### Internet2 Overview

AAMU – MS-CC Workshop: Campus Technology, Cybersecurity, & Research Computing Support

October 29, 2024

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### **Internet2 Core Components in Support of R&E**





COMMUNITY

Internet2 is a community providing cloud solutions, research support and services tailored for R&E.

Our trusted, secure network empowers higher education, research institutions, government entities and cultural organizations.

330+
HIGHER EDUCATION MEMBERS

100+
COUNTRIES & RESEARCH NETWORKS CONNECTIONS

80,000+

COMMUNITY ANCHOR INSTITUTIONS

500+ NET+ SUBSCRIBERS

1000+
INCOMMON PARTICIPANTS

50+
AFFILIATE & GOVERNMENT MEMBERS

800G+
WAVELENGTHS OF NETWORK CAPABILITY

50+
INDUSTRY MEMBERS

BY THE NUMBERS

1100+
EDUROAM SUBSCRIBERS

50+
COMMUNITY GROUPS SHAPING PRIORITIES

50+
CLOUD SCORECARD PARTICIPANTS

750+
NET+ CLOUD CONTRACTS

46
REGIONAL & STATE NETWORKS

20+
NET+ SERVICE OFFERINGS

32Tbps CAPACITY PER LINK

# NETWORK

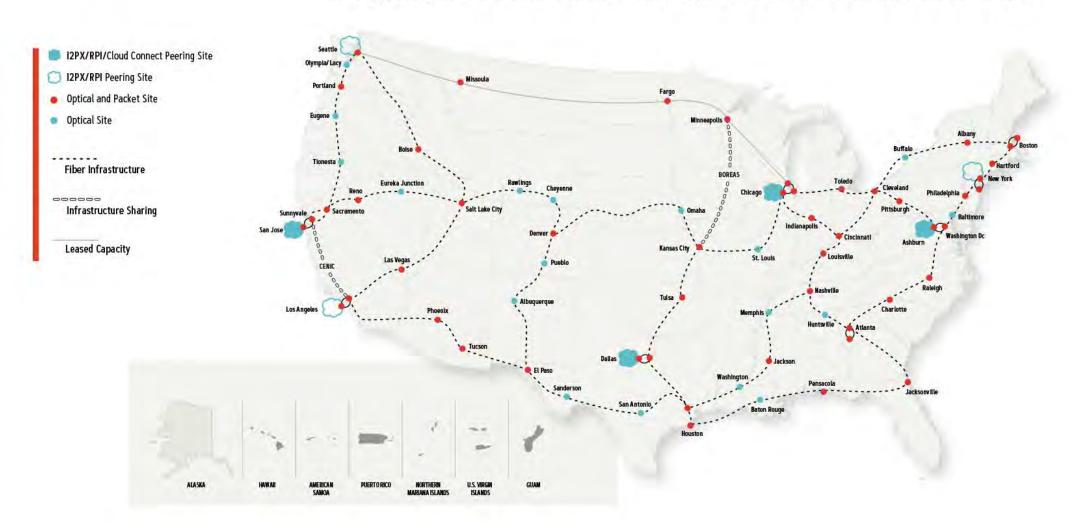


We're more than just a network



### **Network Infrastructure Topology** | May 2024

This map represents all 50 states and five major territories of the U.S. The Internet2 network infrastructure extends across the contiguous U.S. and, through a global fabric of research and education networks and exchange points, interconnects with locations in Alaska, Hawaii, Guam, Puerto Rico, and 100+ countries worldwide.



### INTERNET2 & REGIONAL RESEARCH & EDUCATION NETWORKS (REN) IN THE UNITED STATES



# SECURITY

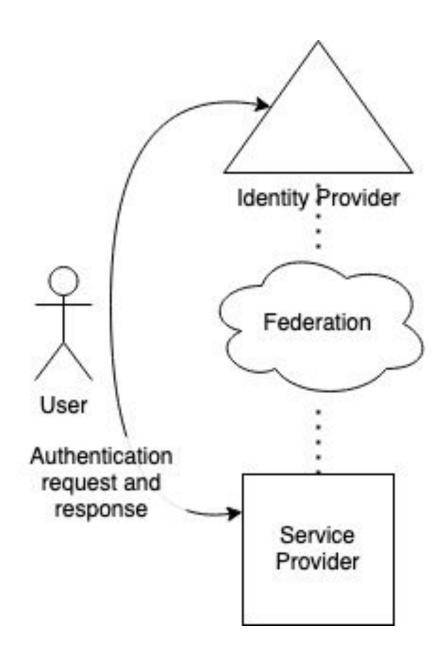


# The Identity and Access Challenge

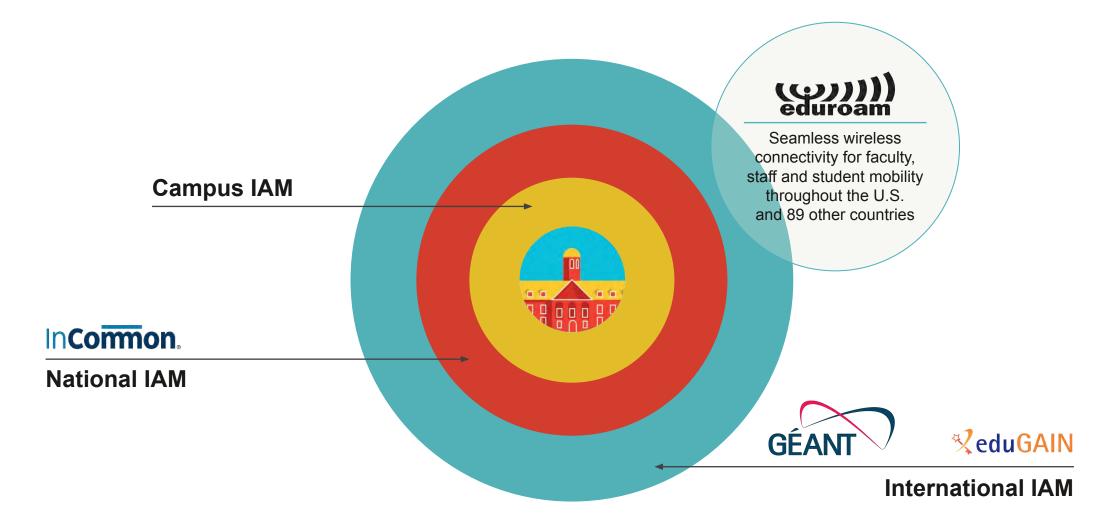
If you provide a service, you want many people from many institutions to use that service.

If you support an organization, you want your users to be able to access a wide variety of services in an efficient way with their work identity.

So how do you find (and trust) one another at scale? Federation.



#### **Identity Management:** Locally, nationally and internationally



### Global High-speed, Roaming Wi-Fi Service: For researchers, students and staff wherever they are located

All of your institution's users have seamless, secure and fast internet connectivity across campuses and millions of access points across the globe using your home institution's credentials. And you save precious resources by

not provisioning guest Wi-Fi accounts.





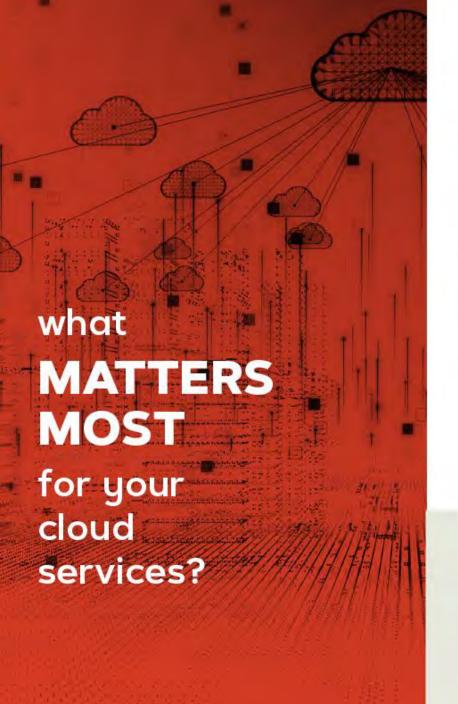
Find out more about InCommon Federation and eduroam:

www.incommon.org

# CLOUD

























### A Trusted Ecosystem of Tailored Top-Quality Cloud Solutions



**1100+** active NET+ subscriptions

**600+** institutions subscribe to at least one NET+ service

**140+** institutions have contributed to at least one NET+ service evaluation

20+ NET+ cloud services in the portfolio











































### **CLASS: Cloud Learning and Skills Sessions**



CLASS fills the gaps in training for cloud and research computing. The program accelerates the adoption of best practices in research computing and data in the cloud and provides professional development for research computing and data professionals.

More info? <a href="mailto:class@internet2.edu">class@internet2.edu</a>
Visit us at <a href="mailto:http://internet2.edu/CLASS">http://internet2.edu/CLASS</a>

#### **Some Participating Organizations**

American Indian Higher Education Consortium

**DePaul University** 

Florida International University

Grinnell College

Harvard University

Indiana University

Jackson State University

Michigan State University

Missouri University of Science and Technology

Northwestern University

Oregon State University

Princeton University

**Purdue University** 

Rensselaer Polytechnic Institute

Rice University

Stanford University

State University of New Jersey-Rutgers

Texas Tech University

University of British Columbia

University of California, Berkeley

University of California, San Diego

University of Delaware

University of Florida

University of Richmond

University of South Carolina

University of Utah

University of Virginia

University of Washington

University of Wisconsin-Madison

## COMMUNITY



The heart of who we are and what we do



### **Snapshot for today**

### Institutions at workshop:

**Internet2 members**: Alabama A&M University, Clark Atlanta University, Georgia State University, Jackson State University, Meharry Medical College

**Internet2 network connectors in the region:** SoX, MISSION

**eduroam subscribers:** Alabama A&M University, Georgia State University, Jackson State University

**NET+ subscribers:** Jackson State University (Panopto)

InCommon Participant: Georgia State University