Flows Tab

The Flows tab of Scope contains the flow map, which lists currently active flows and their statistics in a table.

Table of Contents

The flow monitor in Scope is very useful, showing the individual traffic flows composing the total captured traffic in the monitored interface with the given packet filter. It also has a security aspect, allowing you to easily detect if there are flows that should not be. In addition, you can use it to verify that the packet filter is functioning as expected, especially in complex measurement scenarios.

Dashboards Flows Numerical Map QoE Status

	Source	Destination	Protocol	State	Load [b/s] (downlink)	Load [b/s] (uplink)	Age [s]	Inactivity
1	192.168.0.112 : 58492	89.166.9.145 : 443	TCP	Persistent	1180	3502	118.4	2
2	192.168.0.100 : 55301	239.255.255.250 : 1900	UDP	New	0	3259	1.1	0
3	192.168.0.100 : 55300	239.255.255.250 : 1900	UDP	New	0	3017	1.1	0
4	192.168.0.106 : 54915	192.168.0.255 : 54915	UDP	Persistent	0	2439	119.4	0
5	192.168.0.112 : 54915	192.168.0.255 : 54915	UDP	Persistent	0	2439	119.5	0
6	192.168.0.112 : 58694	37.16.105.72 : 22	TCP	New	7968	2326	2.5	0
7	00:d8:61:7a:ba:94 : 62654	ff:ff:ff:ff:ff:ff : 5355	ARP	Persistent	0	335	7.8	0
8	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 63771	2001:14b8:1000::0002 : 53	UDP	New	315	195	4.1	4
9	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 61255	2001:14b8:1000::0002 : 53	UDP	New	311	193	4.1	4
10	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 49169	2001:14b8:1000::0002 : 53	UDP	Persistent	0	0	24.1	24
11	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 60534	2001:14b8:1000::0002 : 53	UDP	Persistent	0	0	12.9	12
12	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 60933	2001:14b8:1000::0002 : 53	UDP	Old	0	0	32.9	32
13	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 61121	2001:14b8:1000::0002 : 53	UDP	Persistent	0	0	11.1	11
14	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 62755	2001:14b8:1000::0002 : 53	UDP	Old	0	0	32.8	32
15	2001:14ba:16fd:8300:24d4:ba2f:5f70:7dab : 63309	2001:14b8:1000::0002 : 53	UDP	Persistent	0	0	18.3	18
16	fe80::bad9:4dff:fe61:8564	ff02::0001	ICMPV6	Persistent	0	0	110.8	15
17	192.168.0.112 : 57671	37.16.105.72 : 8888	TCP	Persistent	0	0	118	7
18	192.168.0.112 : 123	62.241.198.252 : 123	UDP	Persistent	0	0	108.7	12
19	192.168.0.112 : 56210	139.99.46.91 : 443	TCP	Persistent	0	0	119.6	5
20	192.168.0.112 : 58490	139.99.46.91 : 443	TCP	Persistent	0	0	11.1	10
21	192.168.0.112 : 58447	172.67.72.165 : 443	TCP	Old	0	0	32.9	32

The view has a set of fixed columns. For more information on the columns and flow results in general, see Flow Results.

Column Header	Description
`Source`	The source address and port (if port number is available)
`Destination`	The source address and port, (if port number is available)
`Protocol`	The protocol above the address layer
`State`	New => Persistent => Old
`Load [b/s] (downlink)`	The current throughput in the downlink (received direction)
`Load [b/s] (uplink)`	The current throughput in the uplink (sent direction)
`Age [s]`	The age of the flow in seconds

Column Header	Description
`Inactivity`	The time passed in seconds since the last packet detected in this flow

Each flow has a **state**, which can have one of three values:

- **New** - The flow is new and reported for the first time
- **Persistent** - The flow has traffic or has been inactive less than the set limit
- **Old** - The flow has been inactive longer than the set limit and will be removed the next time flow results arrive

The *inactivity* counts duration from the last observed packet in the flow. If the flow is active, this number remains at or near zero. When inactivity begins to increase, the flow has stopped, i.e., no more packets are observed related to that. Once it reaches the set limit, i.e., Flow timeout, the flow is deemed ended and will be removed from the visualization.

No flows

If flows do not appear in the flow monitor during measurement:

- Check that flow results are selected in the Results Tab
- Check that the capture interface is pointing to the correct interface
- If using manual packet filter, make sure that the packet filter is not too strict
  - Test by switching to automatic filtering and see if flows begin to appear in the flow map