Building Trusted Transactions
Identity Authentication & Attribute Exchange
In Public and Private Federations

Kantara Initiative
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Kantara Initiative is Born (mid-2009)

Primary focus to foster:
- industry coordination
- interoperability
- innovation
- broad adoption

...through the development of:
- technical specifications
- operational frameworks
- deployment best practices
- compliance programs
Kantara Initiative enables Harmonization

Bridging and harmonizing the identity community with actions that will help ensure secure, identity-based, online interactions while preventing misuse of personal information so that networks will become privacy protecting and more natively trustworthy environments.

It is our mission and goal to work openly with the Identity community to develop and harmonize real value solutions to solve issues facing Identity Access Management today…

http://kantarainitiative.org
Trust Frameworks
Overview

What are Trust Frameworks?
What do Trust Frameworks do?

The Trust Framework model enables internet scale interoperability and trust in entities and their authentication systems through trusted and certified credentials.
Three Main Components

- Policy Criteria
- Privacy Protection
- Technology Deployment
Identity Ecosystem: All About Trust
Federated Identity requires Technical & Policy Interoperability

- Credential Service Provider (CSP)
  - Identity Proofing
  - Credential Lifecycle Management
  - Operational Criteria for Trust
- Relying Party (RP)
  - Assesses Risk of Application
  - Complies with Best Practices
  - Provisions the Service or Resource
- User gets great experience: safe, simple access from any device to services/resources
Interoperability & Assurance:

- **Technical Interoperability**
  - Does the system that authenticates me (vouches for me) “talk” to the systems that protect the resources I want to access?

- **Operational Interoperability via: Standard Assurance Levels**
  - Do the CSP and RP management entities “trust” each others' systems, operating procedures, vetting practices, audit reports, etc.?
United States Government: Open Identity Solutions for Open Government (from GSA)

- The Open Identity Initiative seeks to leverage existing industry credentials for Federal use. The Initiative approves credentials for government use through our Trust Framework Providers who assess industry Identity Providers (IDPs).
- The Trust Framework Provider Adoption Process outlines the process that the ICAM community uses to sanctify organizations that assess commercial identity providers.
Kantara Initiative approach to Federated Identity

Identity Assurance Framework – one stop policy shop...
How to achieve operational interoperability at Internet scale
How to achieve operational interoperability at Internet scale

Identity Assurance Framework
Kantara Initiative Accreditation and Certification

- Who should apply and how?
  - Assessors / Auditors
  - Credential Service Providers, Identity Providers

- For More Information
  - Connect with me: joni@ieee-isto.org
What’s Next?

- Profiles, profiles and more profiles
  - Jurisdictional (governments), HealthCare, Financial, Telecommunications, etc

- Federation Interoperability Work Group (FIWG)
  - With input from international stakeholders FIWG developing tools for Federations to use for Interoperation.
  - Enabling communication of Meta-Data between Federations
  - Open for adoption by communities world-wide via Creative Commons IPR
Benefits of Adoption

- US Government ICAM Adopted Level 1, 2, 3 non-crypto
- Identity Assurance Framework (IAF) is technology Agnostic
  - Can be adopted as organizational policy framework regardless of the technology protocol in place.
  - Lowers cost to jurisdictions and entities enabling eased transition in to Trust Framework Model
- Has Kantara Initiative international community input
  - Austria, Canada, Denmark, France, Japan, New Zealand, Sweden, United Kingdom, United States – the list keeps growing
- Enables Inter-federation through trusted and certified credentials
  - Could be applied across jurisdictional federations like the European Union.
- Enables Government entities to leverage private-sector activities
Working Together

Building Trust...
Collaboration

Kantara Initiative

- Accredits Assessors and Certifies IdPs against Identity Assurance Framework Policy
- US Federal ICAM LoA 1,2,3

Identity Assurance WG [IAWG] manages IAF and enables IAF Profile development; develops Federal Operator Guidelines

Federation Interoperability WG [FIWG] develops technical tools enabling federations to communicate certification meta-data

Privacy and Public Policy WG [P3WG] supports development of Levels of Protection

Open Identity Exchange

- "Open Market Model"
- Technology-agnostic, internet utility for identity federation meta-data

- Technology Platform for:
  - global certification listings
  - trans-federation operational meta-data
  - automated attribute exchanges

- Developing legal structures for Levels of Assurance

- Development of the OIX Trust Wiki "model" term sheets/contracts for Trust Framework actors and services

- Adopting FIWG technical tools for automated certification listings

OIX Work Groups

Kantara Initiative Work Groups
Kantara Initiative Work Groups

Kantara Initiative –
Identity Assurance (IAWG)
http://kantarainitiative.org/confluence/display/idassurance/

eGovernment (eGovWG)
http://kantarainitiative.org/confluence/display/eGov/

Federation Interoperability
http://kantarainitiative.org/confluence/display/fiwg/

Privacy and Public Policy (P3WG)
http://kantarainitiative.org/confluence/display/p3wg/
Open Identity Exchange (OIX) Work Groups

Telco Data Work Group
Verizon, AT&T, TNS, Pacific East, etc.

Public Media
National Public Radio, Public Broadcasting Service, etc.

Librarians, Authors, Publishers
National Institute of Health, National Library of Medicine, ORCID, APA, etc

Identity Attributes Trust Framework
Google, Yahoo!, AOL, Hot Mail, etc.
OIX/Kantara Collaborative Work Groups

US ICAM Higher Levels of Assurance
OIX, KI, US GSA, US NIH, etc.

- A public private partnership to define new technical/policy profiles for higher levels of assurance (NIST LoA 2 and 3)
- A forum and forcing function to map policy and legal issues to government and citizen interaction over the web
- A collaboration among leading industry organizations to break new ground in trust framework development
Introduction to OIX

A Market Solution to Online Identity Trust…
A Matter of Trust

- Relying Parties must be able to trust that the Identity Provider is providing accurate customer data.
- Identity Providers must be able to trust that the Relying Party is legitimate (i.e., not a hacker, phisher, etc).
- Direct RP-to-IDP trust agreements are a common solution, but are impossible to manage at Internet scale.
The Trust Framework Solution

OIX Trust Framework

Identity Service Provider

Relying Party

Trust Community
Proven Trust Frameworks Exist!

Credit Card Trust Framework

Trust Community

kantara initiative
The OIX Identity Trust Framework Model

- **Identity Service Provider**
- **Open Identity Exchange**
- **Relying Party**
- **User**

Trust framework agreements
What OIX Provides

- Referee
  - Neutral, technology agnostic provider of trust frameworks

- Certification Listing Service
  - Machine-readable information about trust framework participants and certifications
OIX Drives Adoption

- By improving market efficiency
- By providing openness and transparency
- By ensuring credibility and accountability in the system
- By enabling improved user experience
Real World Examples

- OIX U.S. ICAM (Identity, Credential, and Access Management) Trust framework
  - For U.S. federal government agencies
- OIX Telecom Data Trust Framework
  - For Telco Data Services providers
  - For Data Aggregators
Summary

OIX and KI work together to provide an Internet-scale solution to enable trusted online digital identities.
Thank You!

Get in touch…

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