



# ***A Preview of the E-Authentication FOC Architecture***



# *Agenda*

- Architecture Working Group
  - Baseline Architecture
  - Changes Coming in the FOC

## ➤ **Architecture Working Group (AWG)**

- Kick Off 10/31/03
- 27 members
  - GSA, NIST, USDA, USPTO, Treasury, HHS, OPM, EPA
  - Enspier, BAH, Accenture, Mitretek, IBM
- Four Sub-Group “Tiger Teams”
  - PKI, Composite Apps, SAML, Use Case
- Decided to use the baseline architecture as a starting point on 11/19
  - Agreed it would not constrain the FOC Architecture

## ➤ *Architecture Working Group (AWG)*

- New Scope Considered:
  - Email
  - Forms
  - Personal Identifiable Information and attribute sharing
  - service discovery
  - single sign-off
  - non-browser thin clients (e.g., personal digital assistant, cell phone)
  - cell phone proxies
  - billing and charge-back protocols
  - group/role identification
  - trust agent and power of attorney scenarios
  - Composite Applications

## ➤ *Architecture Working Group (AWG)*

- Status
  - Release Candidate 1 (RC1) completed 5/17/04
  - RC2 completed 5/26/04
  - RC3 expected to be final, expected this week

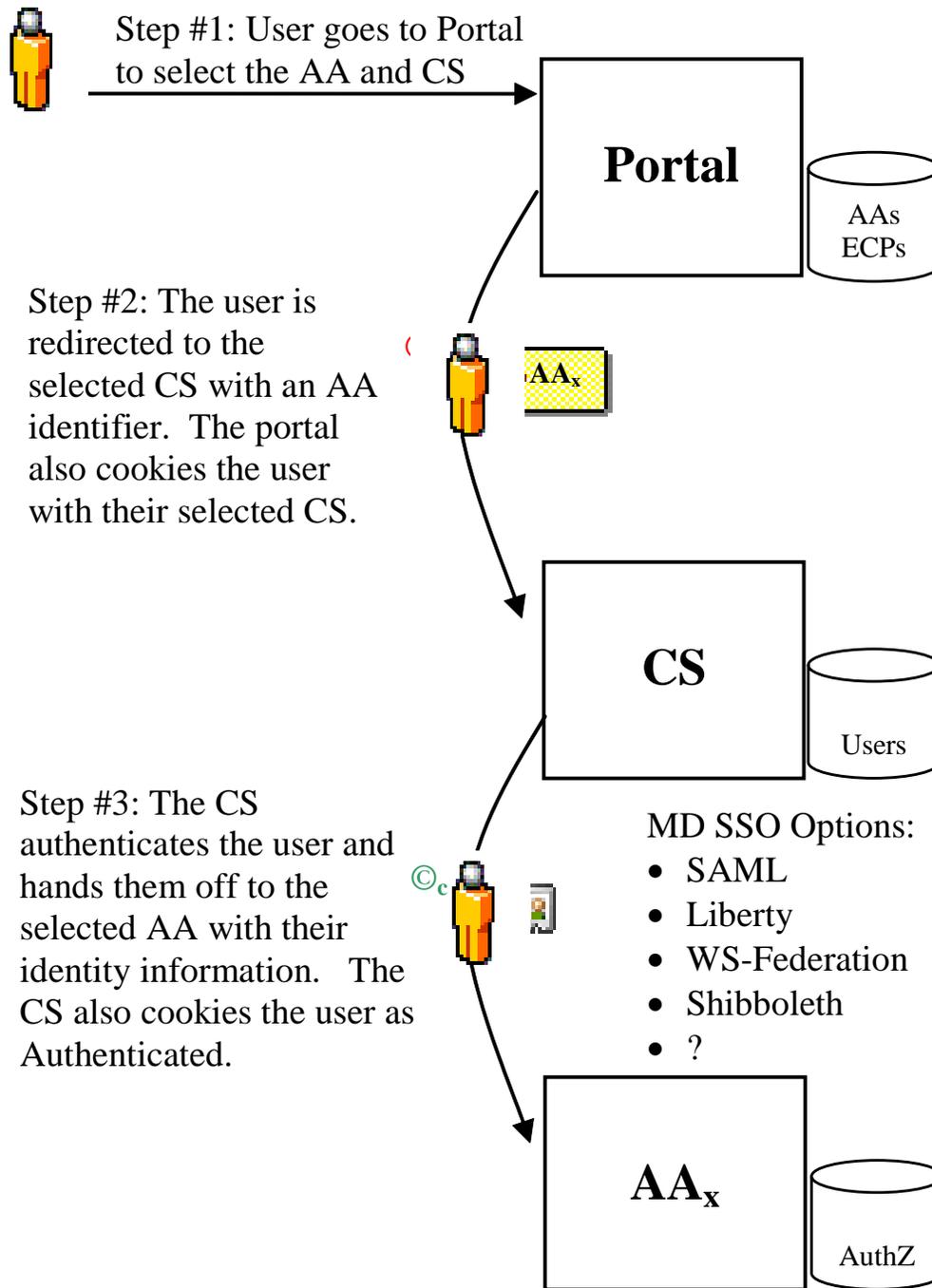
## ➤ *Architecture Working Group (AWG)*

- Result
  - The FOC is a primarily a refinement of the baseline approach, not a new architecture

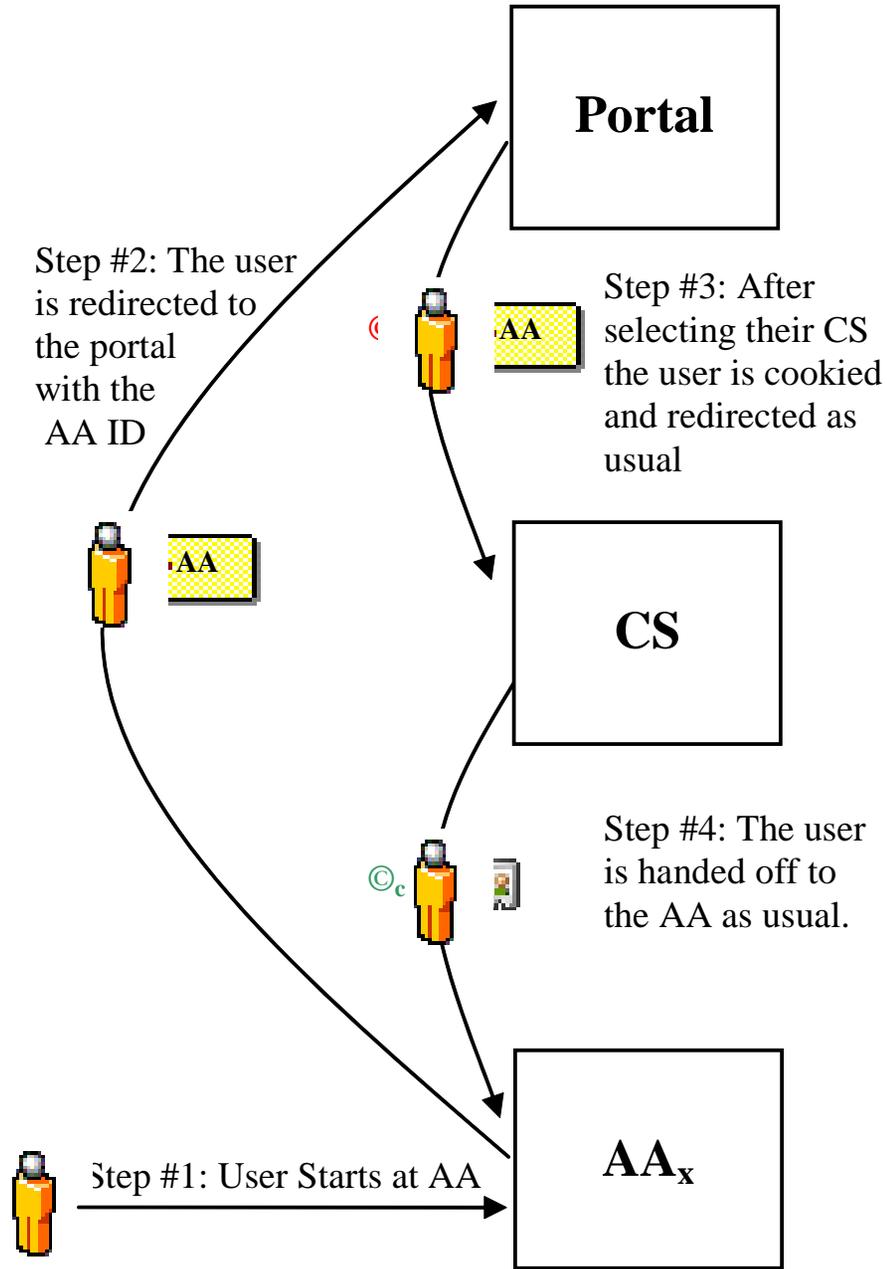
# Agenda

- ✓ Architecture Working Group
- Baseline Architecture
  - Assertion Based (1,2)
  - Certificate Based (3,4)
- Changes Coming in the FOC

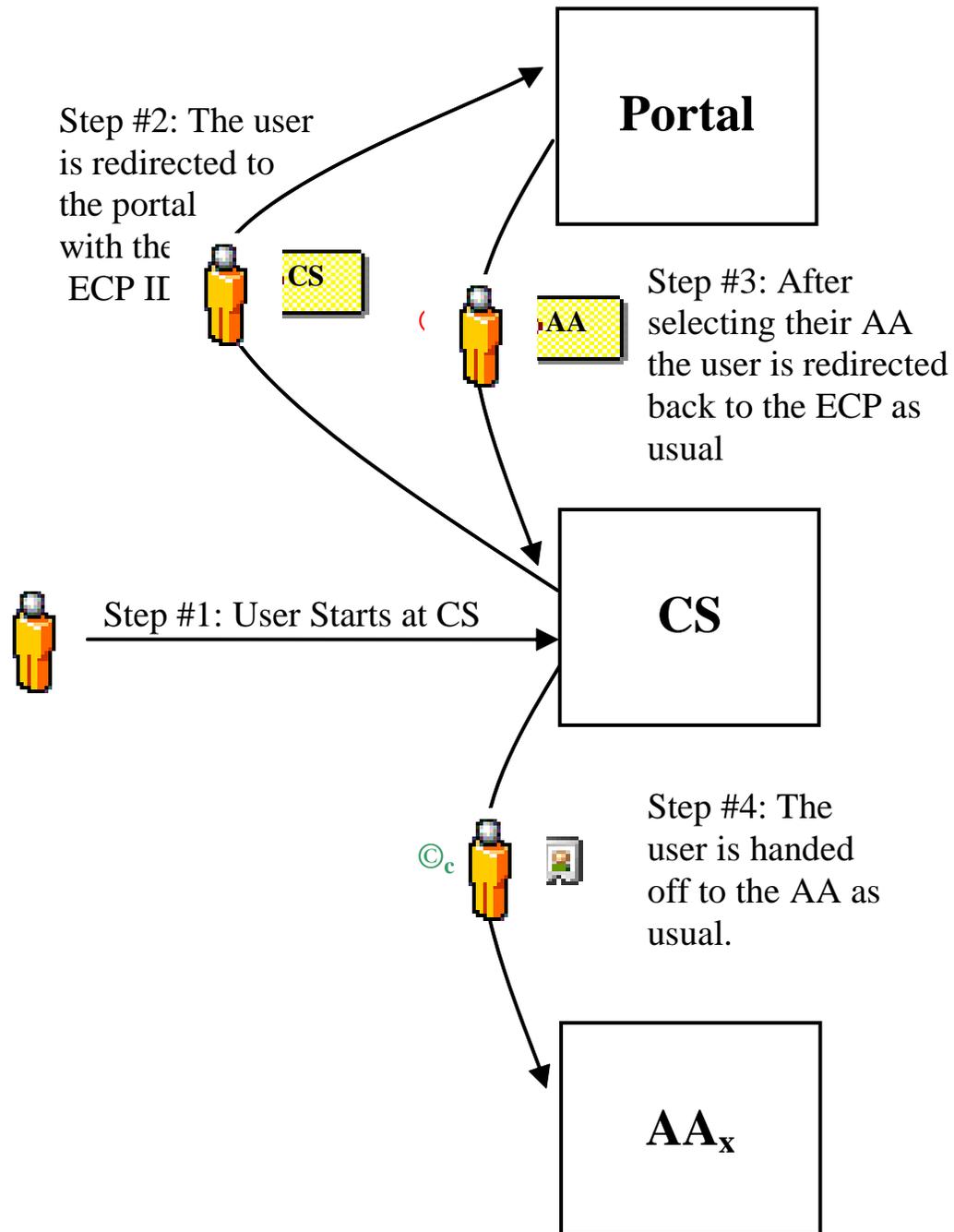
# Base Case



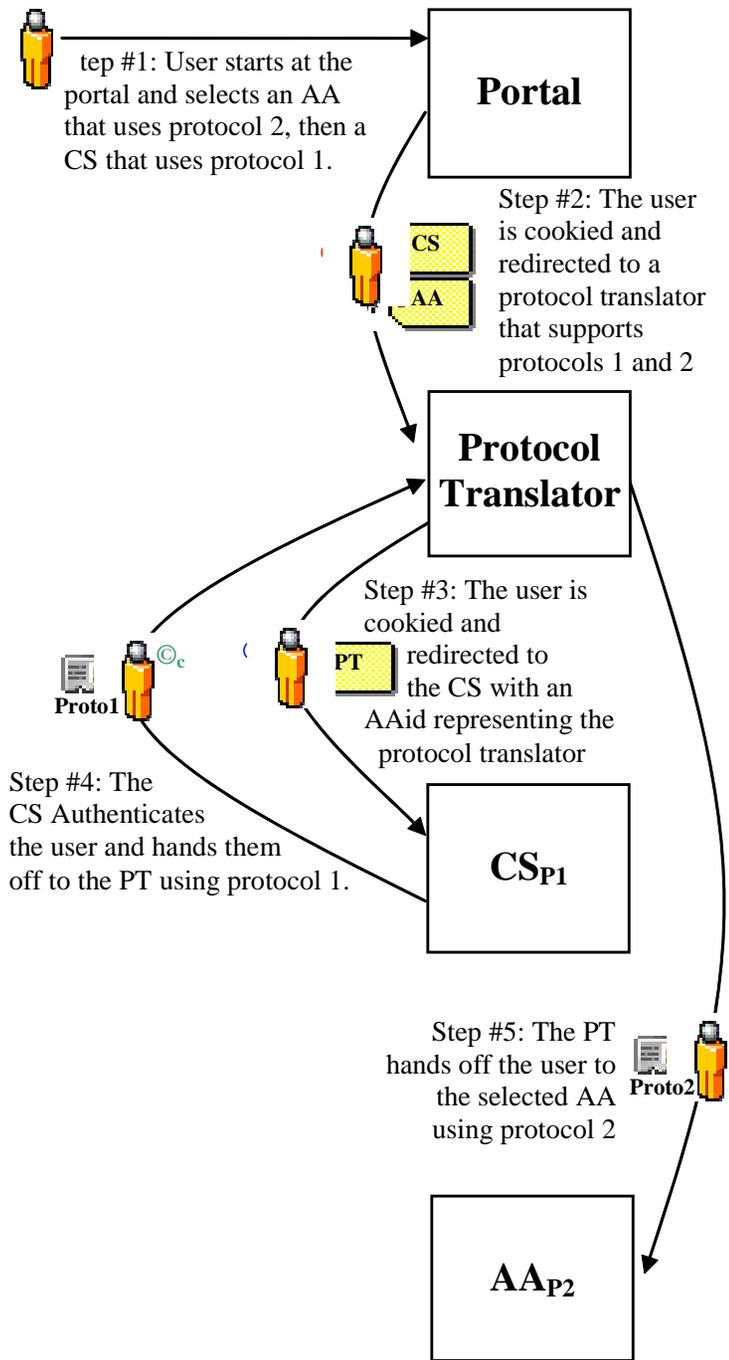
# Starting at the AA

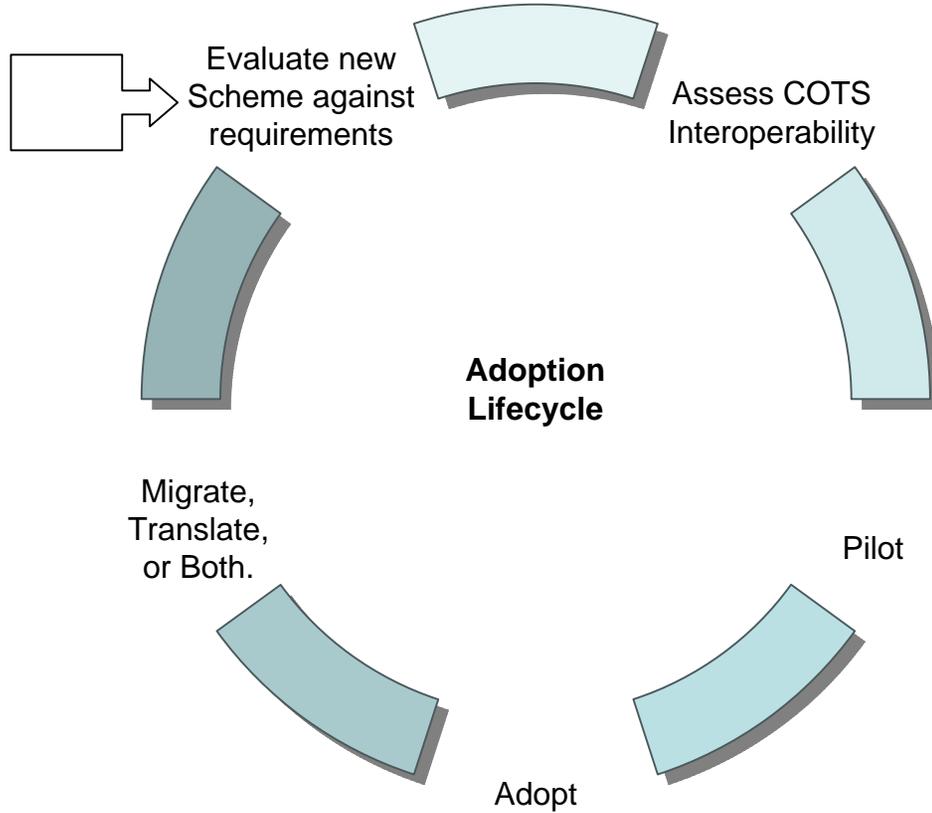


# Starting at the CS



# Scheme Translator

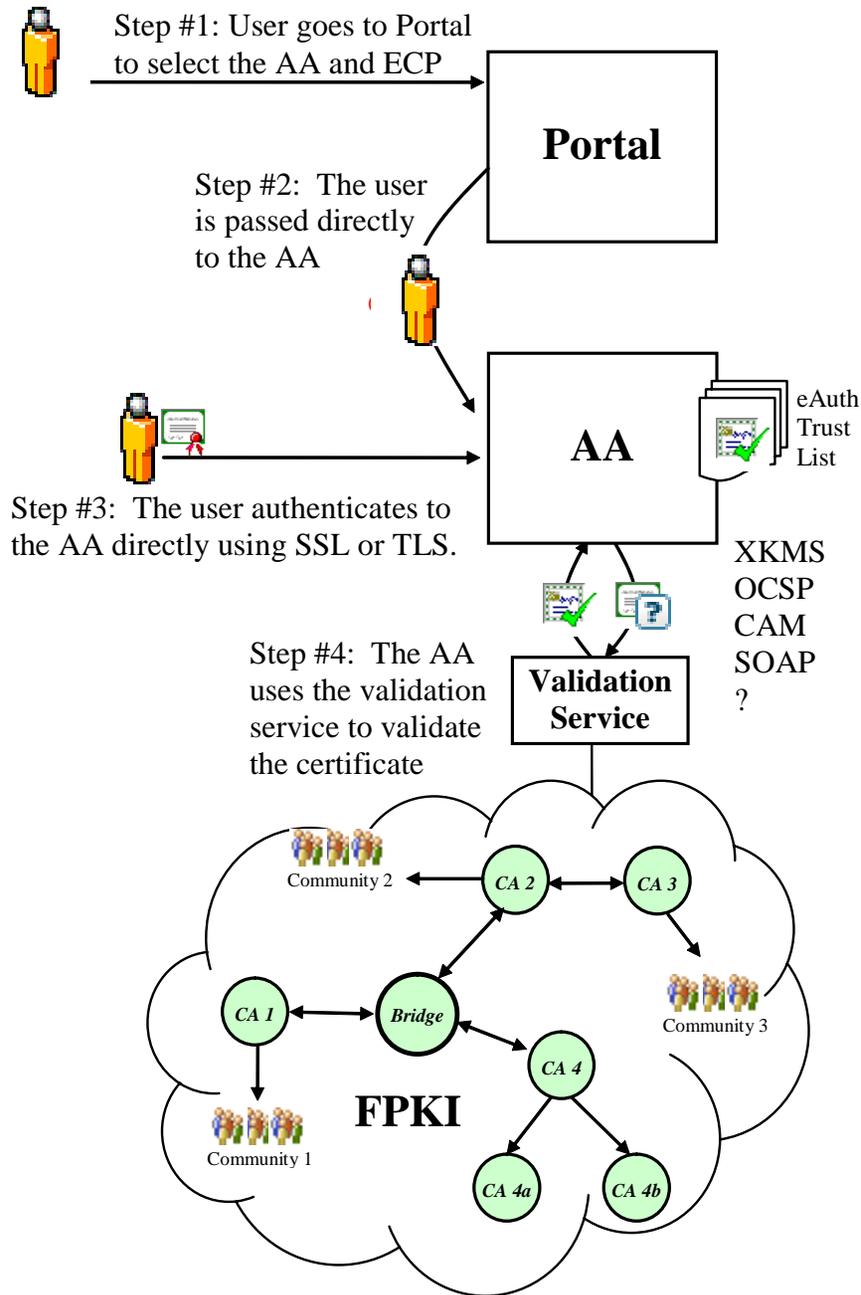




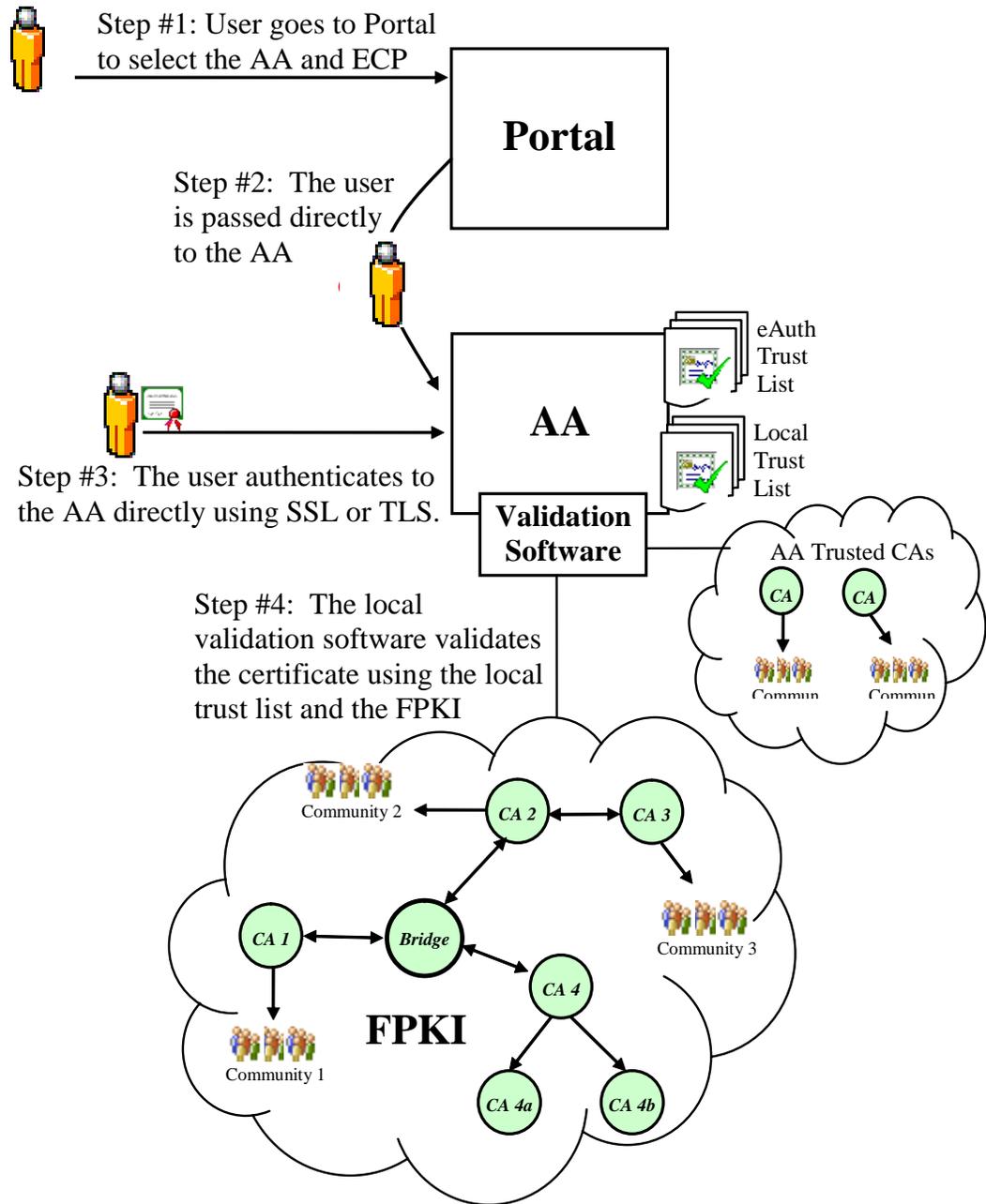
# Agenda

- ✓ Architecture Working Group
- Baseline Architecture
  - ✓ Assertion Based (1,2)
  - Certificate Based (3,4)
- Changes coming in the FOC

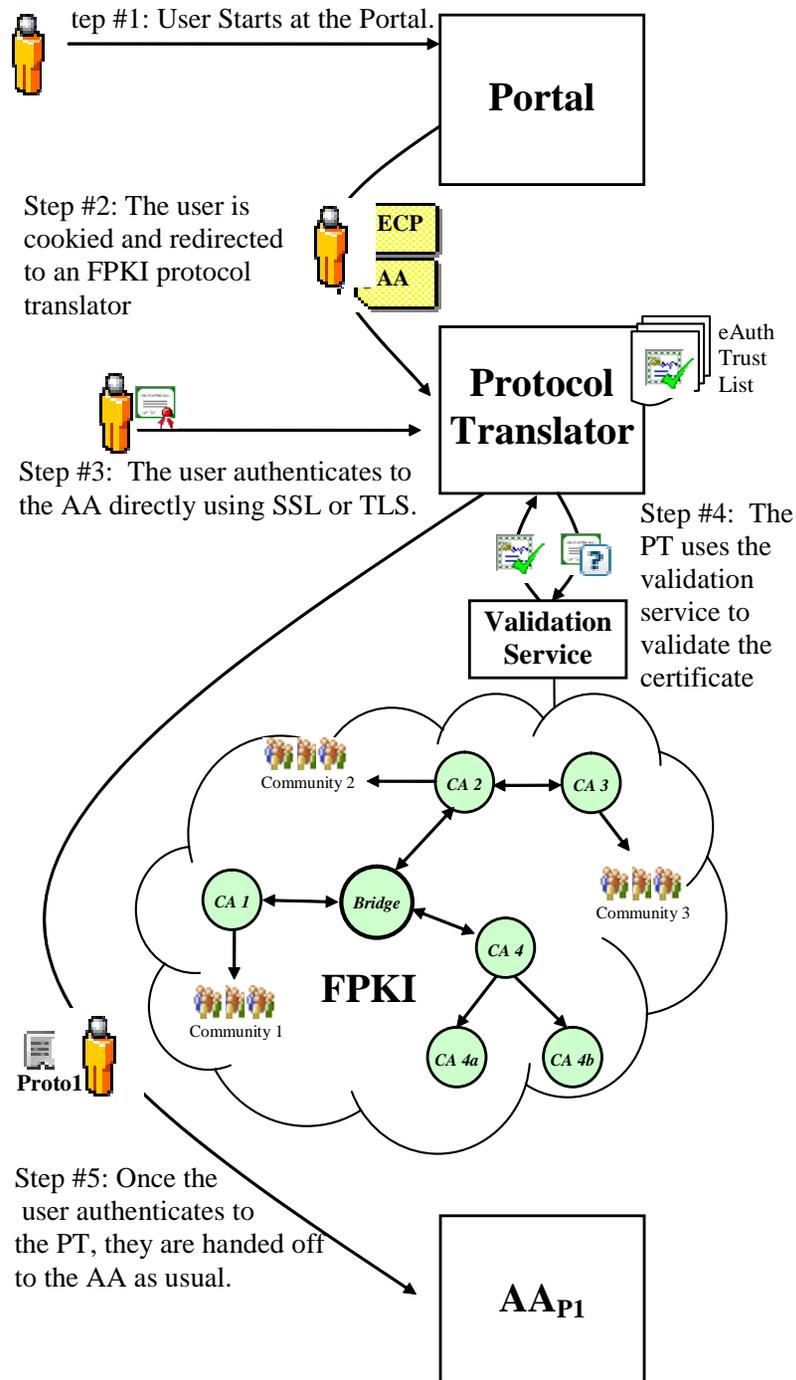
# Validation Service



# Local Validation



# Certificates At Lower Assurance Applications



# Agenda

- ✓ Architecture Working Group
- ✓ Baseline Architecture
- Changes coming in the FOC
  - Summary
    - FEA Alignment
    - Refinements
    - Email
    - Forms

## ➤ *Summary of FOC Changes*

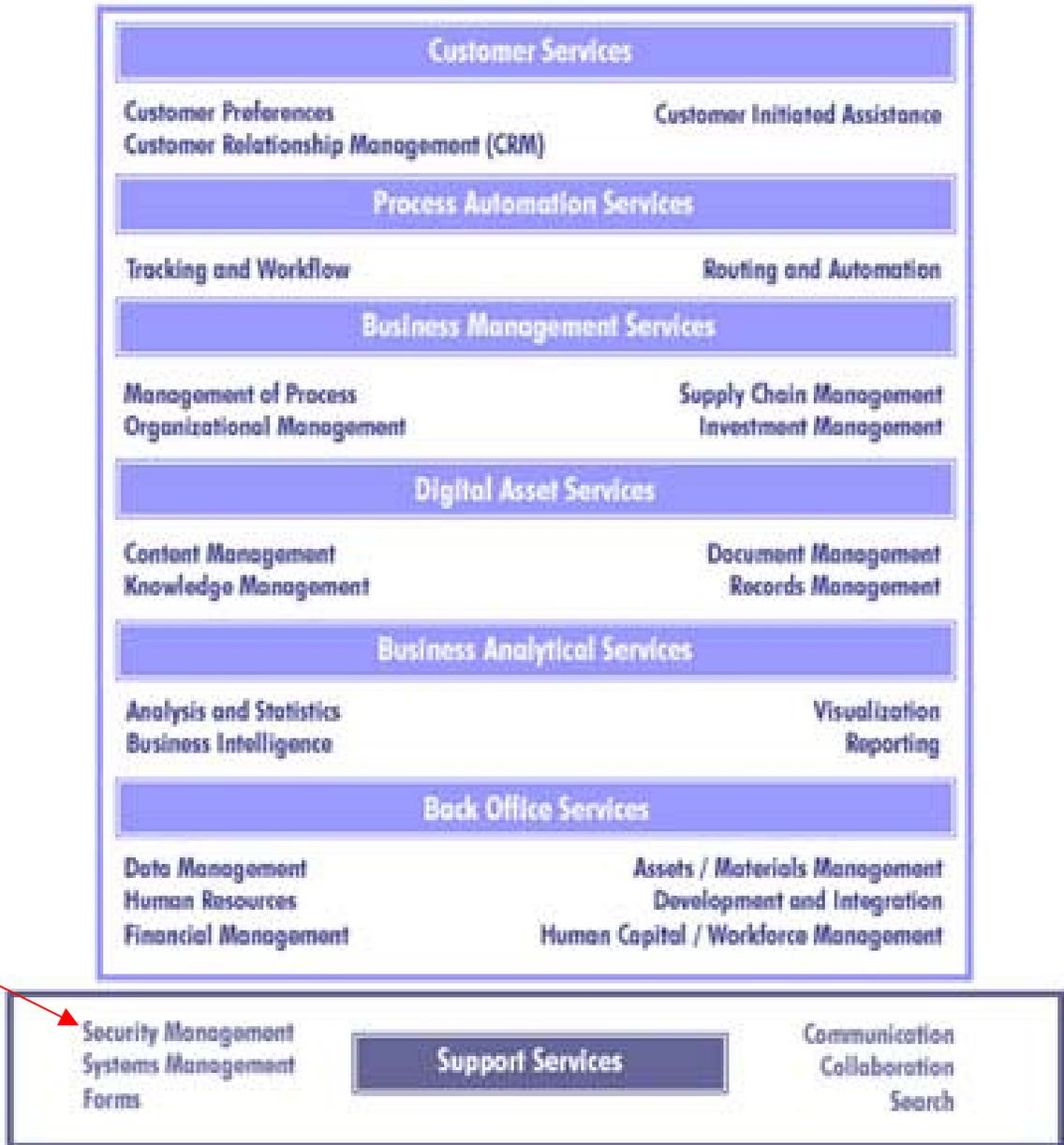
- New Name: E-Authentication Service Component
- Clarified relationship to the FEA
- A Refinement of the Baseline Approach
  - Not a new architecture
- New Appendix on Email
- New Appendix on Forms

# Agenda

- ✓ Architecture Working Group
- ✓ Interim Architecture
- Changes coming in the FOC
  - ✓ Summary
  - FEA Alignment
    - Refinements
    - Email
    - Forms

# E-Authentication fits into the Service Component Reference Model (SRM) Of the FEA

**E-Authentication  
Service  
Component**



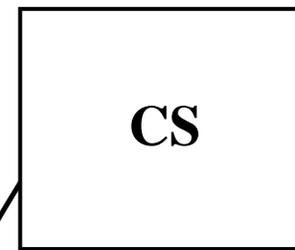
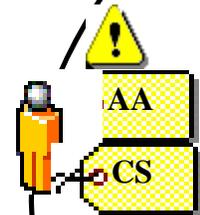
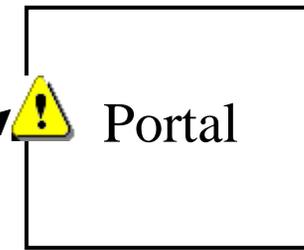
See <http://www.feapmo.gov/>

# Agenda

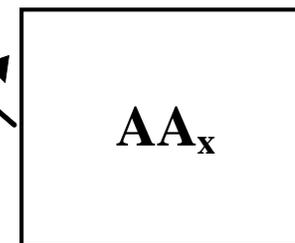
- ✓ Architecture Working Group
- ✓ Interim Architecture
- Changes coming in the FOC
  - ✓ Summary
  - ✓ FEA Alignment
  - Refinements
    - Email
    - Forms

# Exception Fail-Safe

Step #2: The user is redirected to the error handling URL at the portal. The user can then select an appropriate CS and resume with the base case

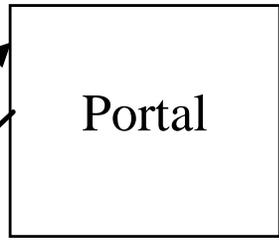
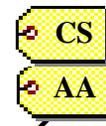


Step #1: The user is handed off to the AA from a CS of a lower assurance level



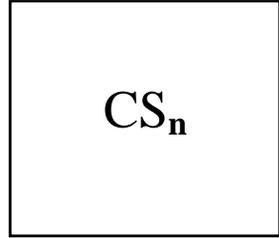
# Session Reset Support

**Step 1:** The AA redirects the user to the portal with the CSid, AAid, and Session Reset tag on the query string.

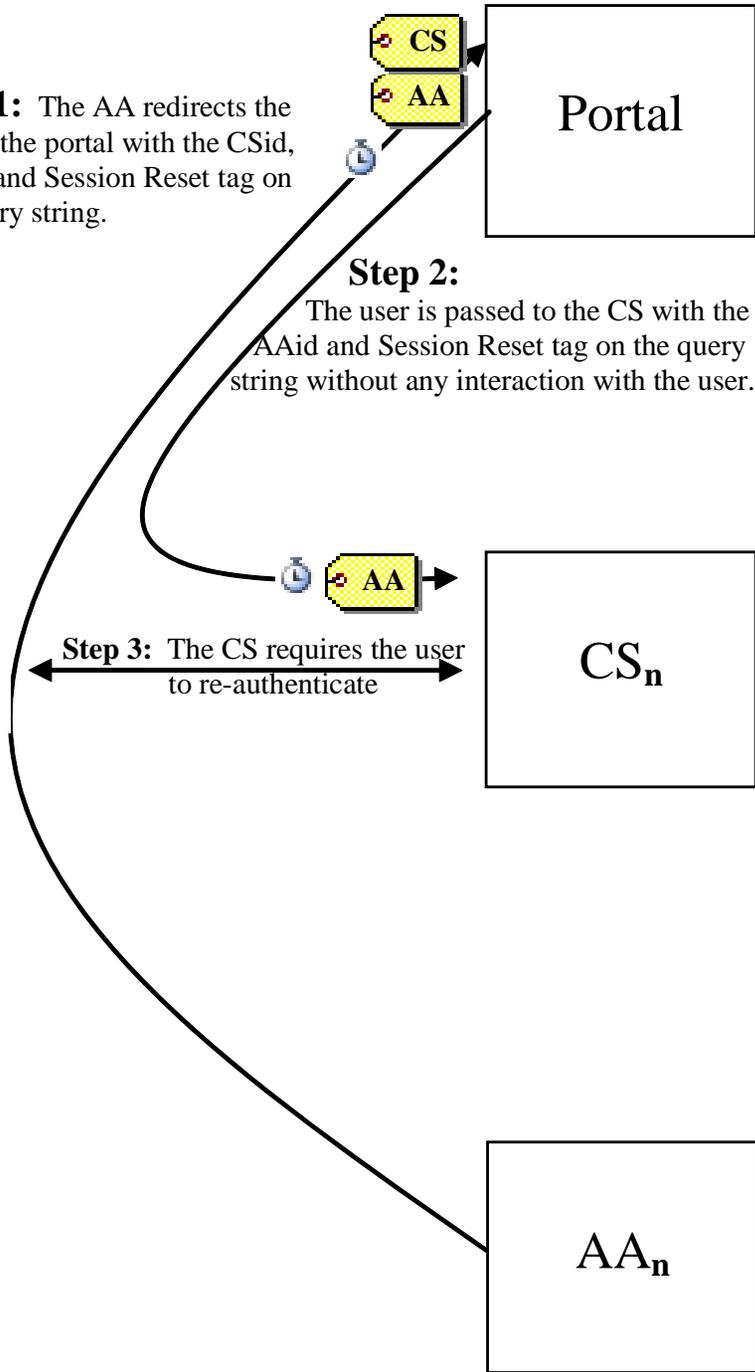
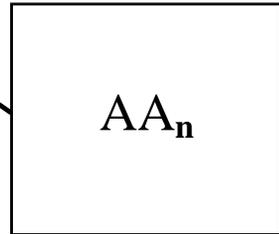


**Step 2:**

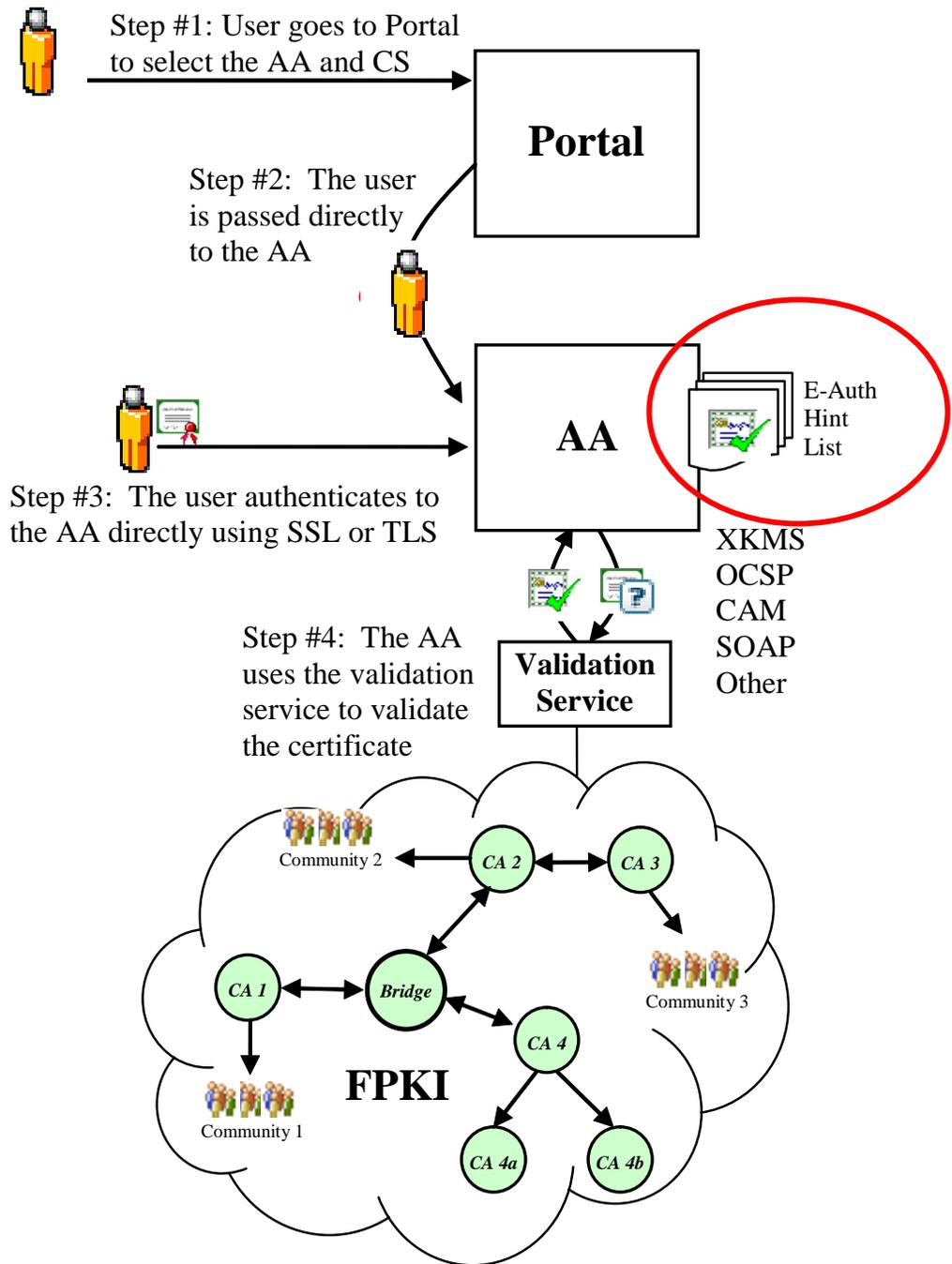
The user is passed to the CS with the AAid and Session Reset tag on the query string without any interaction with the user.



**Step 3:** The CS requires the user to re-authenticate



# “Hint List” metaphor

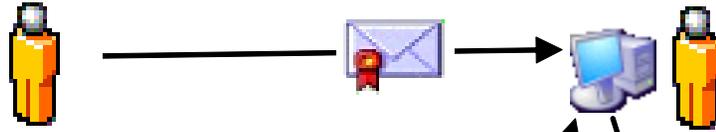


# Agenda

- ✓ Architecture Working Group
- ✓ Interim Architecture
- Changes coming in the FOC
  - ✓ Summary
  - ✓ FEA Alignment
  - ✓ Refinements
  - Email
  - Forms

# Email with Validation Service

Step #1: User receives digitally signed email

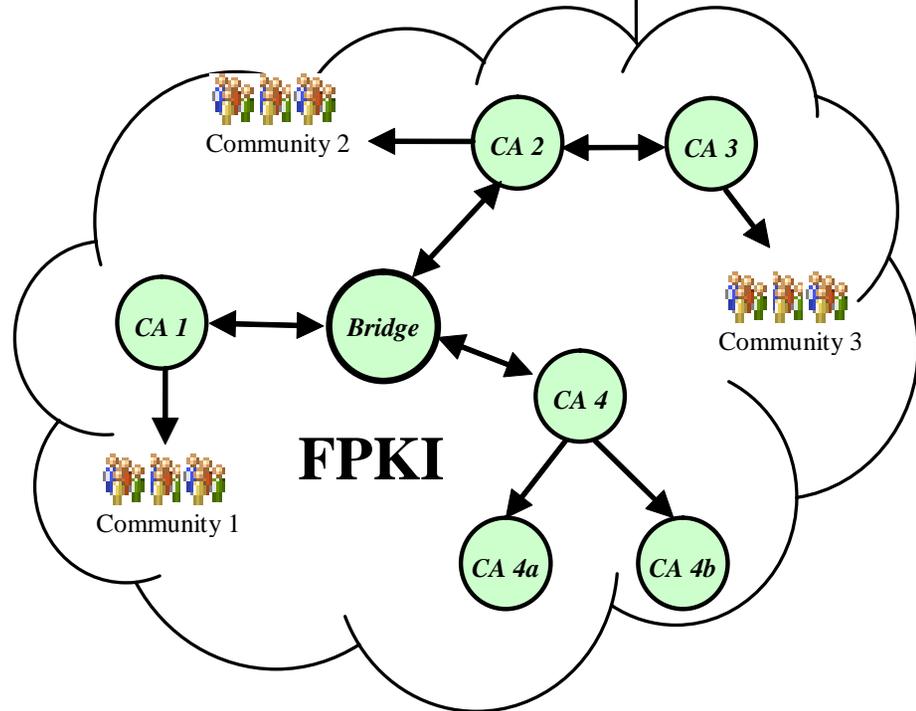


Step #2: The email application requests certificate verification from VS



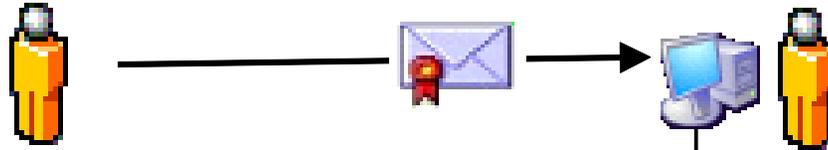
Step #3: The VS validates the certificate

**Validation Service**

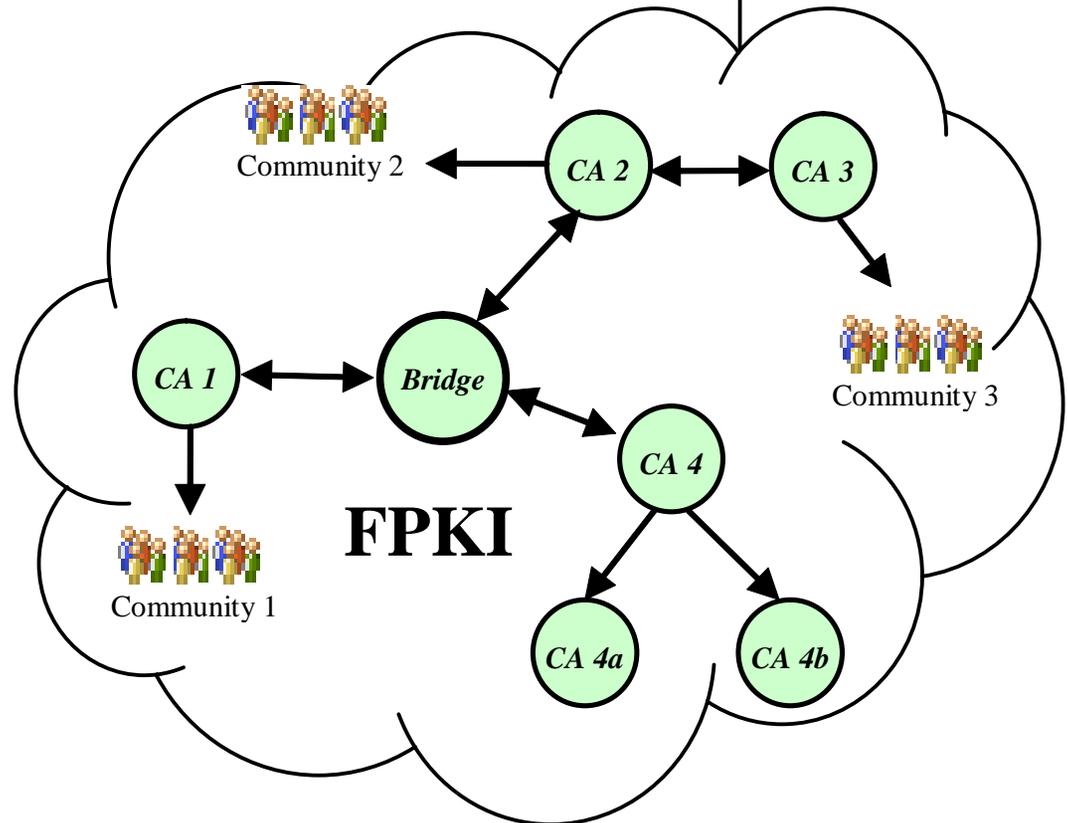


# Email with Desktop Validation

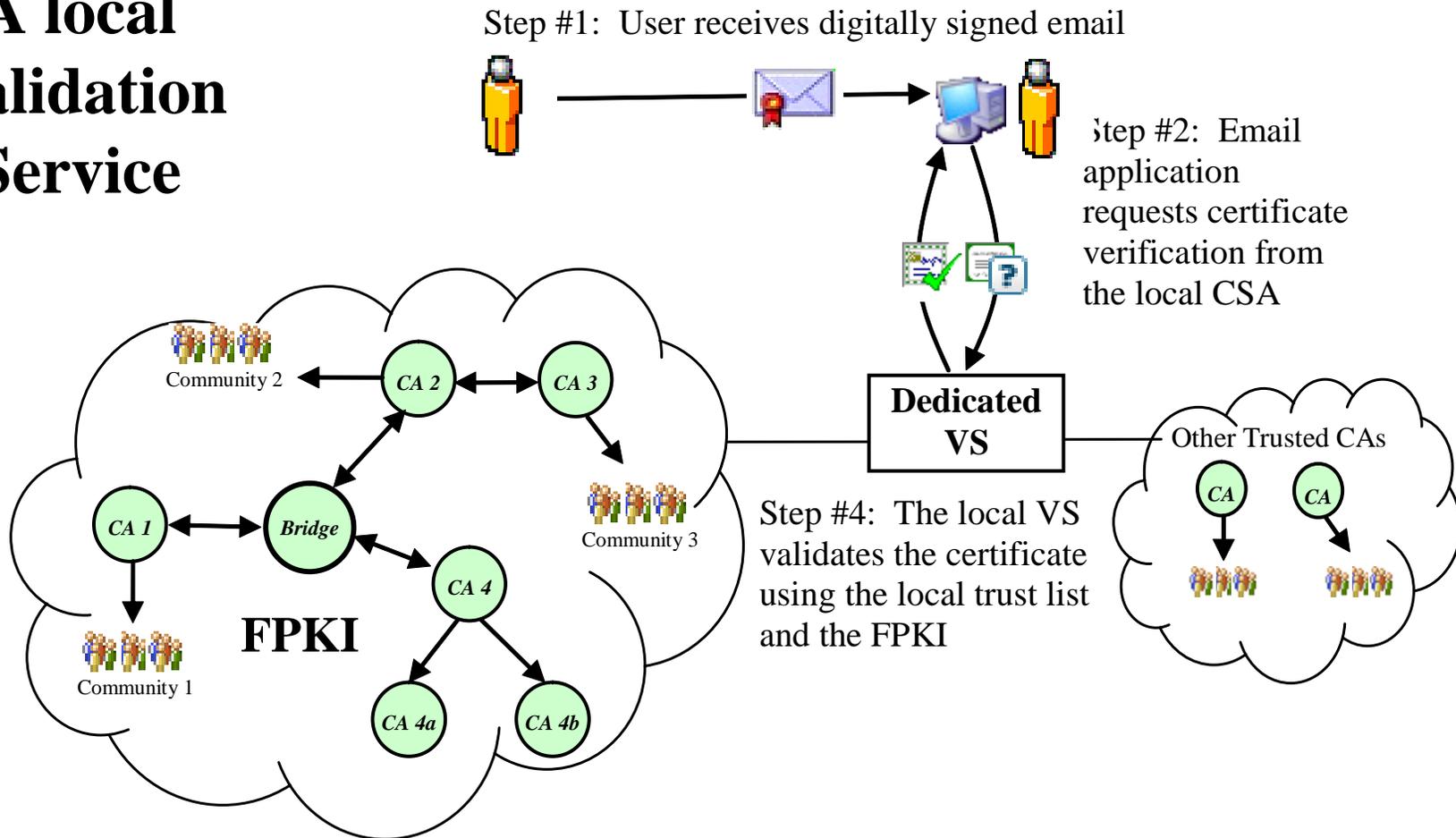
Step #1: User receives digitally signed email



Step #2: The email application validates the certificate directly



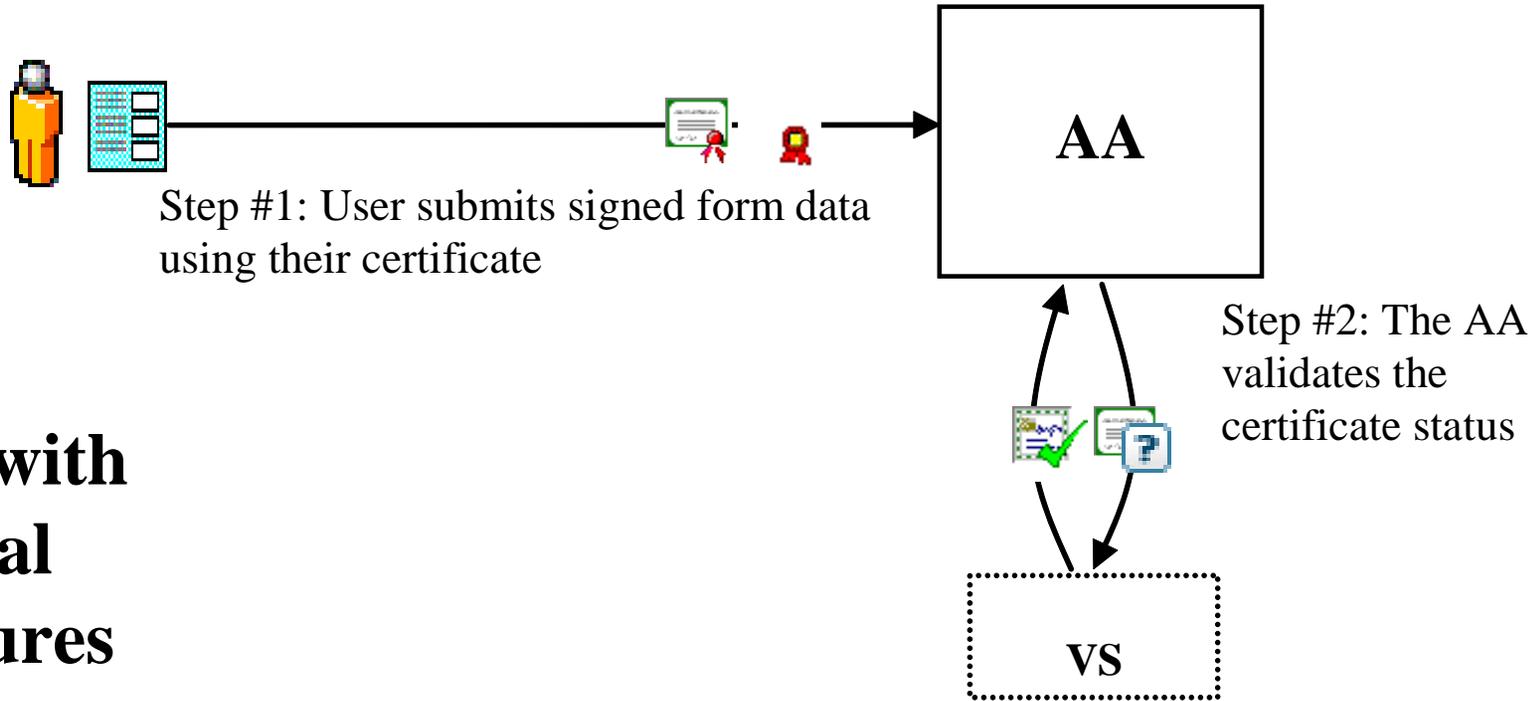
# Email with A local Validation Service



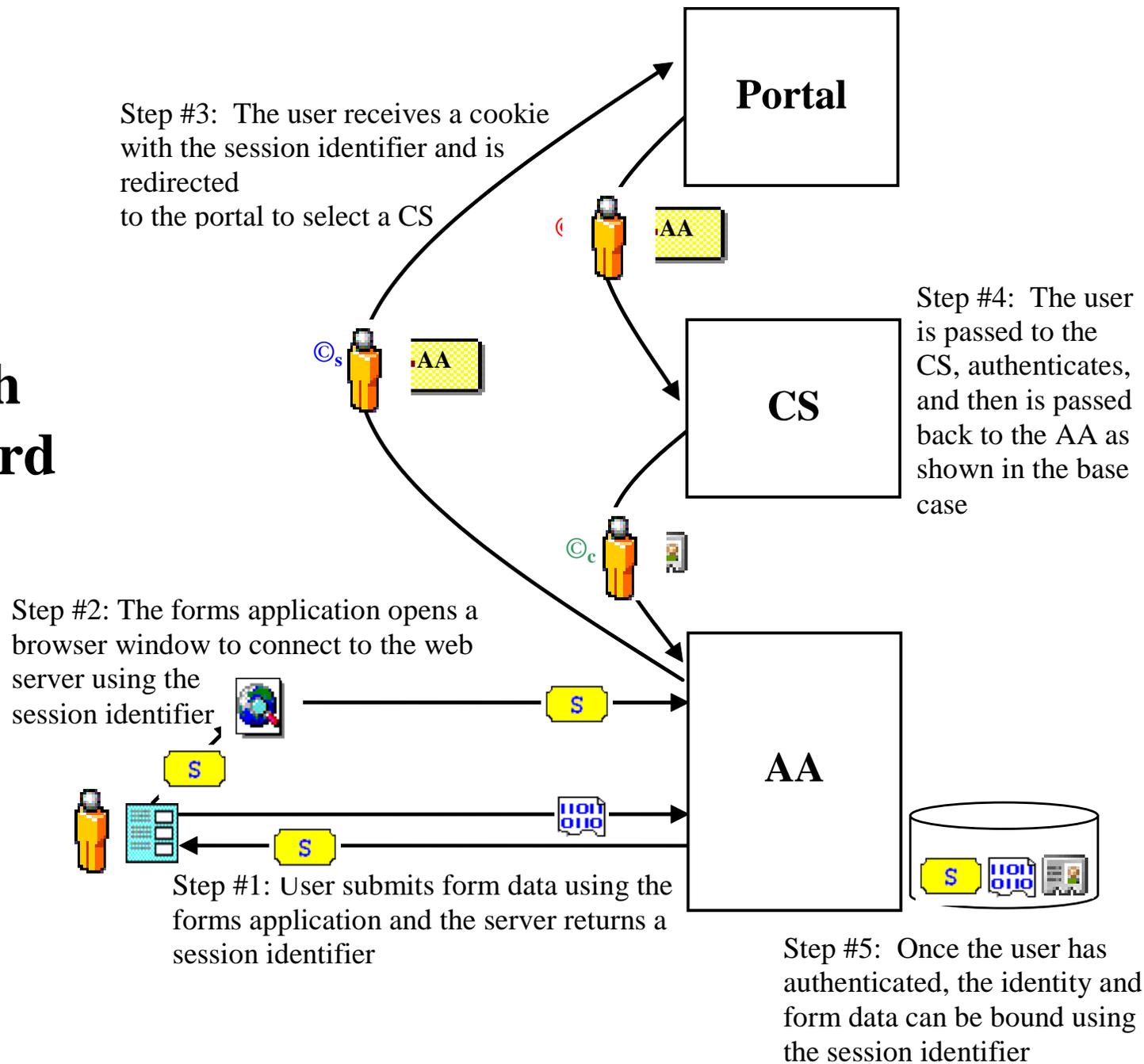
# *Agenda*

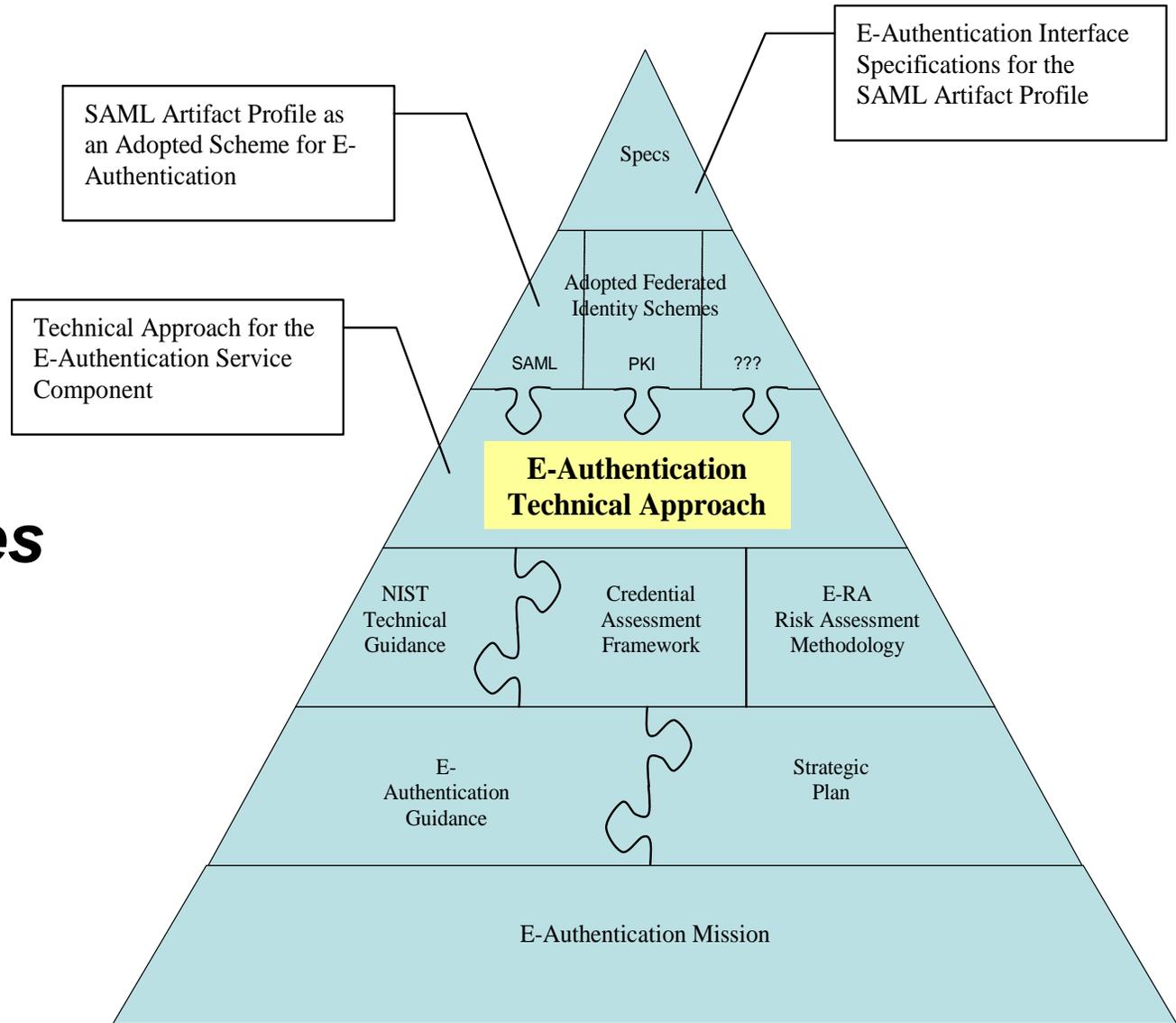
- ✓ Architecture Working Group
- ✓ Interim Architecture
- ✓ Changes coming in the FOC
  - ✓ Summary
  - ✓ FEA Alignment
  - ✓ Refinements
  - ✓ Email
  - Forms

# Forms with Digital Signatures



# Forms with PIN/Password





➤ **Resources**

➤ ***Questions***