

Identity Assurance Framework: Realizing The Identity Opportunity With Consistency And Definition

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Liberty Alliance

Welcome!

- Introduction of speakers
- Introduction of attendees
 - Your organization's interest in identity assurance
 - What do you want to learn today?
- Goals for the session

Introduction of the Identity Assurance Framework

Defining the framework and its goals

**Peter Alterman
GSA**



IAEG Charter

- Formed August 2007 to develop a **global standard** framework and necessary support programs for validating trusted **identity assurance** service providers in a way that scales, empowers business processes and benefits individual users of identity assurance services
- Move beyond pure policy development and into **development of actionable and measurable programs** including certification education, awareness and broad market promotion
- Provide public and private organizations with a **uniform means of relying on digital credentials** issued by a variety of providers in order to **advance trusted identity federation** and thereby **facilitate access to online services and information**
- First version of the **IAF specification** was officially released and published June 22, 2008
- **Certification program** will be available by end 2008



Identity Assurance Framework

- **What is it?**
 - Framework supporting mutual acceptance, validation and lifecycle maintenance across identity federations
 - EAP Trust Framework and US e-Authentication Federation Credential Assessment Framework as baseline
 - Harmonized, best-of-breed industry identity assurance standard
 - Identity credential policy
 - Business procedure and rule set
 - Baseline commercial terms
 - Guideline to foster inter-federation on a global scale
- **It consists of 4 parts:**
 - Assurance Levels
 - Service Assessment Criteria
 - Accreditation and Certification Model
 - Business Rules

The IAF Ecosystem



IAF Assurance Levels

- **Definition:** Level of trust associated with a credential measured by the strength and rigor of the identity-proofing process, the inherent strength of the credential and the policy and practice statements employed by the Credential Service Provider (CSP)
- Four Primary Levels of Assurance
 - Level 1 – little or no confidence in asserted identity’s validity
 - Level 2 – Some confidence
 - Level 3 – Significant level of confidence
 - Level 4 – Very high level of confidence
- Use of Assurance Level is determined by level of authentication necessary to mitigate risk in the transaction, as determined by the Relying Party
- CSPs are certified by Federation Operators to a specific Level(s)

IAF Assurance Levels 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 and NIST Special Publication 800-63



IAF Service Assessment Criteria (SAC)

The SAC is how the framework materializes in practice

- **3 SAC areas:**

- Common Organization - The general business and organizational conformity of services and their providers
- Identity Proofing - The functional conformity of identity proofing services
- Credential Management - The functional conformity of credential management services and their providers

IAF Certification / Accreditation Model

- **High-level Description**
 - Program for assessors to become accredited
 - Provide candidate CSPs with guidelines for certifying against IAF
 - Enables Federation operators to certify members against IAF
 - Liberty Alliance to provide governance over accreditation process
 - Phase one certification process for CSPs defined in Framework

- **Accreditation Program is current focus**
 - Opportunity to contribute and collaborate
 - Planned availability by end of 2008, if not sooner!

IAF Business Rules

- Focused on the use of credentials for authentication, initially targeting CSPs
- Liberty Alliance provides accreditation of assessors who will perform certification assessment
- Federation Operators will require Liberty-accredited assessments
- Provides guidelines for how all involved parties (relying parties, CSPs and Federation Operators) may work together
- Liberty Alliance will maintain the Identity Assurance Framework and provide a current list of accredited assessors

Questions?



Identity Assurance Accreditation

Frank Villavicencio
Citigroup Global Transaction Services

Background

- As presented, Liberty Alliance has developed and published an Identity Assurance Framework (IAF)
- An IAF operational governance model for deployment needed to be created
 - Including standards for assessment of credential issuers and consumers
 - Accreditation of assessors
- An accreditation and certification model must co-exist with existing controls programs

Accreditation Goals

- Standards conformity
 - Certification by any authority has equivalence the four defined assurance levels
- Broad adoption
 - Not specific to any business model
 - Not geographically aligned
- Leverages existing control frameworks

Value Proposition

- For Assessors
 - Business opportunities in new digital identity realm
 - Deepen relationship with existing clients
- For Credential Issuers
 - Reduces/Eliminates need for unique and “one-off” assessments by credential consumers
 - Makes identity services more marketable
- For Credential Consumers
 - Creates a level playing field for an identity marketplace
 - Reduces/eliminates need to assess issuers

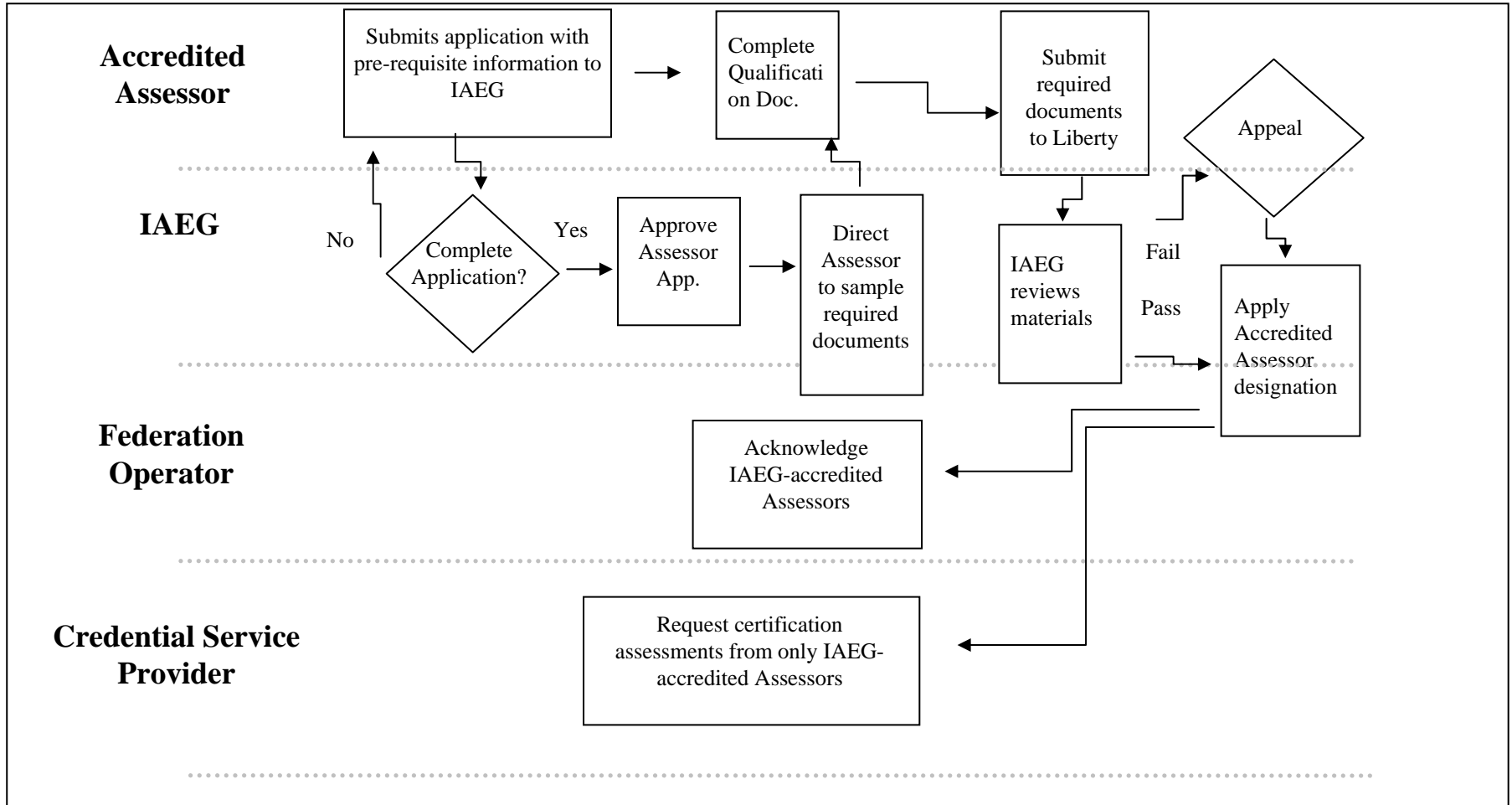
Liberty Accreditation Model

- **Pre-requisites for recognition**
 - **Must hold accreditation from national accreditation body (UKAS, AICPA/CICA, EA, ANAB/Int'l Accreditation Forum)**
 - **Experience w/ ISO 27001 general controls review**
 - **Experience w/ Web Trust, or similar specific controls review**
 - **Familiarity w/ assessment provisions outlined in ISO 19011**
 - **Completion of Liberty-sponsored IAF expertise online exam**
- **Required Documentation**
 - **Application for Accreditation**
 - **Qualification Document**
- **Annual re-accreditation**

Assessor Accreditation Process

- Submit application for accreditation designation to Liberty
- Submit Qualification Document for review and approval by Liberty
 - Qualifications/assessments vary by Assurance Level
- Register designated expert resources for Liberty-sponsored, online IAF compliance exam
- Successfully complete exam
- Sign Liberty Trademark License Agreement
- Annual re-accreditation
 - Onsite assessment not required

Accreditation Process Flow



Ongoing Participant Checklist

Assessor	<ul style="list-style-type: none"> • Application submission • Provide pre-requisite information • Designate resources for examination • Sign Trademark License Agreement • Annual re-accreditation
Liberty	<ul style="list-style-type: none"> • Support Application process • Draft sample accreditation material • Provide updated Assessor list • Maintain list of participating CSPs and Federations • Maintain currency of IAF and Accreditation program • Publish and maintain Operating document
CSP	<ul style="list-style-type: none"> • Identify IAEG-accredited Assessors • Request IAEG certification • Provide assessment from IAEG-accredited body to Federation Operator(s)
FO	<ul style="list-style-type: none"> • Acknowledge IAEG-accredited Assessors • Request only CSP assessments by IAEG-accredited Assessors for IAEG certification • Provide ongoing list of IAEG-certified CSPs to Liberty
RP	<ul style="list-style-type: none"> • Establish acceptance policies with respect to IAEG-certified CSPs • Officially acknowledge Federations to which they subscribe

Implementation Roadmap

1. Industry Analysis

- Analysis of existing accreditation programs
- Research standards bodies' existing programs

2. Process Design

- Identify business model
- Create process flow diagram
- Identify roles and responsibilities
- Write process checklist
- Develop IAEG development checklist

3. Development

- Write Assessor Application
- Draft sample documents
- Develop online exam
- Draft Operating document
- Draft TMLA
- Create sub-committee

4. Validation

- Publish process for review with feedback gathering
- Stakeholder approval
- Liberty Board approval
- Plan for official launch
- Identify initial candidate

5. Launch

- Post application and sample docs on site
- Press release
- Analyst "road" show
- Engage feedback process
- Maintain currency of IAF and Accreditation program
- First assessor accredited

Outside Consulting

Input from IA EG and SIG

Liberty Infrastructure

Questions?

Planning for the Future

**Peter Alterman, GSA
and
Frank Villavicencio,
Citigroup Global Transaction Services**

Roadmap

- Launch Accreditation Program to accompany the Certification Program
 - Available by end of 2008
- Scope and define Phases 2 and 3 for Relying Parties and Federation Operators
- Refine Service Assessment Criteria (SAC) introduced in IAF document
 - SAC Development
 - Process for reviewing and approving new criteria to keep up with technological advances
 - SAC Requirements Matrix
- Mapping project
 - IAF and US Government e-Authentication Credential Assessment Framework & NIST Special Publication 800-63 to streamline government adoption
 - Complete by Oct. 2008

Roadmap (cont.)

- Work with the ITU-T
- Expansion to RP focus?
- Others?
 - Group discussion on where your priorities are→

For More Information

- **Visit our site:**
http://projectliberty.org/liberty/strategic_initiatives/identity_assurance
- **Read the IAF specification:**
<http://projectliberty.org/liberty/content/download/4315/28869/file/liberty-identity-assurance-framework-v1.1.pdf>
- **Get involved with the public Identity Assurance Special Interest Group:**
<http://wiki.projectliberty.org/index.php/IASIG>
- **Contact** Frank Villavicencio (frank.villavicencio@citi.com) or Peter Alterman (peter.alterman@gsa.gov)
- **Attend kick off keynote session** for DIDW featuring Identity Assurance panel

Thank You