Active Measurements of Dynamic L2 Circuits

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Not as different as you might think…

- Same considerations as discussed yesterday still apply: **What are you trying to demonstrate with your tests?**

- Same tools still apply (though your traceroute's might be a bit shorter)

- **Important Difference:** Endpoint Coordination
  - Choose a private address space
  - VLANs

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What am I trying to demonstrate with my measurements?

- Do I have a lot of long-lived circuits and I primarily want to do acceptance testing?

- Do I have a lot of short-lived circuits and need to test setup and teardown?
  - Probably going to need special software for this currently

- What type of transfers are being done on my circuit?
  - UDP vs TCP
  - Is anything else using my circuit?
  - Am I testing the circuit used for production work or am I testing a best approximation?

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Example 1: ESnet

- ~50 testers located at each of our sites

- Pre-configured tagged interface on VLAN 3600

- Preconfigured private address space

- Primarily used for "closest approximation" testing

- All tests are on-demand

- Most circuits on ESnet long-lived so no regular setup and teardown

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Example 2: DYNES

- Expect many short-lived circuits

- Periodically setup and teardown circuits then run FDT transfers.

- Regularly tests both control plane and dataplane

- Run tests directly to data transfer nodes

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Discussion