The New Grouper: Its New User Interface and More

IAM Online
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Thank you to InCommon Affiliates for helping to make IAM Online possible

Brought to you by Internet2’s InCommon in cooperation with the Higher Education Information Security Council
- Open source, community-driven access management project enabled by Internet2, National Science Foundation, Universities, and Commercial Affiliates
- Let people & business processes manage access
  - Designed for delegation and distributed management
- Groups and more express all kinds of access policies
  - Dynamic, ad hoc, nested, Boolean
  - Roles, permissions, attributes, rules
- Integratable with most any technology
  - Connectors, APIs, loaders, shell, hooks, changelog, ...
Today’s Agenda

New User Interface  Chris
Other New Features  Shilen
Upgrading and Gotchas  Shilen
Provisioning  Dave
Q&A all along the way  You guys
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Grouper new UI agenda

- Overview
- Screen design
- Dashboard
- Groups
- Entities
- Memberships
- Privileges
Grouper new UI overview

- Designed by Michael Girgis, experienced designer at University of Chicago
  - Includes user experience testing
- Ajaxy (but bookmarkable and backbutton friendly)
- No struts
- CSRF protection
- Rich controls (DOJO) work better and are accessible (e.g. can be controlled with keyboard)
  - Tree control
  - Combobox (can use modal dialog instead)
- New libraries: e.g. bootstrap, less, font-awesome
Grouper new UI screen design

- Tree control
- Search
- Create objects
- Quick links
- Tabbed screens
- Filter and page results
- Hide buttons in menus
Grouper new UI dashboard

- Recent activity
- Widgets
  - Recently used
  - Favorites
  - Services
Grouper new UI groups

- Show commonly needed attributes, hide the rest
- Show memberships by default (like lite UI)
- Easy to edit memberships
- Composites are easier
- Privileges much easier
- Can see where group is used
Grouper new UI memberships

- Can trace a membership to see what paths an entity has in a group
- Works for privileges too
- On the entities screen there are tabs for quick views into a subject’s memberships or privileges
- Can quickly deprovision
Grouper new UI bulk assign

- Can add memberships / privileges from multiple entities to multiple groups at once
- Similar import to Lite UI
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Contents

- Other new features
  - Configuration Overlays
  - Services in Grouper
  - UNIX GID Management
  - Subject Security Realms
- Upgrade and Install Highlights and Gotchas
- Performance
Configuration Overlays

- Before v2.2, each configuration file would contain all properties including the default ones and your customized ones.
  - Upgrades become challenging because you have to merge your configuration files with the new version to get new properties but also keep your custom ones.
- Many (but not all) of the configuration files in v2.2 use a new method to solve this problem.
- There is a base file that contains the default properties and then you have one or more override files.
Configuration Overlays (continued)

- For example:
  - grouper.base.properties – contains all the default properties.
  - grouper.properties – your custom properties go here.

- Another example:
  - grouper.base.properties – contains all the default properties.
  - grouper.properties – your custom properties that apply to all environments.
  - grouper.local.properties – your custom properties that apply to the current environment (test vs prod).
Services in Grouper

- The folder structure in Grouper can be difficult for end users to navigate especially in institutions that have a large number of groups and folders.
- An end user may just be interested in a particular folder somewhere in the hierarchy that contains objects that they can manage for a service.
- Or the objects related to the service may be in multiple folders.
- V2.2 allows tagging folders as a service to make them easier to find and manage.
Services in Grouper (continued)

- Services can be created using the lite UI.
- Services can be assigned to folders also using the lite UI.
- A services widget exists in the new UI that shows on the main page.
UNIX GID Management

- Groups, folders, attribute definitions, and attribute names are now assigned unique integers.
- Those integers can be used for UNIX GIDs.
Subject Security Realms

- Different users might have different privacy requirements for the Subject API.
  - For instance admin users can see more data than regular users. (e.g. FERPA protected attributes)
- When calling search methods in the Subject API, callers can specify a “realm” that is used to adjust how the search takes place and what the results look like.
- The GrouperJdbcSourceAdapter2 source adapter in Grouper supports this feature.
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Upgrade and Install Highlights and Gotchas

• Before you upgrade:
  • Be aware of legacy attribute migration.
  • Be aware of new attribute privileges.
  • Make sure you have enough tablespace.
  • Check to make sure new unique indexes would be added without issue.
  • Analyze your tables.

• Upgrading software and configuration
  • Keep in mind that in Grouper 2.2 many configuration files use configuration overlay.
  • Download Grouper 2.2 software and merge configuration.
Upgrade and Install Highlights and Gotchas (continued)

- Upgrading database
  - Run command to produce SQL script.
  - Execute SQL script
    - Creates stem set table.
    - Adds integer values for groups, folders, attribute definitions, and attribute names.
    - Adds unique indexes for point in time audit tables.
    - Adds new privileges.
    - Backs up legacy attribute tables.
  - Run a post install script (postGrouper2_2Upgrade.gsh)
    - Adds group sets for new privileges
    - Migrates legacy attributes
    - Populates stem set table.
    - Fixes point in time audit due to new privileges
Performance

- Performance testing between v2.2 and v2.1.5.
- Environments loaded with 126K groups, 105K folders, 1 million memberships/privileges, and 585K permissions.
- Tests were run against several of the API methods.
- The numbers for both versions were largely similar.
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Provisioning – Grouper → Downstream

- Grouper PSP for Active Directory / LDAP
- Voot (https://spaces.internet2.edu/x/uA35AQ)
- Experimental Support for SCIM
Future Directions

- Junction for Provisioning Strategy
- Discussion on the grouper-dev list
- Post-PSP Provisioning wiki: [https://spaces.internet2.edu/x/hABkAg](https://spaces.internet2.edu/x/hABkAg)
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Contributing to the Community

- Share info about your deployment on the Community Contributions page.
- Participate on the Grouper-Users List
- Starting point is the Grouper wiki: https://spaces.internet2.edu/display/Grouper/Grouper+Wiki+Home
Evaluation

Please complete the evaluation of today’s webinar

Register today for the Technology Exchange

REFEDS, Advance CAMP, CAMP

See the CAMP 101 and CAMP 201 schedules here: http://www.incommon.org/techex2014.html

October 26-30, 2014 - Indianapolis, Indiana

Complete Technology Exchange information here: http://events.internet2.edu/2014/technology-exchange/
InCommon Shibboleth Installation Workshops
Single Sign-on and Federating Software

September 29-30 – New Jersey Institute of Technology – Newark NJ

November 10-11 – University of Utah – Salt Lake City

Details and registration at www.incommon.org/shibtraining
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