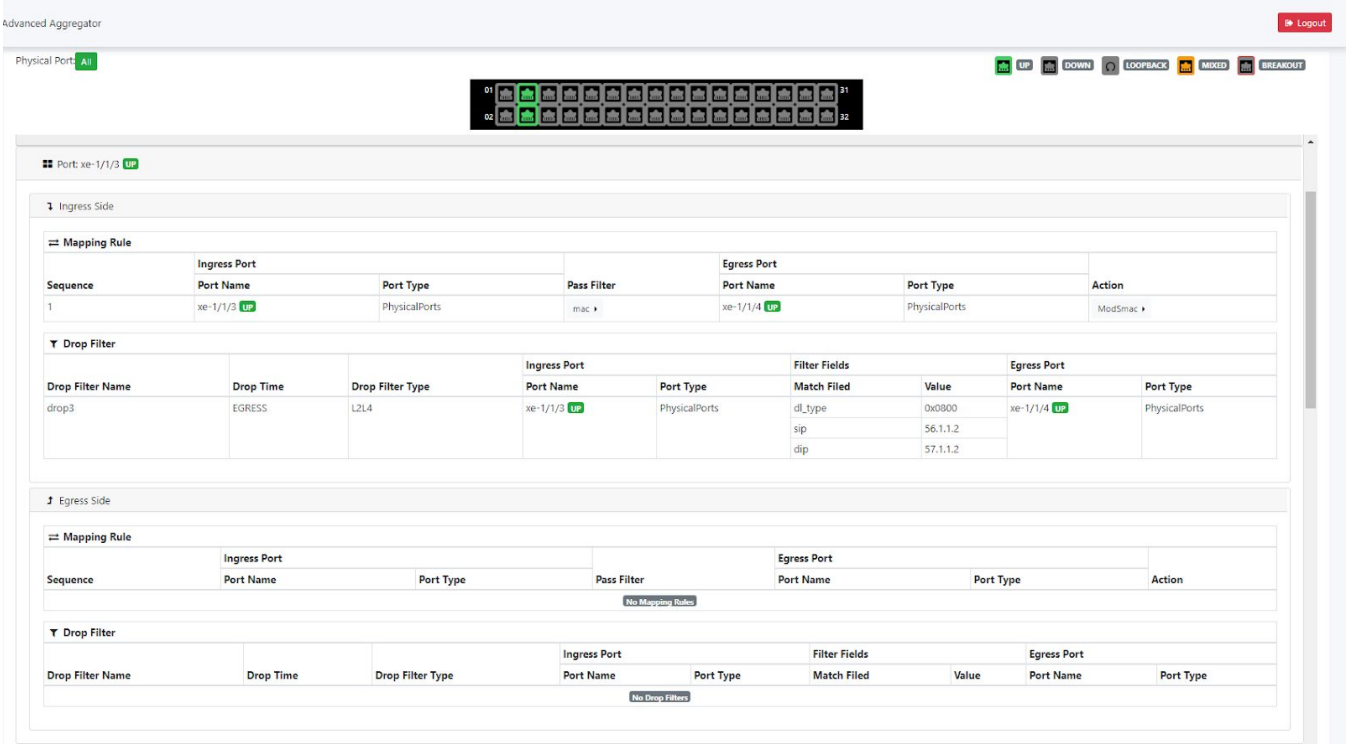


And you can click drop1 or drop2 to check the configured in drop filter.

3) The Flows Under port

Click an port, it will show the mapping rules and drop filter



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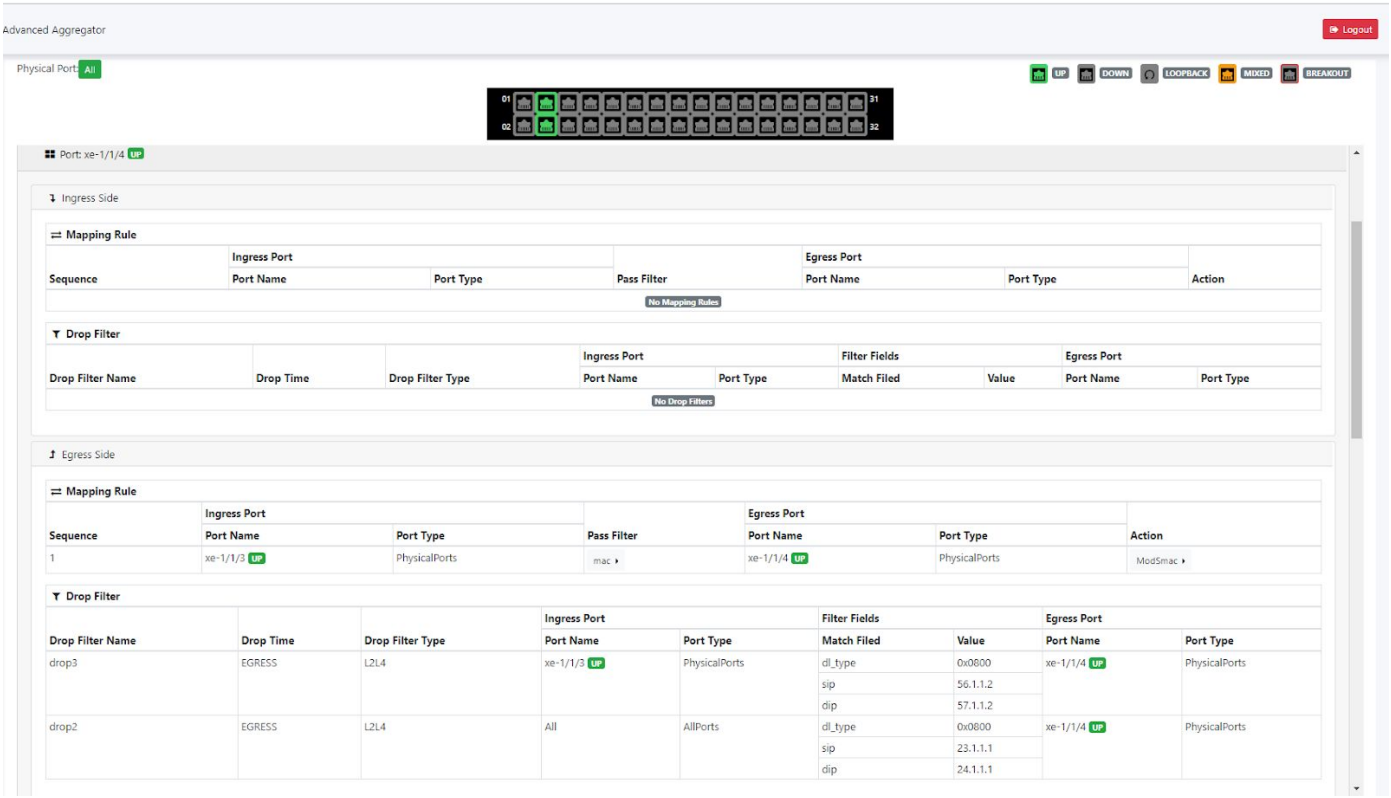

3 Mapping

On this module, you can add the pass filter and actions and then apply the settings to mapping rules.

1: Add a pass filter

Step1: click “+ button to add a filter.

Step2: you can write the filter name and choose match field or an Template. After setting the value, you can click “+” button to add one or more match fields and click “X”to delete one or more match fields on the filter

Step3: click “Save changes” to save the setting. And then you can click the filter name to see the detailed information.

Step4: Click the “ ” button to modify this pass filter and click the “X” button to delete this filter.

eg: add a filter to match basic fields:

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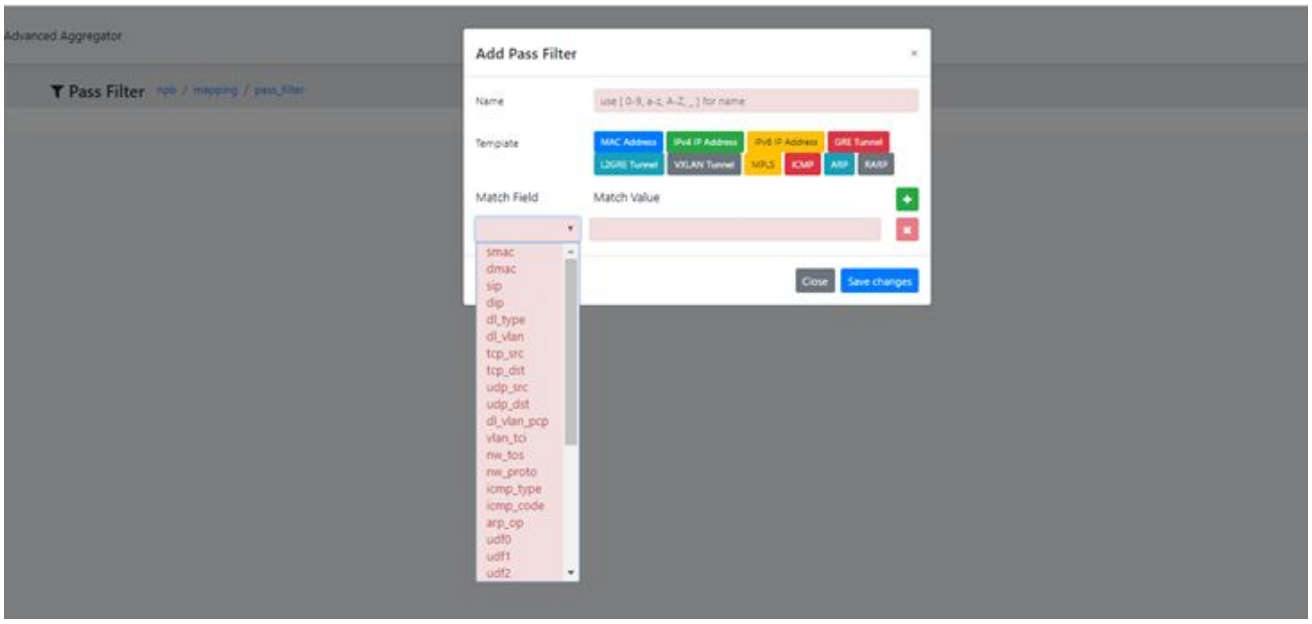

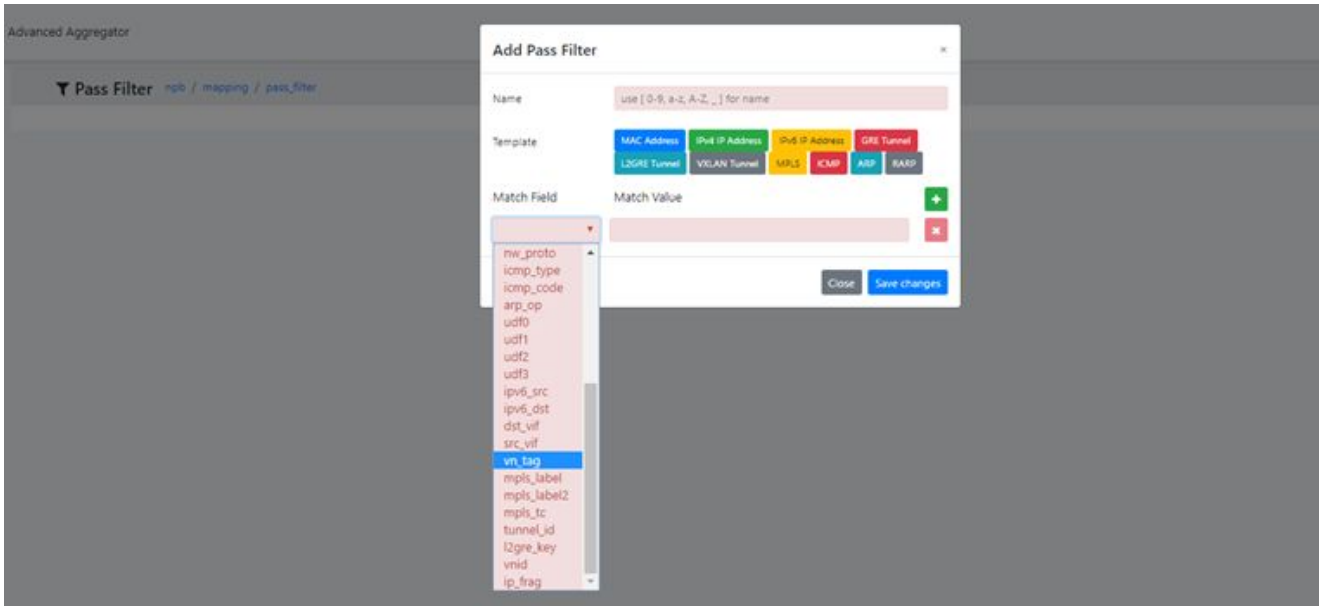

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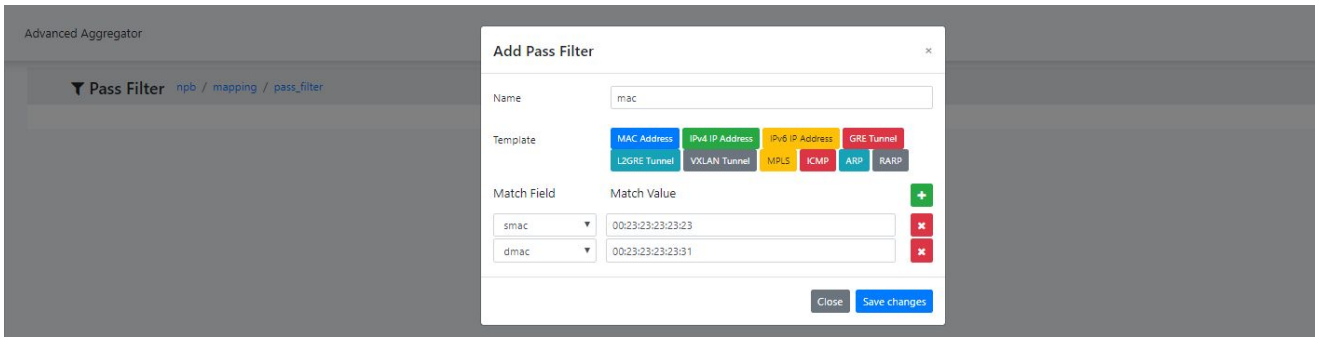
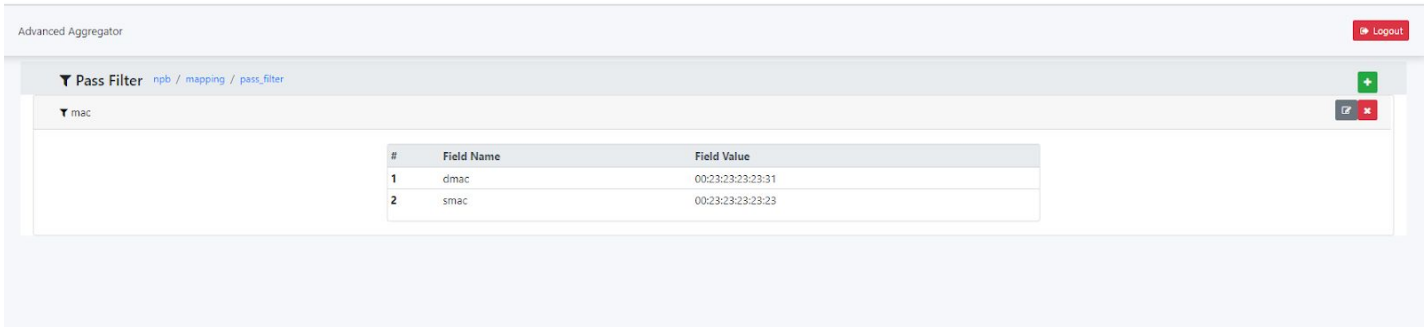


Click Save changes:



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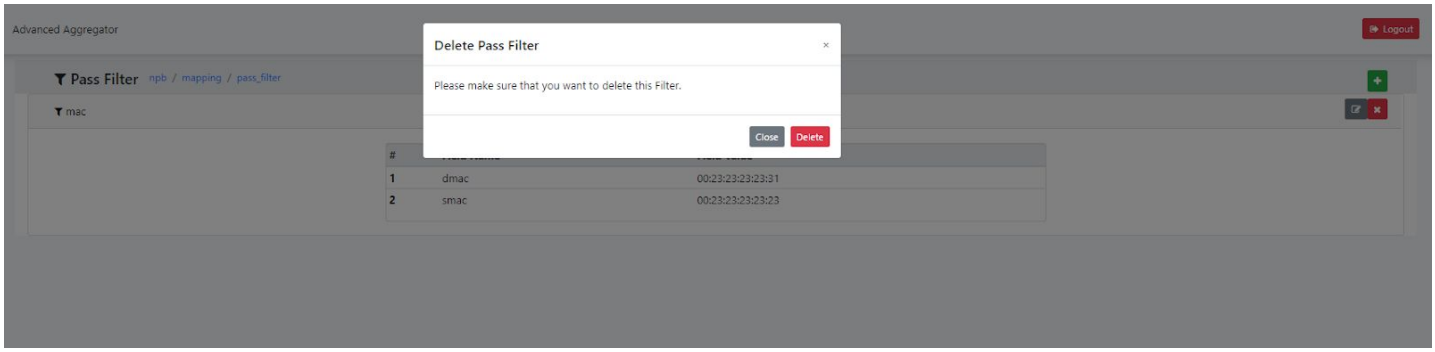

2: Add Action

Step1: click “+ button to add an action.

Step2: you can write the action name and choose action Field. After setting the value, you can click “+” button to add one or more action fields and click “X”to delete one or more action fields on the action.

Step3: click “Save changes” to save the setting. And then you can click the action name to see the detailed information.

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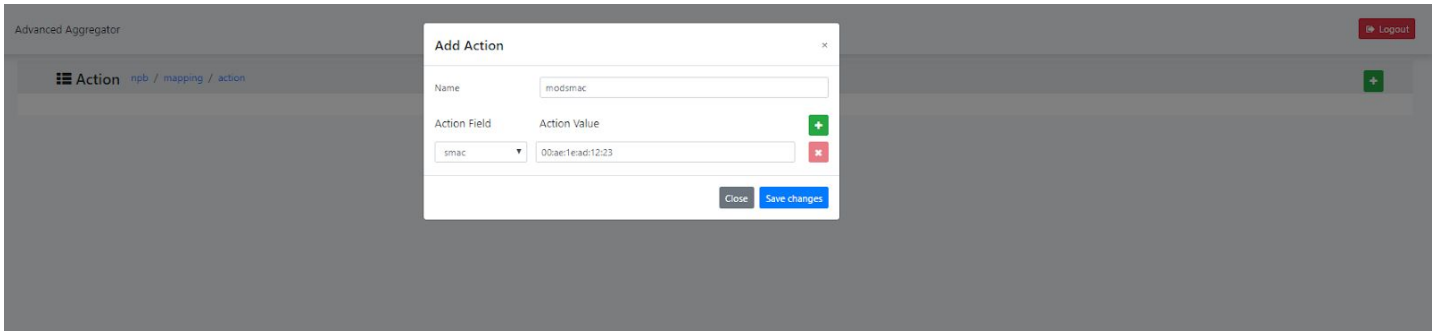
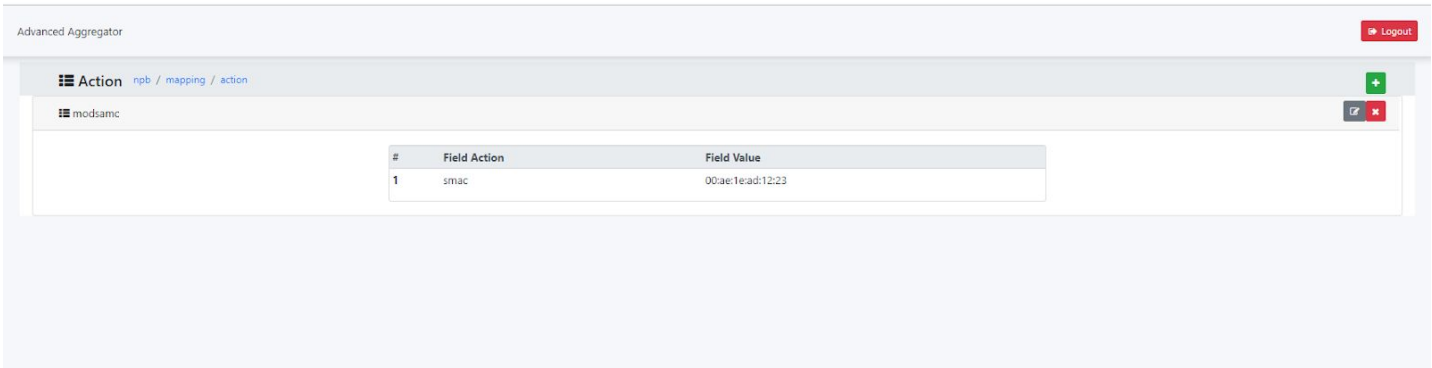
Step4: Click the “ ” button to modify this action and click the “X” button to delete this action.

eg: add an action:



Click Save changes:



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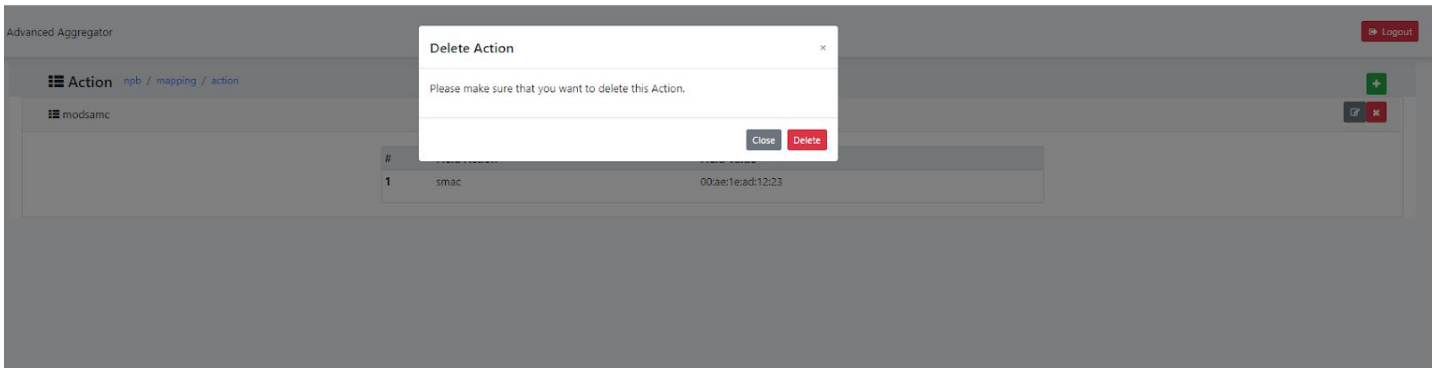

3: Add mapping rules

Step1: click ‘’+” button to add a mapping rule.

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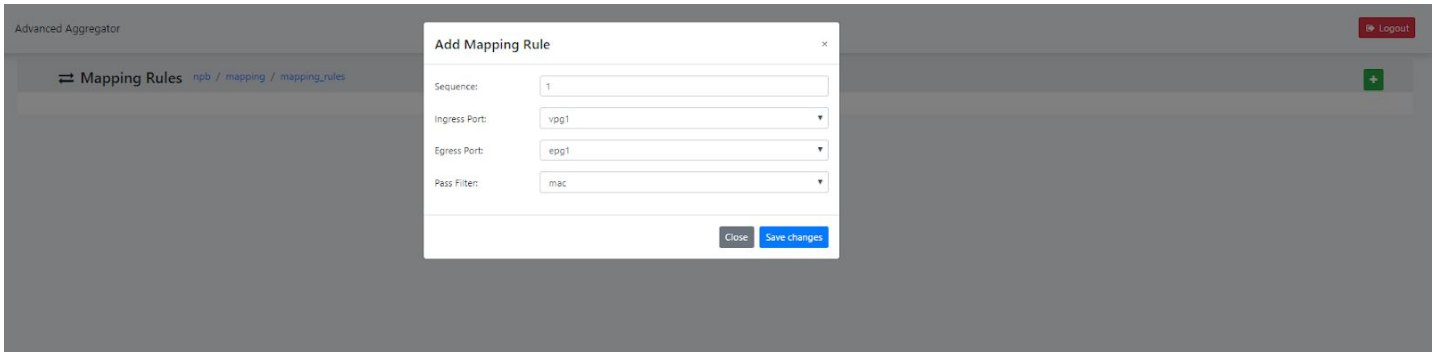
Step2: configure details of mapping rule: the ingress port can be a virtual port group or physical port and the egress port can be a virtual port group or physical port or egress port group.

Step3: after settings, click “Save changes”.

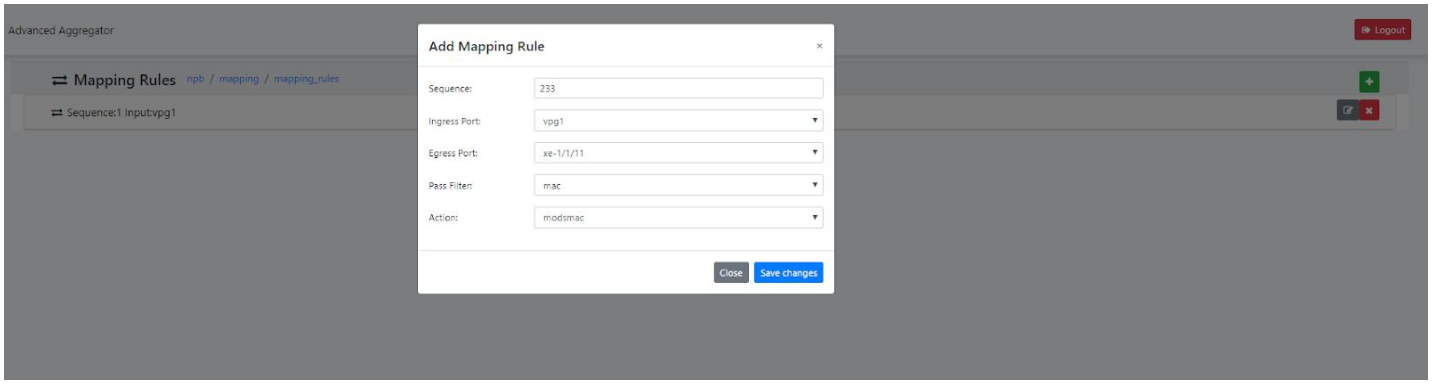
Step4: you can check the details of mapping rule which you added. And click “X” to delete this mapping rule, click “ ” to change the settings.

eg: add two mapping rules:

When egress port is an egress port group:



When egress port is a physical port:



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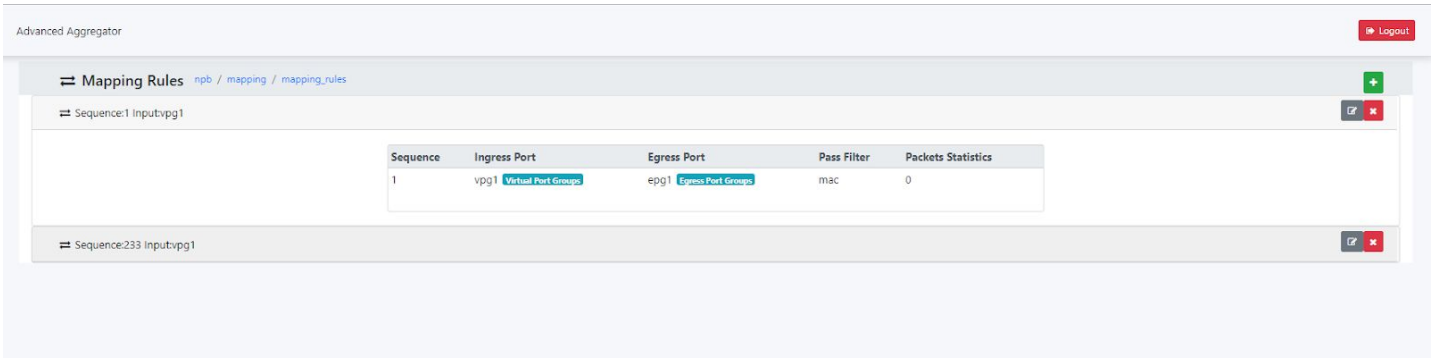
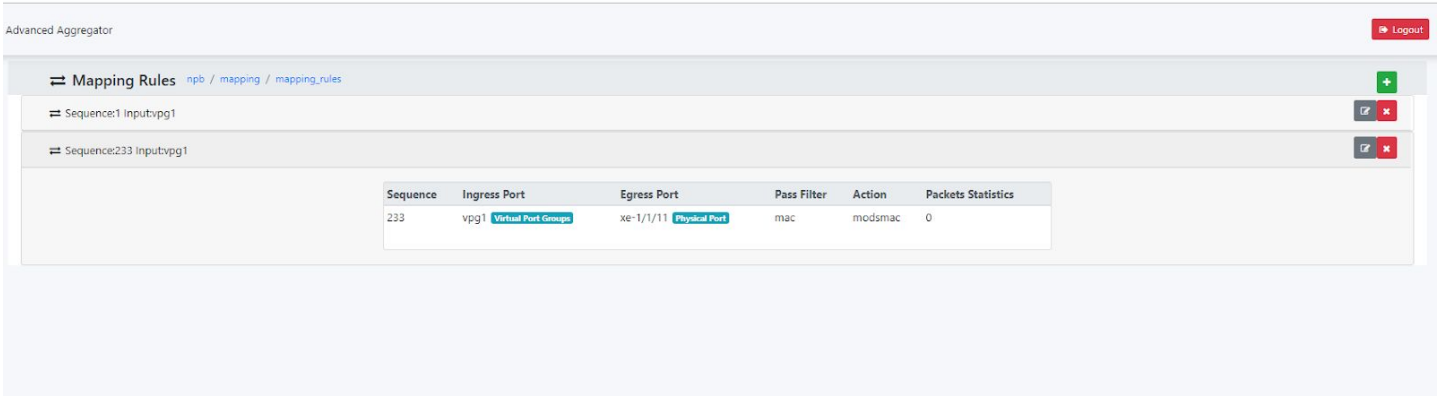
After above settings:





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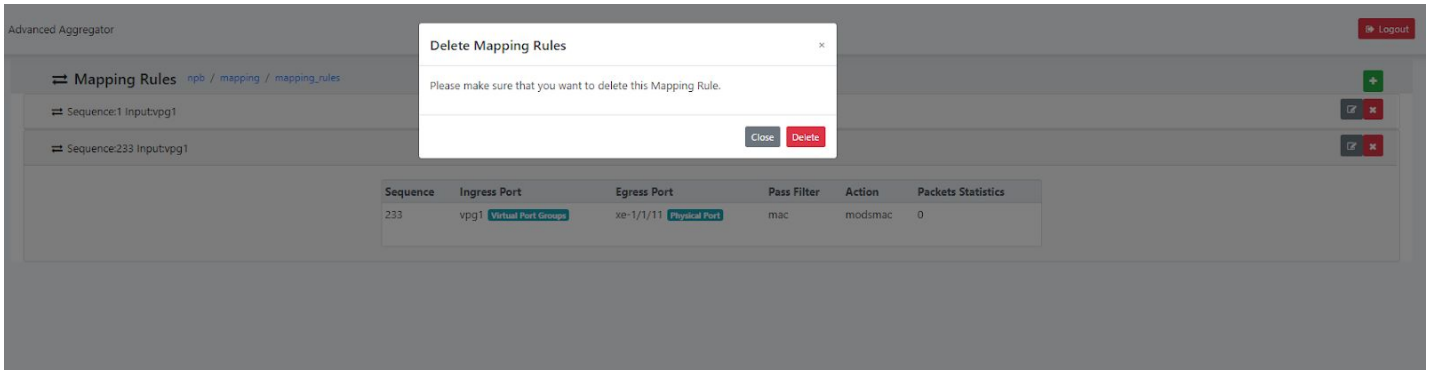

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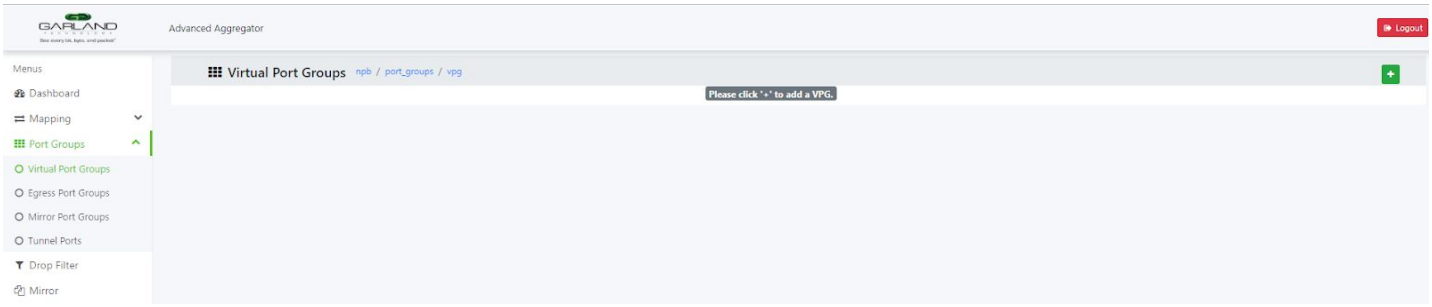
4 Port Groups

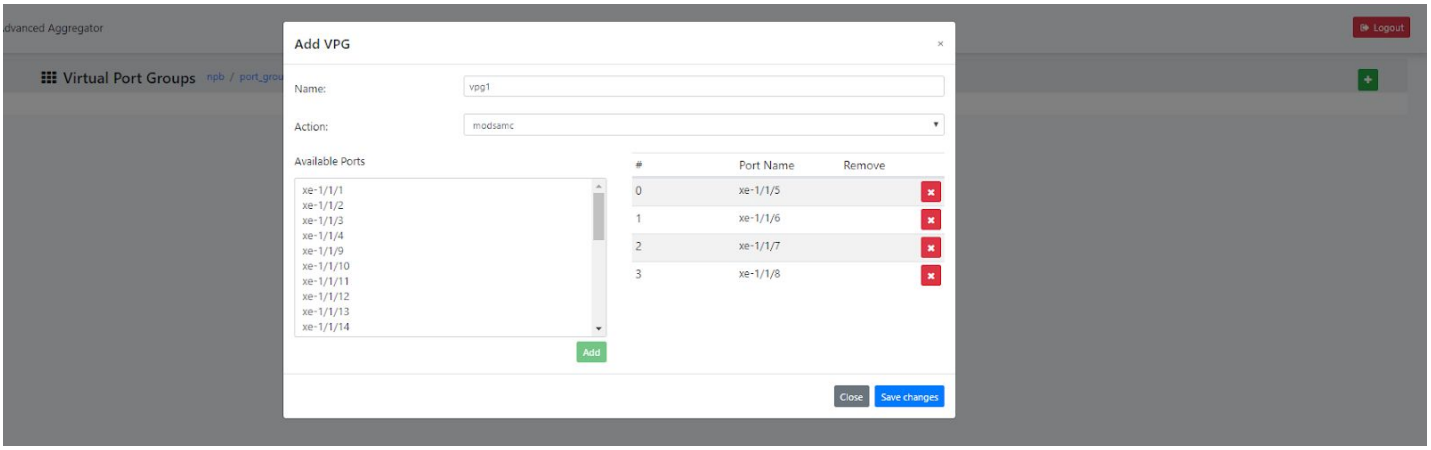


1: Add a Virtual Port Group_(VPG)

Step1: click “+” button to add a vpg.

Step2: click “Add” button to add physical ports to virtual port group.

Step3: fill in group name and choose one configured action - you can see the ports which you added; click “X” to delete this port from group. Click “Save changes” to save the setting.



Step4: You can click the virtual port group to see the details.

Click “X” to delete the setting.

Click “ ” to modify your setting.

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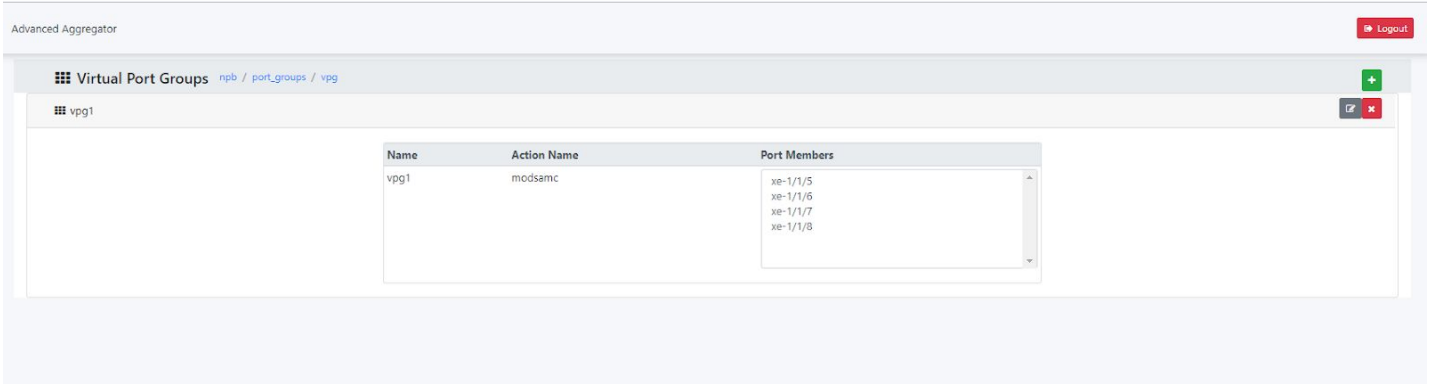
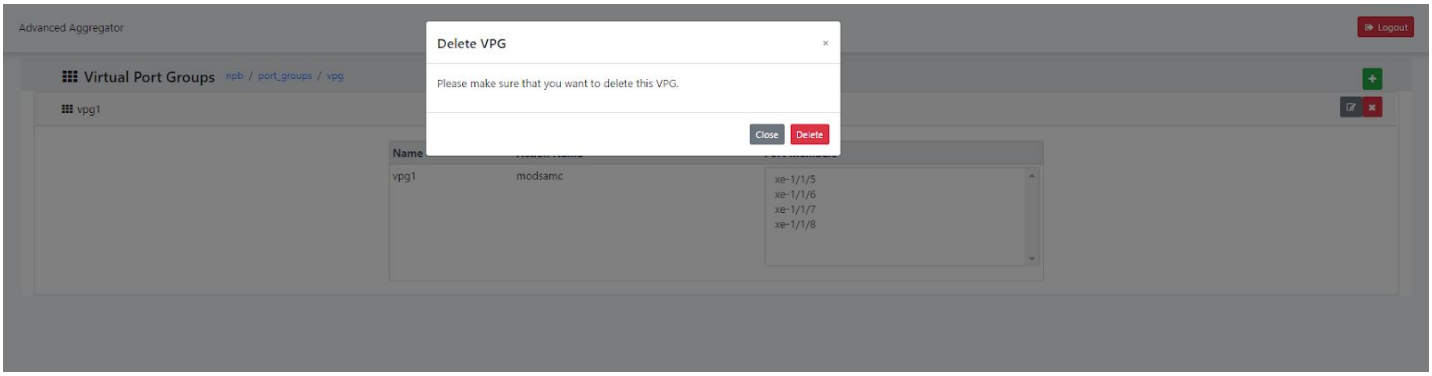
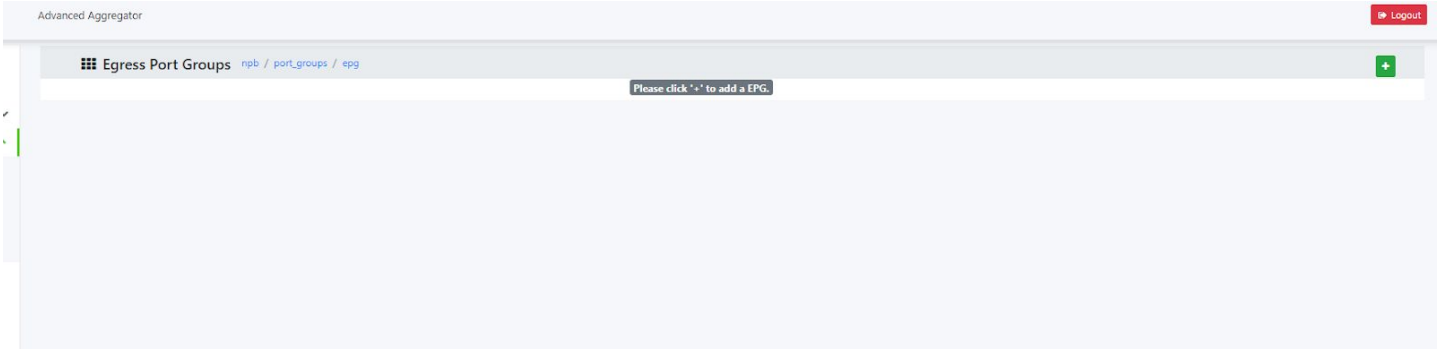


Delete:



2: Add an Egress Port Group_(EPG)



Step1: Click “+” button to add an egress lag group.

Step2: click “Add” button to add physical port to Egress port group.

Step3: fill in egress port group name, choose one configured action and hash field; you can see the ports which you added, and click “X” to delete this port from group. Click “Save changes” to save the setting.

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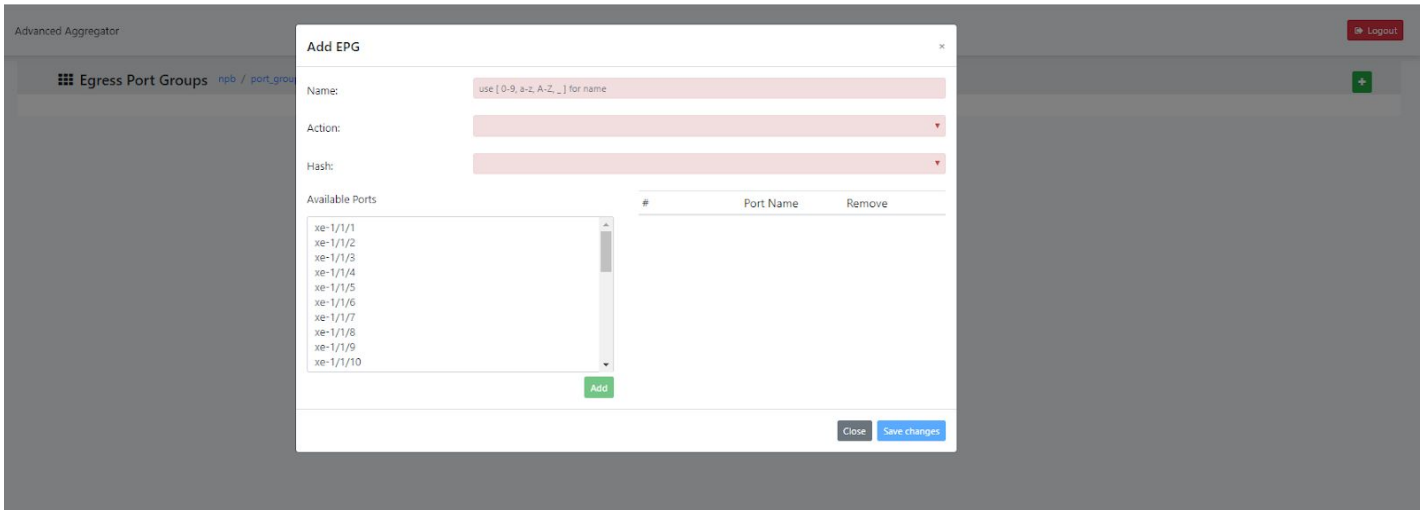
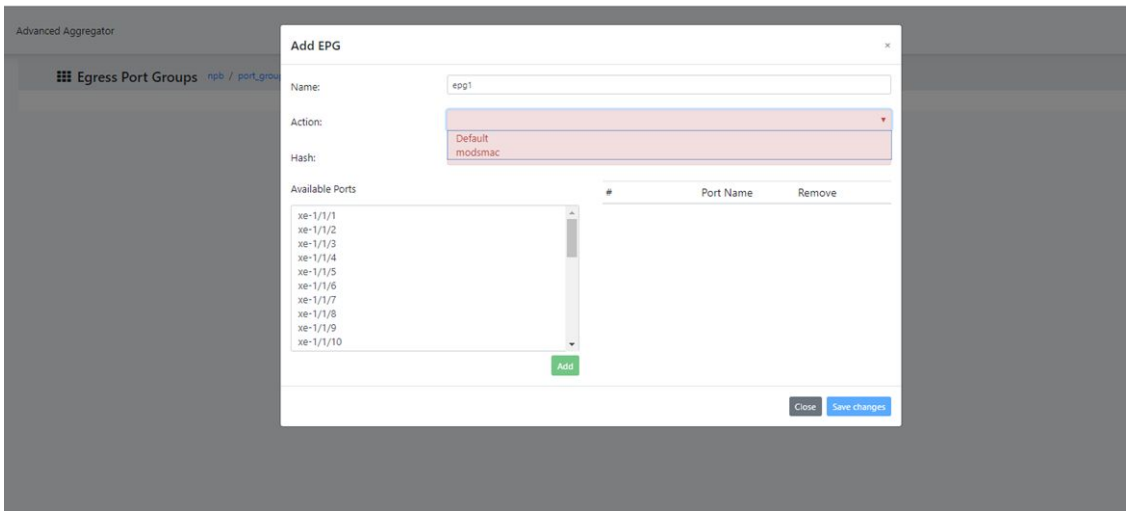
Step4: You can click the egress port group to see the details.

Click “X” to delete the setting.

Click “ ” to modify your setting.

Note: the egress port group_id range is 1-200.





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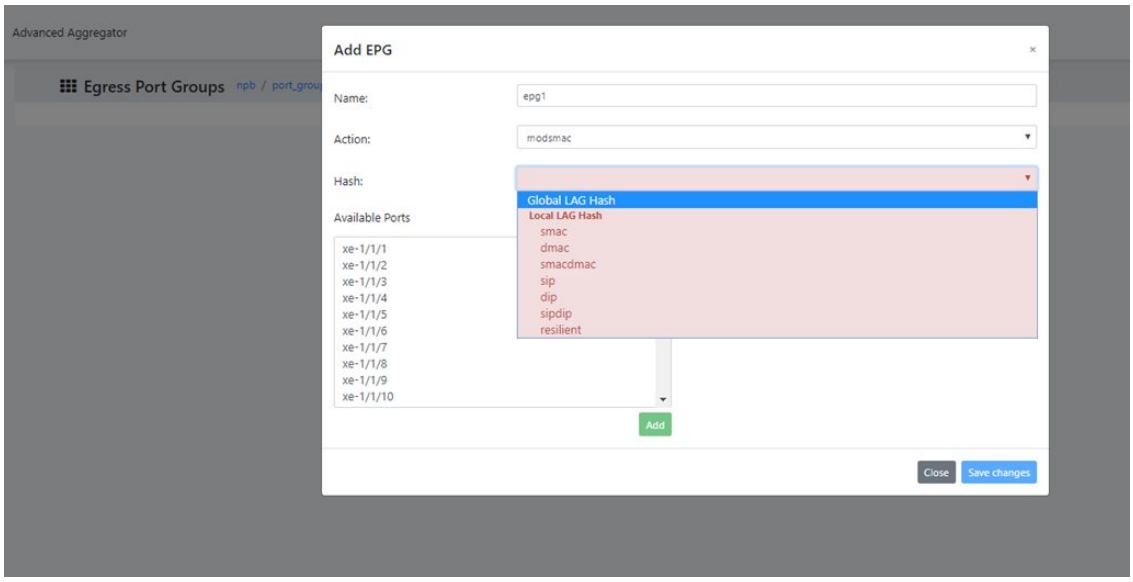

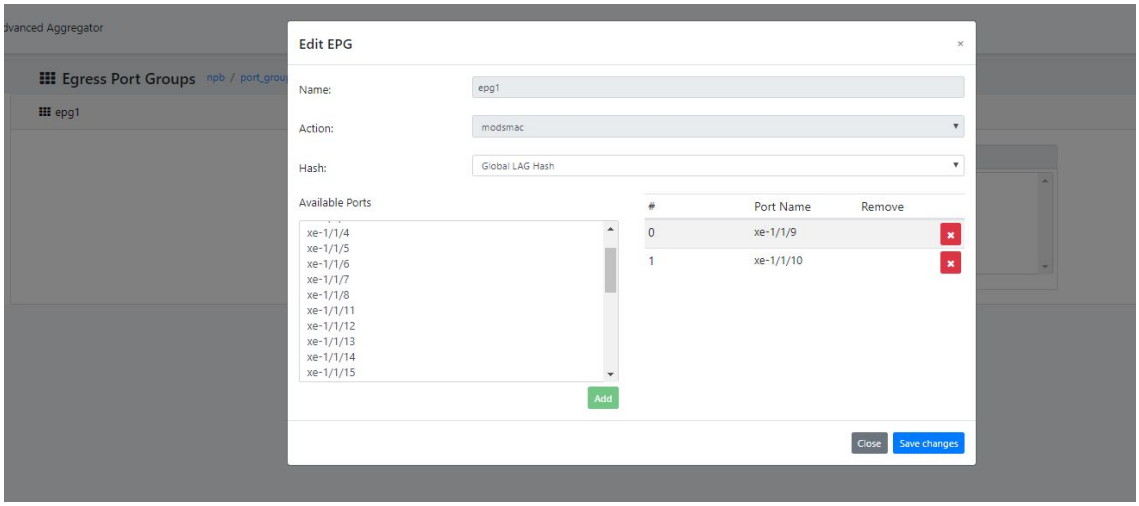

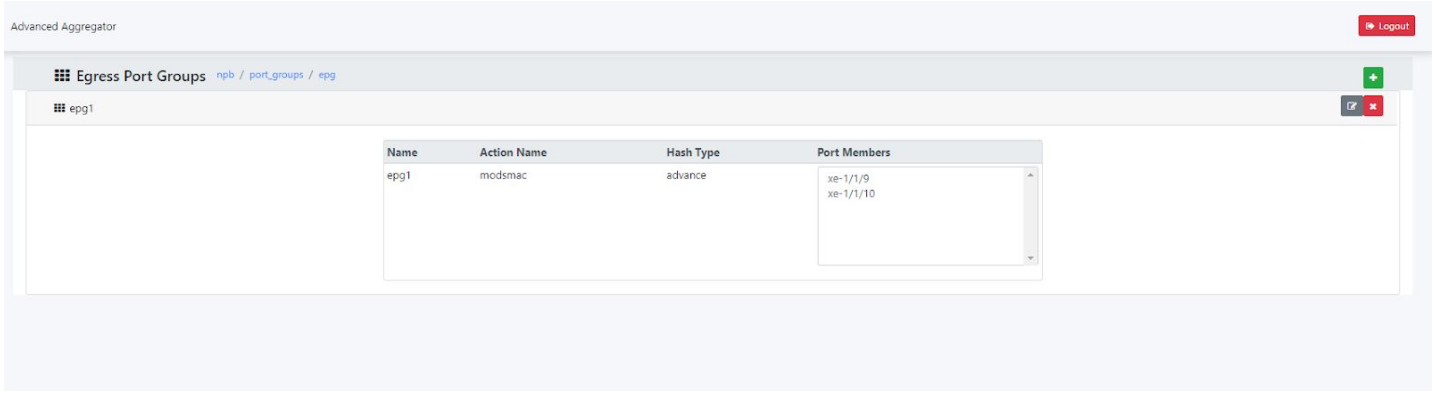

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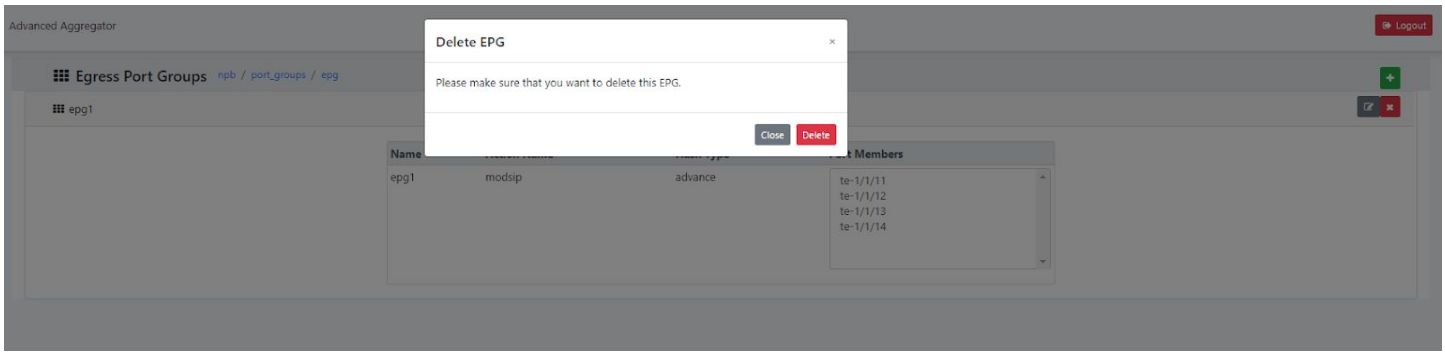
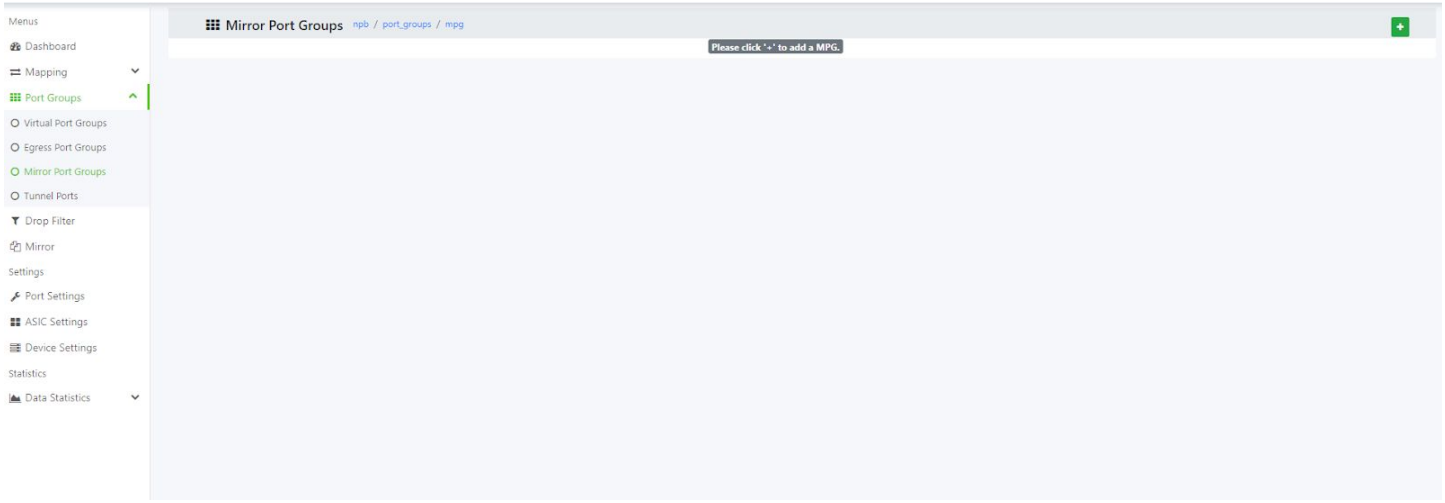


3: Add Mirror Port Group_(MPG)



Step1: click “+” button to add lag port for mirror.

Step2: click “Add” button to add available port to mirror port group.

Step3: choose port number, lag type and hash field; also you can see the ports which you added, and click “X” to delete this port from group. Click “Save changes” to save the setting.

Step4: You can click the mirror port group to see the details.

Click “X” to delete the setting.

Click “ ” to modify your setting.

Note: the type of lag that you can choose: Static or LACP.

NOTE： the Maximum of MPG supported is 4.

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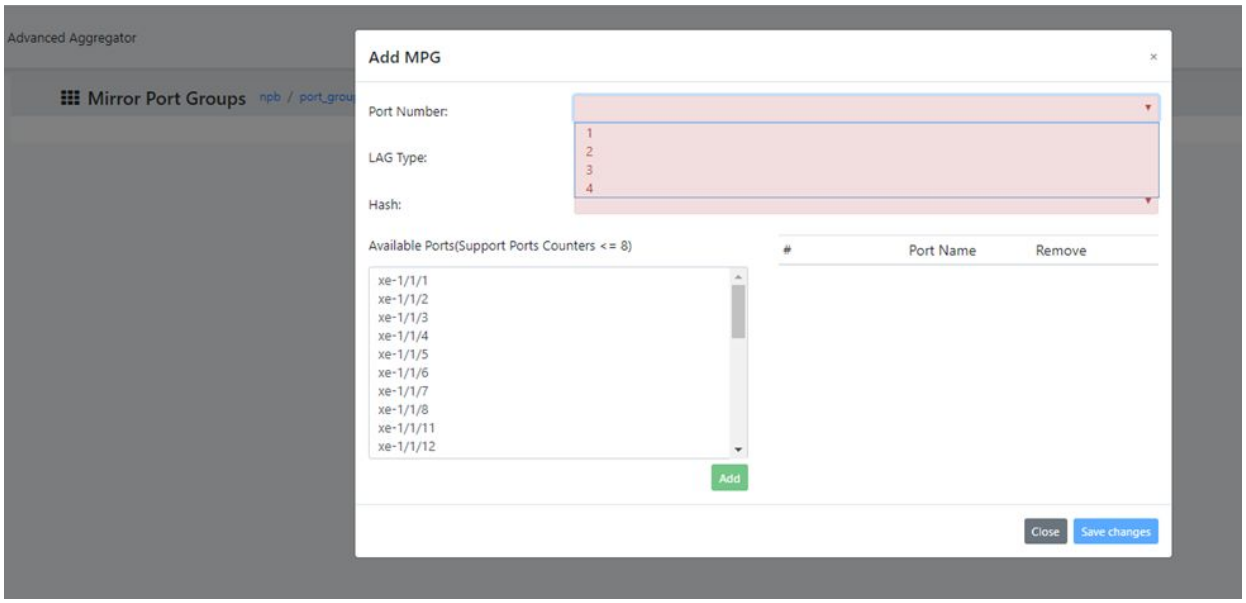

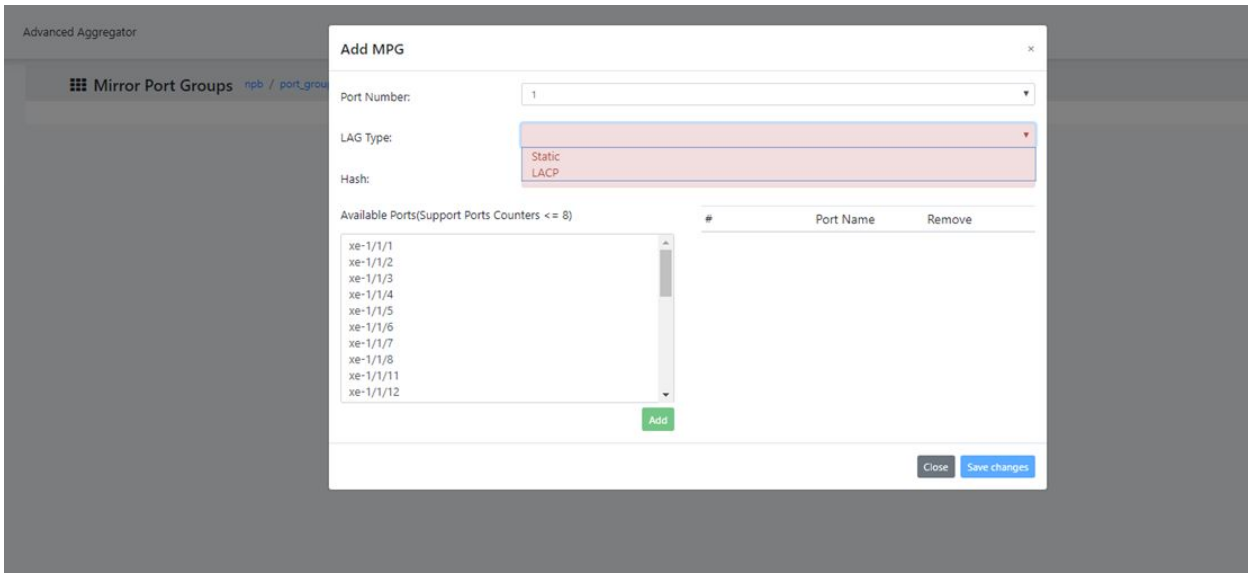

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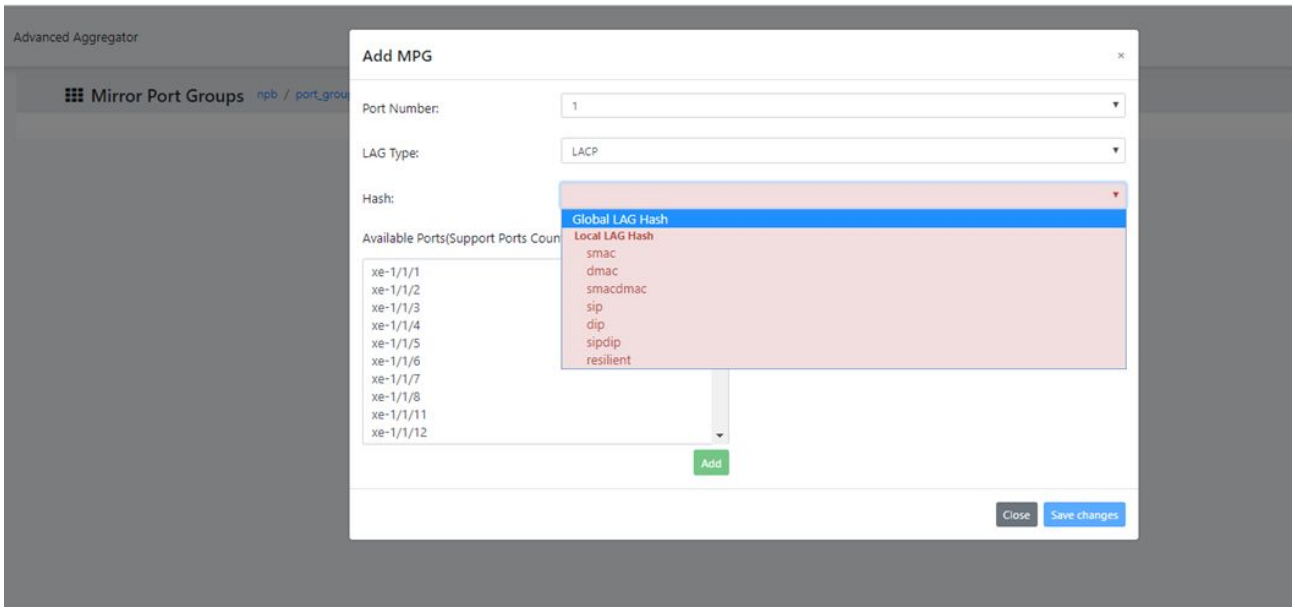

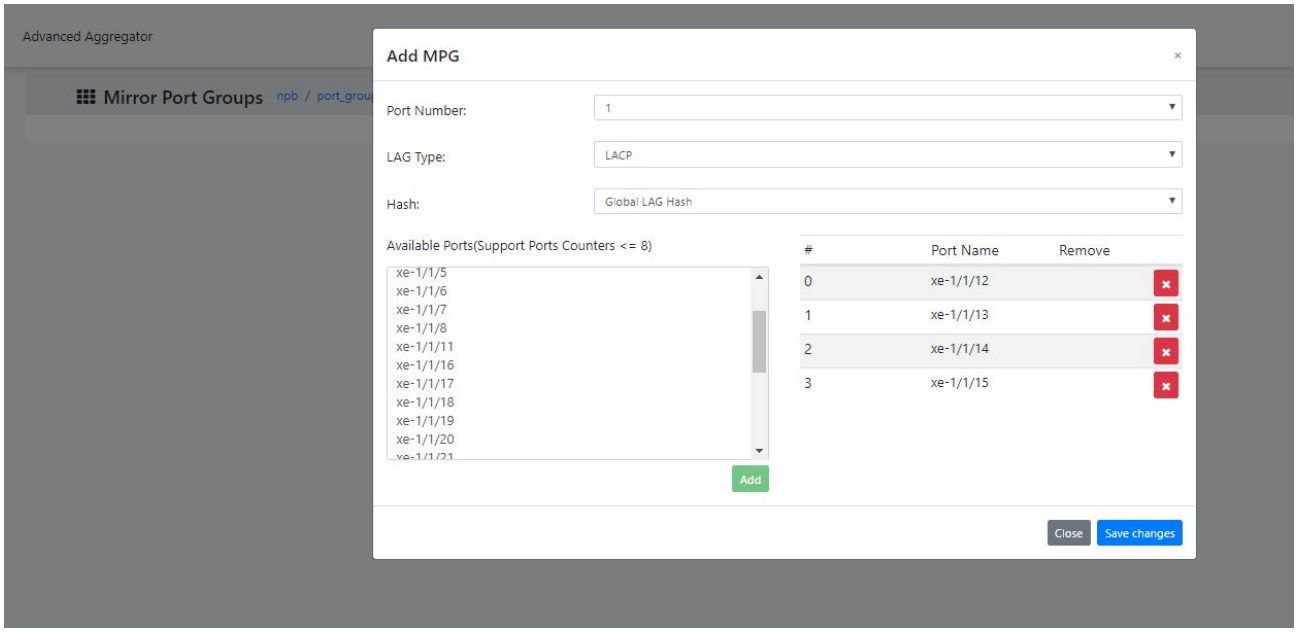

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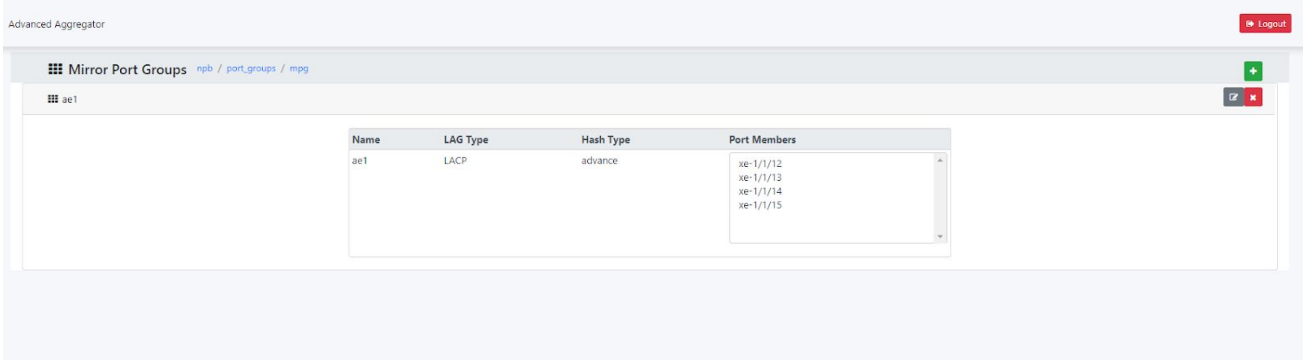
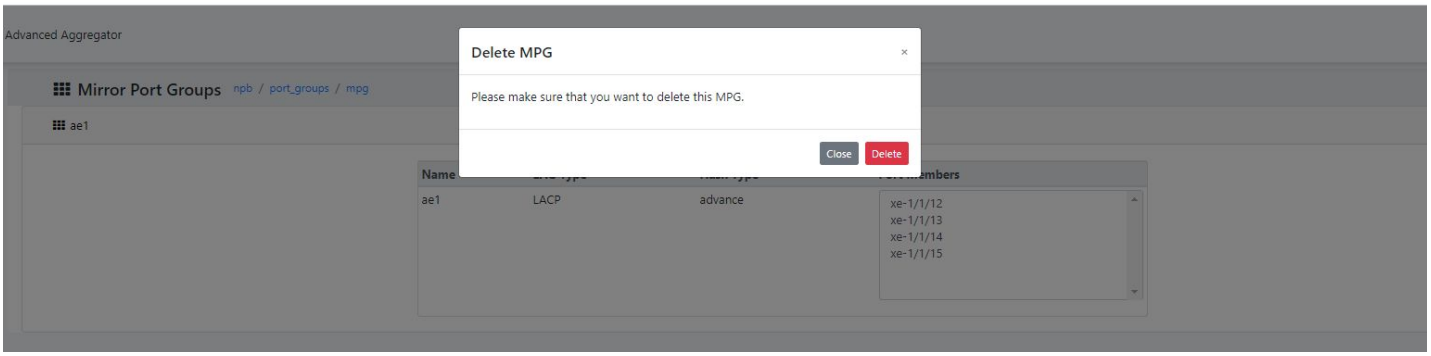
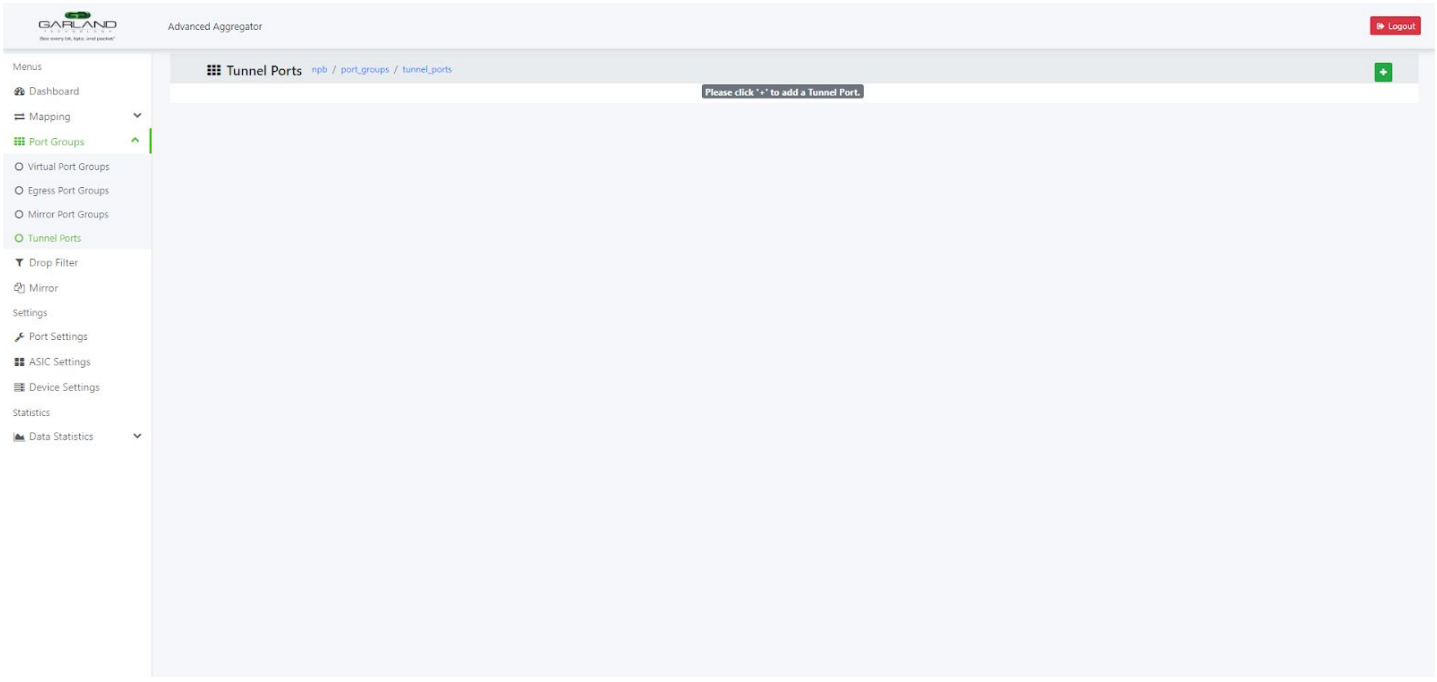


Delete:



4: Add Tunnel Ports



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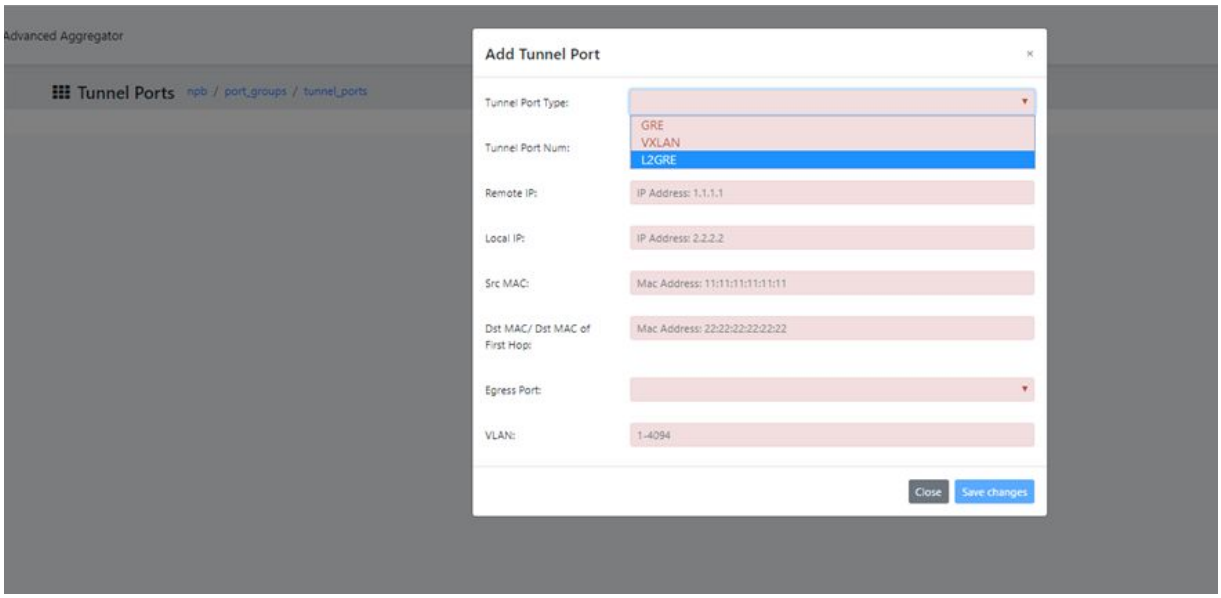
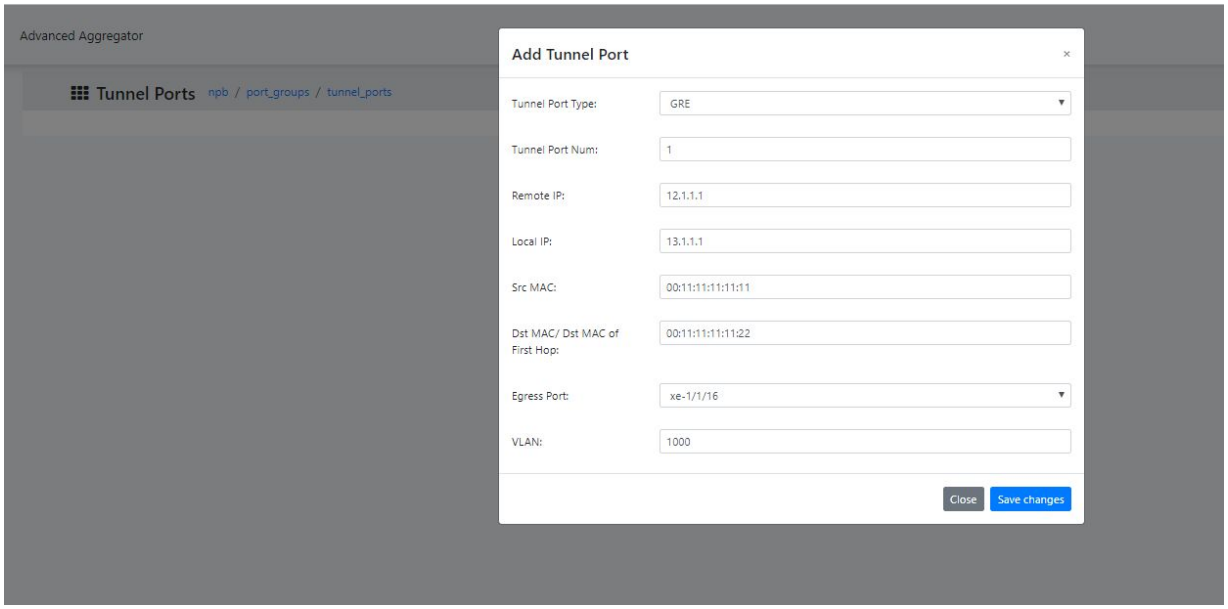
Step1: click “+” button to add a Tunnel Port. Fill in the fields and click “Save changes” to save the setting.

Step2: You can click the Tunnel Port to see the details.

Click “X” to delete the setting.



Eg1: Add a GRE Tunnel Port



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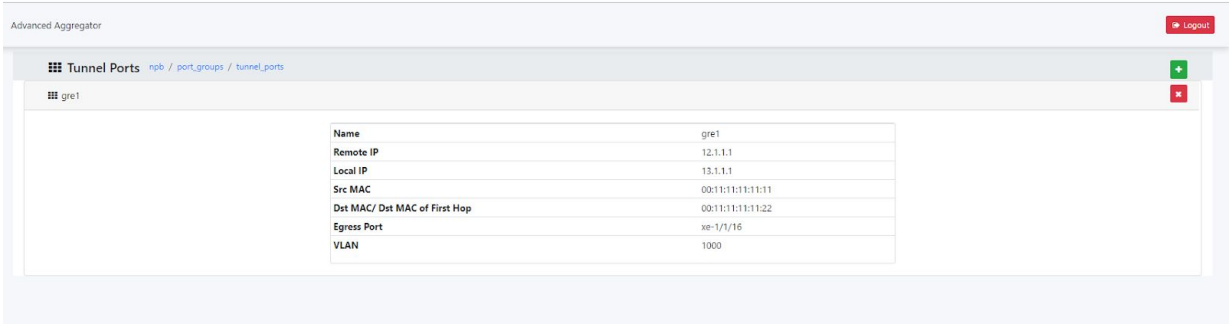
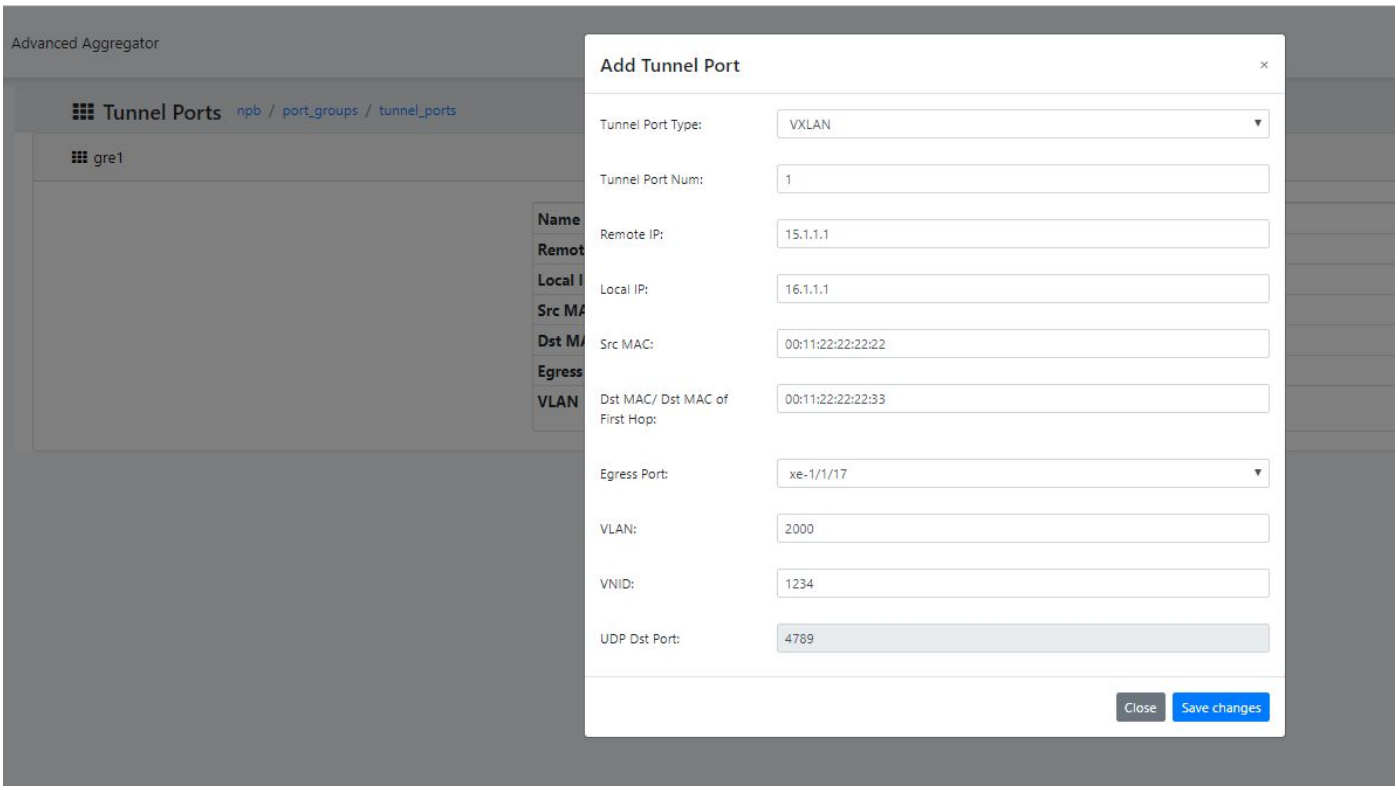


Eg2: Add a VXLAN Tunnel Port



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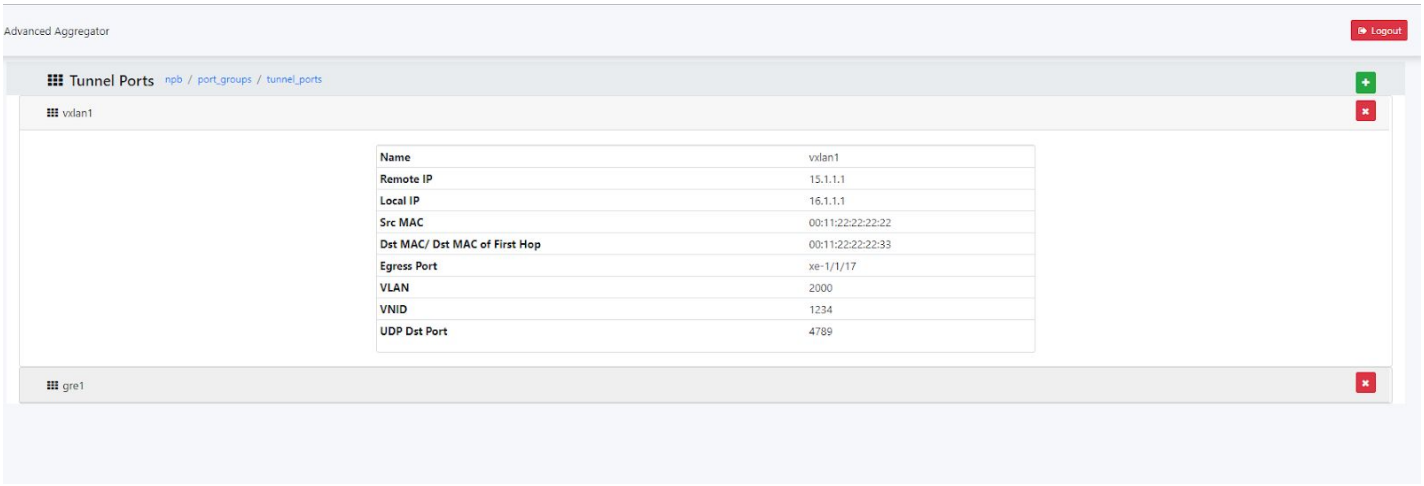
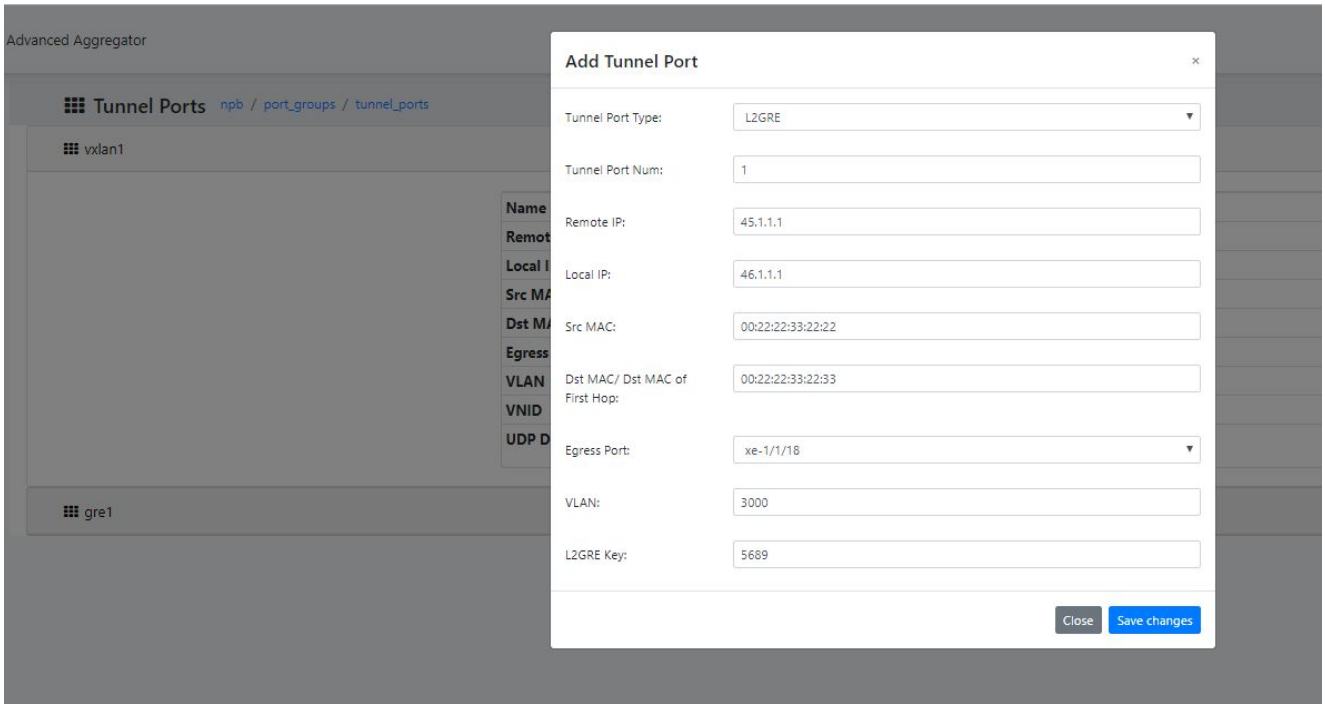


Eg3: Add a L2GRE Tunnel Port



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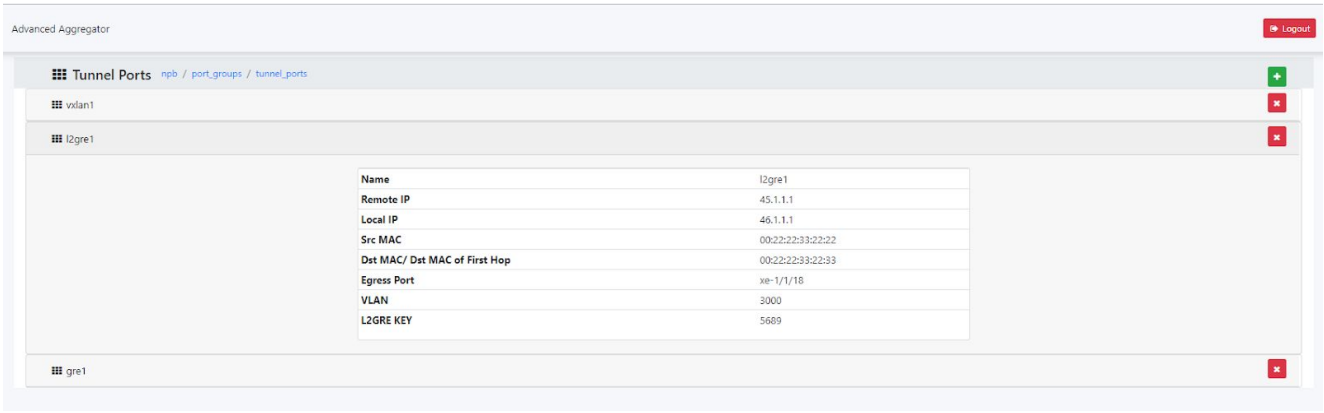
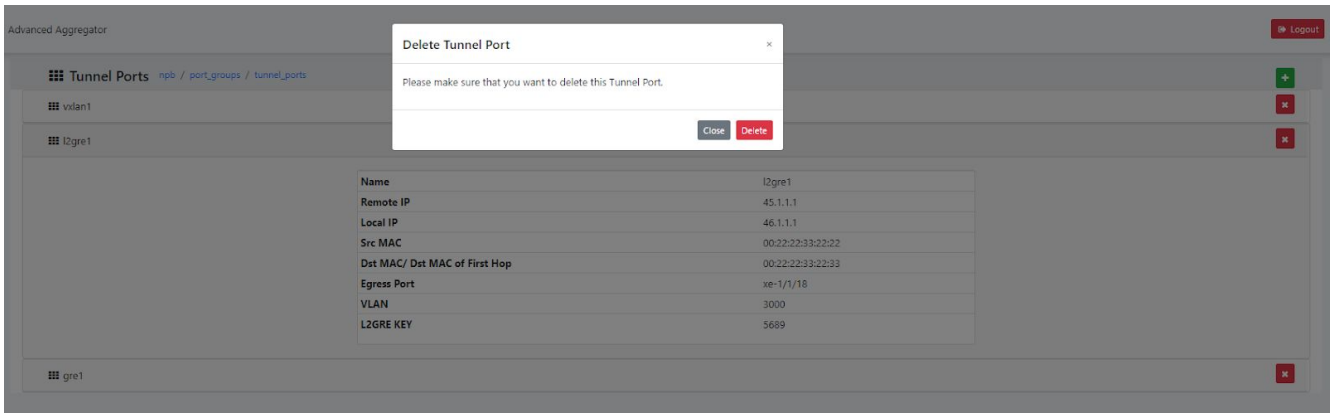


Delete:



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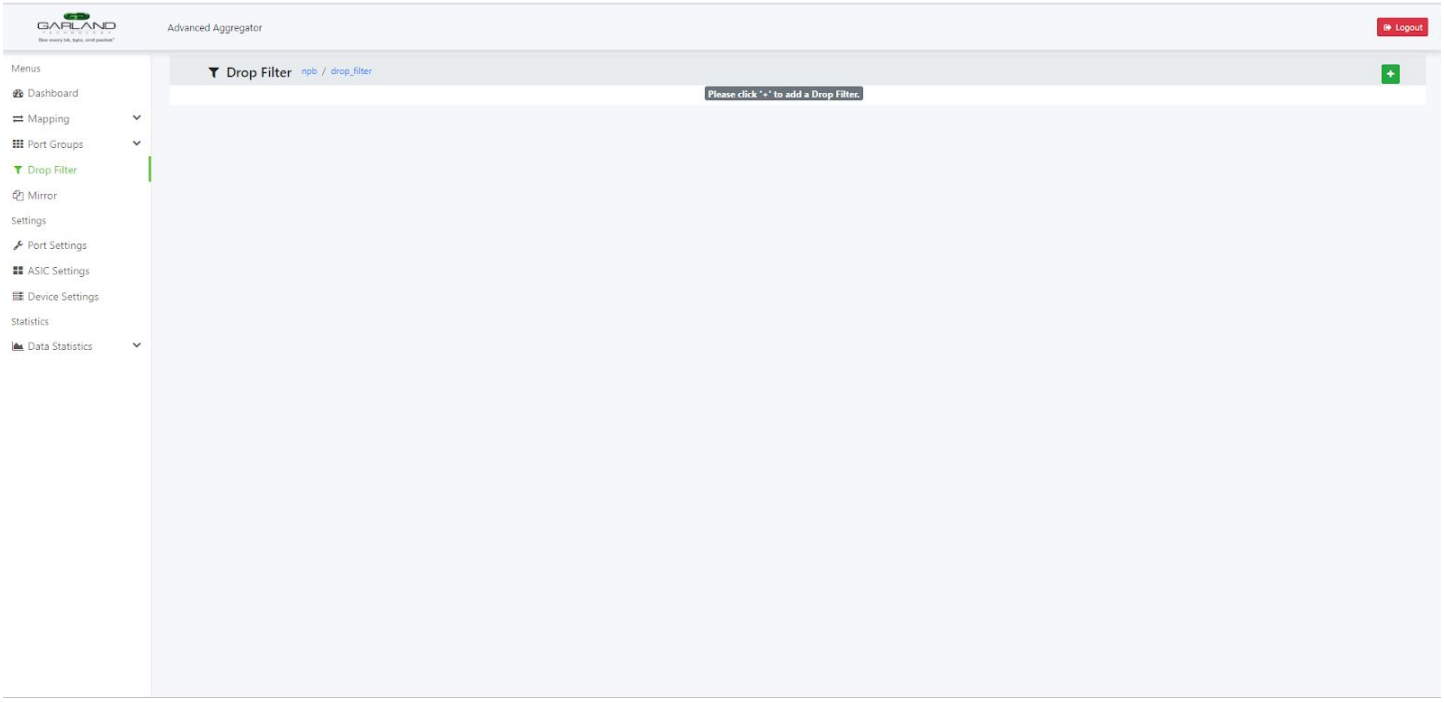
5 Drop Filter



Step1: Click “+” button to add a drop filter.

Step2: you can write the Drop filter name and choose match field or an Template. After setting the value, you can click “+” button to add one or more match fields and click “X”to delete one or more match fields on the Drop filter.Click “Save changes” to save the setting.

Note: the drop point can be ingress or egress; type is L2-L4 without match mode.

Step3 : After adding, you can click the name to show the details.

Click “X” to delete the setting.

Click “ ” to modify your setting.

eg1: add an ACL on ingress:

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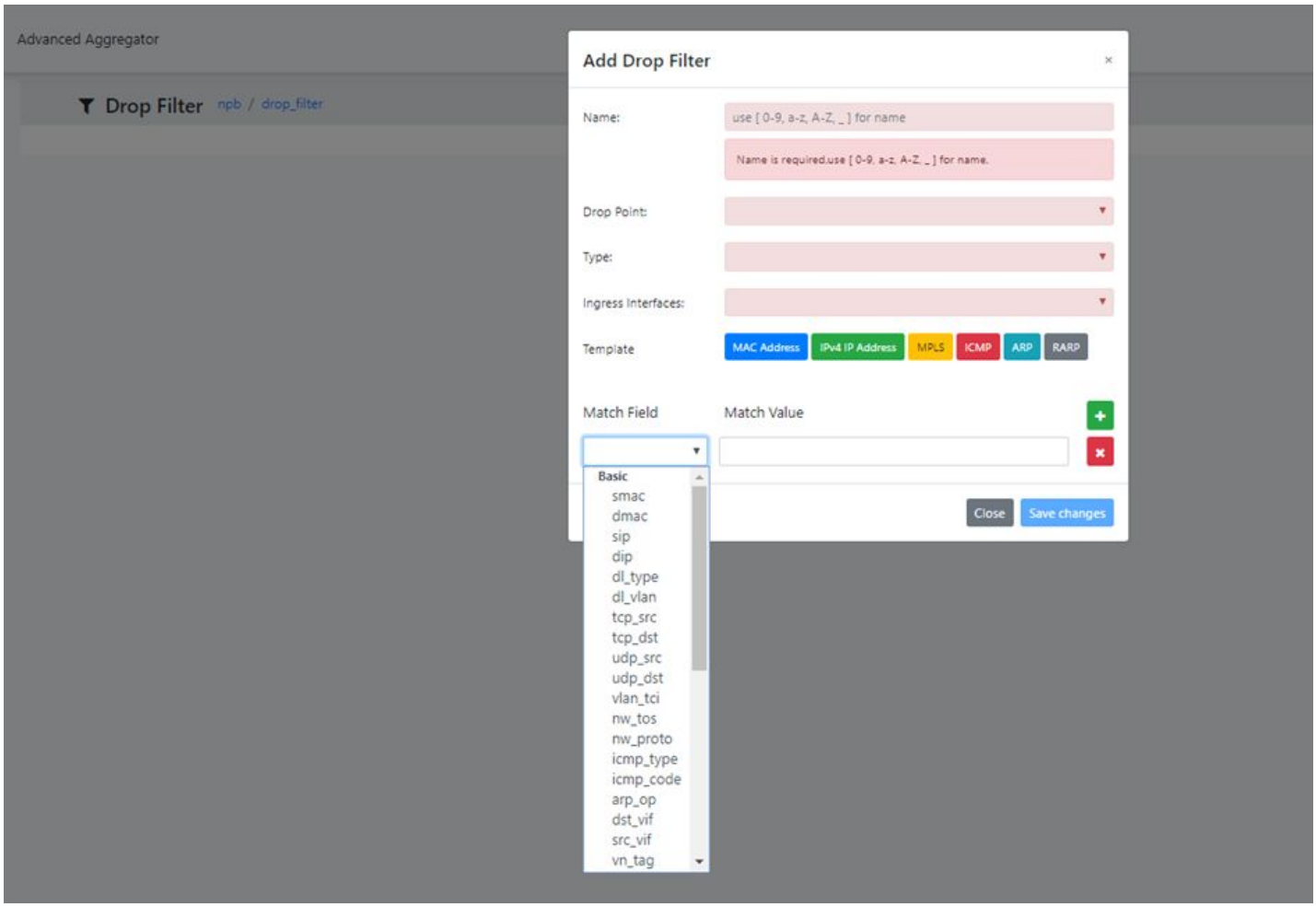

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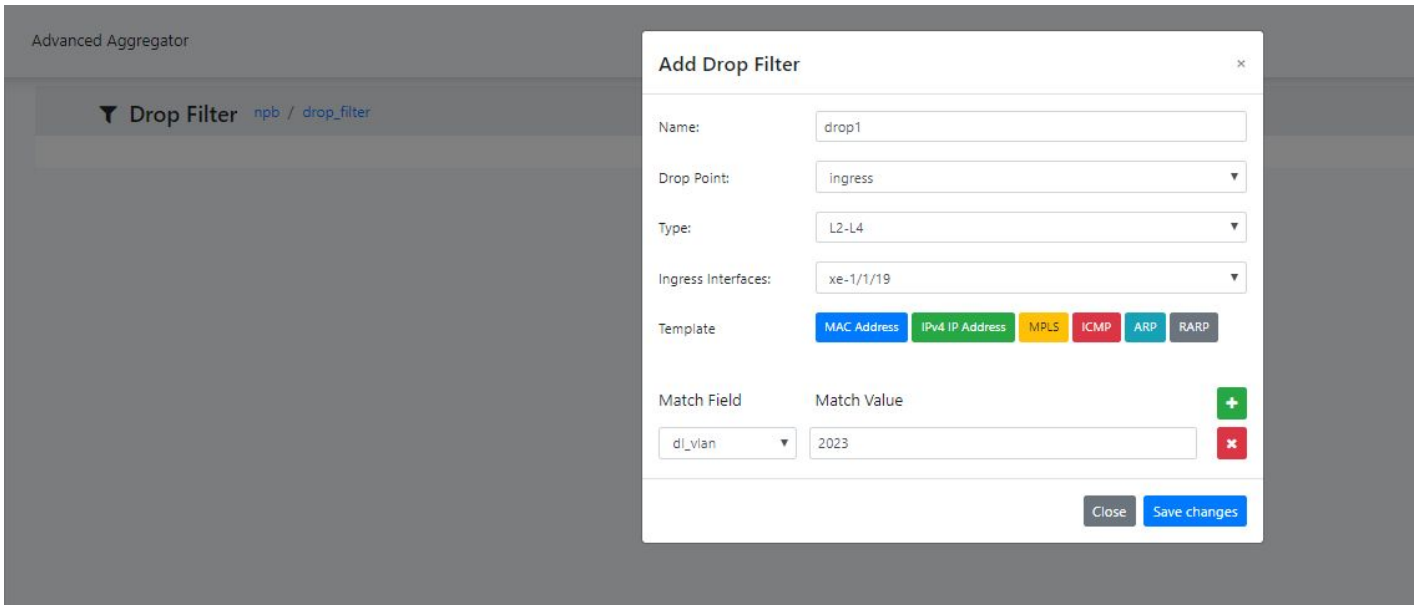

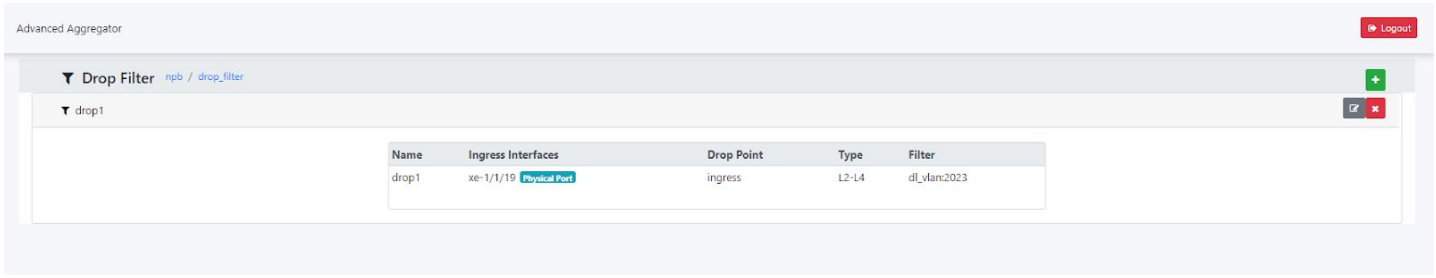

eg2: add an ACL on egress.

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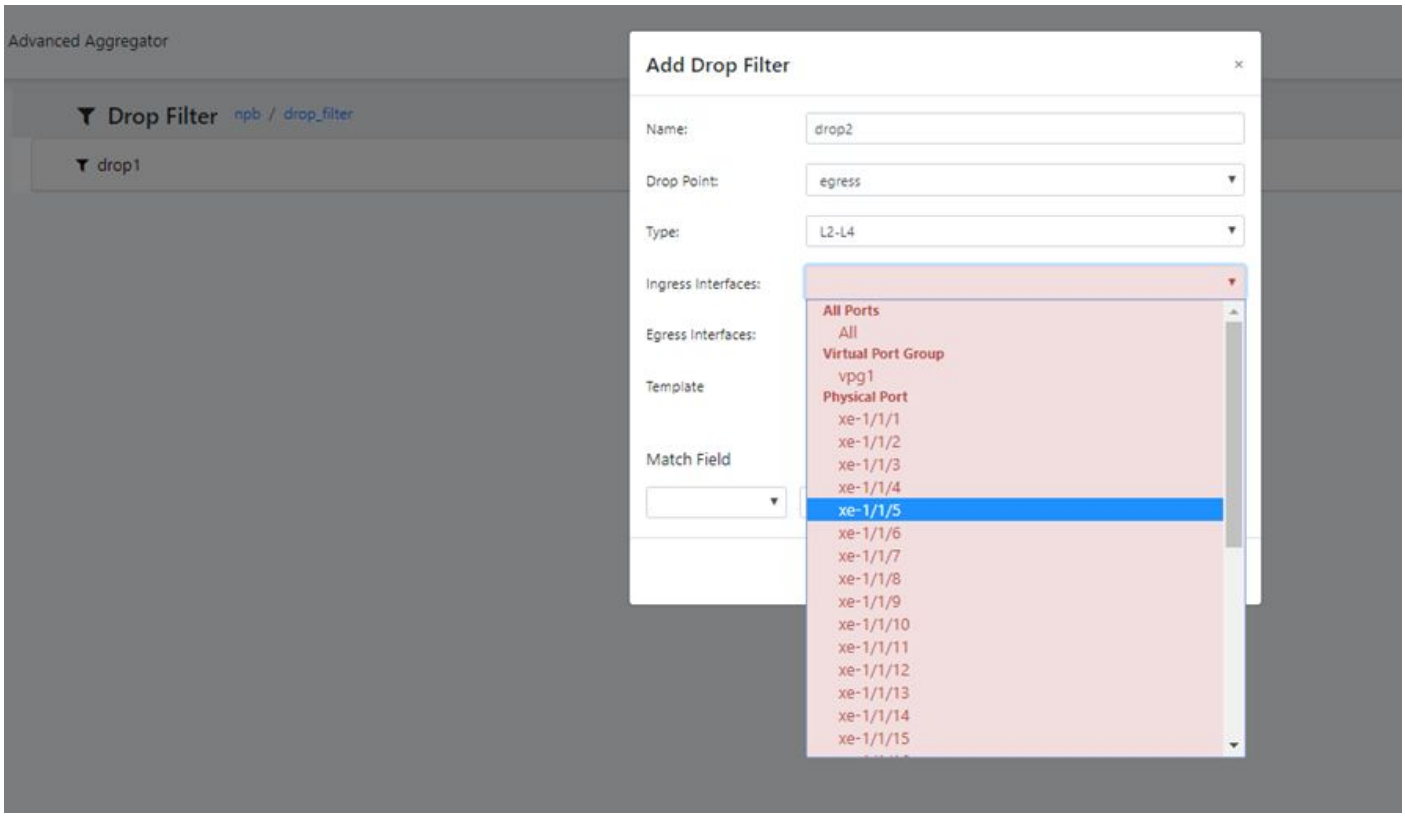

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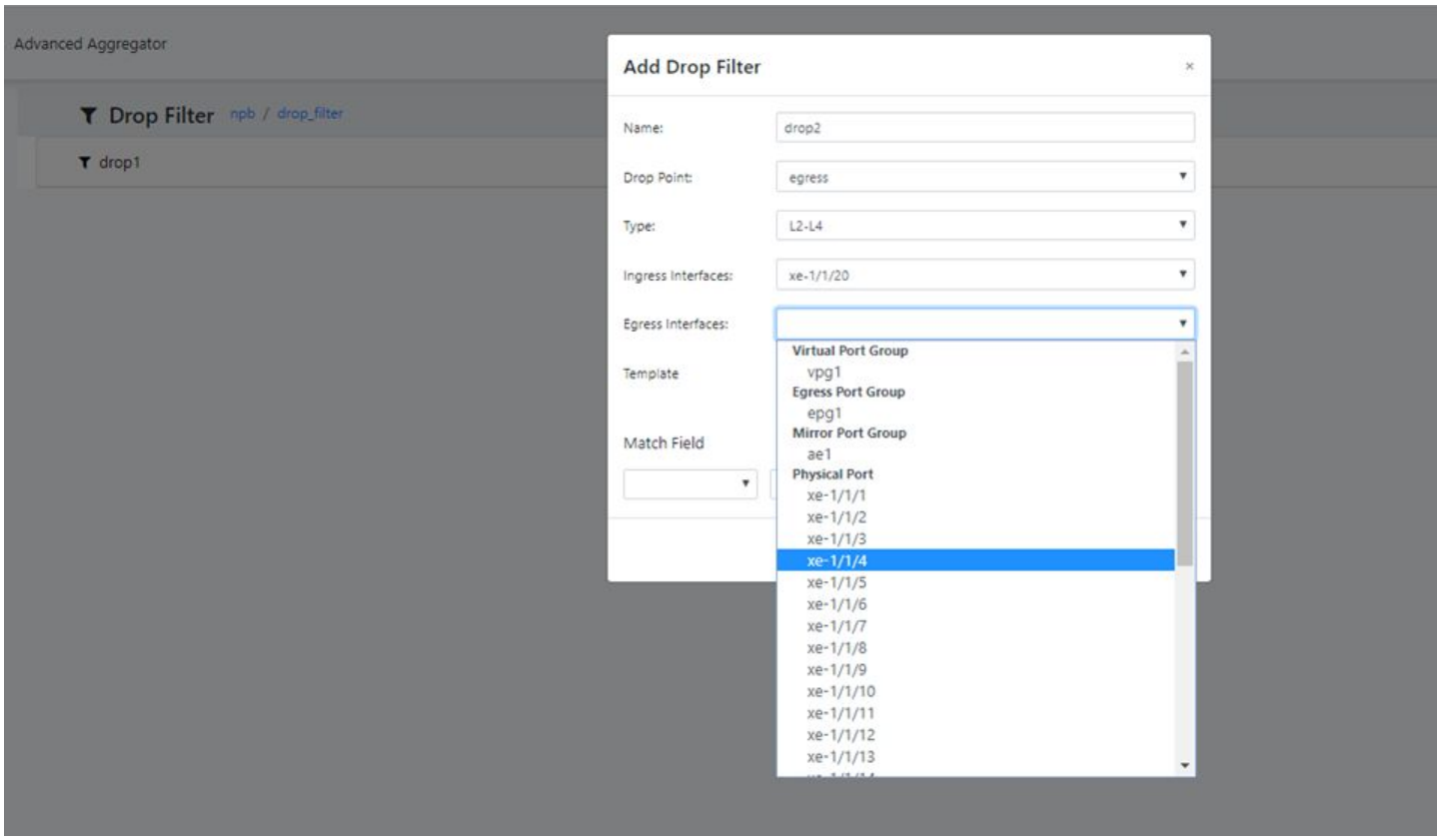

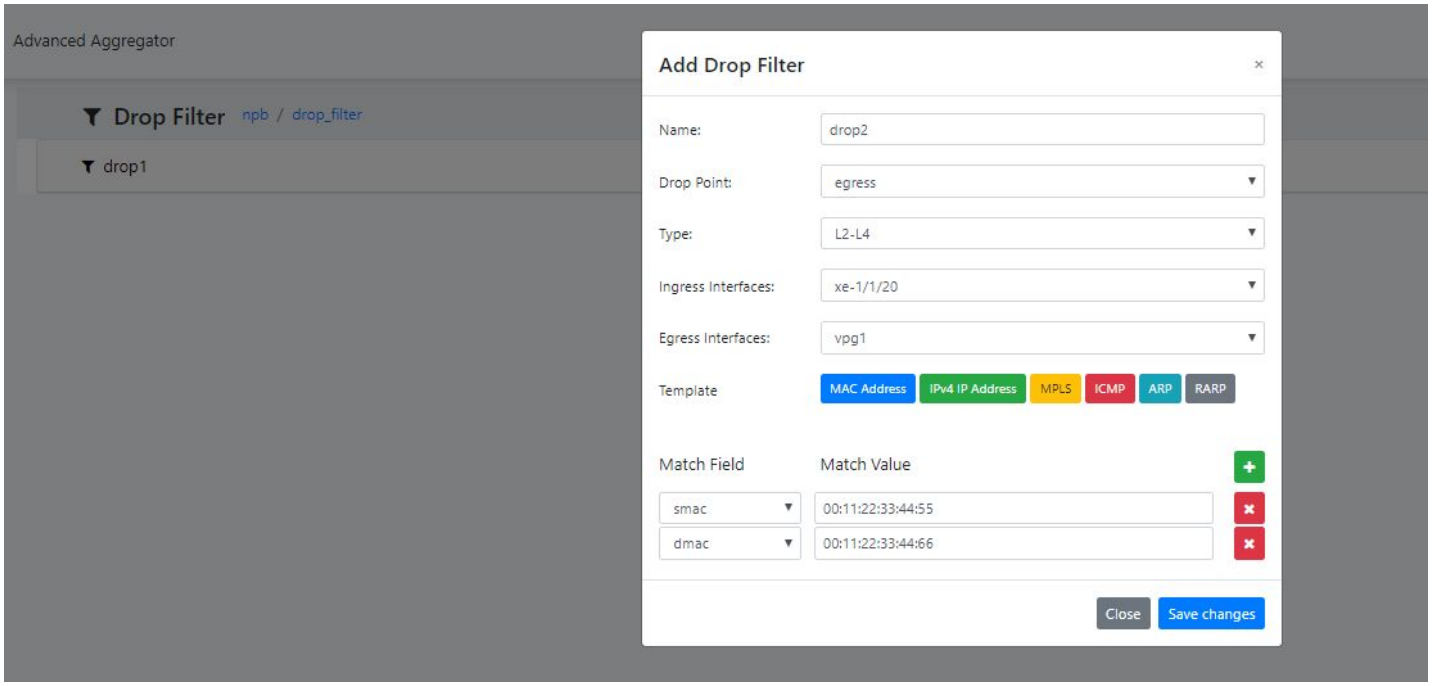

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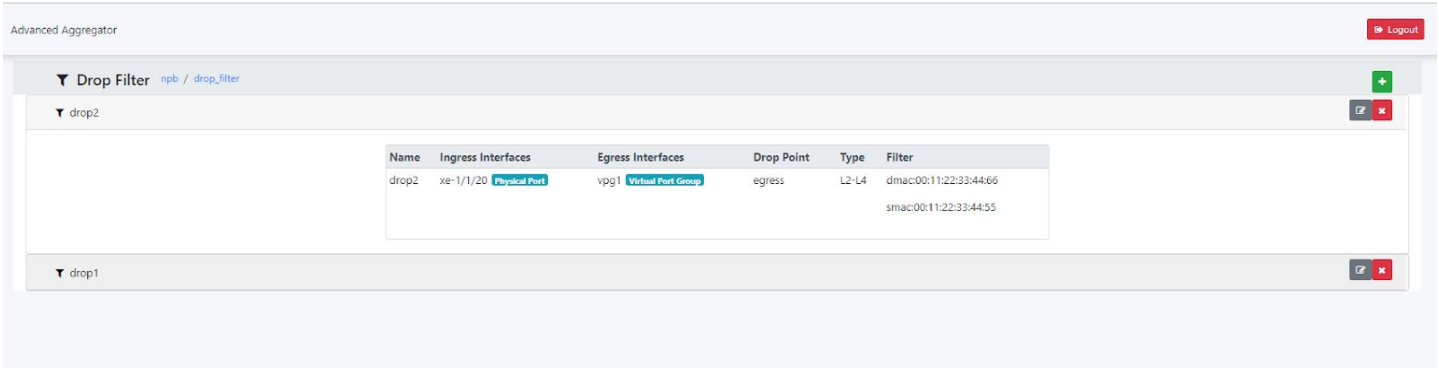
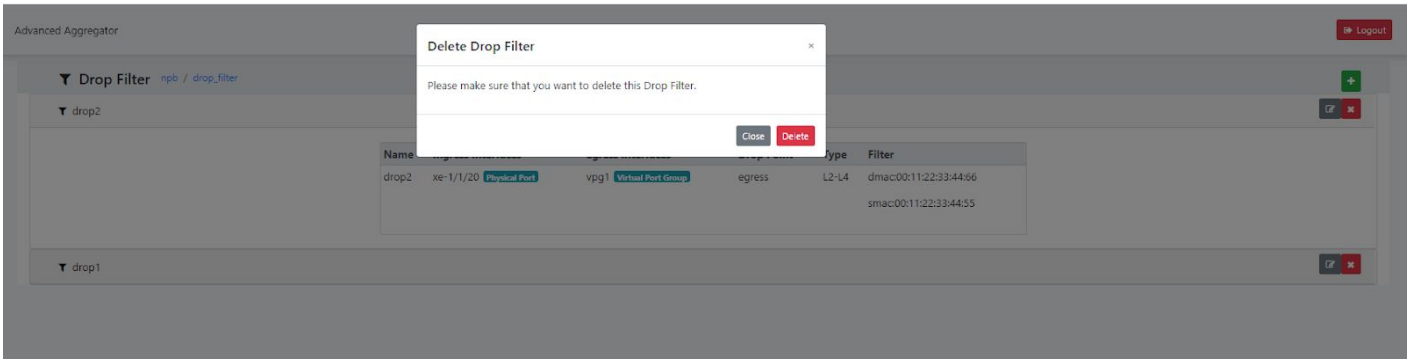


Delete:



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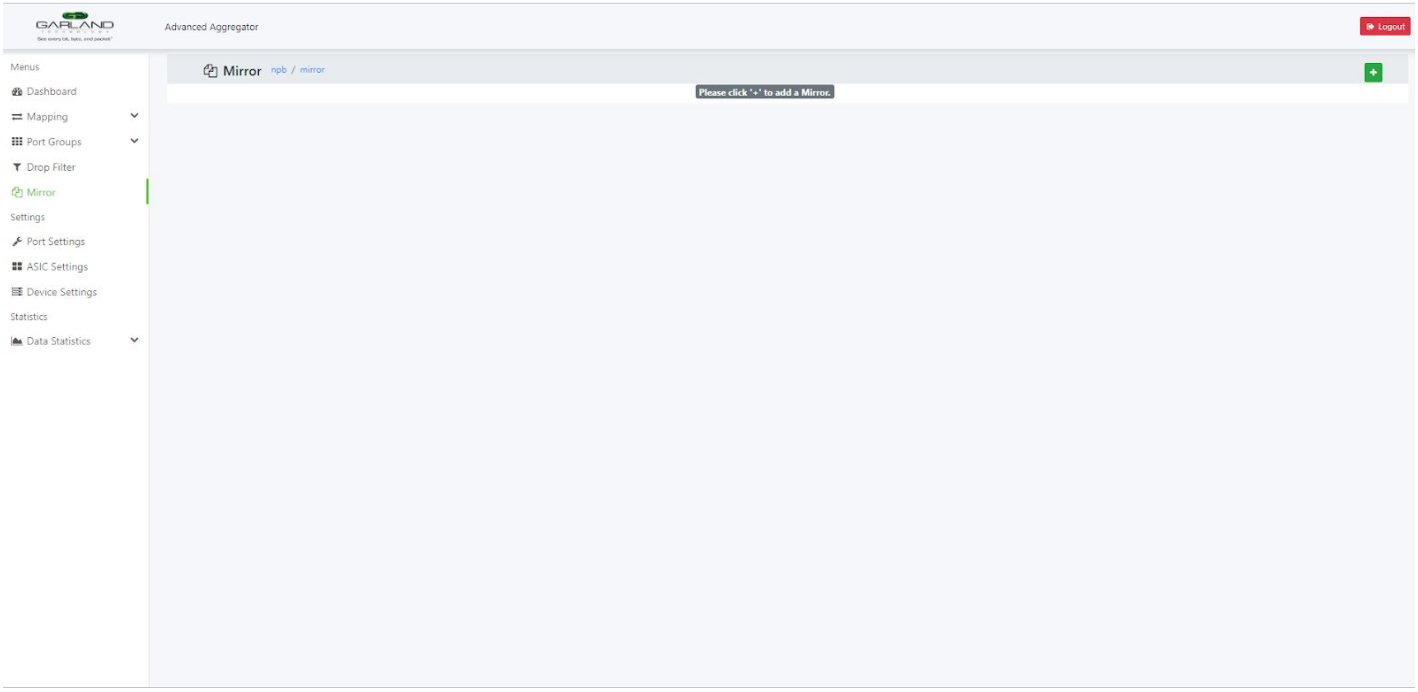
6 Mirror



Step1: Click “+” button to add a mirror.

Step2: you can write the Mirror name and click “Add” to chose Available Ports for Port Rx or Tx. After setting the value, you can click “X”to delete one or more Ports on the Mirror,Then chose an MPG as an output Port. Click “Save changes” to save the setting.

Step3: After adding, you can click the name to show the details.

Click “X” to delete the setting.

Click “ ” to modify your setting.

Note: Currently the output of mirror only supports MPG(LAG).

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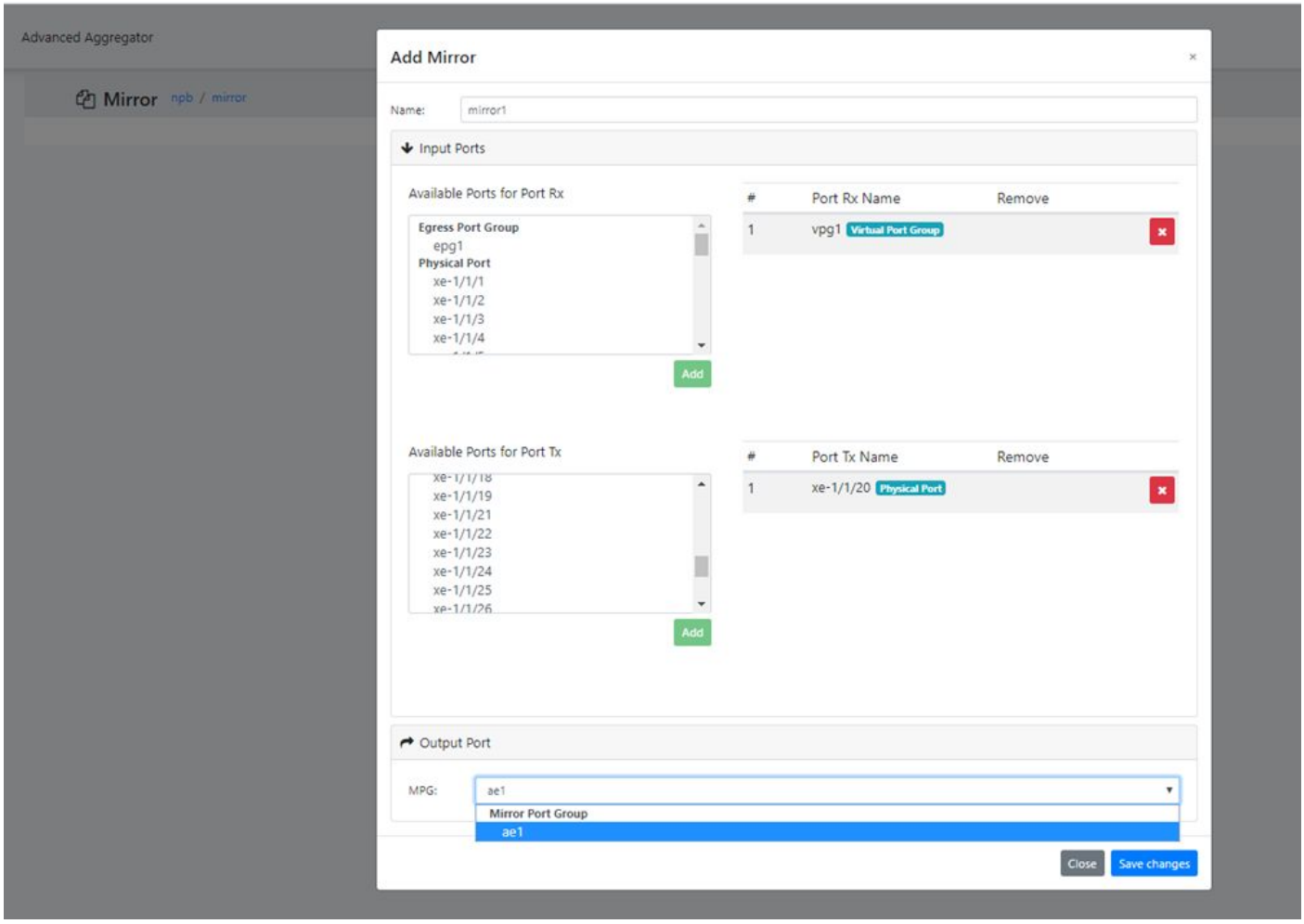

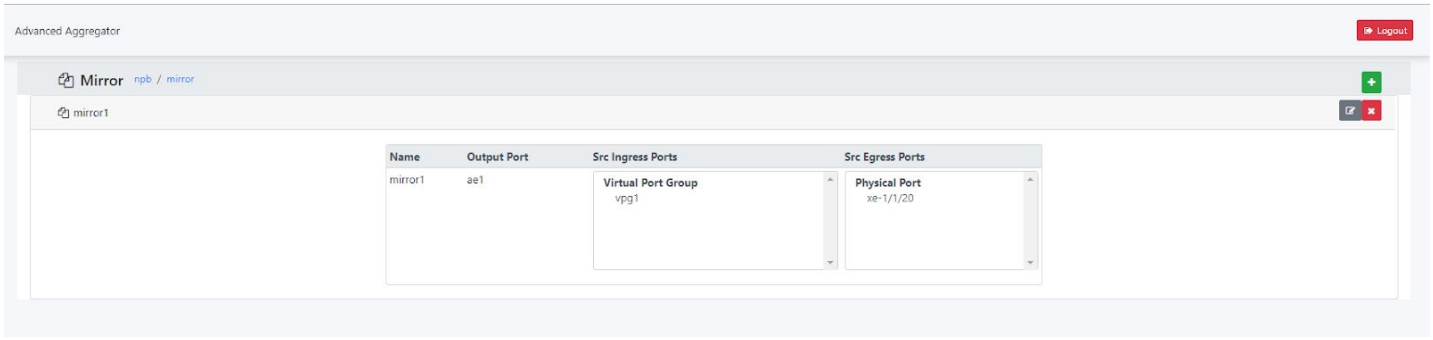

Note： the maximum of mirror settings is 4.

Delete:

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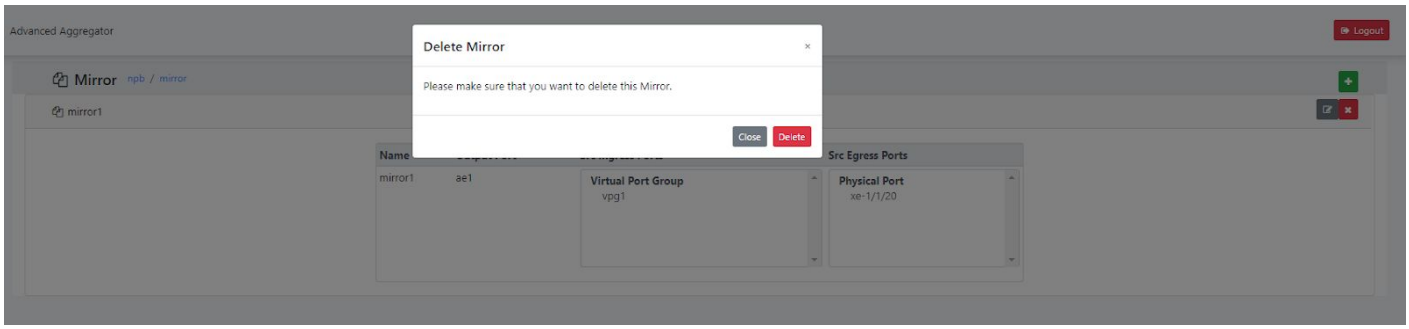


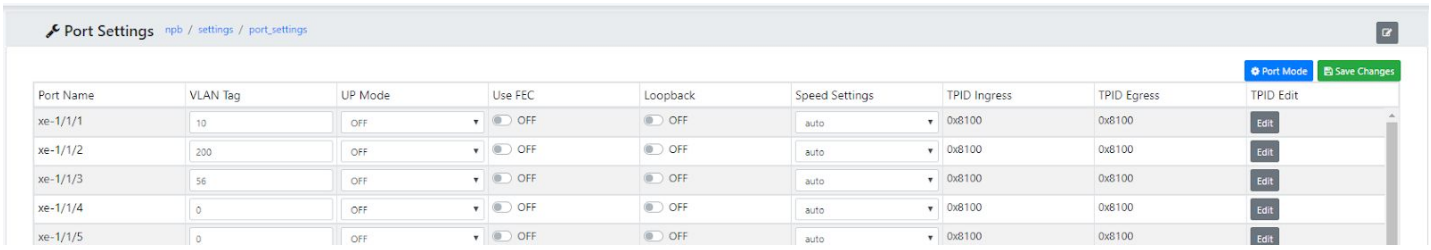
7 Port Settings

The status of all physical ports is displayed, and for each port, you can set its mode; you can also set VLAN Tag,UP Mode,Use FEC, Loopback ,port speed and TPID.

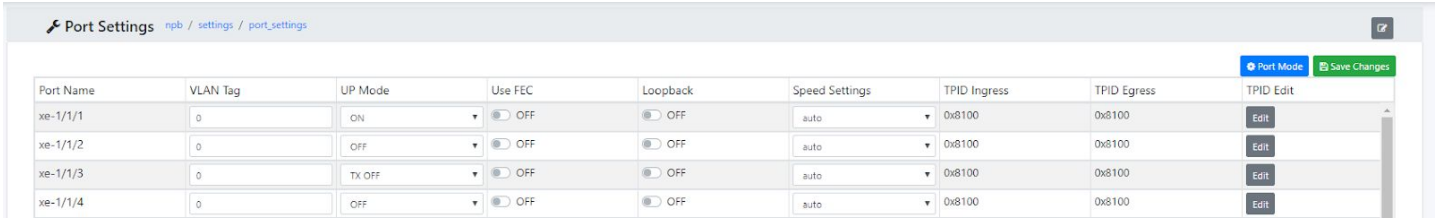
1: setting “VLAN Tag”, “UP Mode”,”Use FEC”, “Loopback” , “Speed Settings”,”Tpid ingress”and”Tpid egress”

For each port, click “ ” and then choose the settings and click “Save Changes”, then the configuration will be set and saved.

1) VLAN Tag



2)UP Mode



3)Use FEC

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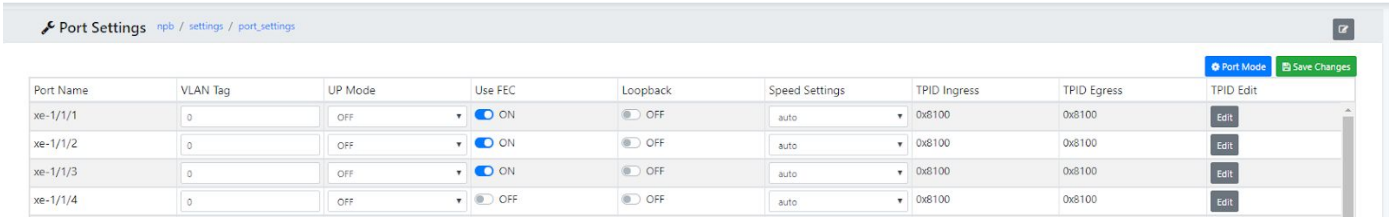
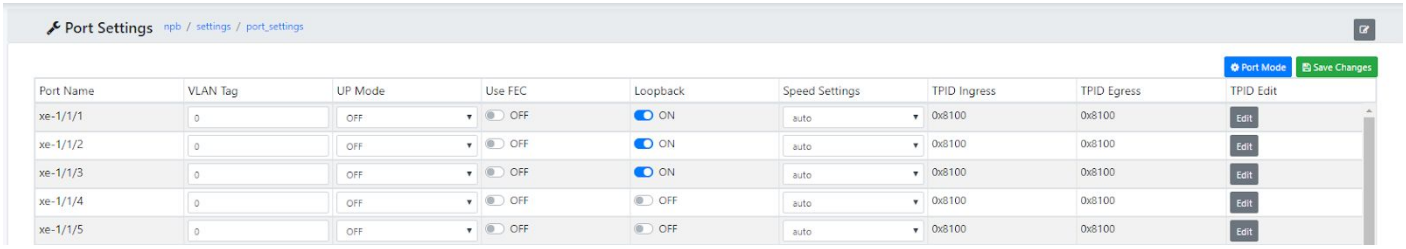
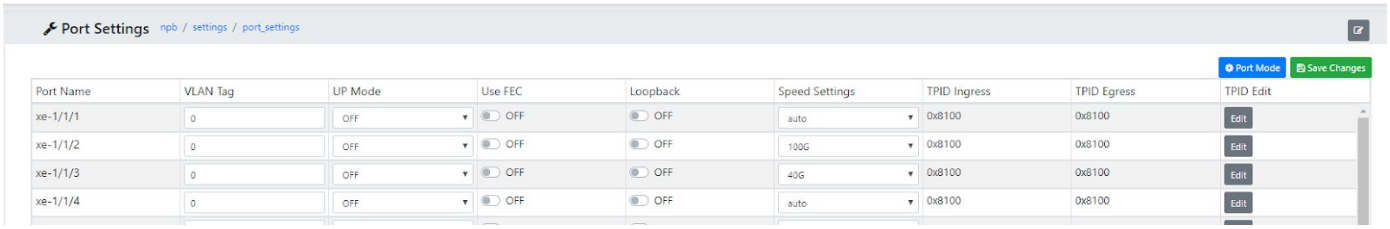


4) Loopback

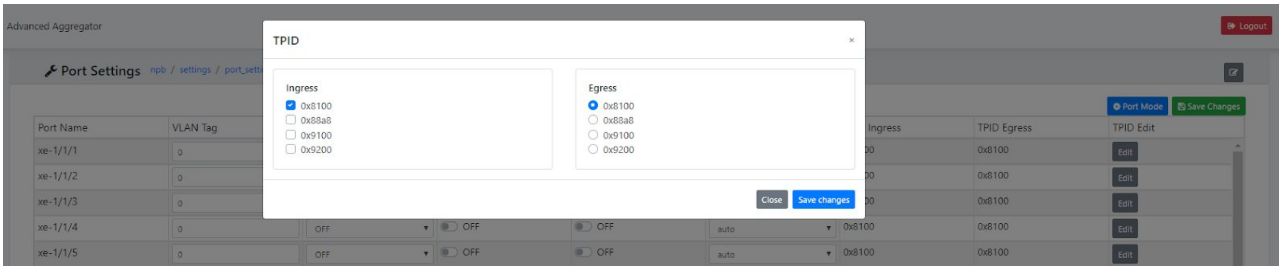


5) Speed Settings



6) Tpid ingress and Tpid egress

Click “ Edit ” ,Then choose Tpid ingress and Tpid egress value,click “save changes”to save settings.



2: Port Mode setting

By default, the Port mode is “Flexible”, and you can choose the ports which you want to breakout into 4 ports.

Step1: Click “ ”and click the “Port Mode” button.

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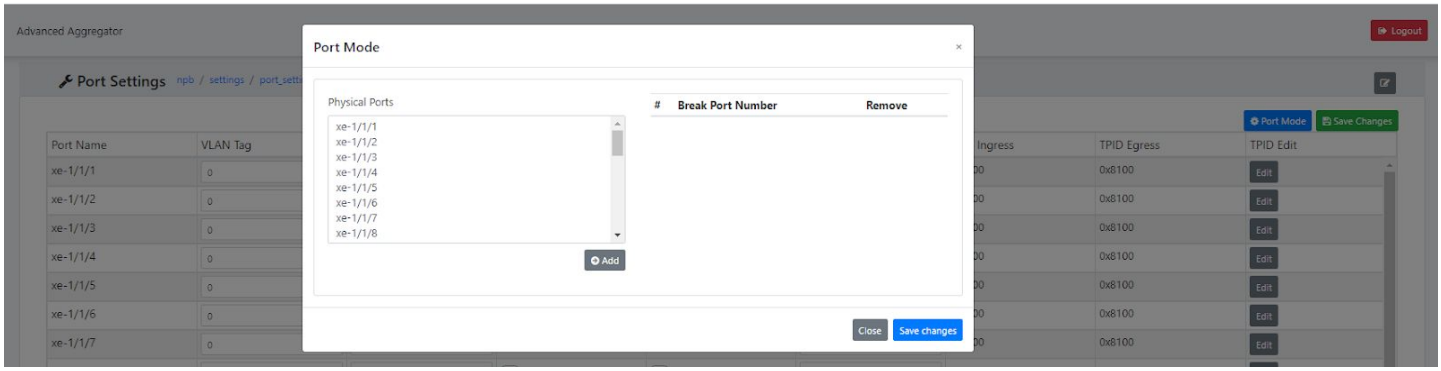
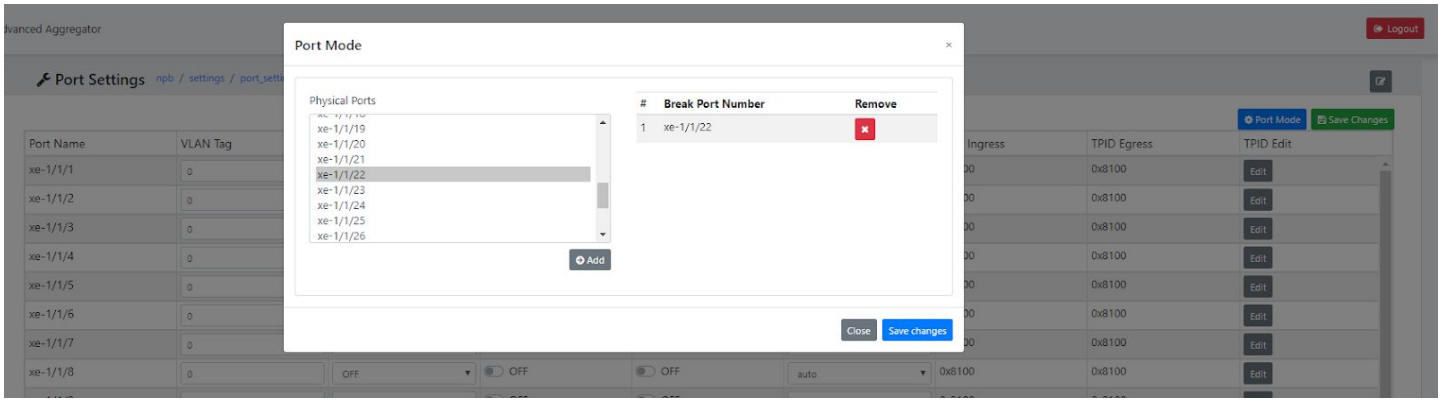
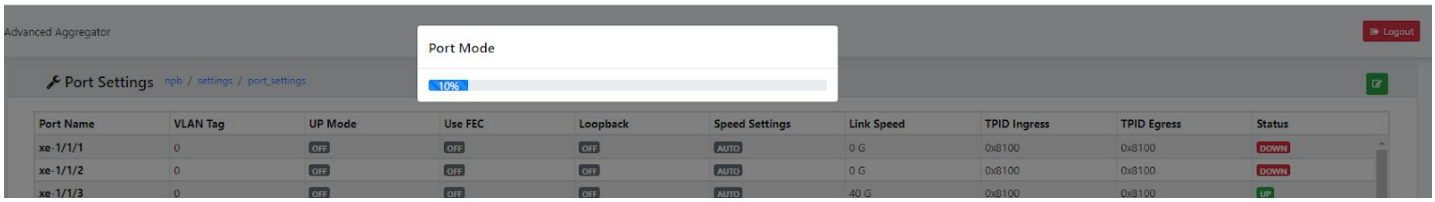
Step2: Choose the ports to breakout, click the “Add” button, and then Click “Save Changes”.

Change Port Mode must restart OVS, so you need to wait.







After system restart, you can see the breakout ports.

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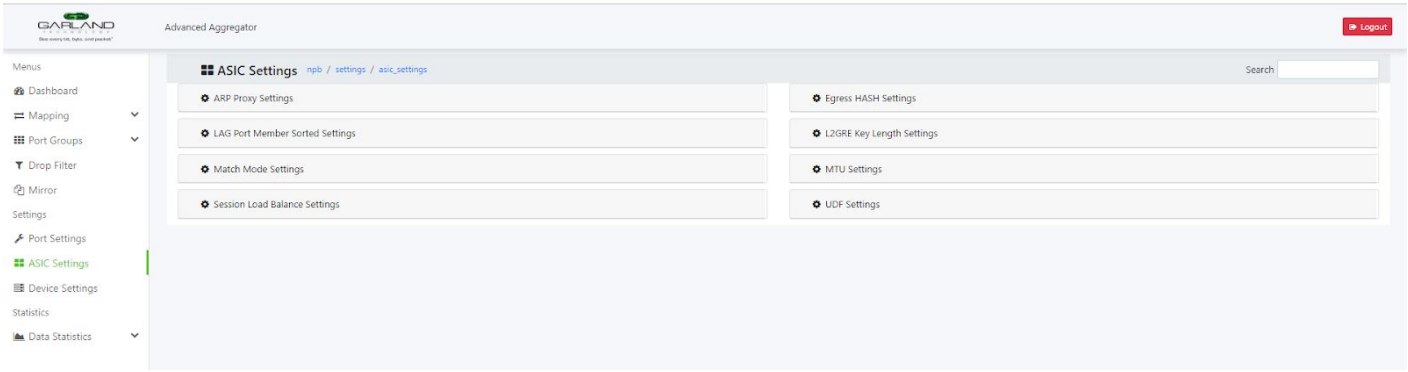
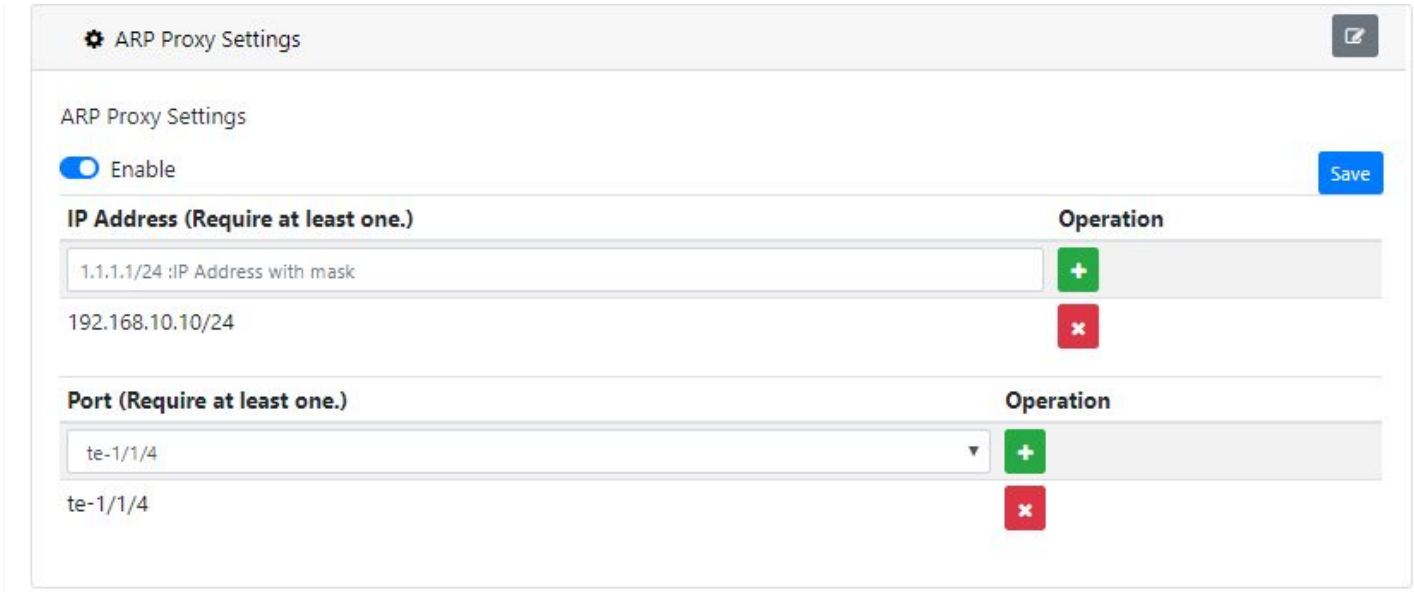
8 ASIC Settings



1: ARP Proxy Settings

Click “ARP Proxy Settings” and click “ ”,Then click “ ” to enable ARP Proxy .Enter the IP Address and click “+” to add a new setting, and click “X” to delete the setting. Enter the Port and click “+” to add a new setting, and click “X” to delete the setting.

Finally,click “save” to save your settings.



2: Lag Port Member Sorted Settings

Click “Lag Port Member Sorted Settings” and click “ ”,Then click “ ” to enable and click “save” to save your setting.

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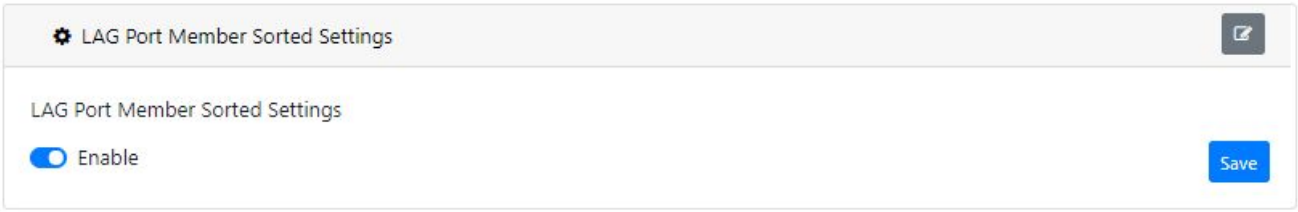

3: Match Mode Settings

Click “Match Mode Settings” and click “ ”,Then click “ ” to enable and click “save” to save your setting.

Following is the default match mode configuration

After saving the setting, you can see the ranges DashBoard of GUI:

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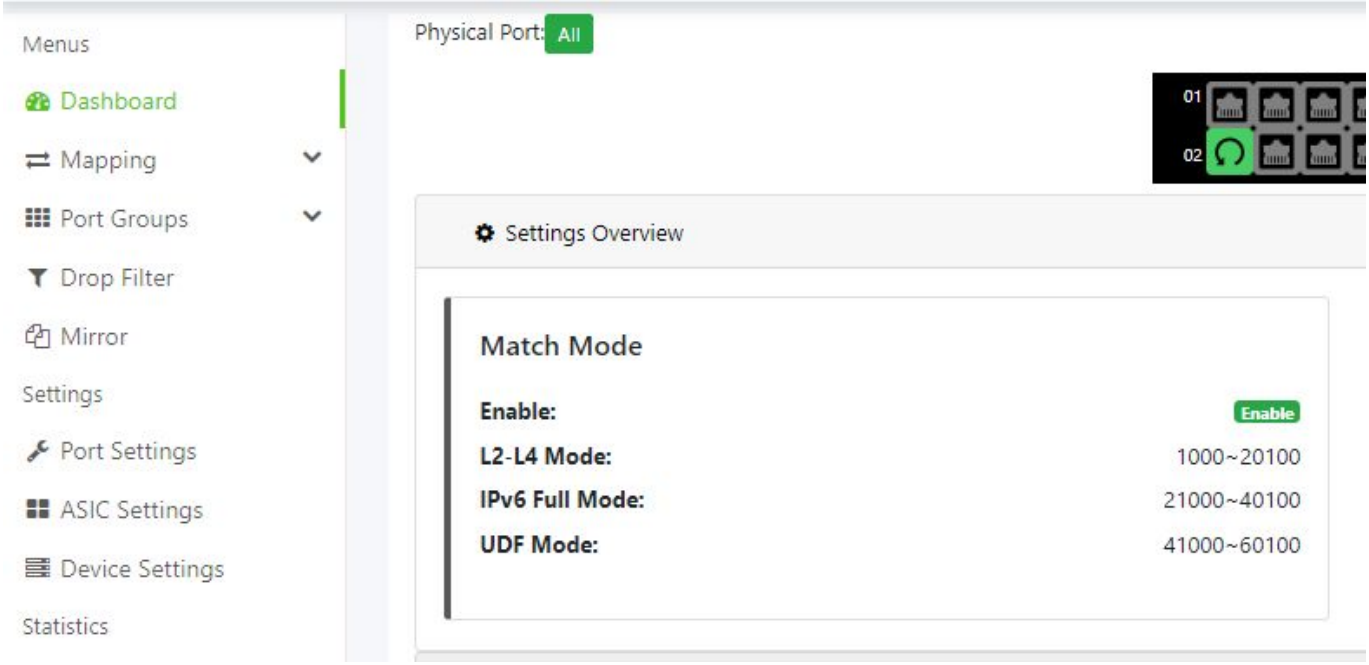
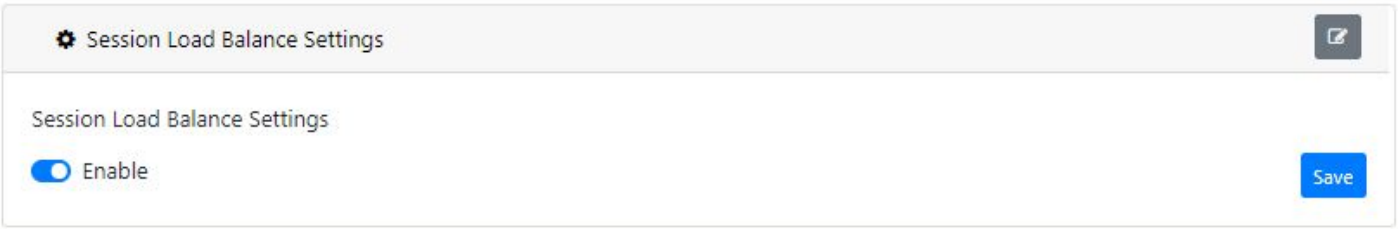


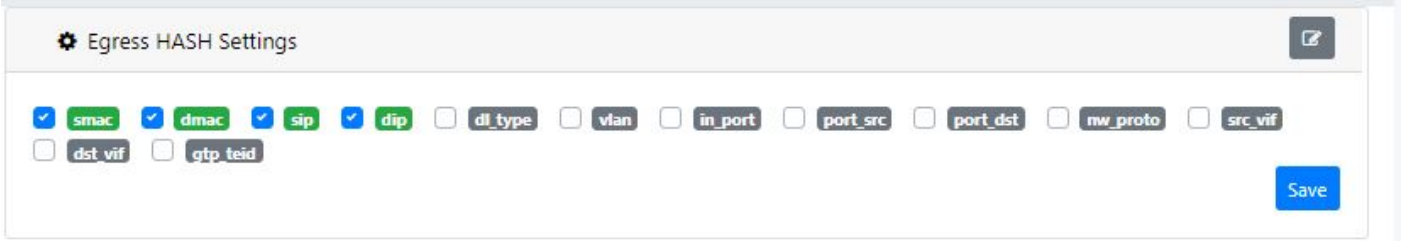
4: Session Load Balance Settings

Click “Session Load Balance Settings” and click “ ”,Then click “ ” to enable and click “save” to save your setting.



5: Egress HASH Settings

Click “Egress HASH Settings” and click “ ”, Then chose your settings and then click “Save” to save your setting.



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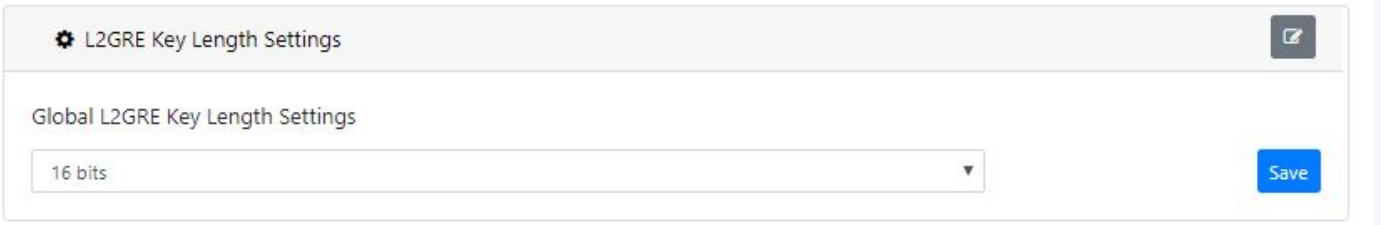
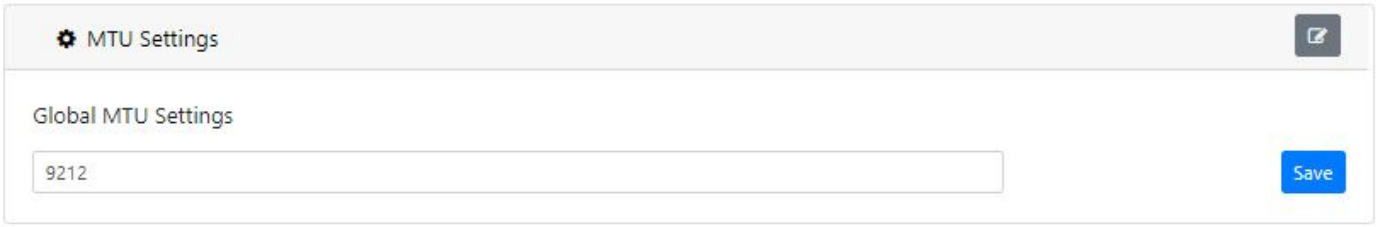
6: L2GRE Key Length Settings

Click “L2GRE Key Length Settings” and click “ ”, Then chose your settings on drop downs menus and then click “Save” to save your setting.



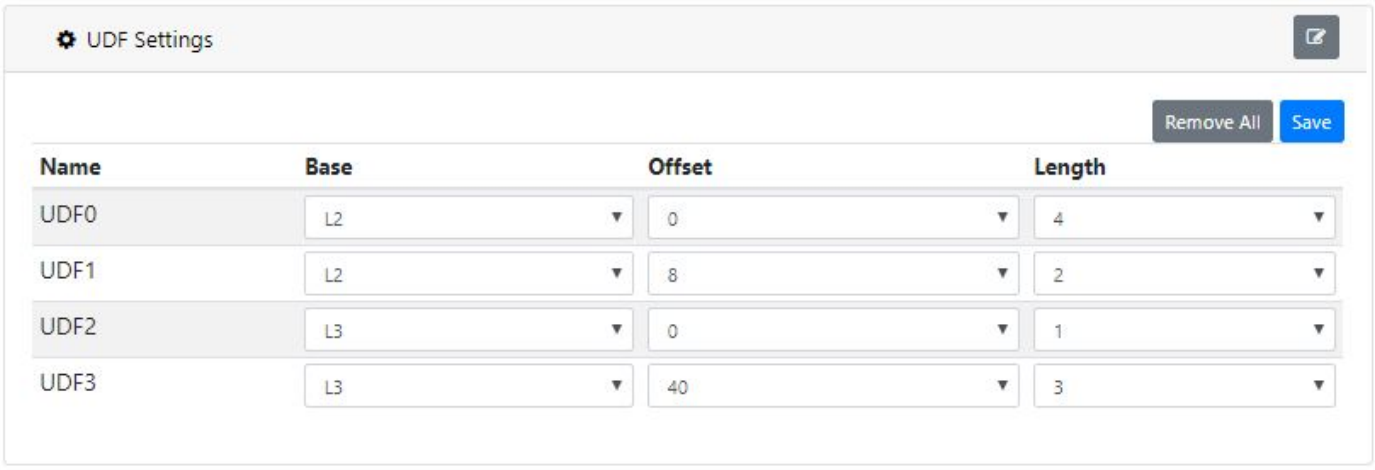
7: MTU Settings

Click “MTU Settings” and click “ ”, Then enter the value and then click “Save” to save your setting.



8: UDF Settings

Click “UDF Settings” and click “ ”, Then chose your settings and then click “Save” to save your setting. Currently supports 4 UDF settings.



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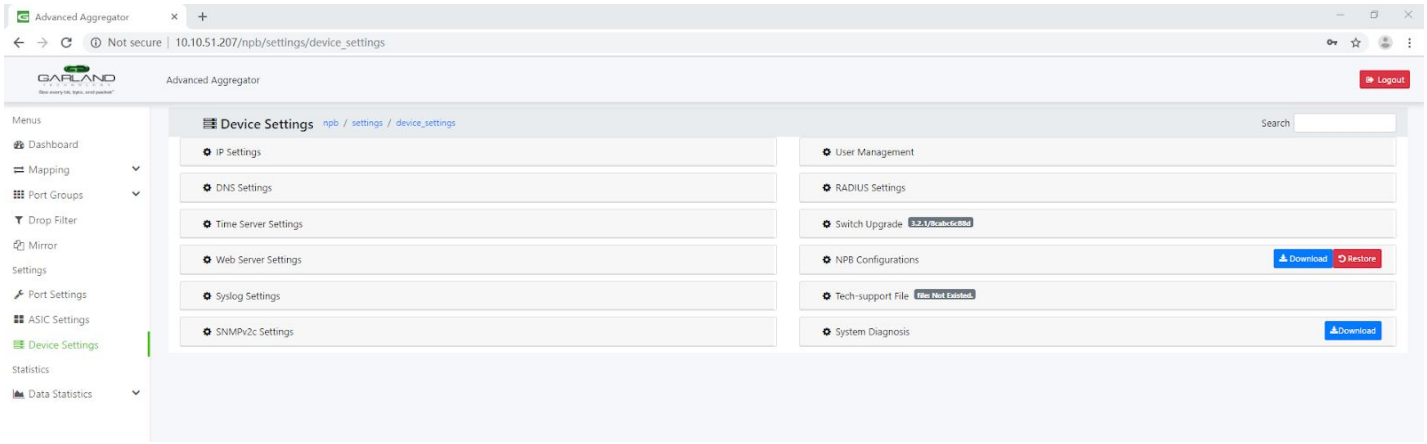
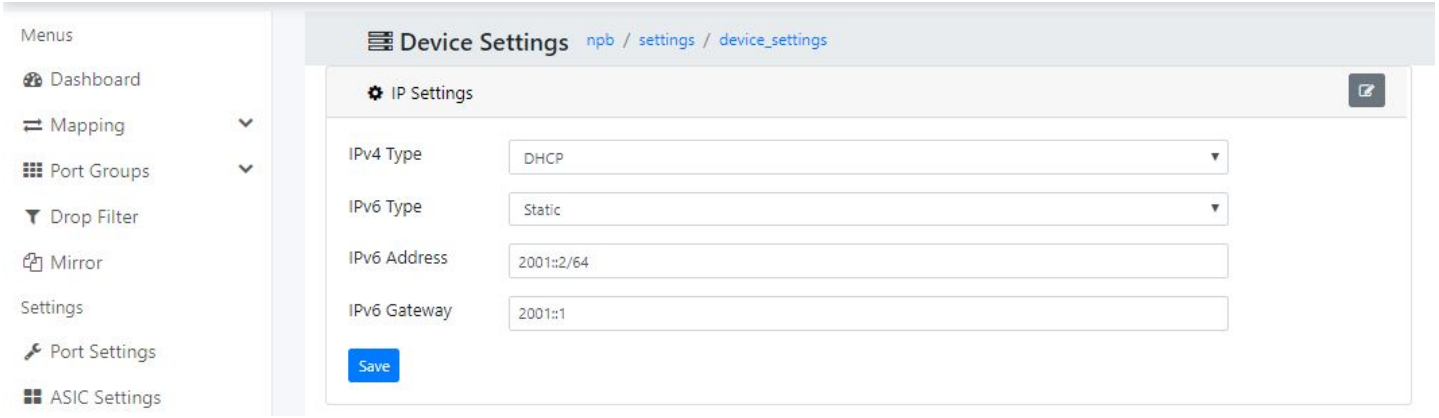
9 Device Settings



1: IP Settings

Click “IP Settings”and click “ ” to choose your setting,Then click “save” to save your setting.

Now it supports ipv4 and ipv6.



2: DNS Settings

Click “DNS Settings” and click “ ”, enter the IP address and then click “+” to add a new setting, and click “X” to delete the setting.

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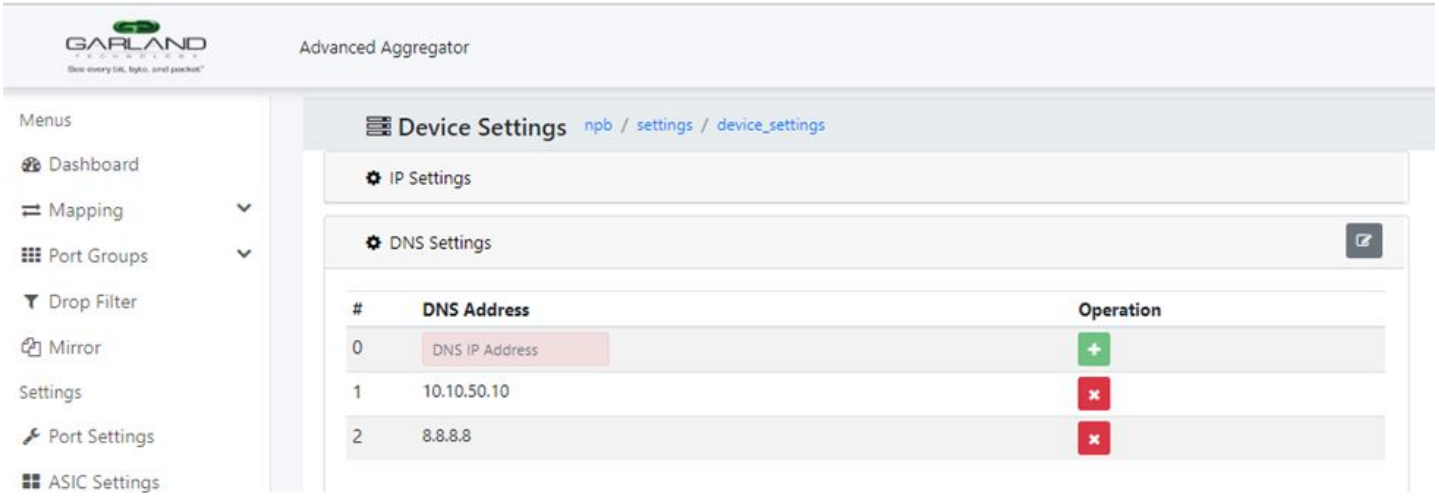
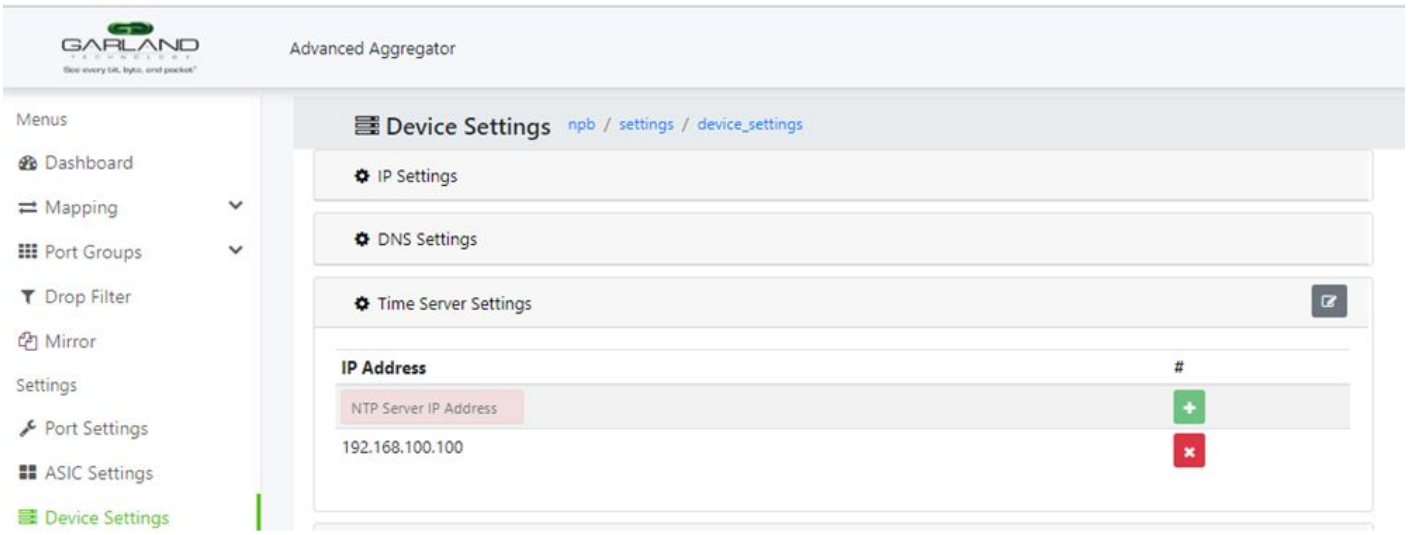


3: Time Server Settings

Click “Time Server Settings” and click “ ”, enter the IP address and then click “+” to add a new setting, and click “X” to delete the setting.



4:Web Server Settings

Click “Web Server Settings” and click “ ” to chose https,Then input vaild PEM file content in text box and click “save changes” to save your setting.Use http by default.

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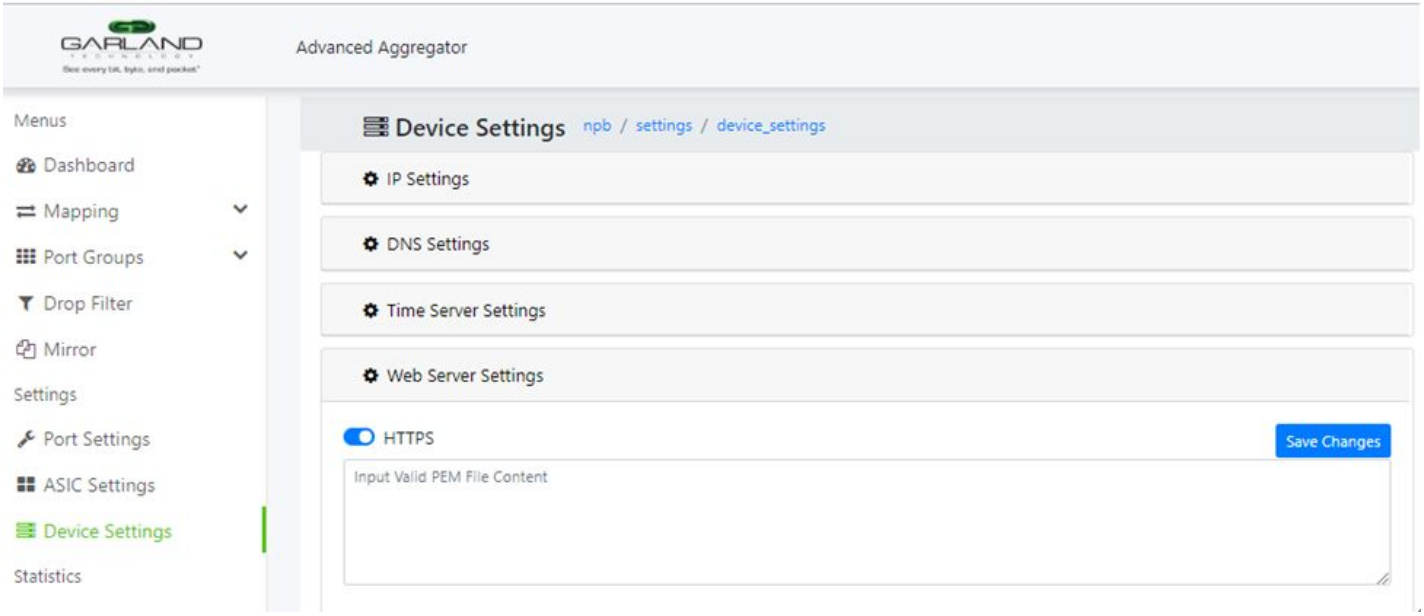
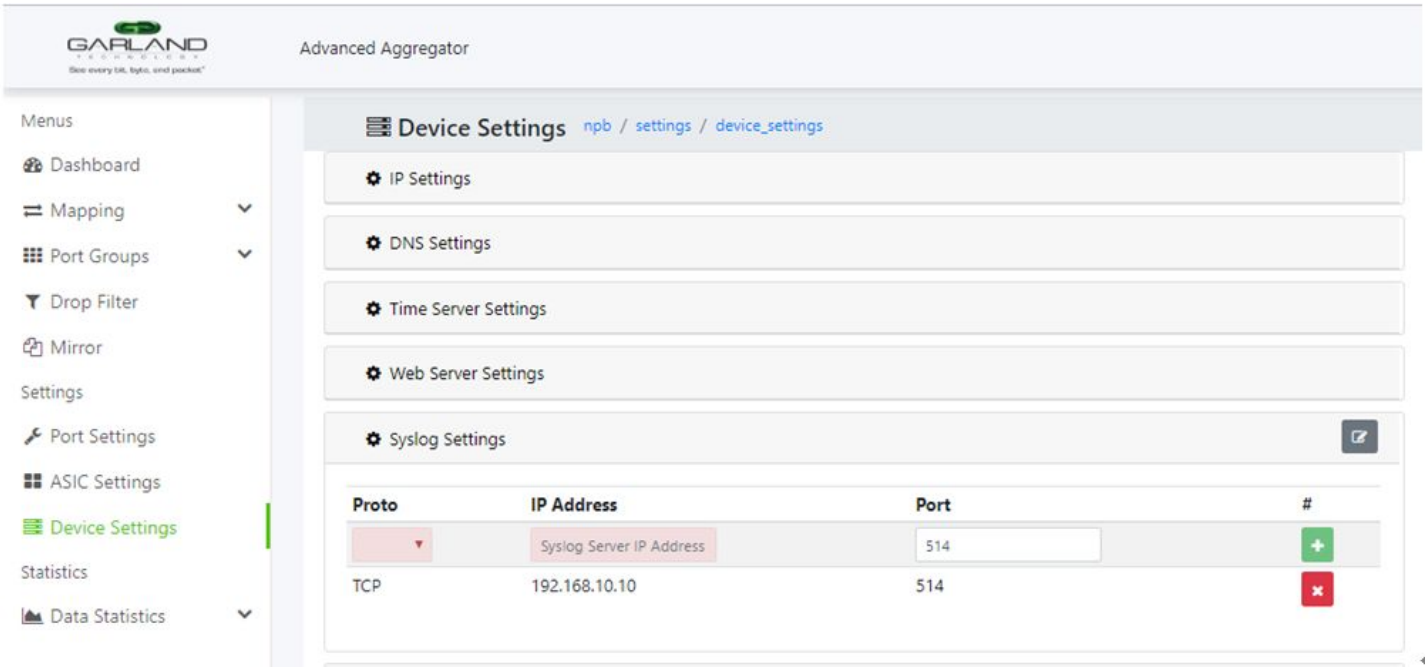


5 ： Syslog Settings

Click “Syslog Settings” and and click “ ”, chose the proto ,enter the IP address ,input the port and then click “+” to add a new setting, and click “X” to delete the setting.



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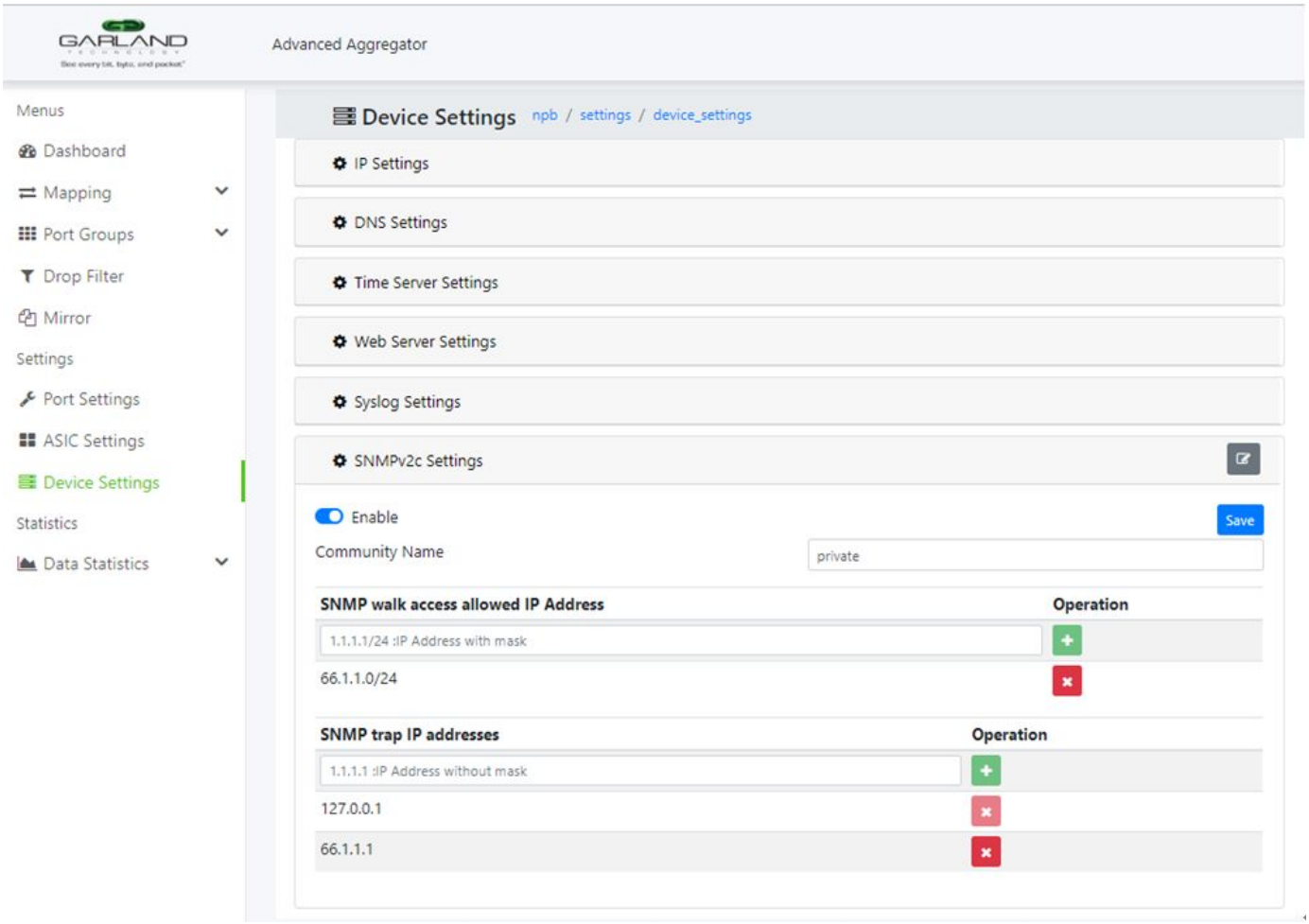
6: SNMPv2c Settings

Click “SNMPv2c Settings” and click “ ”,Then click “ ” to enable SNMP and modify the community name.

Enter the SNMP walk access allowed IP Address and click “+” to add a new setting, and click “X” to delete the setting.

Enter the SNMP trap IP Address and click “+” to add a new setting, and click “X” to delete the setting.

Finally,click “save” to save your settings.



7 ： User Management

Click “User Management” and chose an UserName and input New Password , then click’update’ .you can change the password for the three pre-configured user logins.

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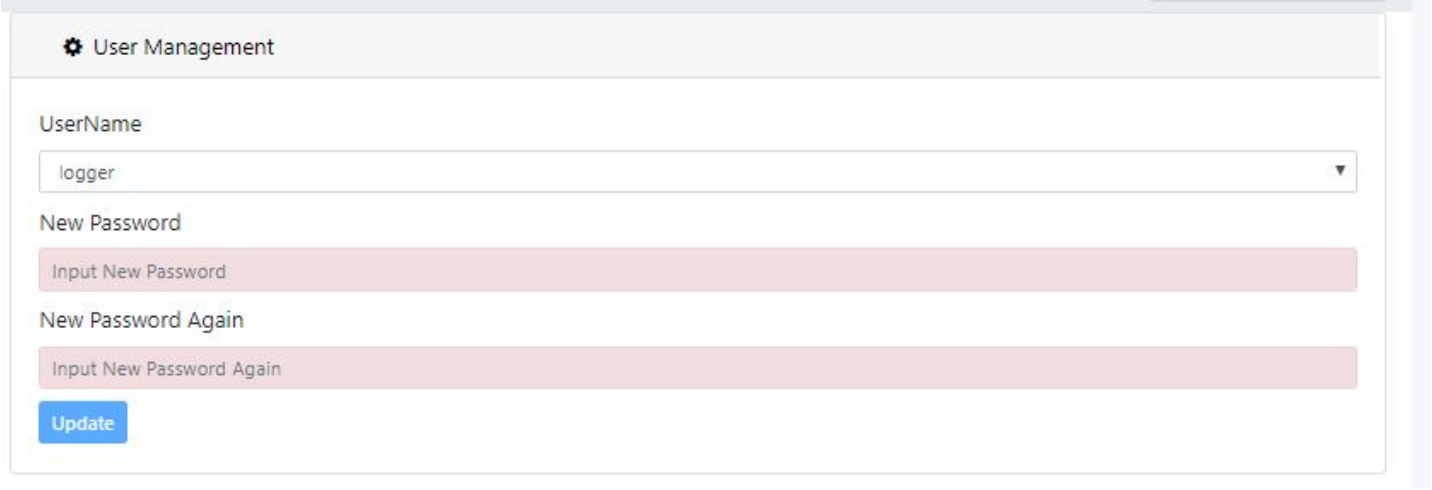
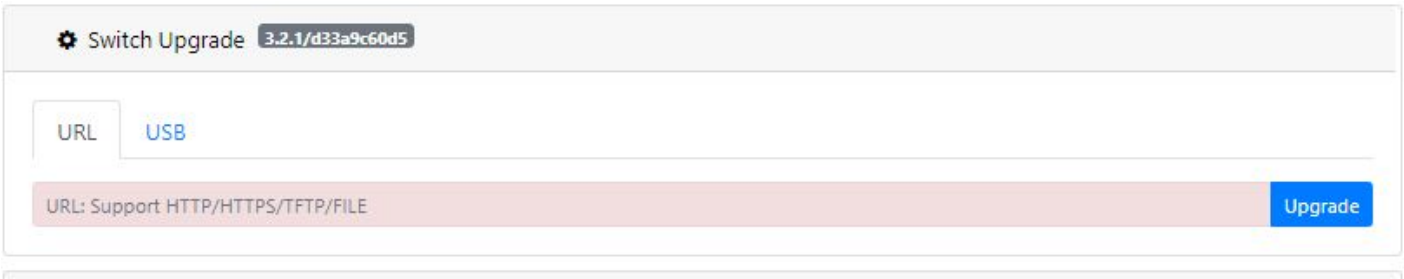


8：RADIUS Setting

Click “RADIUS Settings” and click “ ”， then click “+” to set server IP address and share key, and click “X” to delete the setting.

9： Switch Upgrade

Click “Switch Upgrade”, enter the URL of new version and then click Upgrade, to upgrade the switch software version.



insert USB,chose upgrade.bin, click upgrade, to upgrade the switch software version.

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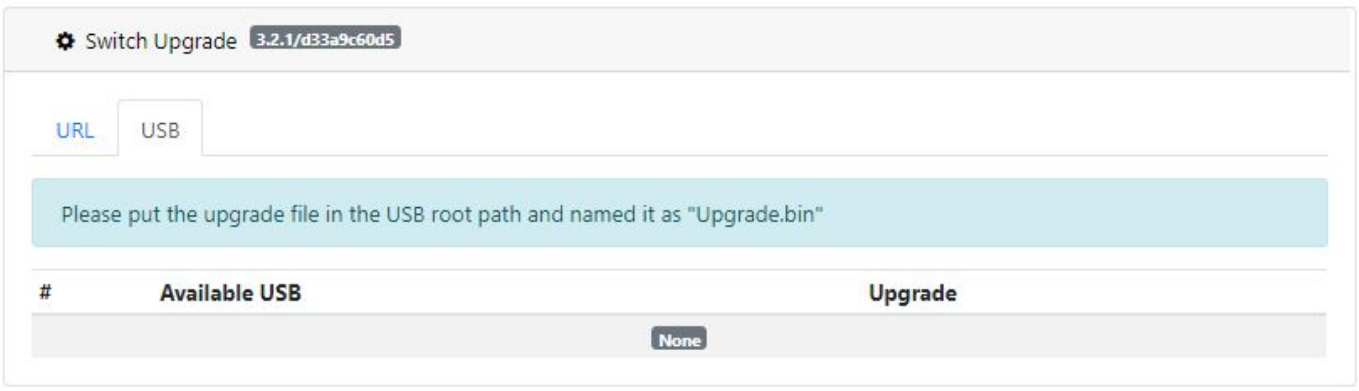
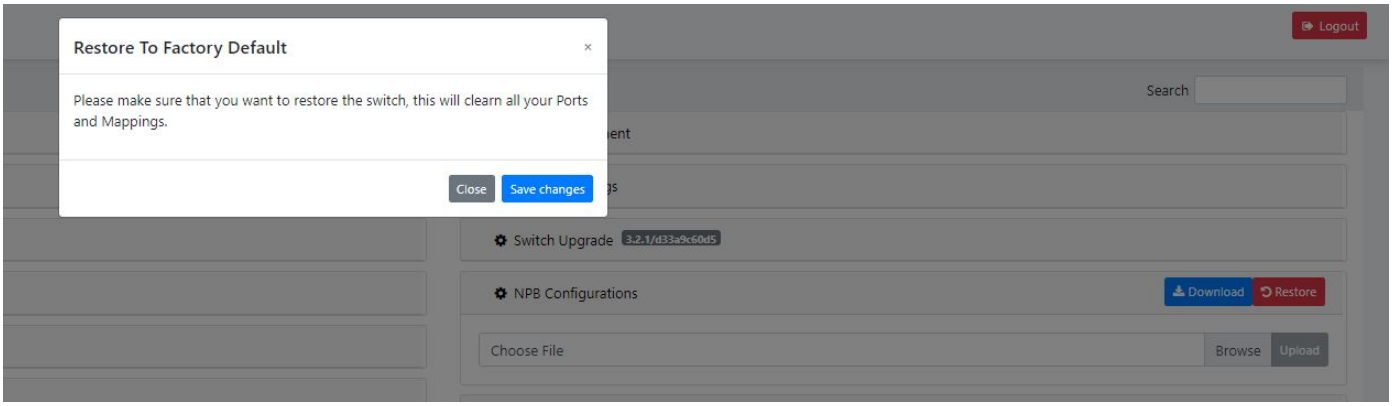


10： NPB Configurations:

Click “ Download ” to download current configurations to a local disk file.

Click “ Restore ” and click”save changes” to Restore to factory Default .



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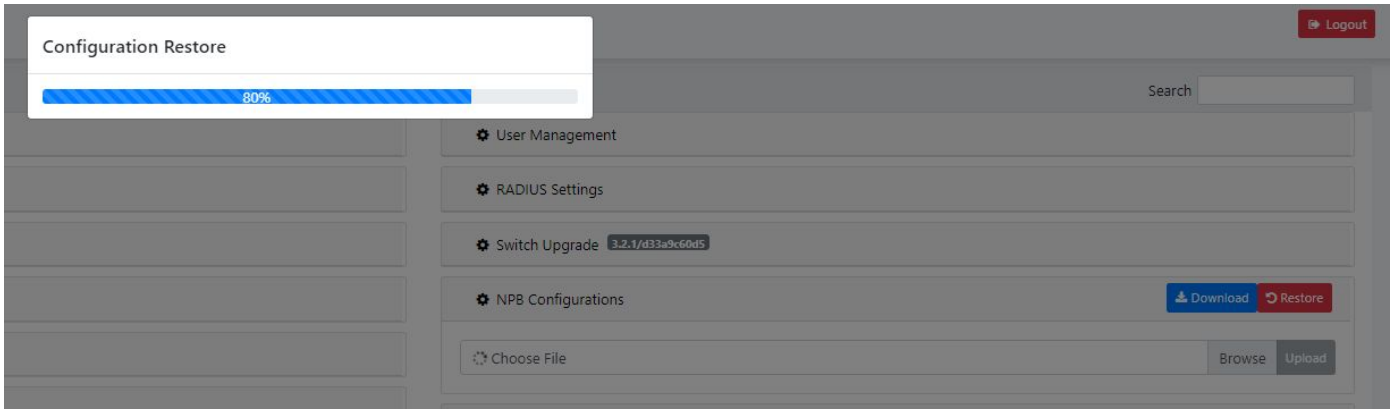
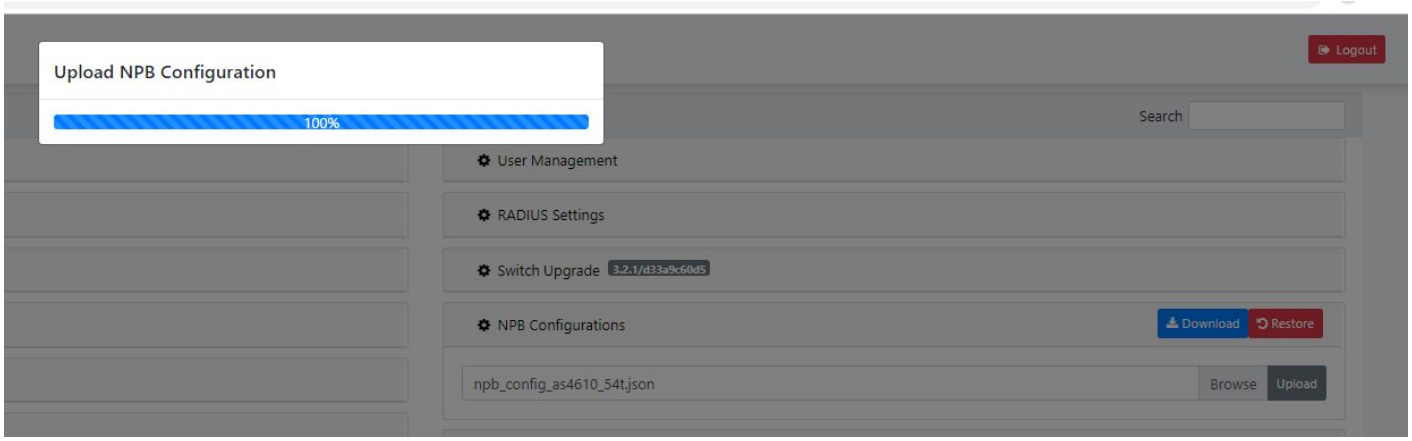


Click “Choose File” to choose the json file from the local disk and then click “Upload” to upload the configuration.



11：Tech-support File:

Click “Tech-support File” and click“ Generate New Tech-Support File ” to generate new tech-support file,Then click “ Download ” to download this file to a local disk file.

12：Syslog Diagnosis

Click “Syslog Diagnosis” and Then click “ Download ” to download to a local disk file.

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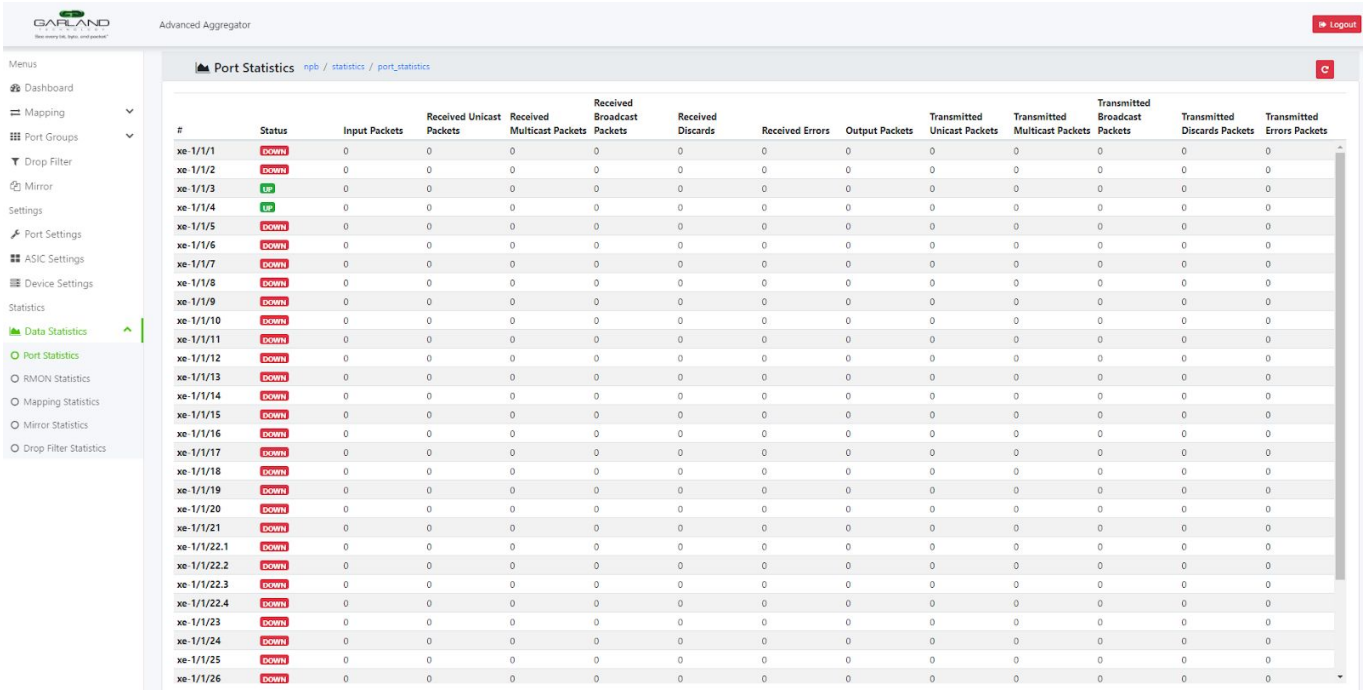
10 Statistics

It can display the physical port, RMON, mapping flows, Mirror and drop filter statistics.

Click their button to select.



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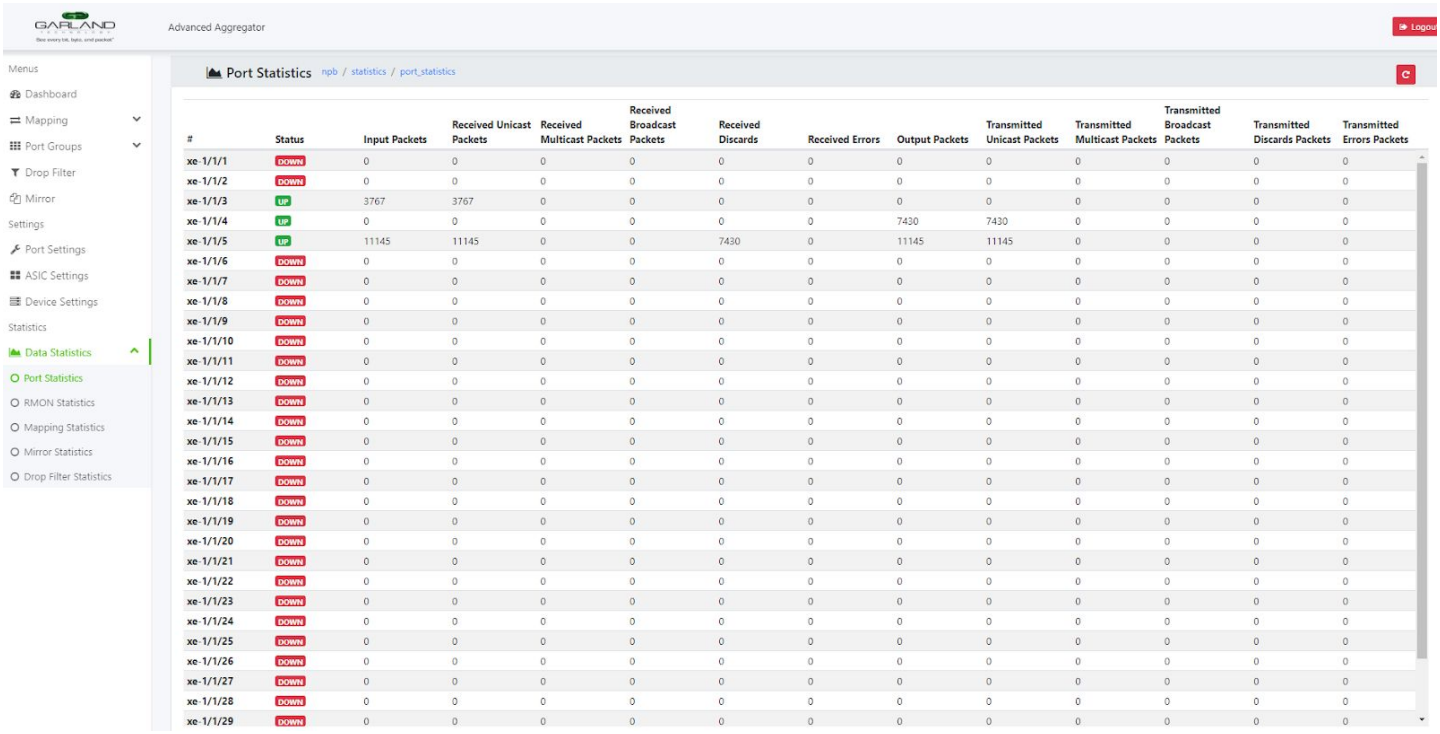
1: Port Statistics

You can click " " to clear the statistics



#	Status	Input Packets	Received Unicast Packets	Received Multicast Packets	Received Broadcast Packets	Received Discards	Received Errors	Output Packets	Transmitted Unicast Packets	Transmitted Multicast Packets	Transmitted Broadcast Packets	Transmitted Discards Packets	Transmitted Errors Packets
xe-1/1/1	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/2	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/3	UP	3767	3767	0	0	0	0	0	0	0	0	0	0
xe-1/1/4	UP	0	0	0	0	0	0	7430	7430	0	0	0	0
xe-1/1/5	UP	11145	11145	0	0	7430	0	11145	11145	0	0	0	0
xe-1/1/6	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/7	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/8	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/9	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/10	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/11	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/12	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/13	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/14	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/15	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/16	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/17	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/18	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/19	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/20	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/21	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/22	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/23	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/24	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/25	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/26	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/27	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/28	DOWN	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/29	DOWN	0	0	0	0	0	0	0	0	0	0	0	0

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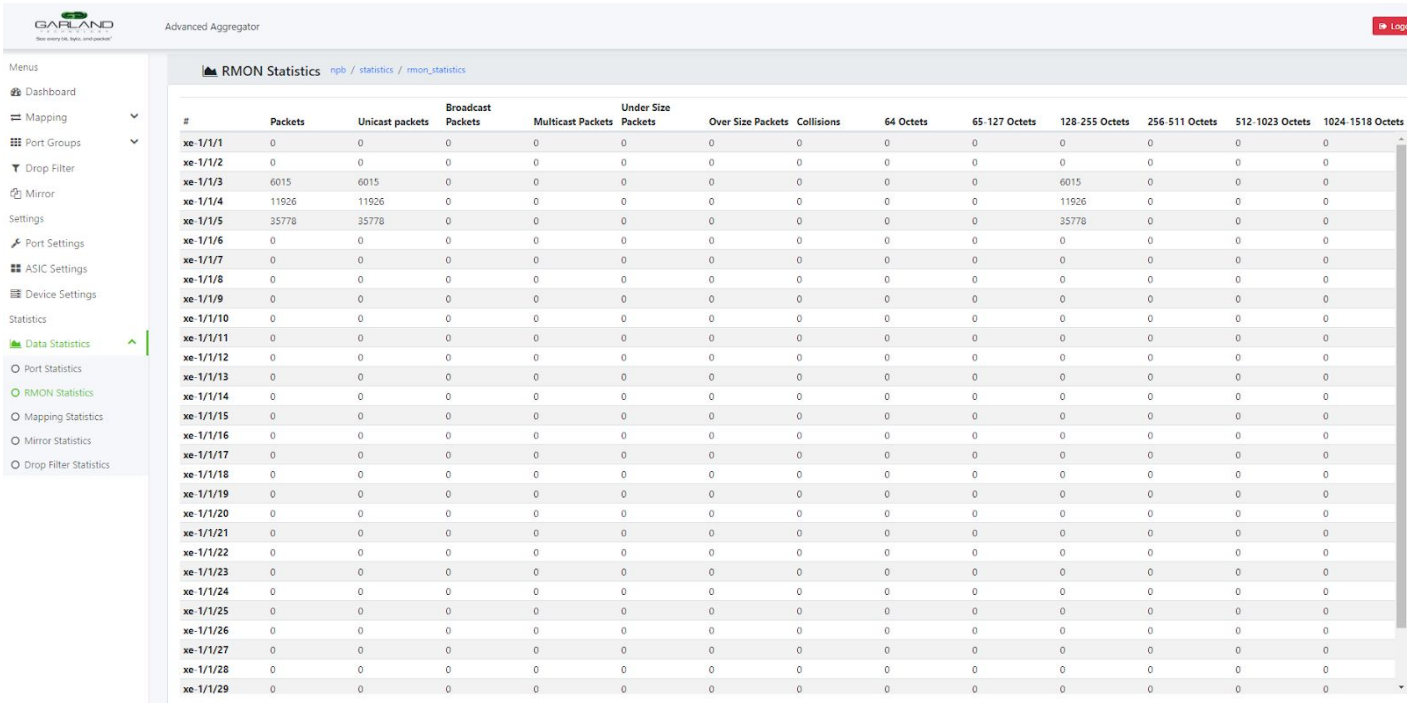
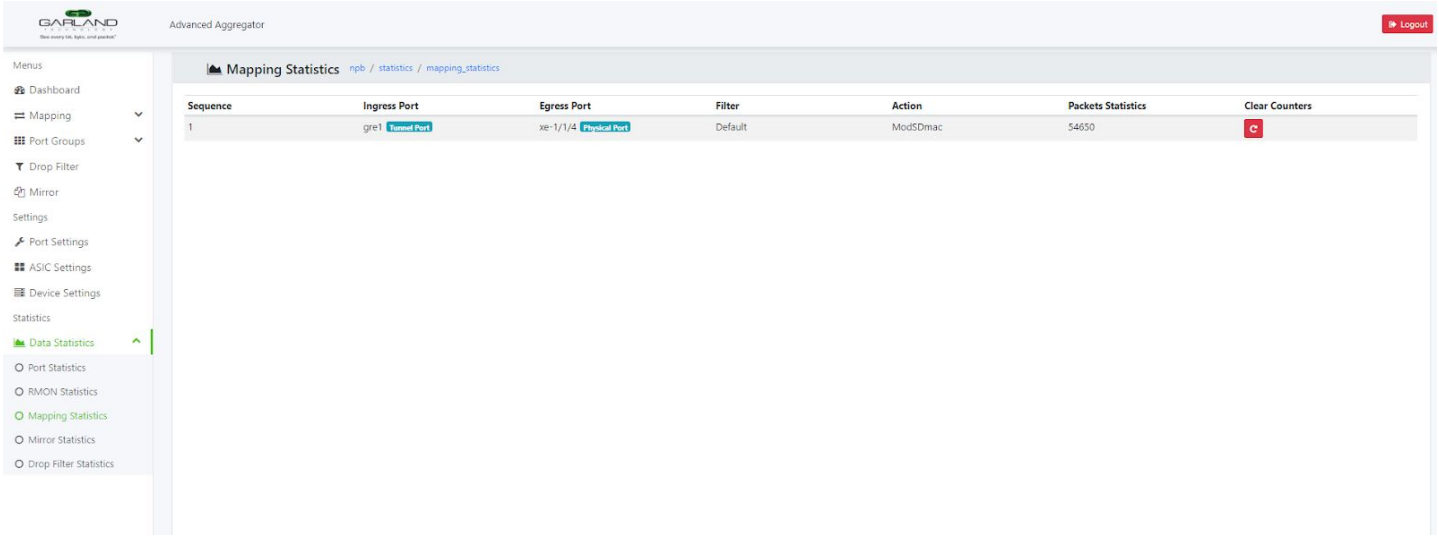
2: RMON statistics



#	Packets	Unicast packets	Broadcast Packets	Multicast Packets	Under Size Packets	Over Size Packets	Collisions	64 Octets	65-127 Octets	128-255 Octets	256-511 Octets	512-1023 Octets	1024-1518 Octets
xe-1/1/1	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/2	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/3	6015	6015	0	0	0	0	0	0	0	6015	0	0	0
xe-1/1/4	11926	11926	0	0	0	0	0	0	0	11926	0	0	0
xe-1/1/5	35778	35778	0	0	0	0	0	0	0	35778	0	0	0
xe-1/1/6	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/7	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/8	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/9	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/10	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/11	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/12	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/13	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/14	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/15	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/16	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/17	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/18	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/19	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/20	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/21	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/22	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/23	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/24	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/25	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/26	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/27	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/28	0	0	0	0	0	0	0	0	0	0	0	0	0
xe-1/1/29	0	0	0	0	0	0	0	0	0	0	0	0	0

3: Mapping statistics

You can click “ ” to clear the mapping rule statistics.



Sequence	Ingress Port	Egress Port	Filter	Action	Packets Statistics	Clear Counters
1	gre1 Tunnel Port	xe-1/1/4 Physical Port	Default	ModSDmac	54650	

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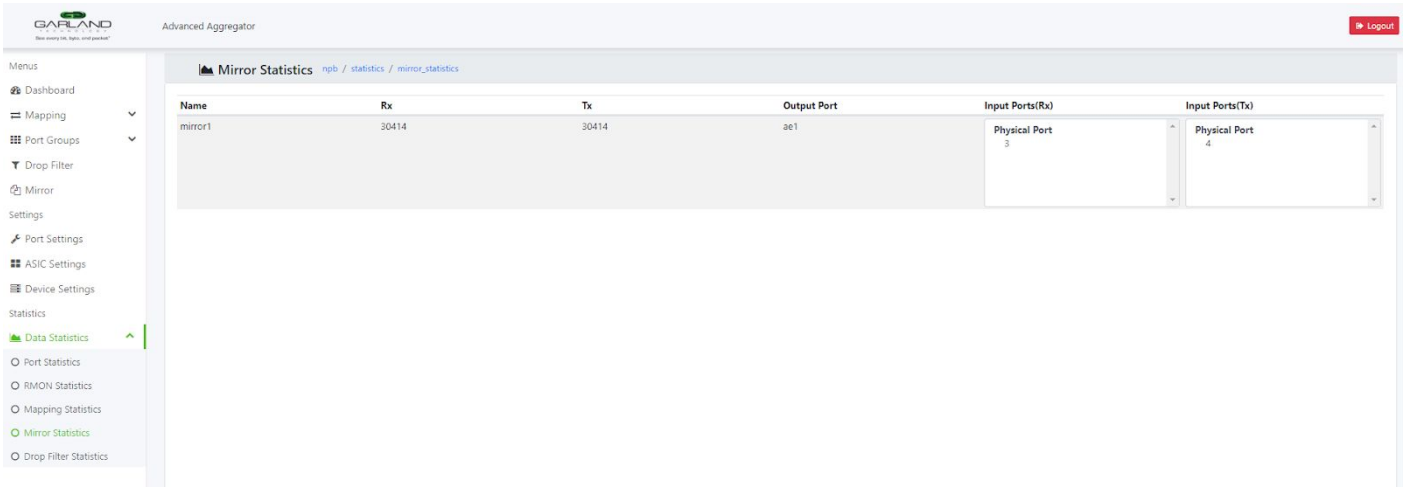
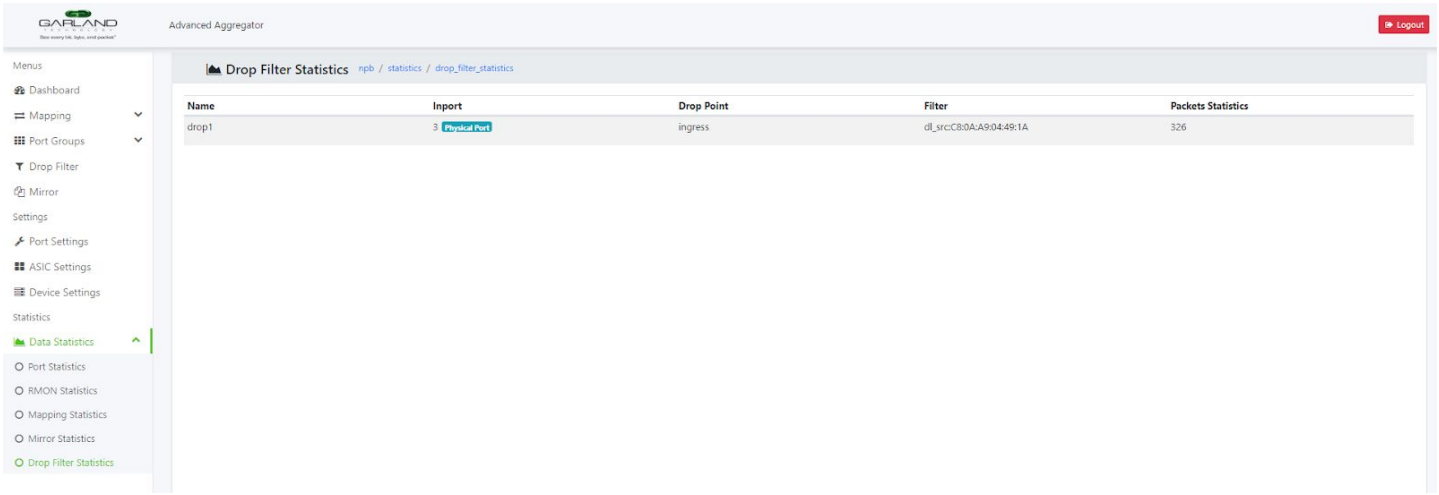
4: Mirror statistics



5: Drop Filter statistics



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8AM-9PM (CST) Monday - Friday (Except for observed US Holidays)

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Online: garlandtechnology.com/support

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