CILogon
Enabling Federated Identity and Access Management for Scientific Collaborations
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IAM for Research Collaborations

CIlogon: 10+ year sustained effort to enable secure logon to scientific cyberinfrastructure (CI) for seamless identity and access management (IAM) using federated identities (SAML, OIDC, OAuth, JWT, X.509, LDAP, SSH, etc.) so researchers log on with their existing credentials from their home organization supporting 20,000+ active users from 500+ organizations around the world with onboarding/offboarding/attributes/groups/roles managed consistently across multiple applications.
supporting access to science applications on HPC clusters, in Jupyter notebooks, using Globus, via REST APIs, and many other interfaces using existing identity providers from the researcher’s home organization (SAML/ADFS) or external sources (Google, GitHub, Microsoft, ORCID)
Project Highlight: NSF ACCESS

The Advanced Cyberinfrastructure Coordination Ecosystem: Services and Support (ACCESS) is a virtual collaboration funded by the National Science Foundation that facilitates free, customized access to advanced digital resources, consulting, training, and mentorship. ACCESS helps the nation's most creative minds discover breakthroughs and solutions for some of the world's greatest scientific challenges.

ACCESS's virtual cyberinfrastructure allows scientists to interactively share computing resources, data, and expertise. ACCESS resources may be broadly categorized as follows: High-Performance Computing, High Throughput Computing, Visualization, Storage, and Data Services. Many resources provide overlapping functionality across categories.

The NSF’s ACCESS program builds upon the successes of the 11-year XSEDE project, while also expanding the ecosystem with capabilities for new modes of research and further democratizing participation.
NSF ACCESS Program Overview

ACCESS Services

- **Allocations**
  - Allocation Services
  - Innovative Pilots
  - Service Model

- **Support**
  - General User Assistance
  - Allocation & Utilization Assistance
  - End User Training
  - Computational Science Support Network

- **Operations**
  - Operational Support
  - Data & Networking Support
  - Cybersecurity Support

- **Metrics**
  - M&M Operations
  - Service Model
  - Data Analytics Framework

ACCESS Coordination Office Services

- **Executive Council**
- **Communications & Outreach**
- **Advisory Board**
Transition from XSEDE

May 1 2022: ACCESS Project Start
June 24: ACCESS IAM WG Kick-off Meeting
July 1: identity.access-ci.org created
August 1: idp.access-ci.org operational
August 19: registry.access-ci.org operational
September 1 2022: xsede.org redirects to access-ci.org

100,000 registered users / 5,000 active users
30+ years of usage history
Kerberos passwords
Duo phone registrations
Transition from XSEDE

xsede.org / portal.xsede.org

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access-ci.org / allocations.access-ci.org / support.access-ci.org / operations.access-ci.org / metrics.access-ci.org / registry.access-ci.org
Three Ways to Access ACCESS

**GOT XSEDE?**

- **CiLogon**
  - Select ID Provider
  - ACCESS CI
  - LOGIN
  - Use XSEDE username & password
  - MFA
  - DUO

**REGISTER AN ACCOUNT**

- **CiLogon**
  - SELECT IdP
  - LOGIN
  - Use ACCESS username & password
  - MFA
  - DUO
  - Login with linked account

You can also link accounts later.

CiLogon

Image Credit: https://support.access-ci.org/

www.cilogon.org
COmanage Registry to the Rescue!

- Bulk import of 100,000 users
- New user enrollment
- Email verification
- Duplicate detection / merge
- Identity linking
- Password resets
- Username reminders
- Profile updates
- SSH key management
- OIDC client management

New COmanage Plug-ins:
https://github.com/search?q=org:cilogon+access&type=repositories
Thanks!

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