Scripted Layer-3 Test

Goal: Use RFC-2544 as a guide to create a Layer-3 connection that can run automatically through various payload sizes and rates for a specified duration.

In this example, LANforge is used to set up a scripted connection that will iterate through a user-defined list of payload sizes and transmission rates. Each iteration will run for a user-defined duration with a user-defined pause between iterations. A summary text report is generated at the conclusion of all iterations.

1. Create a Layer-3 connection. For more information see Generating Traffic to a Switched Network

2. Modify the Layer-3 connection to add the script.
   A. Highlight the Layer-3 connection and select Modify.
   B. Select the Script button on Endpoint A.
C. Select the Script Type, RFC-2544.

<table>
<thead>
<tr>
<th>Endpoint Name:</th>
<th>scr-test-1-A</th>
<th>Script Type:</th>
<th>RFC-2544</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Action:</td>
<td></td>
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</table>

- **A.** Note: A default set of payload sizes are set up based on RFC-2544 but, can be changed by typing over the default values.

- **B.** Note: For Layer-3 UDP and TCP connections, 'payload size' refers to size of the payload being carried by the protocol and not the ethernet frame size.
3. Set up script options. For details refer to: LANforge User's Guide: Scripted Cross Connect

A. Select **Symmetric** for the script to run both endpoints for a bi-directional traffic test.

B. Set the **Run** and **Pause Duration**.

A. Note the total number of **Script Iterations** and **Estimated Total Duration** to help determine how long it will take to run this script.
C. Select OK to close the Add/Modify Script window.

D. The Script Type for Endpoint B is set to NONE because Endpoint A is controlling both ends of the connection in this symmetric script example.

E. Select OK to close the Create/Modify Cross Connect window.
4. Start the Scripted Layer-3 Cross Connect.
   A. Highlight the Layer-3 connection and select Start.

B. A script report window will pop up and show the details of each iteration of the scripted connection as it is run.
At the conclusion of the script, the report window will display a summary of the entire scripted connection results. Full Script Report for this example:

<table>
<thead>
<tr>
<th>C1</th>
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<th>C3</th>
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<td>14</td>
</tr>
</tbody>
</table>

A. per iteration details
B. raw CSV data for all iterations
C. spreadsheet matrices for creating your own 3D graphs
D. system information

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