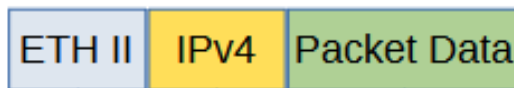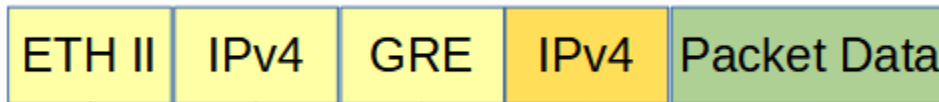**Encapsulate**

When a packet is encapsulated with a l3GRE header the original L2 segment is removed from the packet and the new l3GRE header segments are added. The l3GRE header segments consists of L2, L3 and GRE as shown below.

Original Packet

GRE Encapsulated Packet

Encapsulating a packet with a l3GRE header involves two configuration procedures.
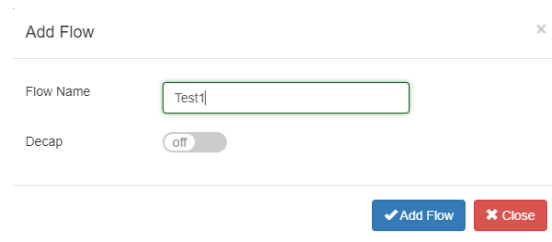
- Create a flow to add the l3GRE header

- Create a TAP Group

This document discusses the procedure to create a flow to add the l3GRE header. The procedure to create a TAP Group is discussed in the TAP Group Guide.

Create a Flow

1. Select TAP Management.

2. Select Flow.

3. Select + Add Flow.

> *The Add Flow panel will appear.*

Add Flow		×
Flow Name	Test1	
Decap	off	
	✔ Add Flow	✖ Close

4. Enter the Flow Name.

5. Select Add Flow.

> *The flow will be displayed.*

TAP Flow Statistics   **+ Add Flow**

#	Flow Name	Remark	Decap	Options
1	l3GRE	N/A	Disable	+ 🗑

6. Select the + in the Options column to define the attributes.

> *The Add Flow Entry panel will be displayed.*

The Add Flow Entry panel is divided into two sections, match rule and action.

> Match Rule Section
>
> - Defines whether the packets are permitted or denied
>
> - Determines the permitted or denied packet filter criteria
>
> - Determines which permitted packets will be modified by any action(s) selected and defined in the action section

Action Section

- The action section is used to define the modification(s) that will be performed on any packet(s) that is permitted by the match rule section

Flow Match Options

7. Action   permit

8. IP Protocol Number   any

9. Select any other desired options and enter the desired values to define which packets will be encapsulated. The defaults may be used to encapsulate all packets.

Flow Action Options

10. Add l3gre   enable

11. L3gre-src-ip   Enter the desired address. This defines the source IP in the L3 segment of the l3GRE header.

12. L3gre-dest-ip   Enter the desired address. This defines the destination IP in the L3 segment of the l3GRE header.

13. L3gre-dest-mac   Enter the desired address. This defines the destination MAC in the L2 segment of the l3GRE header.

14. Select OK.

15. Select the flow name to display the attributes.
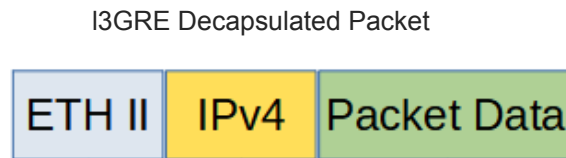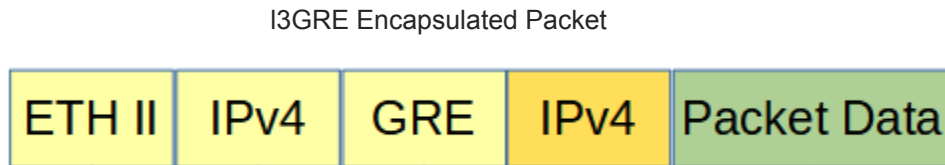
The Flow Entry panel will be displayed

l3GRE		✕
#	**Flow Entry**	**Options**
1	sequence-num 10 permit any src-ip any dst-ip any add-l3gre l3gre-sip 10.10.10.10 l3gre-dip 10.10.10.25 l3gre-dmac f093.c5f1.a1a1	🗑

✖ Close

Additional entries may be created for the flow. Entries may be deleted by selecting the Trash Can. Entries may not be modified.

Decapsulate

When a l3GRE packet is decapsulated the l3GRE header segments are removed from the
packet and a new L2 segment is added as shown below.

l3GRE Encapsulated Packet

| ETH II | IPv4 | GRE | IPv4 | Packet Data |

l3GRE Decapsulated Packet

| ETH II | IPv4 | Packet Data |

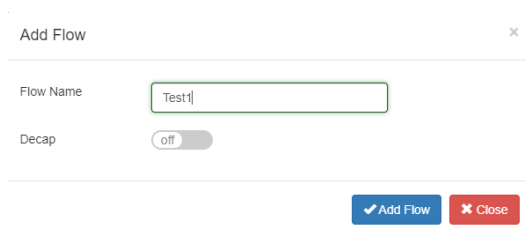Decapsulating the l3GRE header from a packet(s) involves two configuration procedures.

- Create a flow to strip the l3GRE header

- Create a TAP Group

*This document discusses the procedure to create a flow to strip the GRE header. The procedure
to create a TAP Group is discussed in the TAP Group Guide.*

Create a Flow

1. Select TAP Management.

2. Select Flow.

3. Select + Add Flow.

> *The Add Flow panel will appear.*

4. Enter the Flow Name.

5. Select Add Flow.

> *The flow will be displayed.*

6. Select the + in the Options column to define the attributes.

> *The Add Flow Entry panel will be displayed.*

The Add Flow Entry panel is divided into two sections, match rule and action.

> Match Rule Section

- Defines whether the packets are permitted or denied

- Determines the permitted or denied packet filter criteria

- Determines which permitted packets will be modified by any action(s) selected and defined in the action section

Action Section

- The action section is used to define the modification(s) that will be performed on any packet(s) that is permitted by the match rule section

Flow Match Rule Options

7. Action   permit

8. IP Protocol Number   gre

9. Select any other desired options and enter the desired values to define which l3GRE packets will be decapsulated. The defaults may be used to decapsulate all l3GRE packets.

Flow Action Options

10. Strip-header   enable

11. Edit packet   enable

12. Edit-macda   enable

13. Dst-mac   Enter the desired address. This will define the destination MAC for the new L2 segment added to the packet.

14. Edit-macsa   enable

15. Src-mac   Enter the desired address. This will define the source MAC for the new L2 segment added to the packet.

16. Select OK.

17. Select the flow name to display the attributes.

The Flow Entry panel will be displayed

l3GRE		✕
#	**Flow Entry**	**Options**
1	sequence-num 10 permit gre src-ip any dst-ip any strip-header edit-macda F093.C5F1.A1A1 edit-macsa F093.C5F1.A1A2	🗑

✖ Close

Additional entries may be created for the flow. Entries may be deleted by selecting the Trash Can. Entries may not be modified.