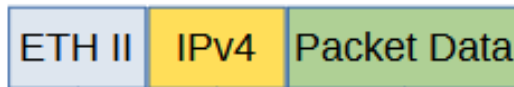


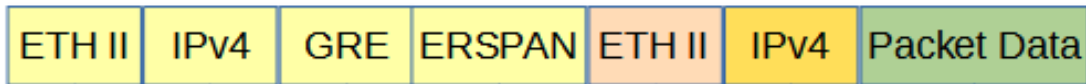
## Encapsulate

When a packet is encapsulated with an ERSPAN Type 2 header the new ERSPAN Type 2 header segments are added to the original packet. The ERSPAN Type 2 header segments consists of L2, L3, GRE and ERSPAN Type 2 as shown below.

Original Packet



ERSPAN Type 2 Encapsulated Packet



Encapsulating a packet with an ERSPAN Type 2 header involves two configuration procedures.

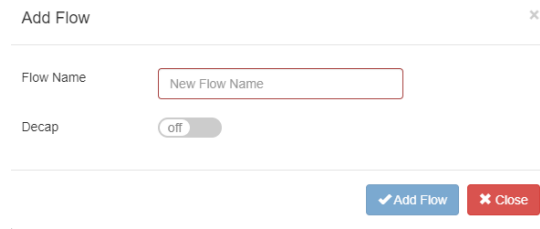
- Create a flow to add the ERSPAN Type 2 header
- Create a TAP Group

*This document discusses the procedure to create a flow to add the ERSPAN Type 2 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.*

TAP Flow Statistics					+ Add Flow
#	Flow Name	Remark	Decap	Options	
1	ERSPAN	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

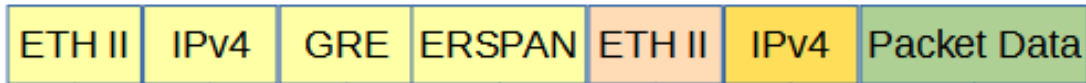
- The action section is used to define the modification(s) that will be performed on any packet(s) that is permitted by the match rule section



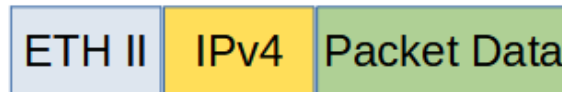
## Decapsulate (IP Protocol-GRE)

When an ERSPAN Type 1 packet is decapsulated the ERSPAN Type 1 header segments are removed from the packet along with the original L2 segment. A new L2 segment is added as shown below.

ERSPAN Type 2 Encapsulated Packet



ERSPAN Type 2 Decapsulated Packet



Decapsulating the ERSPAN Type 2 header from a packet(s) involves two configuration procedures.

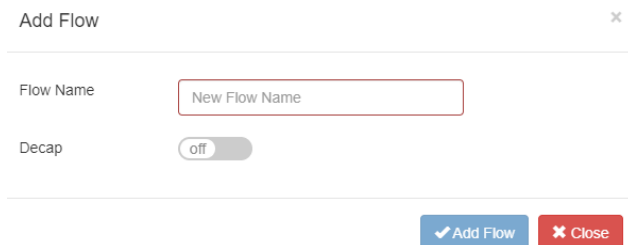
- Create a flow to strip the ERSPAN Type 2 header
- Create a TAP Group

*This document discusses the procedure to create a flow to strip the ERSPAN Type 2 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.*

TAP Flow Statistics					+ Add Flow
#	Flow Name	Remark	Decap	Options	
1	ERSPAN	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 Rule Options**

- Action permit
- IP Protocol Number gre
- Select any other desired options and enter the desired values to define which ERSPAN packets will be decapsulated. The defaults may be used to decapsulate all ERSPAN packets.

**Flow Action Options**

- Strip-header enable
- Strip-position enable
- Type L4
- Strip-offset enable
- Value 20
- Edit packet enable
- Edit-macda Enter the desired address. This will define the destination MAC for the new L2 segment added to the packet.
- Edit-macsa Enter the desired address. This will define the source MAC for the new L2 segment added to the packet.
- Select OK.
- Select the flow name to display the attributes.

*The Flow Entry panel will be displayed*

ERSPAN ×

#	Flow Entry	Options
1	sequence-num 10 permit gre src-ip any dst-ip any strip-header strip-position I4 strip-offset 20 edit-macda F093.C5F1.A1A1 edit-macsa F093.C5F1.A1A2	

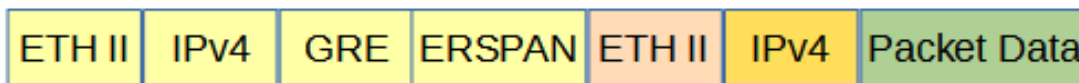
✖ Close

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

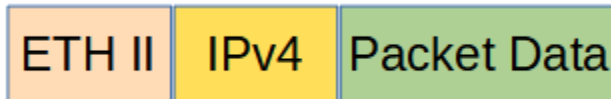
## Decapsulate (IP Protocol-GRE ESPAN)

When an ERSPAN Type 2 packet is decapsulated the ERSPAN Type 2 header segments are removed from the packet. The original packet is not modified as shown below.

ERSPAN Type 2 Encapsulated Packet



ERSPAN Type 2 Decapsulated Packet



Decapsulating the ERSPAN Type 2 header from a packet(s) involves two configuration procedures.

- Create a flow to strip the ERSPAN Type 2 header
- Create a TAP Group

*This document discusses the procedure to create a flow to strip the ERSPAN Type 2 header. The procedure to create a TAP Group is discussed in the TAP Group Guide.*

## Create a Flow

The GRE ERSPAN flow must be created using CLI commands. This flow type cannot be created using the GUI. The flow defines which ERSPAN Type 2 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.

Connect to the Advanced Features unit. A connection to the unit may be established using two options:

Directly connected to the Console Interface to COM Port using Putty/Serial connection.

Connected via the IP Management Interface using Putty/SSH connection.

1. Press the Return key.
2. Enter enable.
3. Enter configure terminal.
4. Enter the following commands to create the flow.

```
Switch(config)# flow ERSPAN
```

***ERSPAN** is the flow name.*

```
Switch(config-flow-ERSPAN)# permit gre erspan any src-ip any dst-ip any strip-  
header strip-position 14 strip-offset 20
```

5. Once the flow is created it will be displayed in the GUI.

TAP Flow Statistics					+ Add Flow
#	Flow Name	Remark	Decap	Options	
1	ERSPAN	N/A	Disable	+ -	

6. Select the flow name to display the attributes.

*The Flow Entry panel will be displayed*

ERSPAN			×
#	Flow Entry	Options	
1	sequence-num 10 permit gre erspan any src-ip any dst-ip any strip-header strip-position 14 strip-offset 20	-	

✖ Close

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