



- Higher Education
- R&E Networks
- Government Agencies
- Industry

About Internet2

Internet2 is a non-profit, advanced technology consortium founded by the nation's leading higher education institutions in 1996. It provides national, globally interwoven technology infrastructure and collaboration capabilities for the nation's researchers, scholars, and learners.

Internet2 exists to facilitate mission-critical technology services for U.S. higher education institutions. It enables the power of collaborative scale to make possible vitally important capabilities that no single institution could produce on its own and no other source will provide.

To accomplish this, Internet2 engages mutual-interest collaborators across diverse communities and facilitates their work together to solve shared technology challenges. Internet2 convenes U.S. universities, government agencies, industry partners, and regional and state education networks. Internet2 supports not only the work of these groups but more than 100,000 community anchor institutions.

ADVANCED NETWORKS

The Internet2 Network enables research, science, and academic enterprise using the fastest, most advanced network for research and education in the U.S.

Advanced Networks

Supporting Advanced Research Applications - Supports applications such as the Open Science Grid and national research platform testbed, enabling daily research in multiple disciplines.

Scaling Beyond 7 Petabytes Moved on a Busy Academic Day - Designed with bundles of 100 gigabits per second connectivity for abundant bandwidth, zero congestion, capacity for innovation, and peering to global research and education networks reaching over 100 countries.

Flexible 100 Gigabits per Second Services - Provides users with cost-effective, secure capacity for the big data needs of global science researchers, or allowing innovators to program the network itself through application programming interfaces (APIs).

Next Generation Infrastructure -The fifth iteration of the Internet2 Network will include optical system sharing, 400-gigabit wavelengths, and deeper integration of programmable interfaces and automation.

A Trusted Infrastructure to Accelerate Research



Delivers nationwide next-generation networking capability between sites up to 200G, 400G, and 1Tb on the roadmap



Offers cost efficiency, operational transparency, and better economies of scale through infrastructure sharing



Same access and operational control as dedicated network



Community-built and community-driven trust and identity infrastructure that supports global collaboration among faculty, staff, researchers, and scholars



Bold engagement with custom approaches and new technology

TRUST AND IDENTITY

Internet2's Trust and Identity program ensures that members of the research and education community have access to the right services, at the right time, with the right protections and privacy considerations, while supporting easy collaboration both nationally and globally.

Trust and Identity

InCommon Federation - Provides a collaboration-ready trust framework for research and education, including single sign-on and privacy-enhancing exchange of information among participants.

Software Engineering and Development - Ensures that key identity and access management (IAM) suite software components work together and are sustainable, with straightforward installation and configuration.

eduroam - As the U.S. node for this global federated wireless service, ensures that eduroam-enabled user mobile devices can attach to eduroam-enabled wireless networks automatically and securely, around the world.

InCommon Certificate Service - Operates an enterprise-scale web service security certificate service for one annual fee available to U.S. higher education institutions.

CLOUD SERVICES

Internet2 approaches cloud services as an integrated, organization-wide strategy that provides cloud solution requirements developed in concert with the Internet2 member community.

Cloud Services

Internet2 NET+ Solutions

Internet2 helps solve the cloud conundrum for campuses with a unified portfolio of solutions specifically tailored by and for higher education.

- Leverages the capacity of the Internet2 Network connection for enhanced performance and delivery of cloud services.
- Expands adoption of InCommon Federation identity and access management among cloud services.
- Facilitates deployment and ease of integration of commercial cloud services uniquely configured for academic needs.

Internet2 Cloud Connectivity

Allows the Internet2 community to leverage its regional and national trusted infrastructure to directly access leading cloud services.

- Makes it easier for researchers to access and use cloud resources.
- Facilitates data movement using research and education networks into and out of the cloud.
- Uses the community's existing 800 gigabit per second of peering capabilities to the major cloud providers.
- Provides peering services as well as direct access to Microsoft Azure Express Route, Amazon's AWS Direct Connect, and Google Cloud Platform Dedicated Interconnect.

community anchor PROGRAM

The Internet2 Community Anchor Program (CAP) unites 44 state and regional research and education networks, K-12 schools, public libraries, colleges and universities, health care facilities, museums, and other cultural and historic organizations—our nation's community anchor institutions—to explore how advanced broadband capabilities can serve formal and information learning, for everyone, no matter where they are located.

Community Anchor Program

Connects students from all over the world with national presidential historic sites to access primary source documents, shedding light on aspects of the American presidency, including major historical events and significant decisions made.

LOLA for All - Promoted LOLA, which enables real-time, simultaneous, live musical performances across long distances, using an open source, low-latency audio and video conferencing technology. This is emerging as an exciting opportunity for schools and libraries.

Measuring Library Broadband Networks Project - Through support from the Institute for Museum and Library Services, works toward the goal of helping public libraries utilize broadband measurement tools and training materials to develop a better understanding of the relationship between library network infrastructure and digital services.

State and Regional Network Spotlight - Profiles a new state or regional network each month to promote the network to the research and education community and community anchor institutions.