

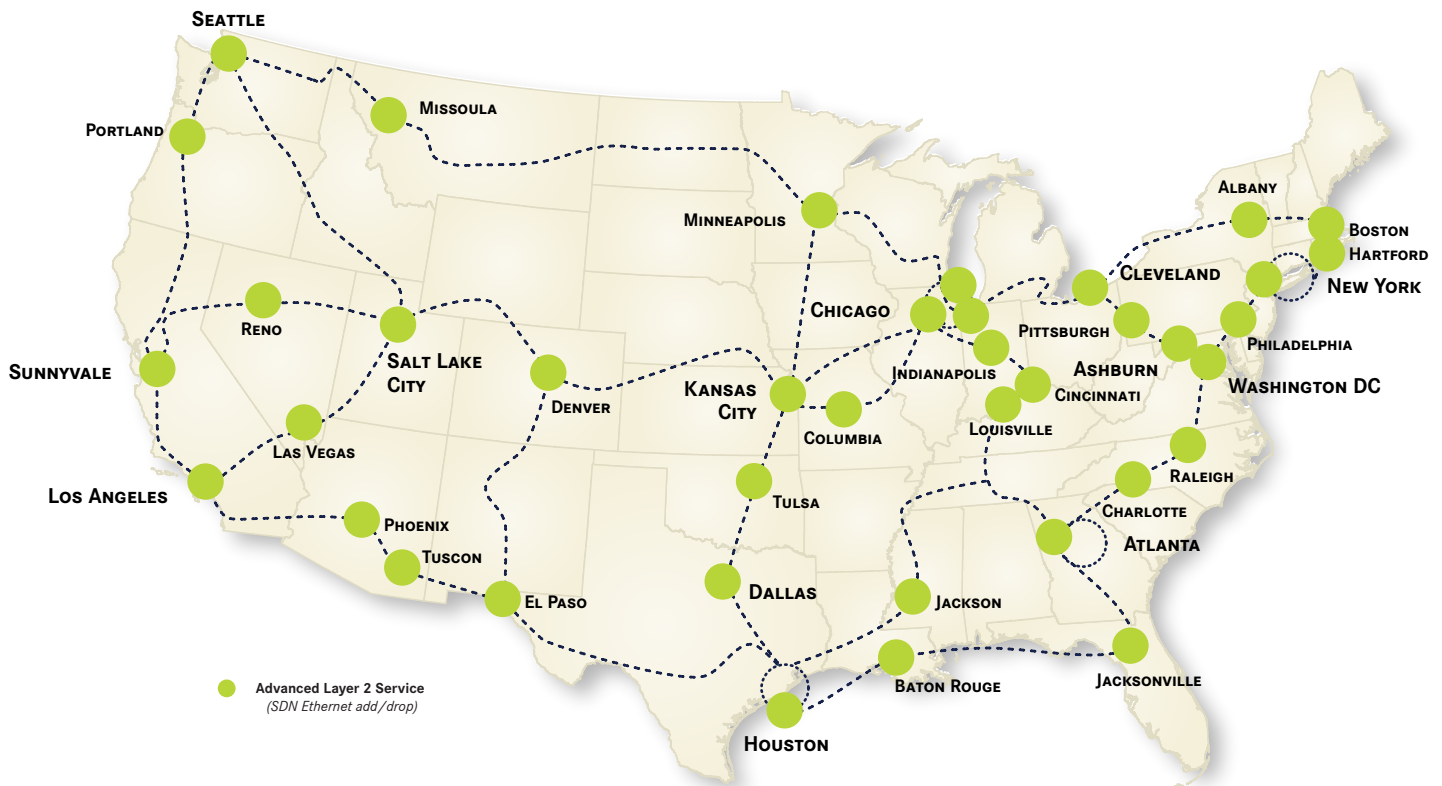
Advanced Layer 2 Service

Network Flexibility—Delivered

Internet2's Advanced Layer 2 Service provides member organizations the ability to meet diverse requests from their most demanding users. Today, networks must enable different and distinct scientific big data exchanges across the country and globe, provide secure student and employee data transmissions into a cloud environment and support bandwidth-consuming multimedia—while supporting all user needs simultaneously. Internet2's Advanced Layer 2 Service now provides a scalable and flexible national network where members can build Layer 2 circuits between endpoints on the Internet2 Network and beyond to meet every user need.

Internet2's Advanced Layer 2 Service is a cost-effective, highly reliable, advanced networking solution designed by and for the research and education community. The service offers:

- Efficient and effective network management, allowing CIOs and IT staff to support the varied needs of all their network users
- Dedicated bandwidth—free of policy or capacity restrictions—to support scientists' and researchers' big data networking needs
- The option to enable software-defined networking (SDN) through technologies such as OpenFlow for network innovators
- Maximum value of Internet2 Network bandwidth, and better management of network traffic for network operators



Global Reach

The Internet2 Advanced Layer 2 Service will be operated as a distributed open exchange, allowing access not only to domestic endpoints, but also interconnectivity with global researchers through dozens of high-capacity intercontinental links to Europe, Asia, Africa, South America and other areas reachable through Internet2's global research and education network partnerships.

Connecting to Internet2 Advanced Layer 2 Service

Any organization can access Internet2's Advanced Layer 2 Service. Bandwidth can be delivered through an existing Internet2 connector port, or through a direct, dedicated Layer 2 port.

A dedicated Layer 2 port is most appropriate for organizations

- With significant bandwidth needs to support big data applications
- Who need full control of an open, policy-free network

A Layer 3 port is most appropriate for organizations

- Who need access to Internet2's Advanced Layer 2 Service with no incremental fees
- Who only require lower-bandwidth, short-term VLANs

Internet2 can develop a solution that best meets each organization's needs across its current local and regional networks.

FOR MORE INFORMATION

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For more information about how Internet2's Advanced Layer 2 Service can help meet your organization's unique needs, contact al2s@internet2.edu.

Internet2 Network services web page internet2.edu/network/services

Internet2 Advanced Layer 2 Service Technical Features

Secure, reliable paths between endpoints around the globe

Bandwidth options from 10M to 100G

- Small, time-critical data transfers
- Large-scale data transfers

Easy configuration and management

- Real-time provisioning portal
- Software-configurable APIs

Persistent circuits

- Short-term connection multiplexing
- Long-term connections

Quality of Service (QoS) options

- Guaranteed bandwidth
- Best effort bandwidth

Flexible network management

- VLAN tagging
- Address translation