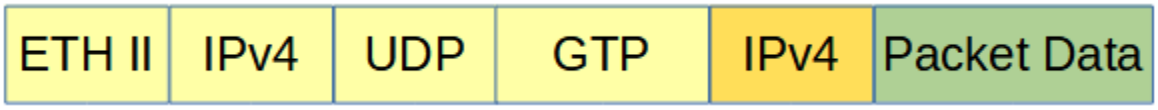
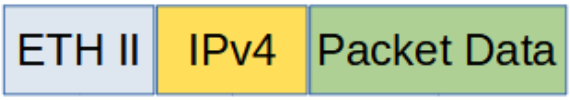
Decapsulate

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

GTP Encapsulated Packet



GTP Decapsulated Packet



Decapsulating all GTP packet(s) involves two configuration procedures.

- Create a flow to strip the GTP header
- Create a TAP Group

Decapsulating the GTP packet(s) per TIED involves three configuration procedures.

- Create a UDF
- Create a flow to strip the GTP header
- Create a TAP Group

This document discusses the procedure to create a flow to strip all GTP headers and the procedure to create the UDF and flow to strip GTP headers per TIED. The procedure to create a TAP Group is discussed in the TAP Group Guide.

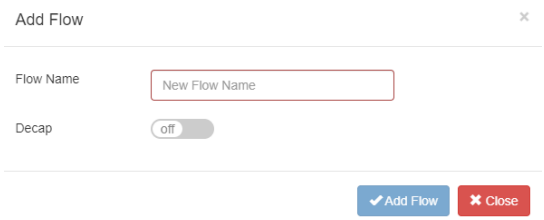
Create Flow to Decapsulate All GTP Packets

1. Select TAP Management.

2. Select Flow.

3. Select + Add Flow.

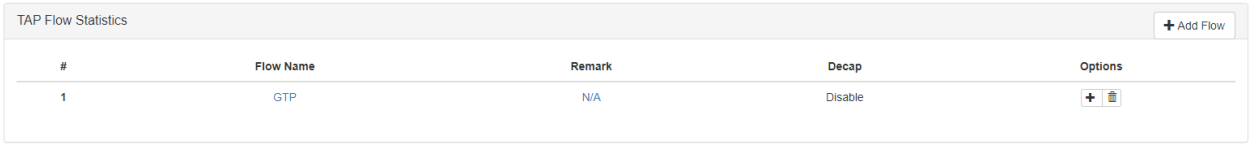
The Add Flow panel will appear.



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	udp
9. Src-port	enable
10. Type	eq
11. Port	2152
12. Dst-port	enable
13. Type	eq
14. Port	2152

Flow Action Options

15. Strip-header	enable
16. Strip-position	enable
17. Type	L4
18. Strip-offset	enable
19. Value	12
20. Edit packet	enable
21. Edit-macda	enable
22. Dst-mac	Enter the desired address. This will define the destination MAC for the new L2 segment added to the packet.
23. Edit-macsa	enable
24. Src-mac	Enter the desired address. This will define the source MAC for the new L2 segment added to the packet.

25. Select OK.

26. Select the flow name to display the attributes.

The Flow Entry panel will be displayed.

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

Create a UDF and Flow to Decapsulate GTP Packets per TEID

This method utilizes a UDF filter to define the GTP TEID and it must be created prior to creating the Flow.

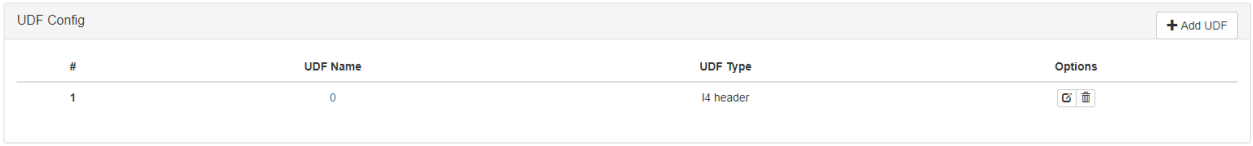
Create the UDF

1. Select TAP Management.
2. Select UDF.
3. Select + Add UDF.

The Add UDF panel will appear.

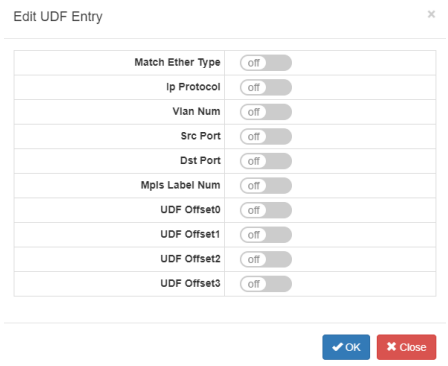
4. UDF Type — l4 header
5. UDF ID — Enter the desired number. Range is 0 to 15.
6. Select Add UDF.

The UDF will be displayed.



7. Select the Edit icon under the Options column.

The Edit UDF Entry panel will appear.



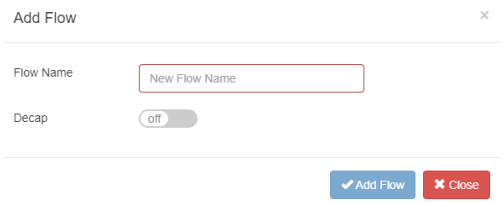
8. Ip Protocol enable
9. Protocol udp
10. UDF Offset0 enable
11. Value 12
12. Select OK.
13. Select the UDF name to display the attributes.

The UDF detail panel will be displayed

Create the Flow

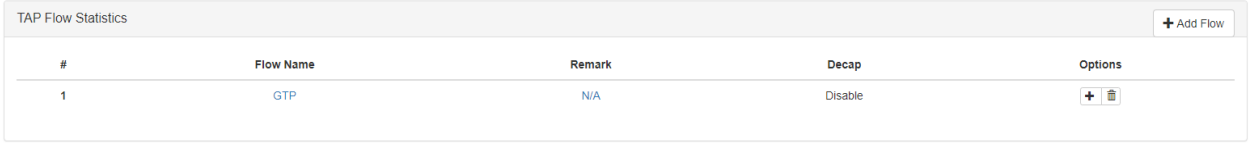
1. Select TAP Management.
2. Select Flow.
3. Select + Add Flow.

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	udp
9. Src-port	enable
10. Type	eq
11. Port	2152
12. Dst-port	enable
13. Type	eq
14. port	2152
15. UDF	enable
16. Type	Layer 4
17. UDF ID	Enter the number of the previously created UDF.
18. Offset Opt	Select UDF number
19. UDF0 type	value
20. UDF0 Value	Enter the desired GTP TEID value, (0xXXXXXXXX)
21. UDF0 Wildcard	Enter the desired UDF0 Wildcard, (0xXXXXXXXX), 0=match exact, F=any value.

Flow Action Options

22. Strip-header	enable
23. Strip-position	enable
24. Type	L4
25. Strip-offset	enable
26. Value	12

27. Edit packet — enable
28. Edit-macda — enable
29. Dst-mac — Enter the desired address. This will define the destination MAC for the new L2 segment added to the packet.
30. Edit-macsa — enable
31. Src-mac — Enter the desired address. This will define the source MAC for the new L2 segment added to the packet.
32. Select OK.
33. Select the flow name to display the attributes.

The Flow Entry panel will be displayed

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