

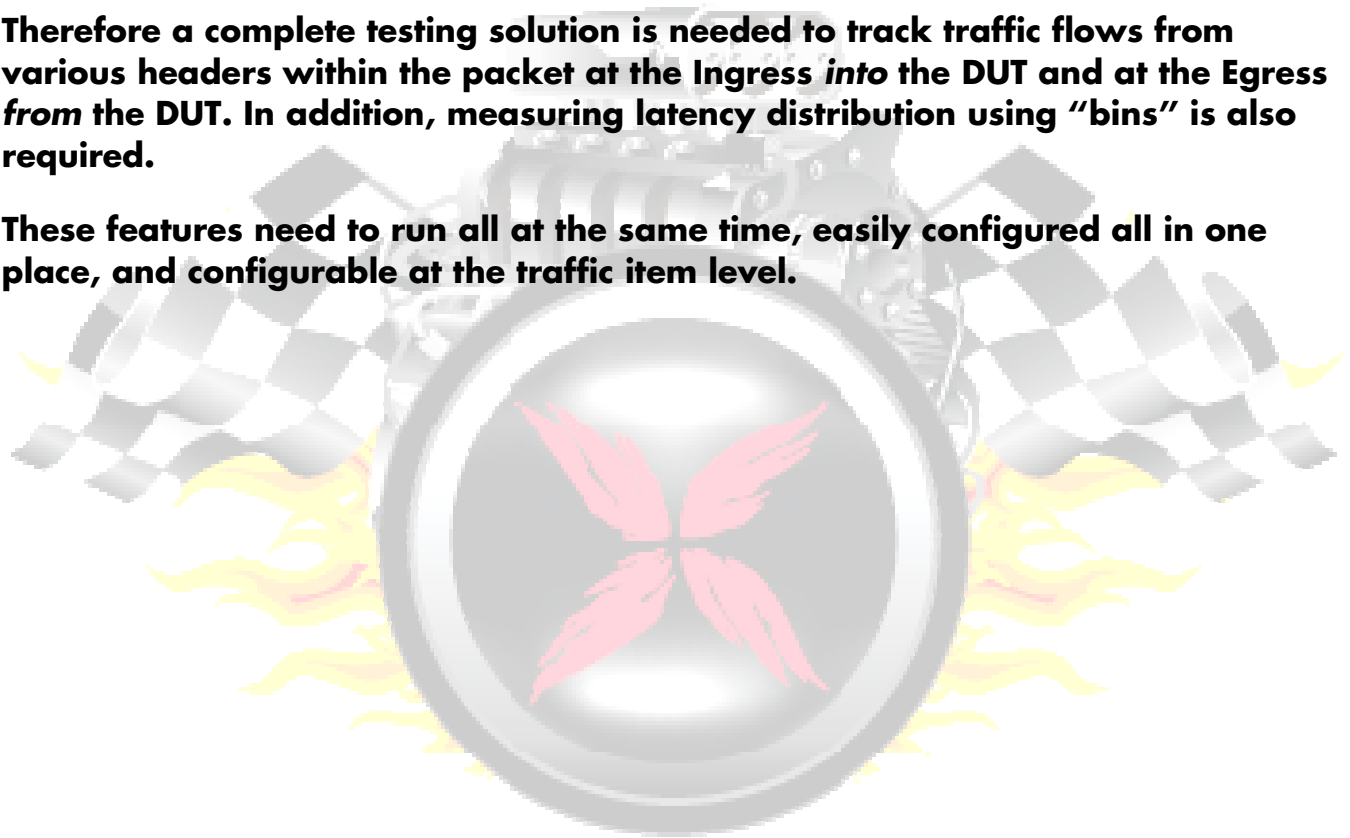
Day 8 – New Ingress/Egress Flow tracking options and latency bin measurements

Testing Challenge:

Real-world test scenarios demand a mixture of several types of traffic with a variety of characteristics.

Therefore a complete testing solution is needed to track traffic flows from various headers within the packet at the Ingress *into* the DUT and at the Egress *from* the DUT. In addition, measuring latency distribution using “bins” is also required.

These features need to run all at the same time, easily configured all in one place, and configurable at the traffic item level.



IxNetwork

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Day 8 – New Ingress/Egress Flow tracking options and latency bin measurements

IxNetwork 5.40 Solution:

In IxNetwork 5.40, Ingress/Egress tracking and latency bin measurements can all be done per traffic item from the same window in the traffic wizard.

Ingress tracking now contains more predefined values, including a custom field option.

Egress tracking is now available at traffic item level. A custom egress tracking capability is also provided.

Latency measurement per bin is also available per traffic item.

The screenshot displays the 'Advanced Traffic Wizard [Read Only]' window in IxNetwork. The 'Flow Tracking' section is highlighted with a red box and contains the following settings:

- Track Flows by:**
 - Traffic Item
 - Source/Dest Endpoint Pair
 - Source/Dest Value Pair
 - Source/Dest Port Pair
 - Source Endpoint
 - Dest Endpoint
 - Source Port
 - Traffic Group ID
 - Ethernet II : Destination MAC Address
 - Ethernet II : Source MAC Address
 - Ethernet II : Ethernet-Type
 - Ethernet II : PFC Queue
 - VLAN : VLAN Priority
- Custom Override:**
 - One - One meshed
 - Offset from: Root
 - Offset: 0 bits
 - Field width: 32 Bits
 - Values:

Value
1
0
<Type to add value>

The 'Egress Tracking' section is also highlighted with a red box and contains the following settings:

- Enable Egress Tracking
- Encapsulation: Any: Use Custom Settings
- Offset: Custom
- Custom Offset: 32 bits
- Custom Width: 12 bits

The 'Latency Measurements' section is also highlighted with a red box and contains the following settings:

- Enable Latency Measurements
- Numbers of Bins: 8
- Minimum step size: 0.02 us
- Greater Than (us):

Bin	Value
1	Greater Than
2	Greater Than
3	Greater Than
4	Greater Than
5	Greater Than
6	Greater Than
7	Greater Than
8	Greater Than
- Less Than or Equal To (us):

Bin	Value
1	1.00
2	1.42
3	2.00
4	2.82
5	4.00

At the bottom of the wizard, there is a legend for Ingress (green), Egress (yellow), and Latency Bins (orange), and a bar chart showing the distribution of these settings across 22 traffic items.

Note: Egress tracking must be the same for all traffic items in the test.

Conclusion:

IxNetwork 5.40 greatly improves in functionality, usability, and flexibility over previous test tools that had most of these parameters only configurable at the “test” level.

It delivers the right tools all in one place, making it easier for the tester to select and track the necessary ingress, egress, and latency parameters to effectively measure today’s real-world test environments.



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