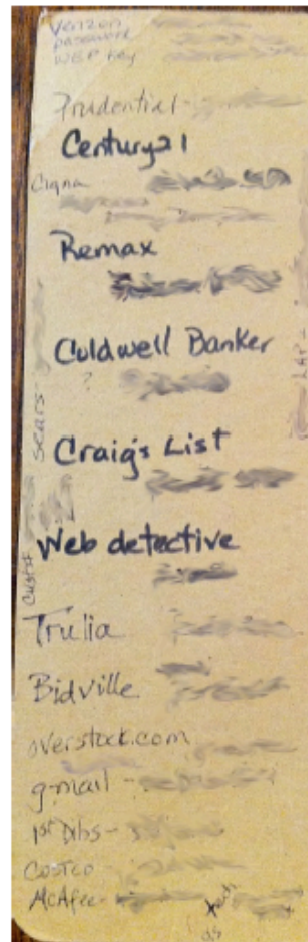
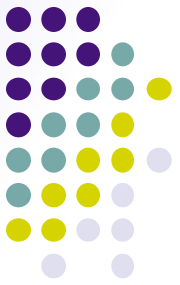


The Bridge to Assurance Communities,
Governance and Technical Interoperability:
A Global Context

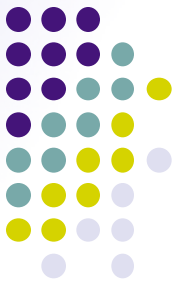
Joni Brennan (Joni@kantarainitiative.org)

Problem Space



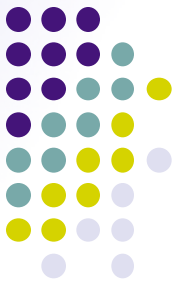
- Inefficient
- Does not scale
- Poor high risk solution

Agenda:



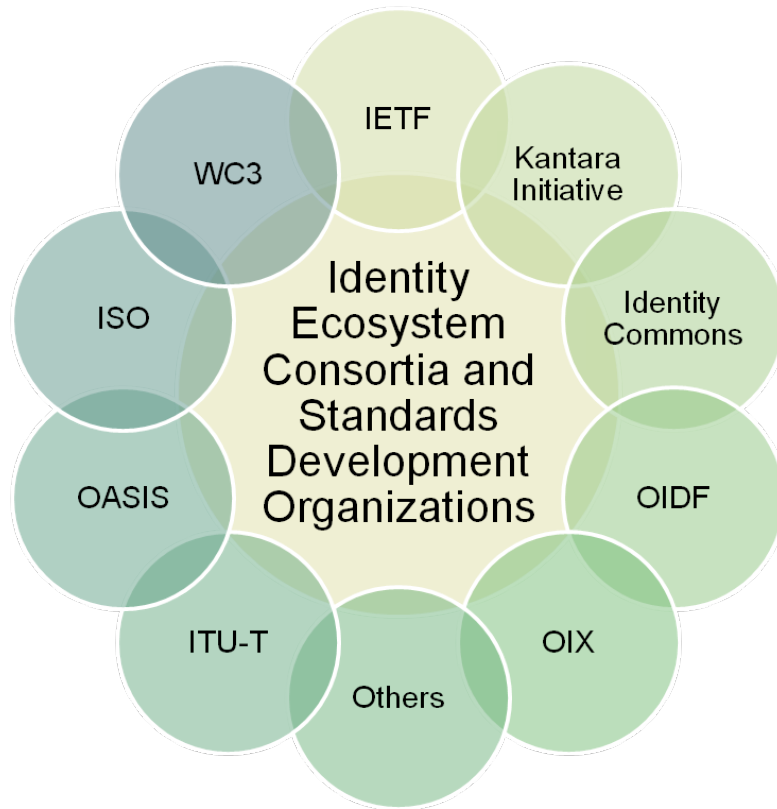
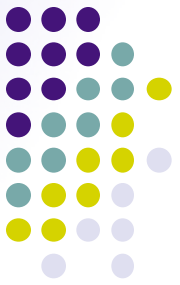
- Overview of Kantara Initiative
- Identity Assurance Framework
- Accreditation / Certification
- Next Steps

Kantara Initiative: Overview



- **Supporting Privacy:**
Developing solutions for secure, identity-based, privacy-respecting online interactions.
- **Building Trust:**
Ensuring trusted network environments are available to support generative growth within the Internet.
- **Open Community:**
Bridging various technologies and harmonizing effective solutions related to online identity.

Technical Community Stakeholders



Building Bridges

Focus on the **harmonization** of existing and evolving solutions.

Supporting **multiple solutions** that fit a variety of requirements and jurisdictions.

Trustees



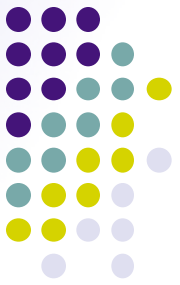
Members



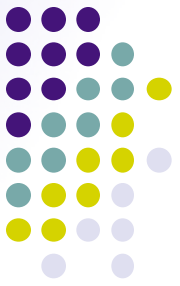
STATE SERVICES COMMISSION
Te Kombina O Nga Tari Kawananga



Kantara Initiative: Liaisons



- ISO: 29115, 29100, 29191, ect
- ITU-T: X.EAA, OITF
- OASIS: eGovernment, SAML SSTC, etc
- Governments: Performing confidential and non-confidential program reviews upon request for specific international governments and government agencies.



Kantara Initiative: Overview

KANTARA INITIATIVE WORK GROUPS

POLICY

eGOV

BCTF

HIA

P3

IA WG

InfoShare

AM

JURISDICTION

eGOV

HIA WG

JAPAN

TELCO ID

AM

USER-FOCUSED

Consumer ID

InfoShare

UMA

WORK & DISCUSSION GROUP ACRONYMS:

- (AM) Attribute Management
- (BCTF) Business Cases for Trusted Federations
- (Consumer ID) Consumer Identity
- (eGOV) eGovernment
- (FI) Federation Interoperability
- (HIA) Health Identity Assurance
- (IA) Identity Assurance
- (Info Sharing WG) Information Sharing
- (Japan) Japan
- (P3) Privacy and Public Policy
- (Telco ID) Telecommunication Identification
- (UMA) User Managed Access



Kantara Initiative: Overview

KANTARA INITIATIVE PROGRAMS

CERTIFICATION

INTEROPERABILITY

Interop Review Board (IRB)

- Certification
- Demos

BCTF

eGOV

EUM

FI

OSSI

ASSURANCE

Assurance Review Board (ARB)

- Certification
- Accreditation

HIA

IA

InfoShare

P3

NON-CERTIFICATION

HARMONIZATION

User-Centric, Jurisdiction and Vertical Based

Consumer ID

Japan

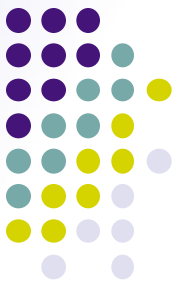
Telco ID

OSSI

UMA

WORK & DISCUSSION GROUP ACRONYMS:

- (BCTF) Business Cases for Trusted Federation
- (eGOV) eGovernment
- (FI) Federation Interoperability
- (IOP) Interoperability
- (HIA) Health Identity Assurance
- (IA) Identity Assurance
- (Info Sharing) Information Sharing
- (OSSI) Open Source Strategic Initiative
- (P3) Privacy and Public Policy
- (Consumer ID) Consumer Identity
- (Japan) Japan
- (Telco ID) Telecommunication Identification
- (UMA) User Managed Access



Interest to Governments



Sverige: The 'E-delegationen' is giving priority to a new inter-agency project in 2011. Its purpose is to facilitate information exchange between agencies, municipalities and county councils with the aim of simplifying everyday life for private individuals and businesses.
<http://en.edelegationen.se/report/making-progress>

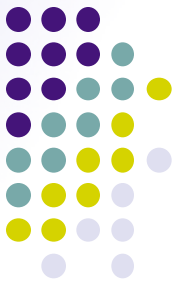


Canada: The Canadian Federal Government recently announced plans to create a single IT department 'Shared Services' that will save \$100-200m a year through consolidation-driven efficiencies.
<http://cloudbestpractices.net/2011/08/08/canadian-community-cloud/>



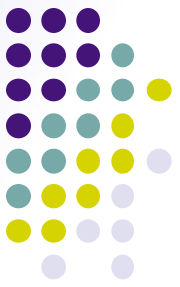
United States: The Open Identity Initiative seeks to leverage existing industry credentials for Federal use. The Initiative approves credentials for government use through our Trust Framework Providers who assess industry Identity Providers (IDPs).
<http://www.idmanagement.gov/pages.cfm/page/IDManagement-open-identity-solutions-for-open-government>

Higher Education Leads Way

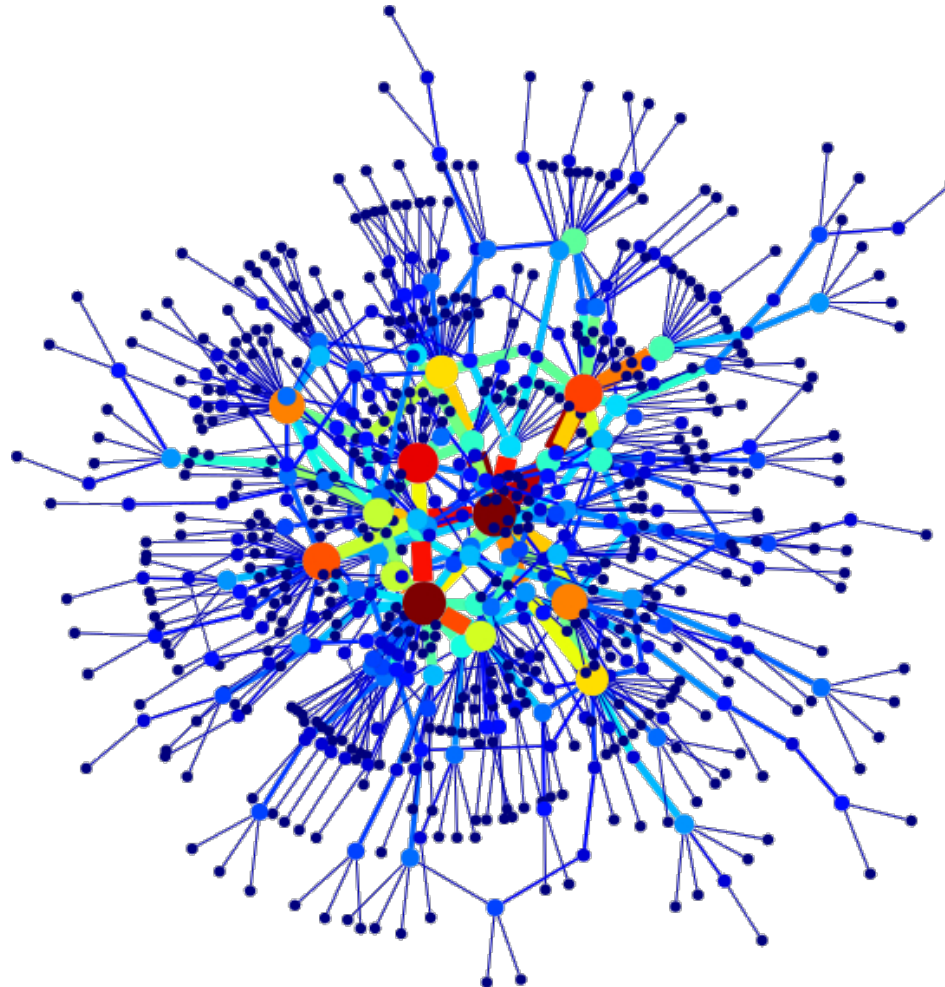


- EduGain
<http://www.geant.net/service/edugain/FAQs/Pages/FAQs.aspx>
- InCommon
<http://www.incommon.org/about.html>
- Kalmar2
http://www.kalmar2.org/kalmar2web/front_page.html
- SWAMID
<http://www.swamid.se/11/faq.html>

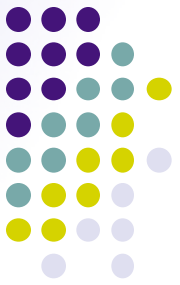
Leveraging Scale-Free Networks



“Inter-Federation”

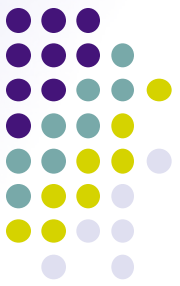


Value Proposition



- Increased security
- Compliance with laws, regulations, and standards
- Improved interoperability
- Enhanced customer service
- Elimination of redundancy
- Increase in protection of Personally Identifiable Information (PII)

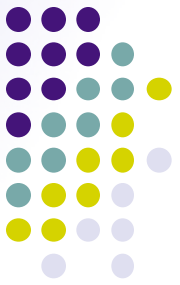
Source: <http://www.idmanagement.gov/pages.cfm/page/IDManagement-library>



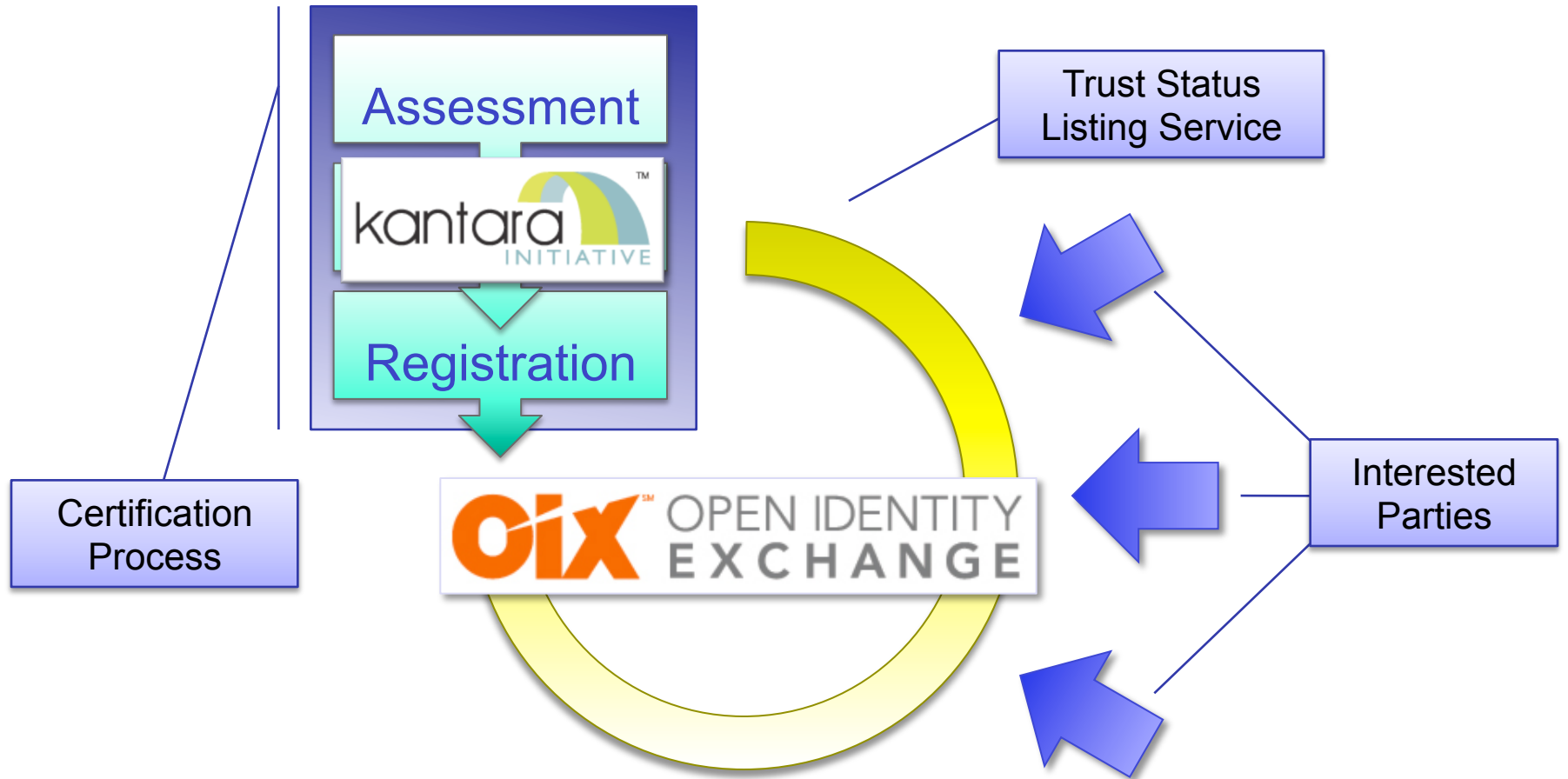
Levels of Assurance : Illustrated

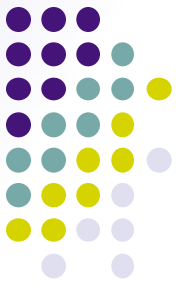
Assurance Level	Example	Assessment Criteria – Organization	Assessment Criteria – Identity Proofing	Assessment Criteria – Credential Mgmt
AL 1	Registration to a news website	Minimal Organizational criteria	Minimal criteria - Self assertion	PIN and Password
AL 2	Change of address of record by beneficiary	Moderate organizational criteria	Moderate criteria - Attestation of Govt. ID	Single factor; Prove control of token through authentication protocol
AL 3	Access to an online brokerage account	Stringent organizational criteria	Stringent criteria – stronger attestation and verification of records	Multi-factor auth; Cryptographic protocol; "soft", "hard", or "OTP" tokens
AL 4	Dispensation of a controlled drug or \$1mm bank wire	Stringent organizational criteria	More stringent criteria – stronger attestation and verification	Multi-factor auth w/hard tokens only; crypto protocol w/keys bound to auth process

Note: Assurance level criteria as posited by the OMB M-04-04 & NIST SP 800-63



Trust Framework Model





Identity Assurance Framework: Actors

KANTARA INITIATIVE IAF

ASSESSORS

Get accredited by Kantara as an assessor against the IAF 1600 AQR

Leverage demonstrable competencies to expedite certification

CREDENTIAL SERVICE PROVIDERS

Get assessed by a Kantara Accredited Assessor for IAF certification against the IAF 1400 SACs

Submit certification application to Kantara's Assurance Review Board (ARB)

Obtain and maintain compliance and certification

FEDERATION OPERATORS

Define criteria for identity assurance for their federation

Map policy against IAF SAC and IAF profiles

Accept or recommend IAF certification to its constituents

APPROVED APRIL 2010

<http://kantarainitiative.org/confluence/x/e4R7Ag>

IDENTITY ASSURANCE FRAMEWORK 2.0 MAP

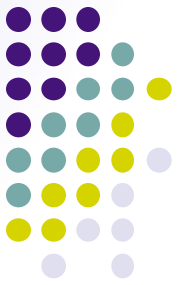
NON-NORMATIVE:

- (IAF 1000) Overview
- (IAF 1100) Glossary
- (IAF 1200) Assurance Levels

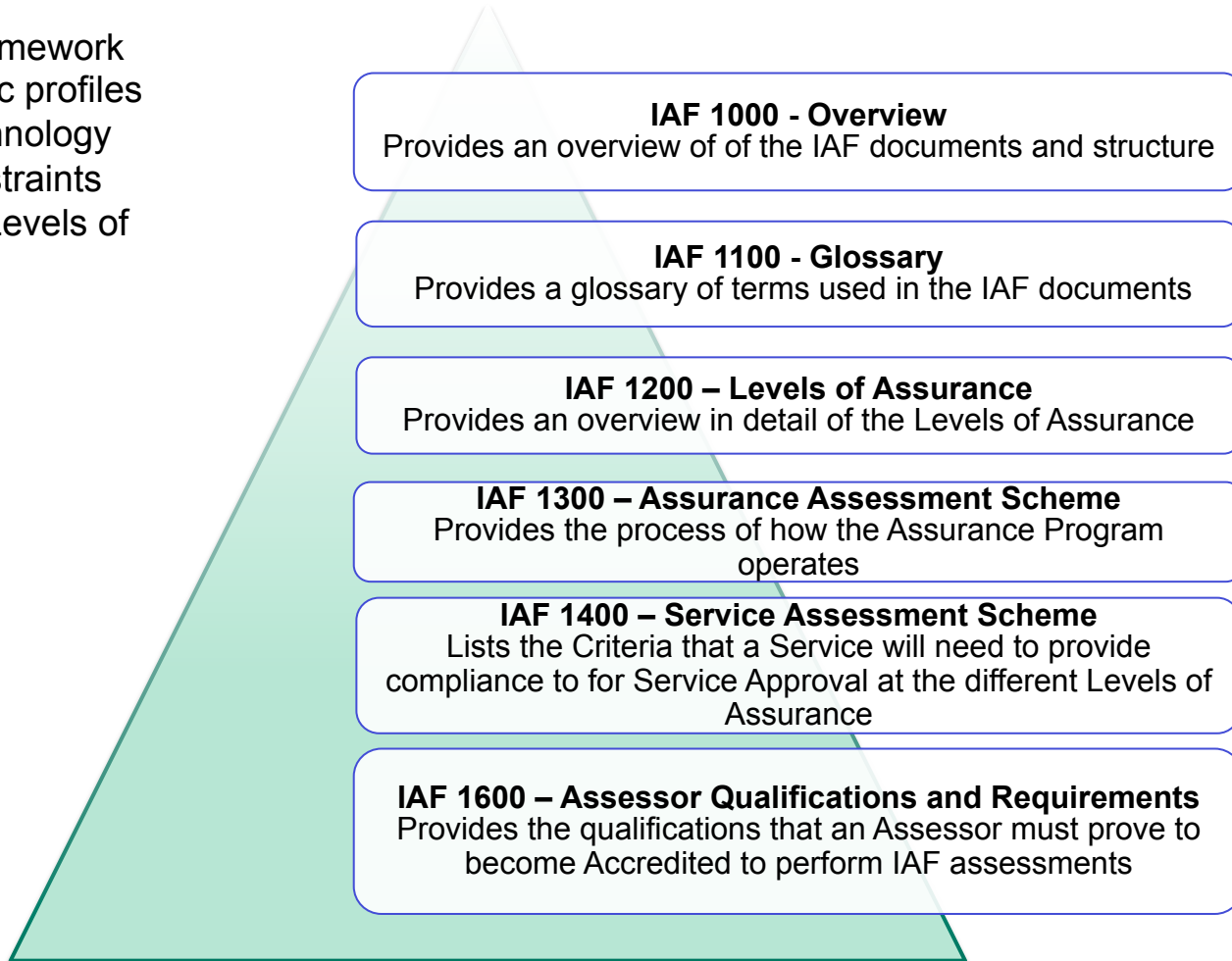
NORMATIVE:

- (IAF 1300) Assurance Assessment Scheme
- (IAF 1400) Service Assessment Criteria
- (IAF 1600) Assessor Qualifications & Requirements

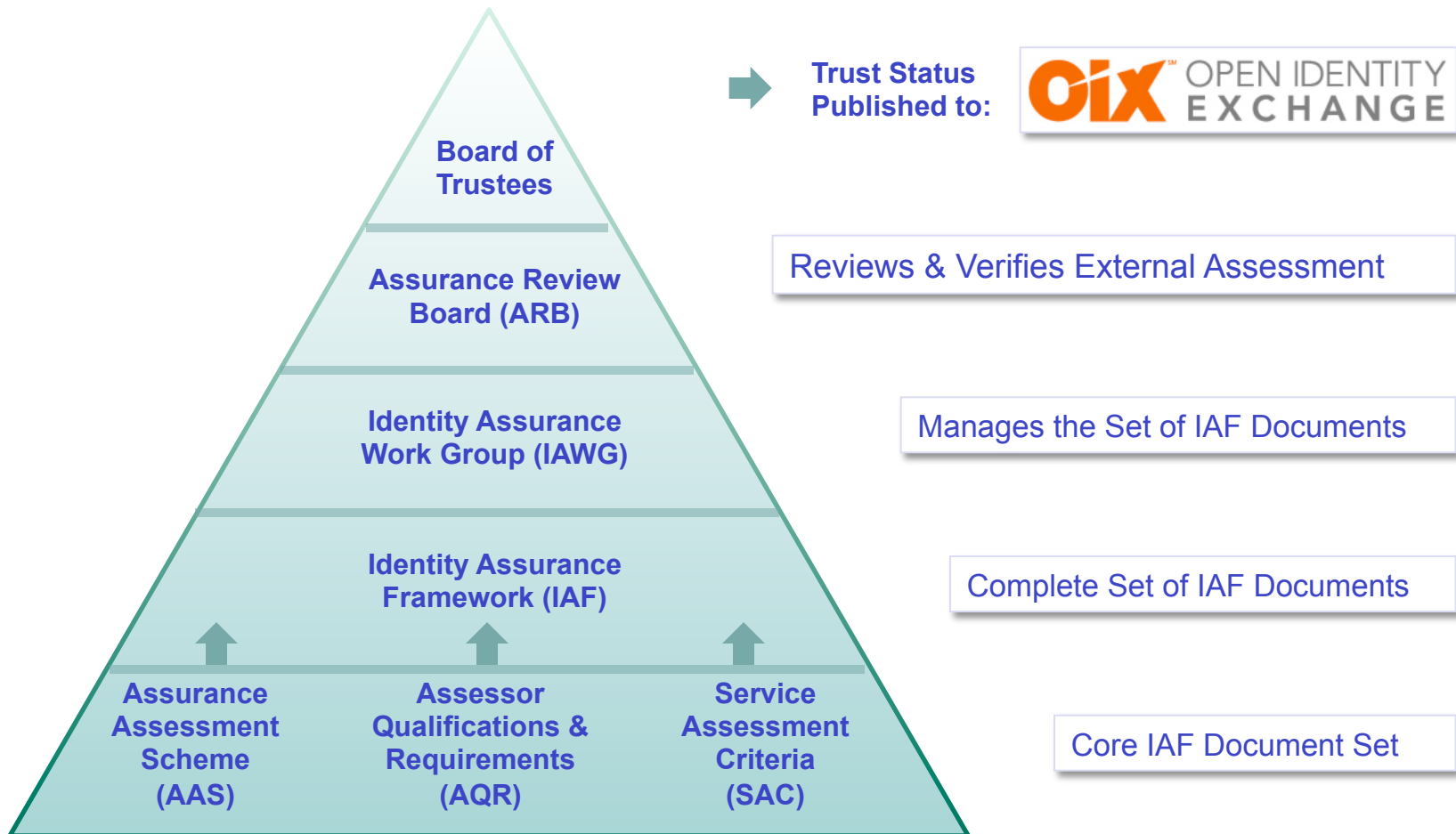
IAF Documents

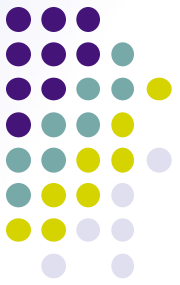


Note: a Trust Framework may apply specific profiles pertaining to Technology and Privacy Constraints used to achieve Levels of Assurance

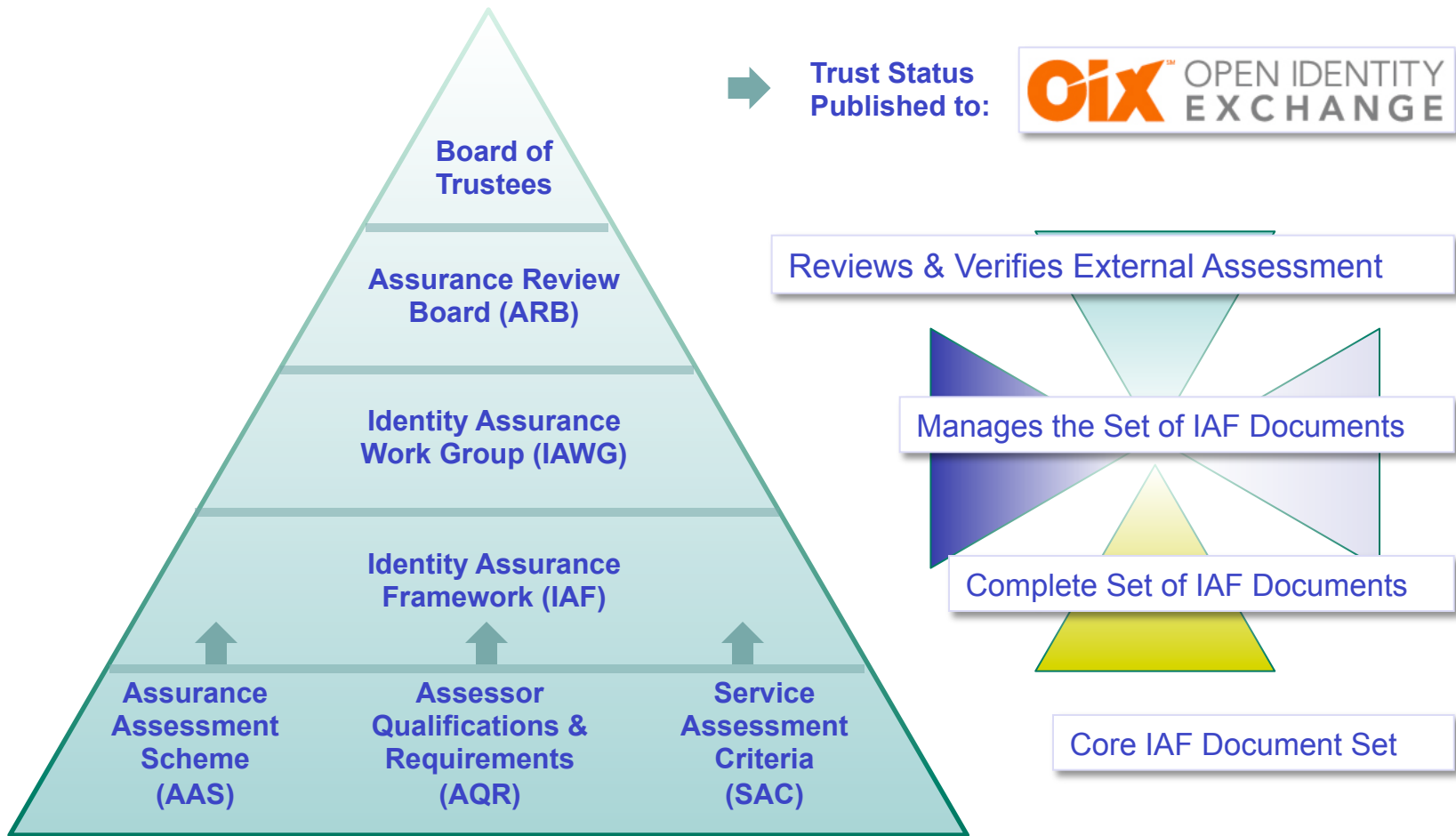


Kantara Trust Framework

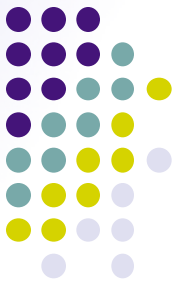




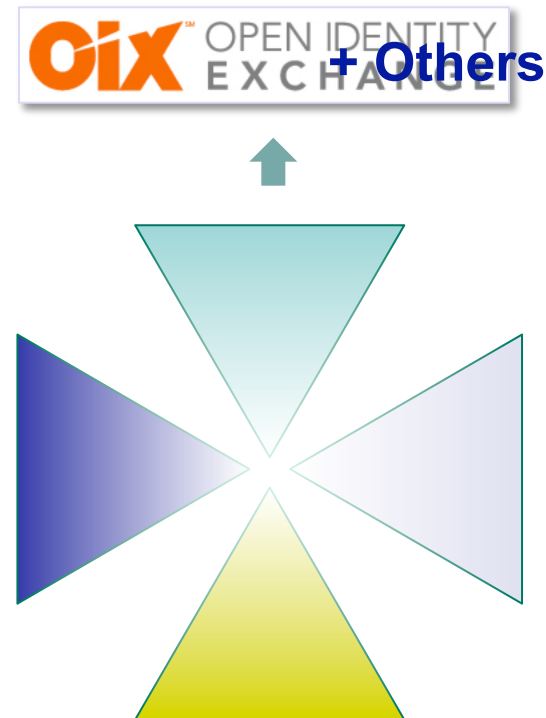
Kantara Trust Framework

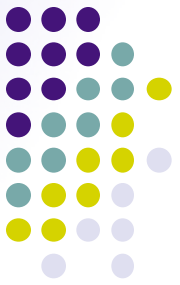


Multiple Trust Frameworks



- Technical
 - SAML
 - OpenID
 - OAuth
- Verticals
 - Social Networks
 - Healthcare
 - Banking
- Jurisdictions
 - National Governments
 - Local Governments





Kantara Accredited to LoA 1-4

Deloitte.



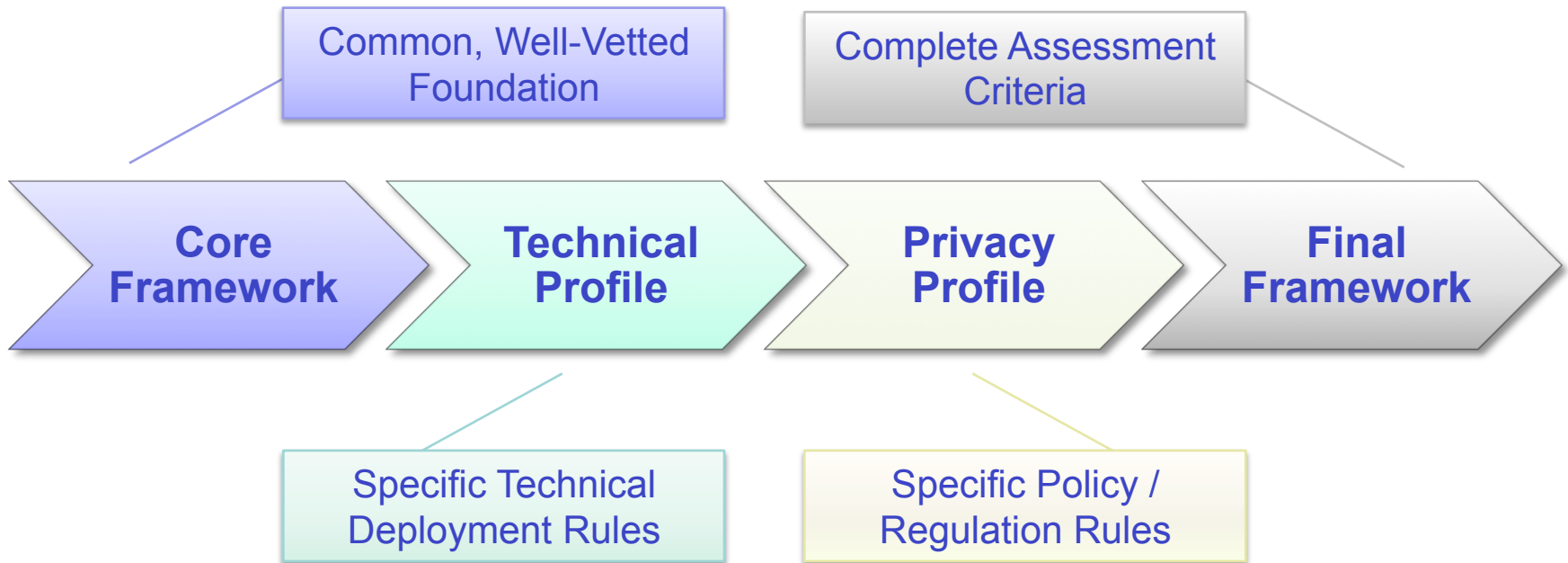
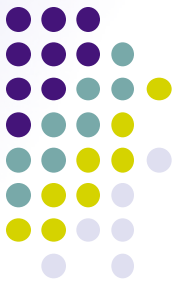
Kantara Approved to LoA 3 non-crypto



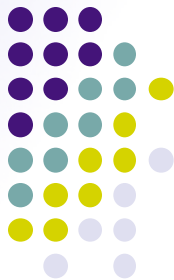
Verizon Universal Identity Service (VUIS)*

* Indicates ICAM Trust Framework Approval

Trust Framework Profiles

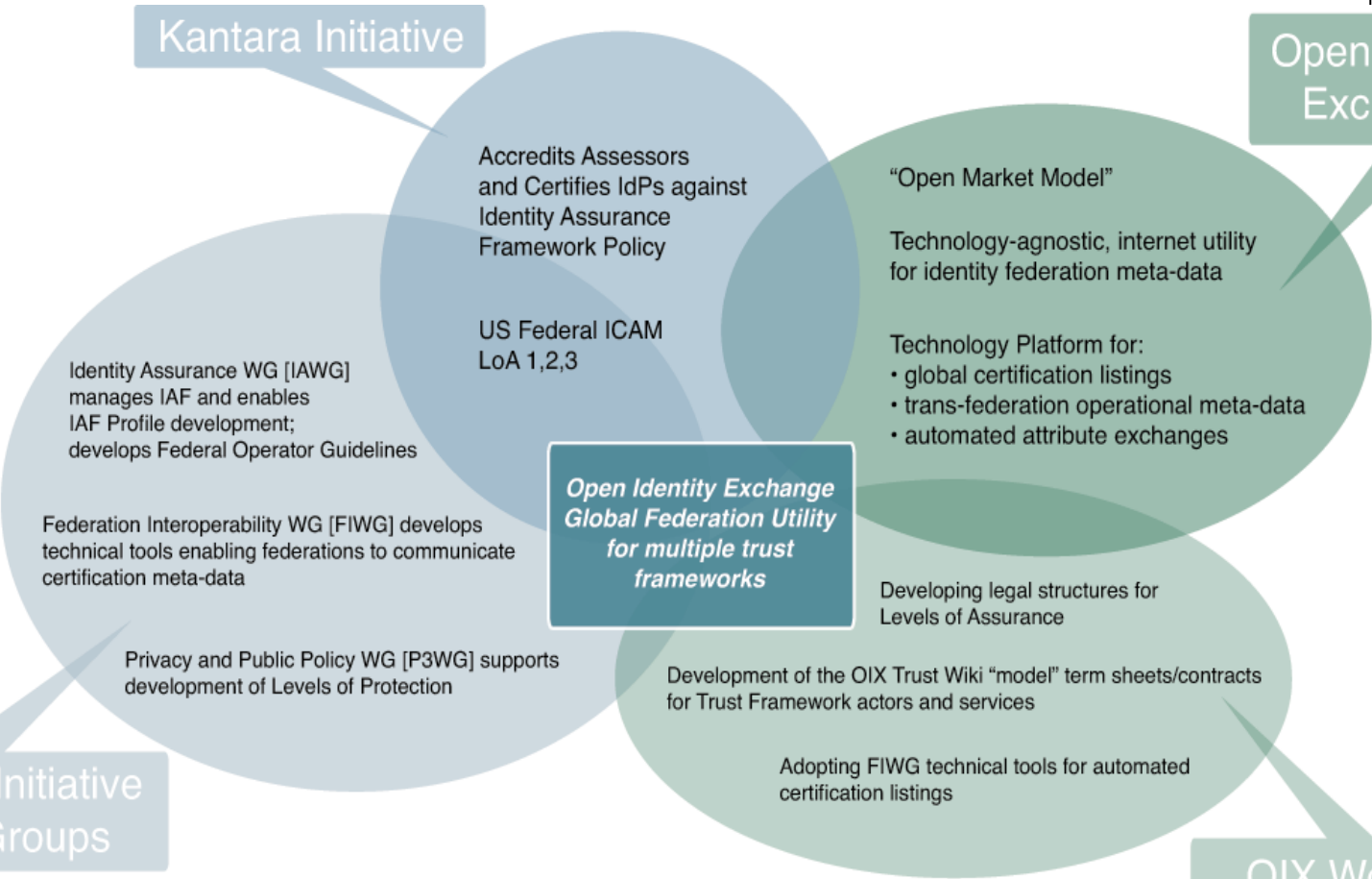


Collaboration is Key



Kantara Initiative

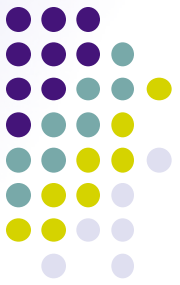
Open Identity Exchange



Kantara Initiative Work Groups

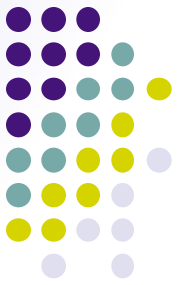
OIX Work Groups

Building on the Core

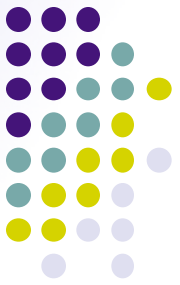


- **Privacy Assurance:**
Building upon the Kantara US Federal Privacy Profile the Privacy and Public Policy (P3) WG will build Privacy Assessment Criteria (PAC) for audit controls applied in a Privacy Assessment.
- **Attribute Management Assurance:**
Recently formed AM group is in process of discovery and gap analysis for next steps to Attribute Management
- **Relying Party Guidelines:**
Identity Assurance WG focusing in on areas of Relying Party concern and engagement.

Status and Lessons Learned



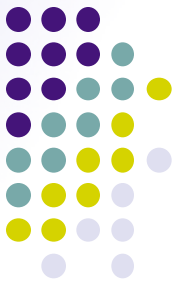
- Status:
 - Operational SAML Framework
 - Operational Organization
 - Approved for US Government Use through LOA 3
 - Referenced by eGov communities including Canada, New Zealand, Sweden
 - Assessments in progress
 - International Partners
- Lessons Learned So Far:
 - Need Additional Members, Participants, and Customers
 - Need Additional Technical Frameworks
 - Need Additional Levels of Assurance
 - Need Additional Privacy Profiles



Shaping the Future of Digital Identity

- **Kantara Initiative Website:**
 - <http://kantarainitiative.org>
- **Community Mail List:**
 - <http://kantarainitiative.org/listinfo/community>
- **Assurance Certification Center:**
 - <http://kantarainitiative.org/confluence/x/EYCYAQ>
- **Membership Documents:**
 - <http://kantarainitiative.org/wordpress/membership/>

Thanks!



Questions?

- **Kantara Executive Director:** Joni Brennan (joni@kantarainitiative.org)