

CILogon

Support for the WLCG JWT Profile and other Token Types

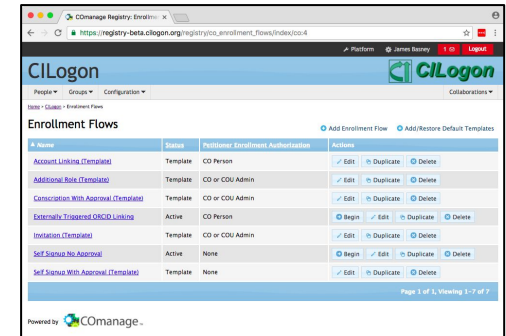
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WoTBAn&Az 2021



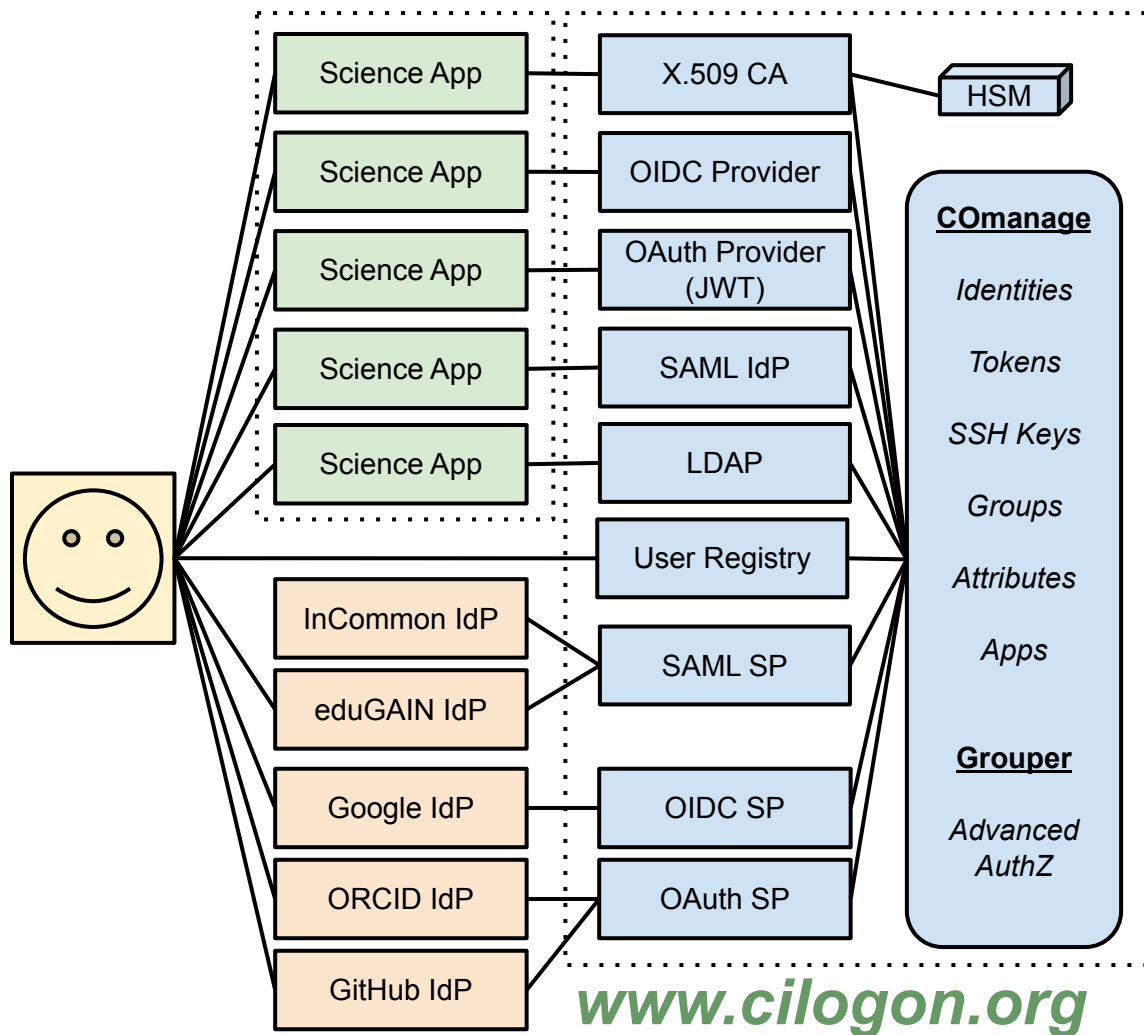
IAM for Research Collaborations

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 15,000+ active users from 400+ 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

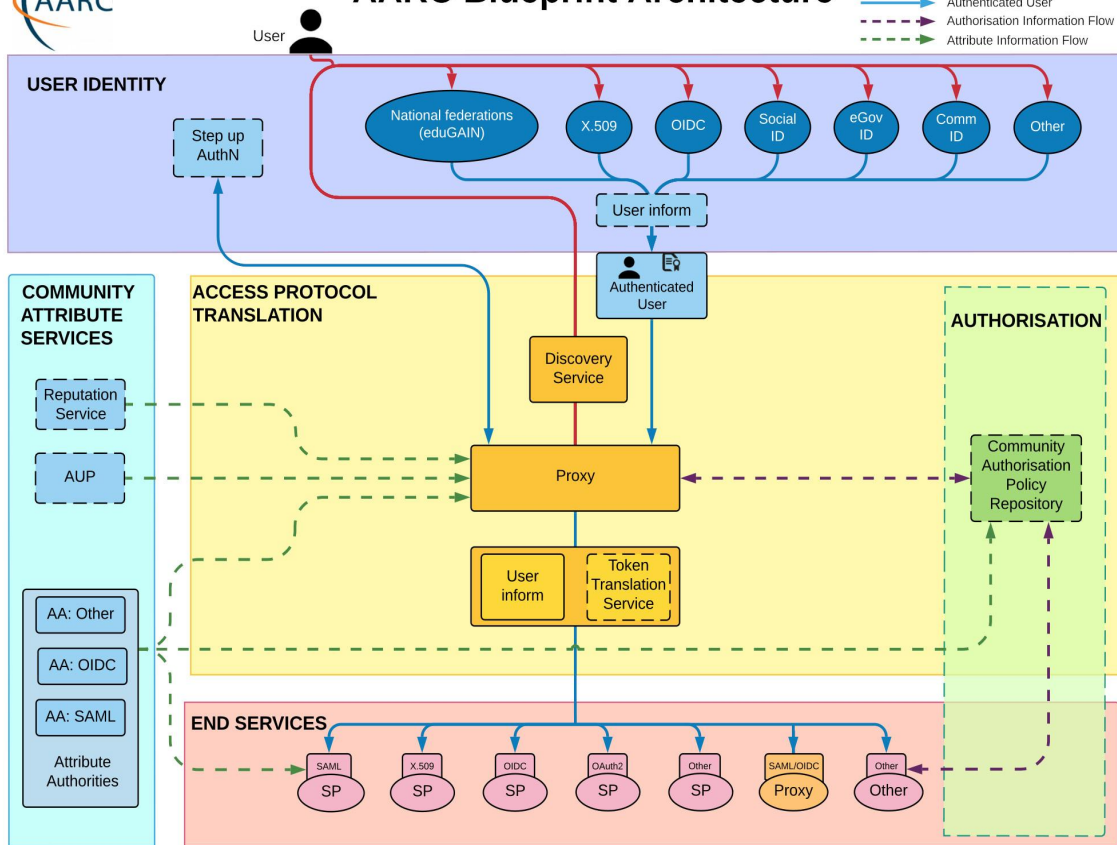
using existing identity providers from the researcher's home organization (SAML/ADFS) or external sources (Google, ORCID, GitHub)





AARC Blueprint Architecture

- Unauthenticated User
- Authenticated User
- Authorisation Information Flow
- Attribute Information Flow



<https://aarc-community.org/architecture/>



Support for Tokens

OpenID Connect (OIDC) ID Tokens (e.g., SCiMMA)
containing user attributes and group memberships
from the research community (via COmanage)
and from the researcher's home institution (via InCommon)



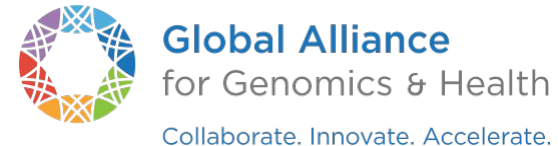
SciTokens (e.g., LIGO)
containing authorization scope values
determined by per client/subscriber policy



WLCG Tokens (e.g., Fermilab)
support for `wlcg.groups` and `storage.*|compute.*` scopes



GA4GH Passports (e.g., Australian BioCommons)
support for `AffiliationAndRole`, `AcceptedTermsAndPolicies`, `ResearcherStatus`,
`ControlledAccessGrants`, and `LinkedIdentities`



Workshop Discussion Topics

How do we manage trust in multiple token issuers?

3 CILogon X.509 CAs → 20+ CILogon token issuers
peer assessments / token issuer practice statements

How do levels of assurance apply to tokens?

authentication strength + identity vetting + token issuer + token properties

How do we ensure token interoperability?

IGTF X.509 technical profiles → WLCG Token Profiles

Do we have a common threat model?

OAuth 2.0 Threat Model (RFC 6819) / Trusted CI's OSCRP

Are we getting input from the stakeholders?

workshops / IGTF / WLCG / OSG / ...

Thanks!

contact:

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