SC18 Network Research Exhibitiong

DTNs Closely Integrated with WAN High Performance 100 Gbps Optical Channels

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Abstract

Data Transfer Nodes (DTNs) are primarily used with L3 services, and in some cases with L2 services. This research project is exploring ways to directly integrate DTNs with 100 Gbps WAN channels based on optical networking. This project is using an international 100 Gbps testbed that has been designed, implemented and operated by Ciena. Recent developments will be showcased through demonstrations at SC18.

Goals

1. Close integration of Data Transfer Nodes (DTNs) with optical channels.

2. Enhanced optical channel utilization.

3. Minimizing EOE conversions.

4. Optimizing E2E performance.

5. Ensuring appropriate DTN middleware.

6. Developing appropriate measurement instruments.

7. Track data flow telemetry.

Resources

Required resources from SCinet are 12*100 Gbps circuits from the StarLight facility in Chicago to the StarLight booth on the SC18 showfloor

Involved Parties

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- Metropolitan Research and Education Network (MREN)
- SCinet