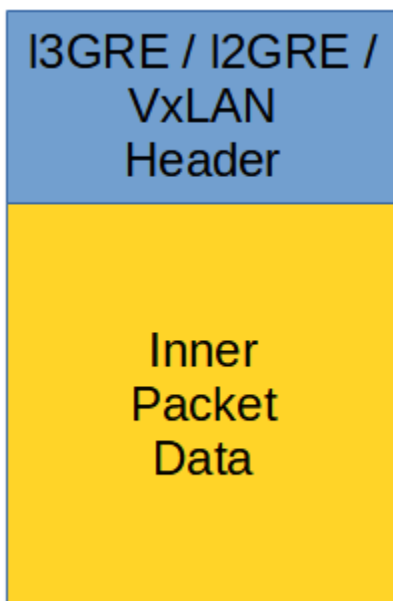


## AF40G24AC

### Inner Match

#### Overview:

Typically, packet decapsulation decisions are made using header data only. However, in some cases, it is necessary to make packet decapsulation decisions based on using the header data and inner packet data. Inner Match may be used to decapsulate I3GRE, I2GRE, and VxLAN packets using header data and inner packet data.



Decapsulating the I3GRE, I2GRE or VxLAN header from a packet using Inner Match involves three configuration processes.

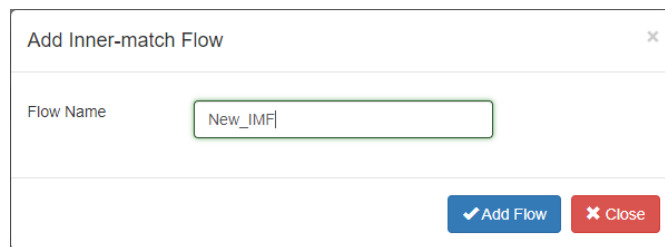
1. Create the Inner Match Flow
2. Create the Flow
3. Create the Tap Group

## 1. Create the Inner Match Flow

The Inner Match flow defines which I3GRE, I2GRE, or VxLAN packets will be decapsulated. Packets that do not meet the Inner Match flow attributes will not be decapsulated. In some cases, it may be required to create more than 1 Inner Match flow.

1. Select Tap Management.
2. Select Inner Match.
3. Select + Add Inner-match Flow.

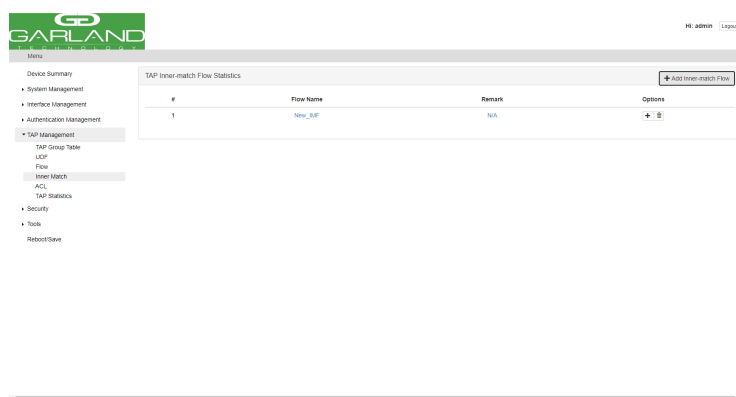
The Add Inner-match Flow panel will appear.



A dialog box titled "Add Inner-match Flow" with a close button (X) in the top right corner. It contains a "Flow Name" label and a text input field with the value "New\_IMF". At the bottom right, there are two buttons: "Add Flow" (blue with a checkmark icon) and "Close" (red with an X icon).

4. Enter the Flow Name.
5. Select Add Flow.

The Inner Match flow will be displayed.



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6. Select the + in the Options column for the desired flow to define the Inner Match flow attributes.

The Add Flow Entry panel will be displayed.

The 'Add Flow Entry' panel is a configuration window with a close button (X) in the top right corner. It contains a list of settings, each with a label and a control element (toggle or text input). The settings are as follows:

Label	Value / Control
Sequence-num	off (toggle)
IP protocol number	any (dropdown)
Filter TYPE	ipv4 (dropdown)
Ether Type	off (toggle)
src-ip	on (toggle)
Source IP	60.60.60.61 (text input)
Source wildcard	0.0.0.0 (text input)
dst-ip	off (toggle)
DSCP	off (toggle)
Ip-precedence	off (toggle)
Options	off (toggle)
Fragment	off (toggle)
src-mac	off (toggle)
dst-mac	off (toggle)
COS	off (toggle)
Inner COS	off (toggle)
VLAN	off (toggle)
Inner VLAN	off (toggle)

At the bottom right of the panel are two buttons: a blue 'OK' button with a checkmark icon and a red 'Close' button with an 'X' icon.

7. Select the desired Inner Match flow options and enter the desired values.

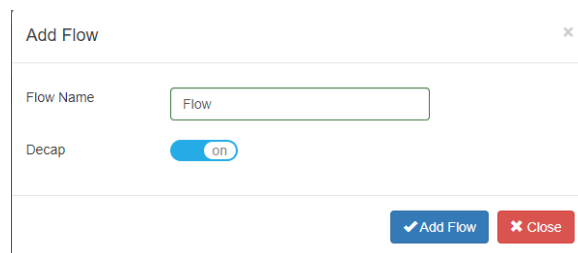
8. Select OK.

## 2. Create the Flow

The flow defines which I3GRE, I2GRE, or VxLAN packets will be decapsulated. Packets that do not meet the flow attributes will not be decapsulated. In some cases, it may be required to create more than 1 flow.

1. Select Tap Management.
2. Select Flow.
3. Select + Add Flow.

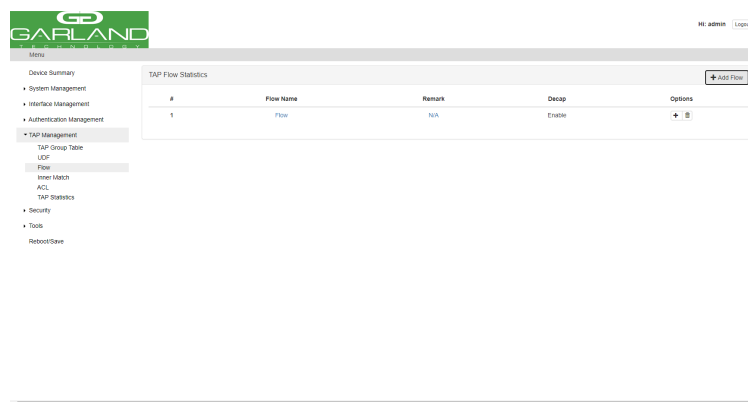
The Add Flow panel will appear.



The 'Add Flow' panel is a modal window with a title bar containing a close button (X). It contains two input fields: 'Flow Name' with the value 'Flow' and 'Decap' with a toggle switch set to 'on'. At the bottom right, there are two buttons: a blue 'Add Flow' button with a checkmark icon and a red 'Close' button with an X icon.

4. Enter the Flow Name.
5. Enable Decap.
6. Select Add Flow.

The flow will be displayed.



The screenshot shows the Garland Technology web interface. On the left is a navigation menu with categories like Device Summary, System Management, Interface Management, Authentication Management, TAP Management (selected), Security, Tools, and Reboot/Save. The 'TAP Management' section is expanded, showing sub-items: TAP Group Table, LDP, Flow (selected), Inner Match, ACL, and TAP Statistics. The main content area displays 'TAP Flow Statistics' with a table and an '+ Add Flow' button.

#	Flow Name	Remark	Decap	Options
1	Flow	N/A	Enable	+ [icon]

7. Select the + in the Options column for the desired flow to define the flow attributes.

The Add Flow Entry panel will be displayed.

**Add Flow Entry**

**Match Rule**

Sequence-num	off
Action	permit
IP protocol number	gre
GRE Key	off
Filter Type	IPv4
Ether Type	off
Src-4p	on
Source IP	10.10.10.10
Source wildcard	0.0.0.0
Dist-4p	off
DSCP	off
IP-precedence	off
Options	off
Fragment	off
Src-mac	off
Dst-mac	off
COS	off
Inner COS	off
VLAN	off
Inner VLAN	off
Inner Match	on
Inner Match	New_IDM

**Action**

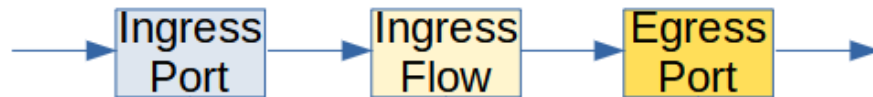
Truncation	off
Untag	Disable
Strip-header	off
Vlan mark	off
Edit packet	off
Add I2gre	off
Add I3gre	off
Add Vxlan	off
Add Erspantype-1	off
Add Erspantype-2	off

OK Close

8. Select the desired IP Protocol Number. (gre = GRE / nvgre = I2GRE / udp = VxLAN)
9. Select the desired flow options and enter the desired values. For udp = VxLAN enable the DST-port. Select eq and enter 4789.
10. Enable Inner Match.
11. Select the desired Inner Match flow.
12. Select OK.

### 3. Create the Tap Group

The Tap Group defines the ingress port, ingress flow and egress port.



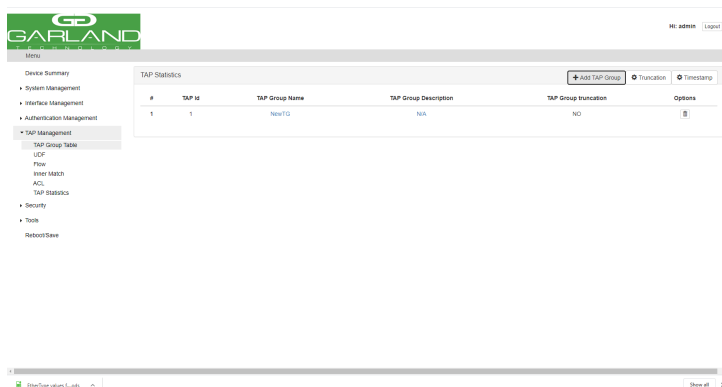
1. Select Tap Management.
2. Select TAP Group Table.
3. Select + Add TAP Group.

The TAP Group Name panel will appear.

The screenshot shows a 'TAP Group Name' dialog box. It has a title bar with a close button (X). Inside, there are two input fields: 'TAP Group Name' with the text 'NewTG' and 'TAP Group ID' with the text '0'. At the bottom right, there are two buttons: a blue 'OK' button with a checkmark icon and a red 'Close' button with an X icon.

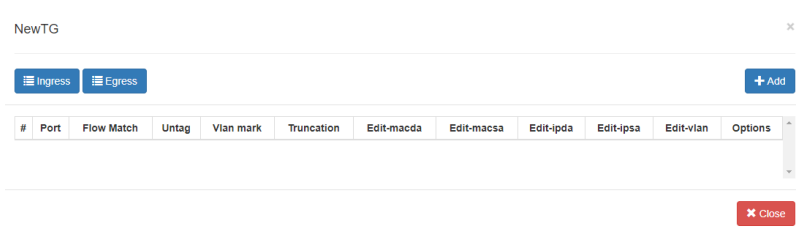
4. Enter the TAP Group Name.
5. Select OK.

The Tap Group will be displayed.



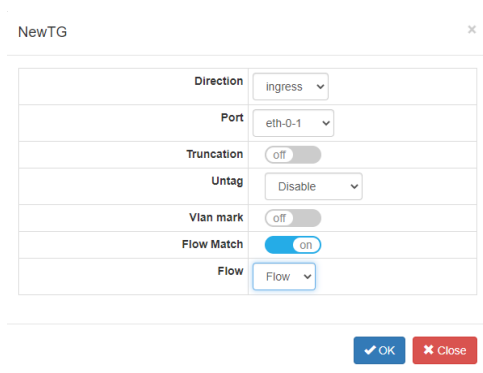
- Place the cursor on the tap group name under the TAP Group Name column and press the left mouse button.

The TAP group panel will appear.



- Select the + Add to define the ingress port and ingress flow.

The add panel will appear.



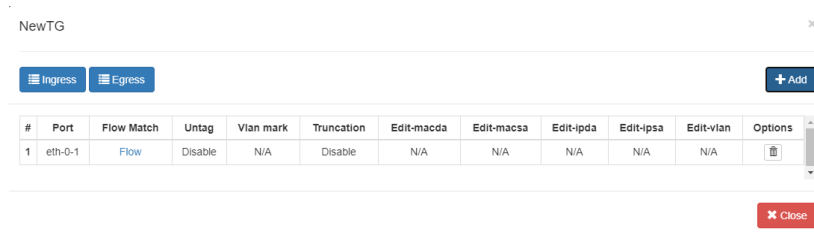
- Select the Direction ingress.

9. Select the Port.

10. Enable Flow Match.

11. Select the flow for the Inner Match.

12. Select OK.



NewTG

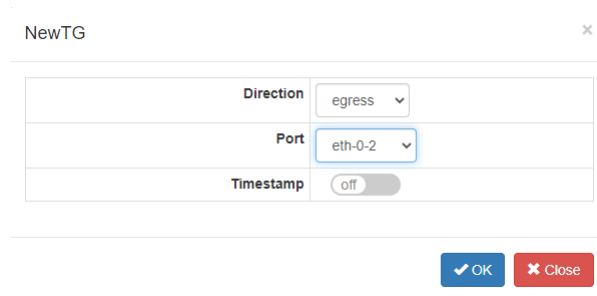
Ingress Egress + Add

#	Port	Flow Match	Untag	Vlan mark	Truncation	Edit-macda	Edit-macsa	Edit-ipda	Edit-ipsa	Edit-vlan	Options
1	eth-0-1	Flow	Disable	N/A	Disable	N/A	N/A	N/A	N/A	N/A	

✖ Close

13. Select the + Add to define the Engress port.

The add panel will appear.



NewTG

Direction: egress

Port: eth-0-2

Timestamp: off

✓ OK ✖ Close

14. Select the Direction egress.

15. Select the Port.

16. Select OK.



NewTG

Ingress Egress + Add

#	Port	Timestamp	Options
1	eth-0-2	NO	

✖ Close

17. The ingress port, ingress flow, and egress port may be displayed by selecting Ingress or Egress.

18. Select Close to return the TAP Group Table display.