

FIPS 201-3 Revision:

Overview of Changes

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HSPD-12

Homeland Security Presidential Directive 12 was issued in 2004 to create a common identification standard for federal employees and contractors for accessing federally-controlled facilities and federal information systems.

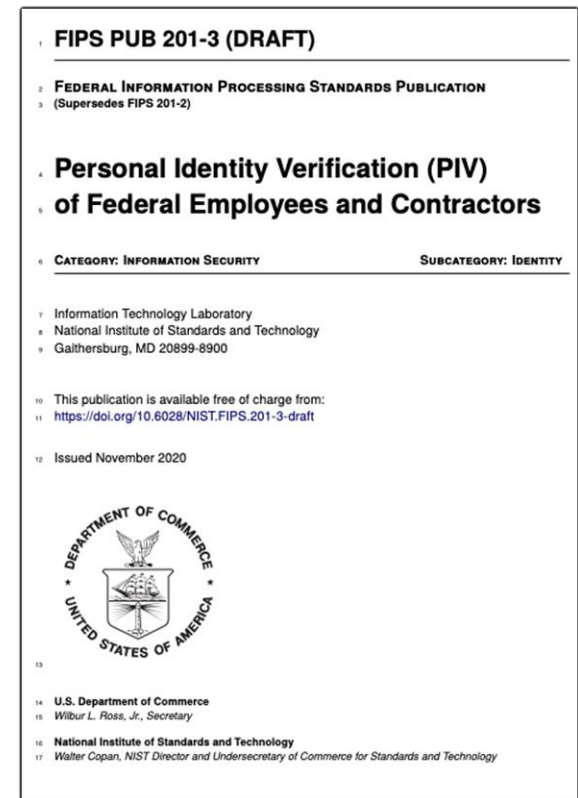
Results:

- A standard, interoperable credential: the PIV credential
- Consistent processes for identity vetting and proofing
- A common, secure approach for accessing facilities and networks
- An increased level of government efficiency



FIPS 201-3 Goals

- Align with NIST SP 800-63-3 requirements and terminology
- Support government-wide ICAM policy and guidance
- Adapt to current best practices and provide flexibility to meet future agency needs



Major Updates



Identity Proofing

- Align with SP 800-63-3
- Supervised remote proofing



Authenticators

- Support new authenticators as derived credentials
- Allow derived credentials on additional platforms



Federation

- Facilitate interagency interoperability and trust
- Simplifies support on relying parties



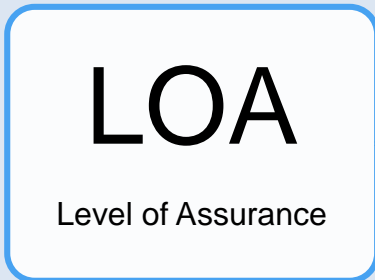
Physical Access Control

- Removal of CHUID authentication mechanism
- Investigate alternative PACS tokens and authentication protocols

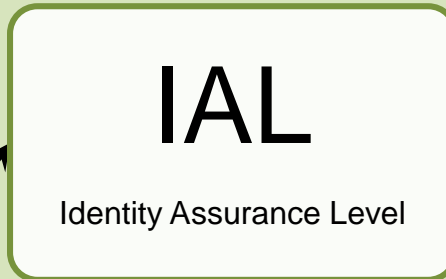
PIV Cards will remain primary authenticator

NIST SP 800-63-3 Model

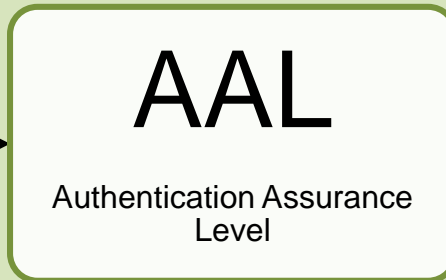
Old



New Model- *SP 800-63-3*



Robustness of the identity proofing process and the binding between an authenticator and a specific individual



Confidence that a given claimant is the same as a subscriber that has previously authenticated



Combines aspects of the federation model, assertion protection strength, and assertion presentation used in a given transaction into a single, increasing scale

PIV Architecture

PKI



CAs, RAs, CRL/OCSP



Card Management

PIV Card



Relying Parties

Logical Access



Physical Access



PIV Architecture

PKI



CAs, RAs, CRL/OCSP

Identity Management



Card Management



PACS Controller



Enterprise IDMS

Authenticators

PIV Card



Derived PIV
Credentials

Relying Parties

Logical Access



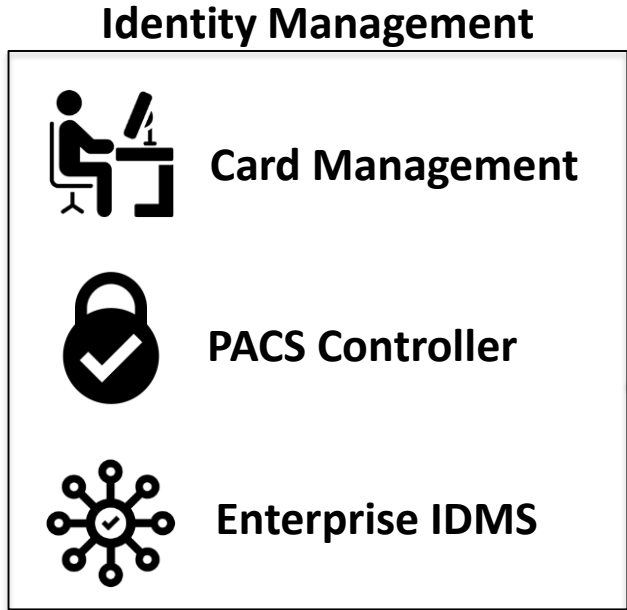
Physical Access



PIV Account

PIV Account:

The logical record containing credentialing information for a given PIV cardholder. This is stored within the issuer's identity management system and includes PIV enrollment data, cardholder identity attributes, and information regarding the cardholder's PIV Card and any derived PIV credentials bound to the account.



Enrollment Records



Identity Attributes



Bound Authenticators



PIV Lifecycle

- **PIV Registration/Issuance**
 - Create the PIV Account in IDMS
 - Create a PIV Card
 - Bind the PIV Card to the Account
- **Registration of Derived PIV Credentials**
 - Bind to PIV Account after successful authentication with PIV credential
 - Managed by cardholder's home agency
- **PIV Credential Usage**
 - Direct or federation between systems/agencies
- **Termination of Credentials**
 - Revoking PKI certificates, as appropriate
 - Unbind/Invalidate [Derived] PIV credentials in PIV account

Federation

Definition:

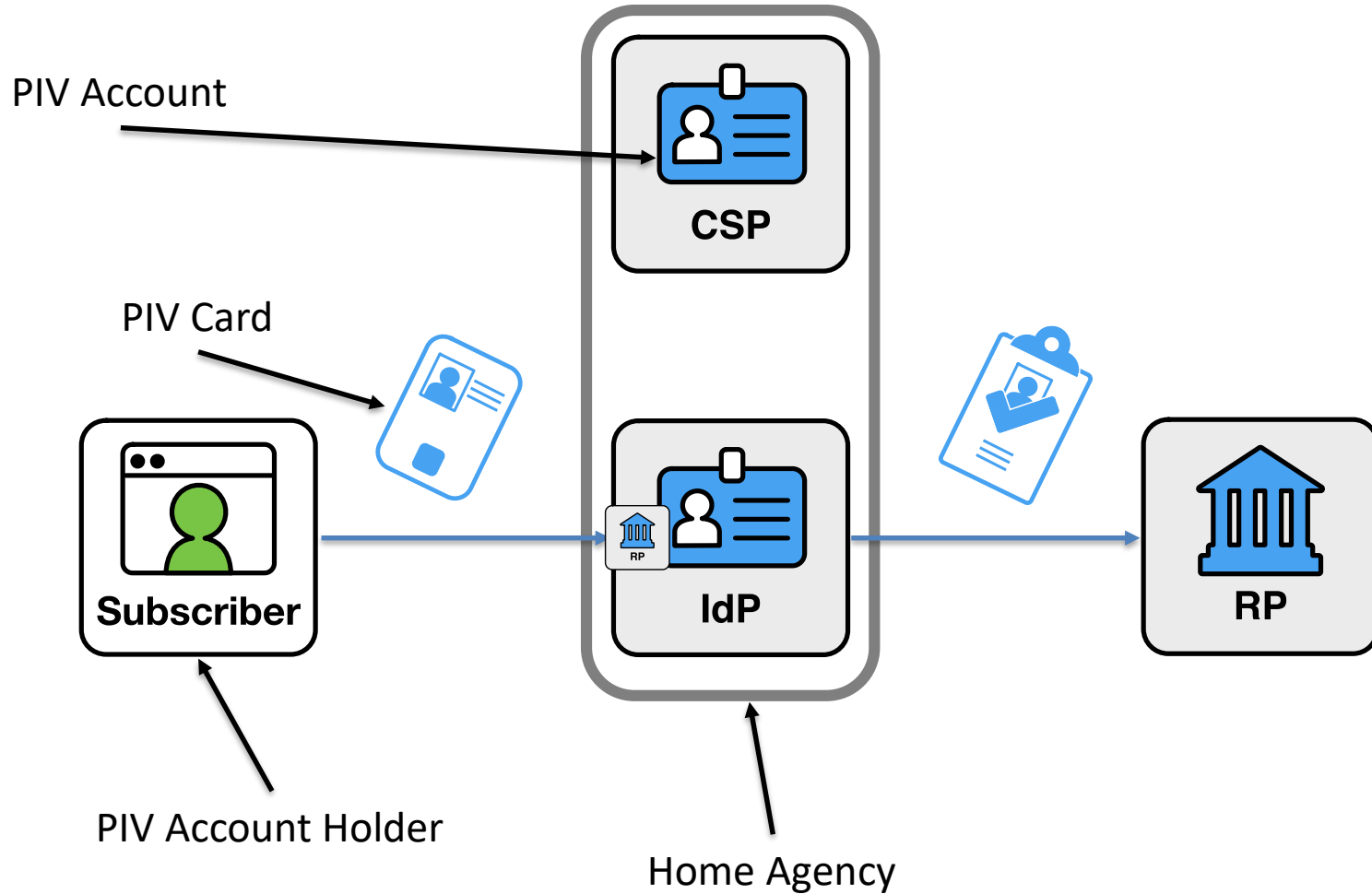
A process that allows the conveyance of identity and authentication information across a set of networked systems.

- NIST SP 800-63-3 Appendix A

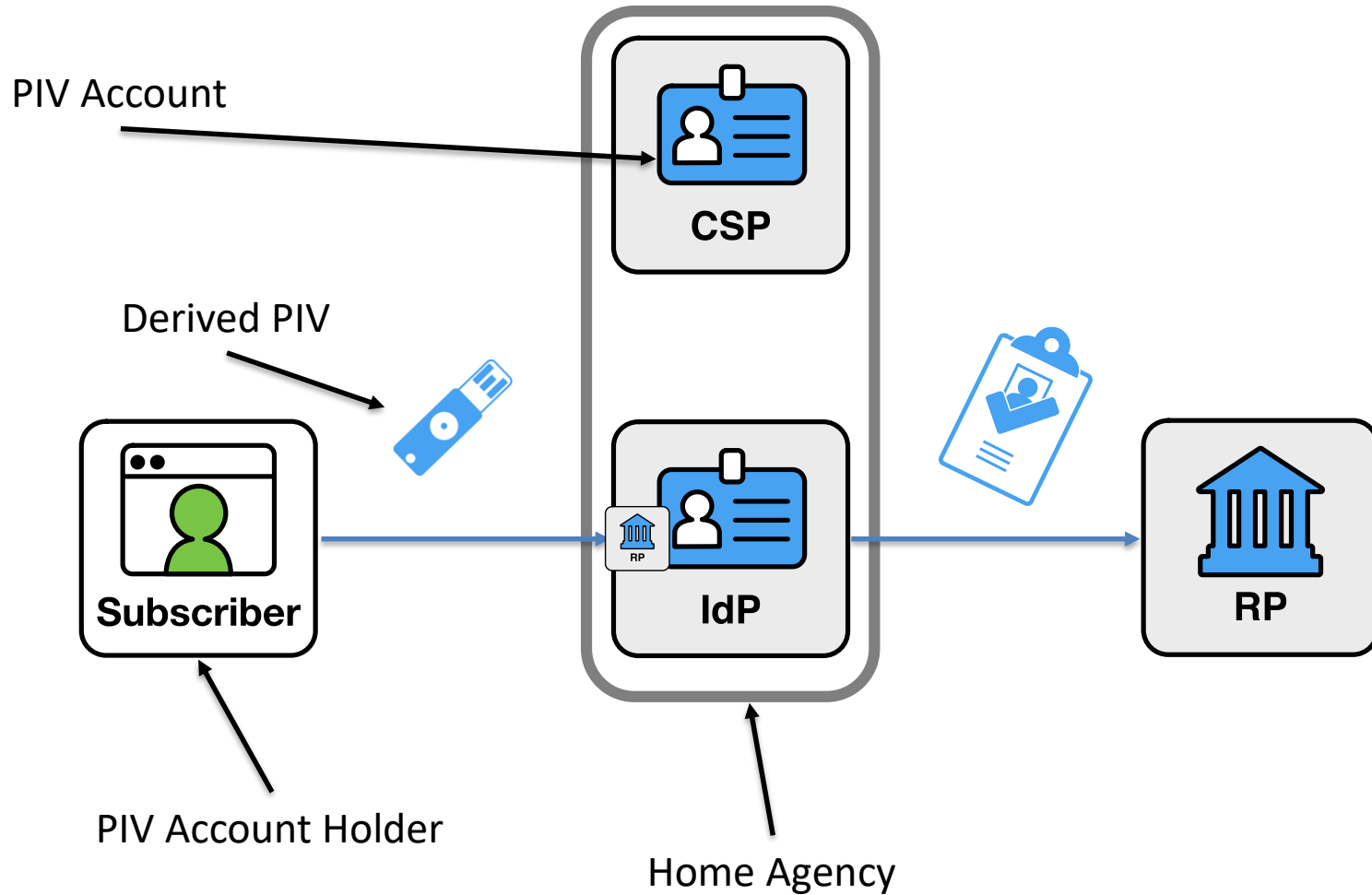
Federation

- Recommended way to accept and process PIV credentials from other agencies
- Provides real-time sharing and identity assertions and attributes from the PIV account at cardholder's home agency
- Facilitates interoperability between relying parties and a variety of authenticators

Federation with PIV



Derived Credentials



Wrap Up

- FIPS 201-3: Increased focus on PIV as federal enterprise identity management
- Major goals/updates:
 - Facilitate stronger, centralized identity management
 - Maintain high-assurance identity proofing
 - Increased flexibility to accommodate emerging use cases and architectures
 - Focus on federation for interoperability and interagency trust