

# The New Grouper: Its New User Interface and More

IAM Online  
September 10, 2014

## **Grouper Project Team**

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cirrus identity



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The logo for Grouper, consisting of three stylized, overlapping waves in black, green, and blue.

# Grouper™

- 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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### **New User Interface**

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### **Chris**

Shilen

Shilen

Dave

You guys

# Groupier 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

# Groupier 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

# Groupier 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

# Groupier 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).

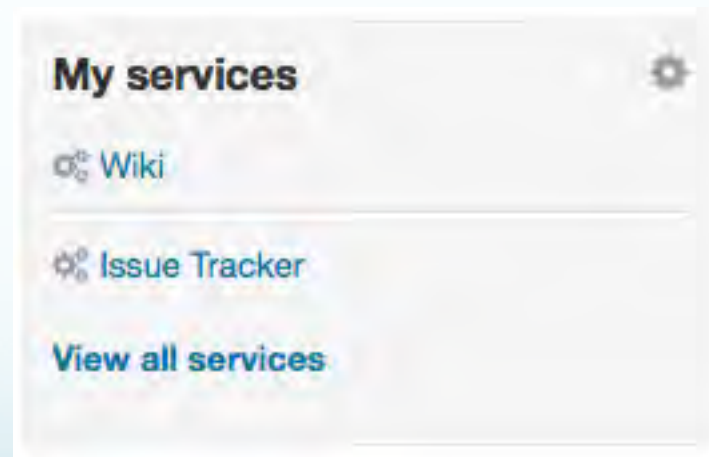


# Services in Grouper

- 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.

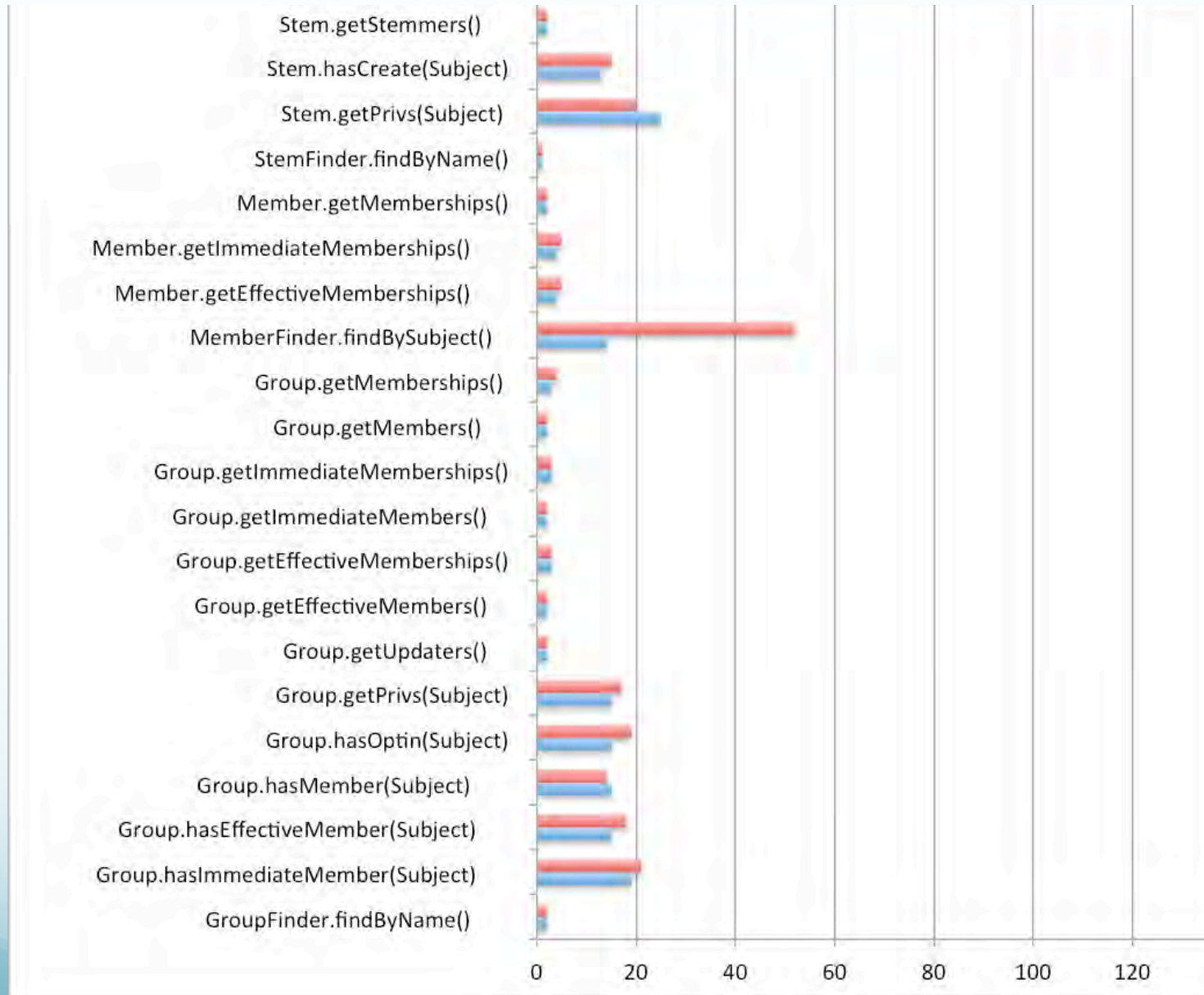
# Upgrade and Install Highlights and Gotchas (continued)

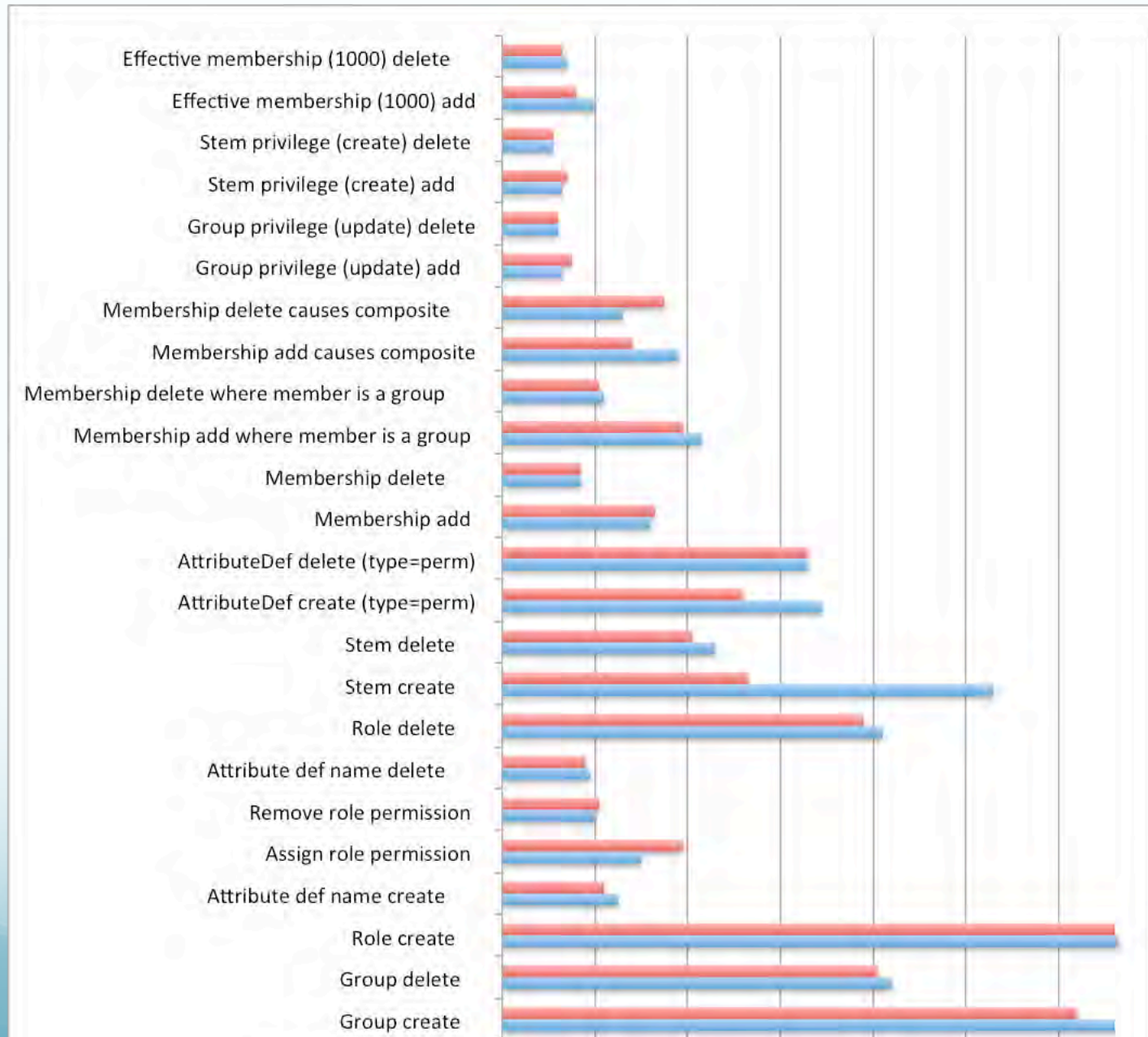
- Upgrading database
  - Run command to produce SQL script.
  - Execute SQL script
    - Creates stem set table.
    - Adds integer values for groups, folders, attribute definitions, and attribute names.
    - Adds unique indexes for point in time audit tables.
    - Adds new privileges.
    - Backs 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>

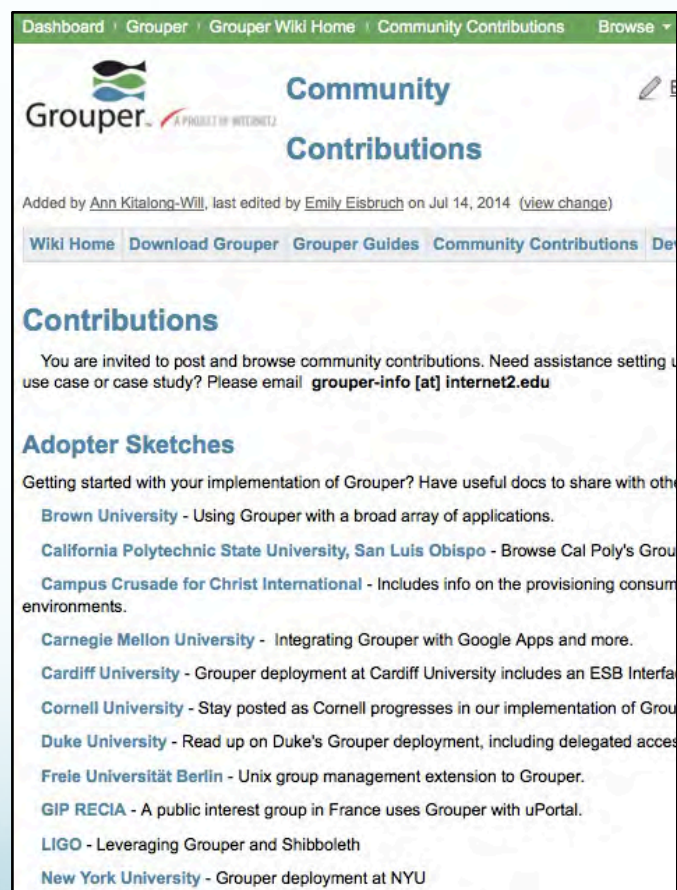


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# Contributing to the Community

- 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>



The screenshot shows the Grouper Community Contributions page. At the top, there is a navigation bar with links for Dashboard, Grouper, Grouper Wiki Home, Community Contributions, and Browse. Below the navigation bar is the Grouper logo and the text "Community Contributions". The page content includes a notice about the page being added by Ann Kitalong-Will and last edited by Emily Eisbruch on Jul 14, 2014. There is a navigation menu with links for Wiki Home, Download Grouper, Grouper Guides, and Community Contributions. The main content area is titled "Contributions" and contains an invitation to post and browse community contributions, along with a list of "Adopter Sketches" from various institutions like Brown University, California Polytechnic State University, San Luis Obispo, Campus Crusade for Christ International, Carnegie Mellon University, Cardiff University, Cornell University, Duke University, Freie Universität Berlin, GIP RECIA, LIGO, and New York University.

# Evaluation

Please complete the evaluation of today's webinar

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## **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](http://www.incommon.org/shibtraining)

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