AA10G54

MPLS Decapsulate

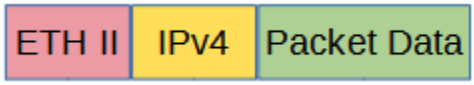
Overview:

When MPLS labels are removed from packets there are two options. Removing MPLS labels is not supported if Match Mode is enabled.

Option 1 - “all”. This option is used to remove the MPLS label from packets with only 1 MPLS label.

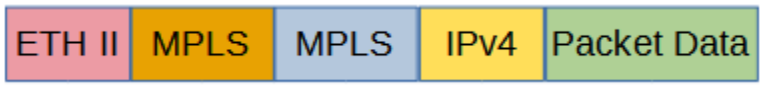
1 MPLS Label Packet

MPLS Label Removed



Option 2 – “once”. This option is used to remove the first MPLS label from packets with 2 or 3 MPLS labels.

2 MPLS Label Packet



First MPLS Label Removed

Removing an MPLS label from packets involves three configuration processes.

1. Create a 1 MPLS Label Pass Filter or 2 MPLS Label Pass Filter

2. Create an All Action or Once Action

3. Create a Mapping Rule

1. Create a 1 MPLS Label Pass Filter

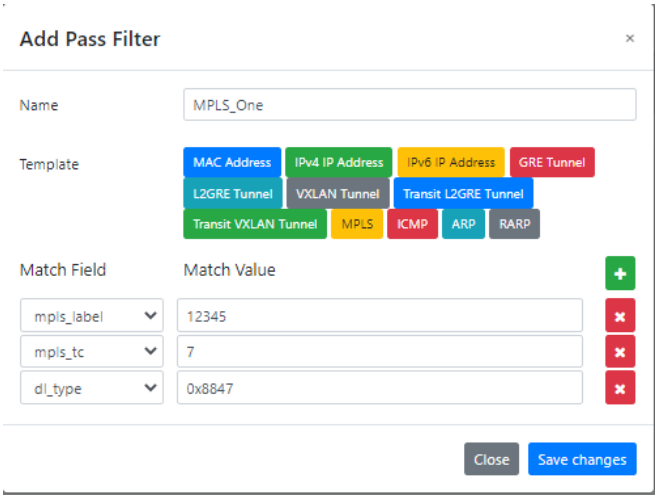
The pass filter defines which packets will have MPLS label removed. Packets that do not meet the pass filter attributes will not the have MPLS label removed. In some cases it may be required to create more than 1 pass filter.

1. Select Mapping.

2. Select Pass Filter.

3. Select the GREEN + to create a new pass filter.

The Add Pass Filter panel will appear.



4. Select the MPLS template. When MPLS is selected the pass filter will automatically display the required options; mpls_label, mpls_tc and dl_type. The dl_type is already defined as 0x8847.

5. Enter the Name.

6. Enter the MPLS label number found in the MPLS label to be removed, (1-1048571).

7. Enter the MPLS Traffic Class found in the MPLS label to be removed, (0-7). The traffic class in the MPLS label in dispalyed in binary, (000-111).

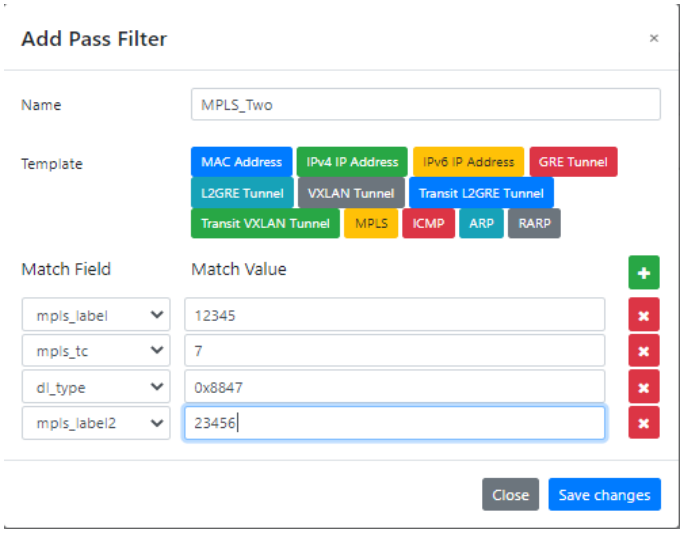
9. Select Save Changes.

Create a 2 MPLS Label Pass Filter

The pass filter defines which packets will have MPLS label removed. Packets that do not meet the pass filter attributes will not the have MPLS label removed. In some cases, it may be required to create more than 1 pass filter.

1. Select Mapping.
2. Select Pass Filter.
3. Select the GREEN + to create a new pass filter.

   The Add Pass Filter panel will appear.



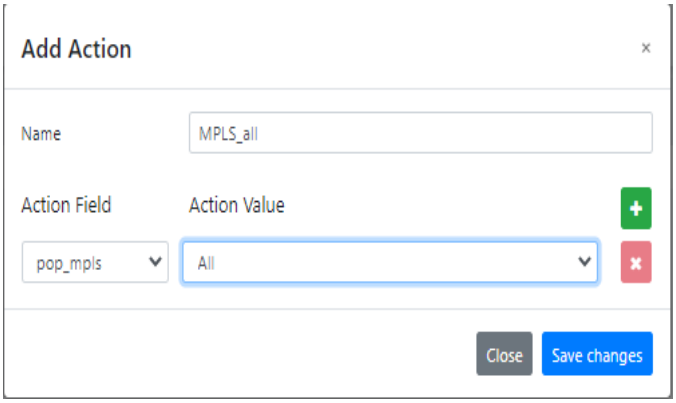
4. Select the MPLS template. When MPLS is selected the pass filter will automatically display the required options; mpls_label, mpls_tc and dl_type. The dl_type is already defined as 0x8847.
5. Using the GREEN + add the mpls_label2 Match Field.
6. Enter the Name.
7. Enter the MPLS label number found in the first MPLS label, (1-1048571).
8. Enter the MPLS Traffic Class found in the first MPLS label, (0-7). The traffic class in the MPLS label in dispalyed in binary, (000-111).
9. Enter the MPLS label number found in the second MPLS label, (1-1048571).
10. Select Save Changes.

2. Create an All Action

The action provides the ability for the MPLS label to be removed from packets with 1 MPLS label.

1. Select Mapping.
2. Select Action.
3. Select the GREEN + to create an action.

    The Add Action panel will appear.



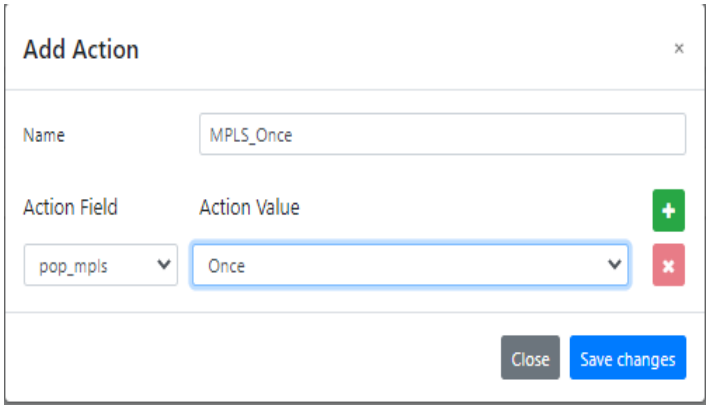
4. Enter the Name.
5. Select the Action Field, pop_mpls.
6. Select the Action Value, All.
7. Select Save Changes.

Create an Once Action

The action provides the ability for the first MPLS label to be removed from packets with 2 or more MPLS labels.

1. Select Mapping.
2. Select Action.
3. Select the GREEN + to create an action.

   The Add Action panel will appear.



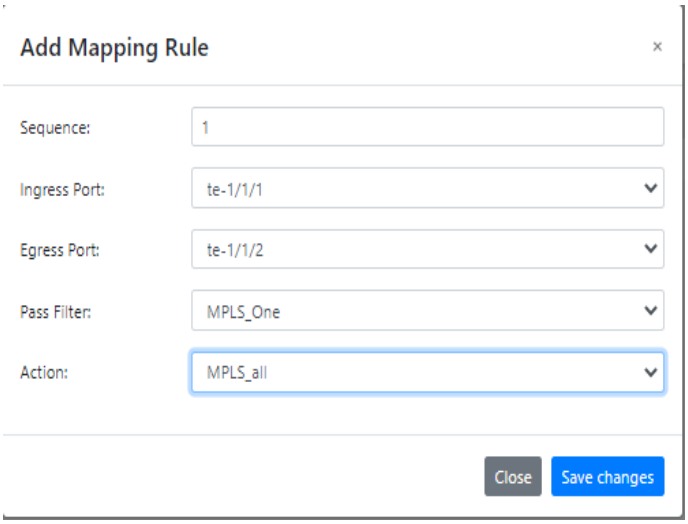
4. Enter the Name.
5. Select the Action Field, pop_mpls.
6. Select the Action Value, Once.
7. Select Save Changes.

3. Create a Mapping Rule

The Mapping Rule defines the ingress port, pass filter, action and egress port.

1. Select Mapping.
2. Select Mapping Rules.
3. Select the GREEN + to create a new mapping rule.

   The Add Mapping Rule panel will appear.



4. Enter the Sequence number. The range 1-1000. The sequence number defines the priority of the mapping rule. The priority is established based on the highest number to the lowest number.
5. Select the Ingress Port.
6. Select the Egress Port.
7. Select the Pass Filter, 1 MPLS label or 2 MPLS label.
8. Select the Action, All or Once.
9. Select Save Changes.