## Program Plan Overview

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**Key**
- **Not Started**
- **Under Development**
- **Release Completed**
- **Due**

### Provisioning
- **Federation**
  - IP Functionality Expansion
  - InCommon Brains Self-Certification Preparation (AD, PIN/CAS)
- **Directory Services**
  - LDAP Updates (H/Auth)
- **App Owner Support**
  - Application Registration
- **Identity Access Governance**
  - IAM External Facing Website
- **Authentication Enhancements**
  - Decommission PIN3
- **Authorization Enhancements**
  - SIS Wave 0
- **Expanded Provisioning**
  - Connections Update
- **Cloud Migration**
  - Cloud Architectural Reference Model

### Federation
- **Provisioning**
  - PIN/AD Credential Management
- **Directory Services**
  - External Directories Expanded
- **Cloud Migration**
  - Cloud Architectural Reference Model

### Directory Services
- **Provisioning**
  - Federation
  - Provisioning
  - Authentication
  - Authorization
- **Directory Services**
  - LDAP Update (H/Auth)
  - New Cloud LDAP (H and AUTH LDAP)
  - LDAP Functional Enhancement
  - LDAP Attribute Expansion
  - Decommission FAS AD
- **App Owner Support**
  - Application Registration
  - Customer Test Data
  - IAM Reference Implementations
  - Federation Updates
  - IAM Service Usage & Access Reporting
  - Identity Analytics & Risk Assessment
  - Identity Proofing
  - Cloud Authentication
  - Identity Proofing
  - Adaptive Access
- **Identity Access Governance**
  - IAM External Facing Website
  - IDP Functionality Expansion
  - UUID Enhancement
  - Refine Privacy Protocols
  - Identity APIs
- **Authentication Enhancements**
  - Decommission PIN3
  - Multifactor Authentication
- **Authorization Enhancements**
  - SIS Wave 0
  - SIS Wave 2
  - Group Management
- **Expanded Provisioning**
  - Connections Update
  - PIN Support
  - Connections UI Improvements
- **Cloud Migration**
  - Stand Up Cloud Based LDAP
  - MIDAS Migration
  - Phonebook & Public LDAP Cloud Migration

### Cloud Migration
- **Provisioning**
  - Make user account management easier for people administrators by replacing outdated tools with a new, feature-rich solution that can be used by interested Schools and units across the University.
- **Federation**
  - Enable end users from both inside and outside the Harvard Community to gain access to internal and external applications and tools, boosting ease of use and collaborative potential.
  - Reduce the number of user information systems of record while also expanding the data model and attributes in the central IAM identity repository — enabling quick, consistent, appropriate access across LDAP, AD, and web authentication protocols.
  - Give Harvard application owners the ability to easily integrate their applications and services with central IAM services.
  - Deliver visibility into IAM program metrics for app owners and key stakeholders — including business intelligence capabilities such as advanced reporting and trend analysis.
- **Directory Services**
  - Enable end users with a simpler, more unified login experience, as well as enhanced security options for sensitive data and applications.
  - Provide end users with a new, feature-rich solution that can be used by interested Schools and units across the University.
  - Enable application owners and people administrators to manage users via access groups, as well as the ability to manage authentication and access rules.
- **Cloud Migration**
  - Securely expose user identity information both inside and outside of the University.
  - Enable identity creation and proofing for nonstandard and non-person users.
  - Boost stability and cut costs by migrating IAM services from on-premise hosting to the cloud, and establish a cloud reference architecture for Harvard application deployments.
Everything that the Identity & Access Management program does — from routine maintenance releases to large-scale major projects — serves one of our three primary constituencies across the Harvard Community:

### End Users

1. Provide a single, easy onboarding portal that enables new Harvard users to initiate their accounts and establish a single unified credential.
2. Give current Harvard users the ability to manage their own accounts (password resets, etc.) whenever they wish via a self-service portal.
3. Make the transition to Alumni status seamless for graduating students and program participants by automatically updating their unified identity, thereby providing access to new Alumni resources while also removing access to student resources.
4. Give users in all participating Schools access to the same Office 365 email tenant — including calendar free/busy views, address books, etc.
5. Reduce the risk of data compromise by adding an extra layer of security through multifactor authentication (in which users receive an additional login code via SMS text to supplement username and password).
6. Enable select users to access specific Harvard resources using their personal identities from social media (such as LinkedIn credentials for an Exec Ed user).
7. Provide access to non-Harvard research material using local Harvard credentials by leveraging InCommon Bronze certification.

### People Administrators

8. Enable the creation of user groups for controlling access to applications (rather than making access decisions on an individual basis), and ensure groups can be shared between applications for even greater simplification.
9. Improve speed and accuracy when creating sponsored or guest accounts by replacing the existing paper-based process with a self-service toolset.
10. Simplify application administration via a central IAM authorization service that manages coarse-grained access control, plus expose an enhanced set of attributes to help administrators determine appropriate access control.

### Application Owners

11. Enable application owners from outside Harvard to register for certificates and receive metadata using a self-service IAM portal.
12. Create the ability for mobile app owners to integrate with IAM’s authentication services, and expand possible integration with desktop applications.
13. Relieve Schools of the cost and responsibility of running their own identity and access management services by integrating them into SailPoint IdentityIQ, and reduce redundancy in data management by pushing IAM data to a larger group of downstream applications.
14. Boost our overall security position by improving machine-to-machine communication security — validate that nonstandard users such as user communities, resources such as microscopes, and protocols have proper authentication credentials when acting as initiating machines.

### Timeline

The simplified timeline below highlights releases that result in the most significant benefits to our constituencies over the life of the IAM program — either as standalone releases, or as the culmination of release series that benefit one or more of our three user groups. See the full timeline and expanded benefit statements for all IAM releases on our website: iam.harvard.edu/resources.

### Benefits to End Users

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