



Provisioning and De-provisioning Best Practices

Big Ten Academic Alliance Working Group Update

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University of Illinois ♦ Indiana University ♦ University of Iowa
University of Maryland ♦ University of Michigan ♦ Michigan State University
University of Minnesota ♦ University of Nebraska—Lincoln ♦ Northwestern University
Ohio State University ♦ Pennsylvania State University ♦ Purdue University
Rutgers University ♦ University of Wisconsin—Madison

Who are we?

- A working group of the Big Ten Academic Alliance IDM Taskforce
 - The Big Ten Academic Alliance, formerly the CIC
 - A consortium of the Big Ten schools plus U. of Chicago
- Also a TIER working group

Why Provisioning?

- No widely used standards
- A wild west
- Hard to scale federation if we can't scale provisioning
- Provisioning what? Identities, Credentials, Services
- De-provisioning? "We can do that later."

What to do about it

- Planned to start with product evaluations
- Got tangled up in terminology
- Take II: survey of current practices and needs
 - Identify trends
- A new product evaluation
 - Understand current product landscape
- Document best practices

Working group initiatives

- Best practices write-up
- Product comparison
- Catalog of SCIM schemas
- Bulk provisioning API definition

SCIM schema cataloging

- Goal: a catalog of known extensions to SCIM
- Progress: Created a Github repo with the core SCIM schema
 - Extensions???
 - It can't be that easy
 - Help us if you know of extensions
- Status: <https://github.internet2.edu/tier/scim-schema>

Bulk provisioning API

- Goal: Create API requirements for provisioning large batches
 - Pass requirements to TIER API WG to develop
- Progress: Created a list of use cases
 - Shared list with TIER API WG
- Status: a separate bulk API is not needed
 - Use cases to be used as tests for the API WG
 - Use cases: <https://spaces.internet2.edu/x/koFyBw>

Documenting best practices

- Completed survey analysis last fall
 - Reported at Technology Exchange
- Created high-level outline for write-up
- Preparing for product evaluations

Best practices outline

- Executive summary
- Problem statement
- Identity provisioning
 - Identity matching
 - Username assignment
 - Identifiers for services and target directories
 - Username changes
 - Social IDs

Best practices outline

- Identity lifecycle
 - State and affiliation changes
 - Deactivation or deletion
- Credential provisioning
 - Password rules and policies
 - Initial password setting
 - Assignment of additional authentication factors
 - Deprovisioning of credentials

Best practices outline

- Target directory provisioning
 - Linking identities between directories
 - Communicating updates to target directories
- Service provisioning
 - Provisioning models: when to provision
 - Reconciliation
 - State changes and fine-grained authorization
 - Deprovisioning and repatriation

Best practices outline

- Groups and roles
 - Types of groups
 - Guidance for architecting
- Auditing
 - Reporting
 - Attestation
 - Workflows to deprovisioning

Product evaluations

- Inspired by TIER Entity Registry WG
- Functional evaluation
- Open source and commercial
- Done by member schools and others
- Collaboration encouraged

What's it look like?

- Simple format
 - 3 questions for each section
 - Product maturity
 - How does the product do it?
 - What's missing?
- A few questions on
 - Licensing and support
 - API capabilities
 - Extensibility and customization

Next steps

- Completed product evaluations this summer
 - Evaluation started for Midpoint
- Produce product comparison
- Discover additional best practices
- Find needs and deficiencies
 - Share needs with TIER developers

Want to help?

- Anyone can help
- Join the working group
- Evaluate your favorite provisioning engine
- Contact Keith Wessel
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