**Community Contributions**

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**Adopter Sketches**

**How to Share your Grouper Story**

- Please share your Grouper story or adopter sketch to benefit the community. Whether you are sharing Grouper plans, a deployment in progress, or a story about a completed deployment, the community will thank you.
- Need assistance setting up a wiki page for your institution to share your Grouper story?
  - To get help, simply email grouper-info [at] internet2.edu

**Categorization by Use Case**

Looking for certain Grouper use cases? Check out [use cases by category](https://spaces.at.internet2.edu/x/QAM7BQ) to find deployer stories by categories, such as LDAP, AD, Box, Google Groups, VPN, email access, CAS, uPortal and more. Click here for Use Cases By Category: https://spaces.at.internet2.edu/x/QAM7BQ

**Blogs on Grouper Deployment from TIER Campus Success Program Participants**

Check out this link for the blogs on Grouper from the TIER Campus Success Program participants. See the blogs here

**Adopter Sketches by Institution**

- **Brown University (Updated Feb. 2015)** - Using Grouper with a broad array of applications.
- **California Polytechnic State University, San Luis Obispo (2011)** - Browse Cal Poly's Grouper implementation.
- **Campus Crusade for Christ International (2012)** - Includes info on the provisioning consumer and on deploying Grouper to multiple environments.
- **Carnegie Mellon University (Updated Nov. 2017)** - Integrating Grouper with Google Apps and using the Grouper Active-MQ Provisioner (GAP) framework.
- **Cardiff University (2011)** - Grouper deployment at Cardiff University includes an ESB Interface.
- **Colorado State University** - (Added February 2018) - Provisioning from Grouper to LDAP.
- **Columbia University** - (Added June 2016) - Using Grouper to support email and institutional reference groups and using Grouper with Google Groups for authorization.
- **Consortium GARR** - (Added Oct. 2014) - Grouper for a centralized authorization system for multiple virtual organizations.
- **Duke University** - Read up on Duke's Grouper deployment, including delegated access control in Active Directory.
Freie Universität Berlin - Unix group management extension to Grouper.

GEANT (Added June 2015) - Using Grouper for a Central Authorization System for the pan-European research and education network

Georgia Tech - (Added July 2016) Using Grouper for Door Management system.

GIP RECIA - A public interest group in France uses Grouper with uPortal.

Indiana University (New May 2017) - Managing a subset of groups in Active Directory.

Harvard University (New Jan 2020) - making it easier to manage permissions to applications and websites

Kenyon College (New June 2016): Google Groups use case.

Lafayette College (Updated May 2016) - Pilot Deployment with VPN use case.

LIGO - (Updated Feb. 2015) using Grouper to support multiple authorization scenarios for the an international virtual organization

New York University - (Updated May 2016) Grouper deployment at NYU, including selective group exclusion when provisioning.

Newcastle University (Updated 2016) - A video on how groups are structured, information on access control groups using Talend, managing room booking, wireless access and more.

Northern Arizona University - See how Northern Arizona University integrated Grouper and uPortal

Northern Dakota State University - (2020)- info coming soon

Oregon State University (Updated 2017) - using Grouper for video access, Canvas, and Google Apps

Penn State University - (Updated Feb. 2015) Using Grouper with the Central Person Registry.

Rice University - (June 2019) Using Grouper and Shibboleth as part of the Identity First project.

Simon Fraser University (2012) - Using the Grouper Loader, the Changelog and an ESB connector

SLAC National Accelerator Laboratory (2020) - Using Grouper to automate affiliation status events and more

SURFnet OpenConext (2015) - See how Grouper is used within the OpenConext collaboration platform

University of Arizona (Updated 2020) - a self-service utility allows FERPA-trained faculty and staff members to manage ad-hoc groups

University of Auckland, NZ (Added 2016) - Migrating all group management functionality to Grouper

University of Bath, UK (Added 2018) - Using Grouper to manage 10,000 groups and 900,000 memberships

University of California, Berkeley (Updated March 2018) - Provisioning groups to AD LDAP, OpenDJ LDAP and Google groups

University of California Los Angeles (Updated Aug. 2016) - Overview of Grouper use cases and deployment at UCLA

University of California, Santa Cruz (Added Oct. 2015) - Grouper for VPN

University of Chicago (Updated Jan. 2016) - Learn about U. Chicago Grouper, including access management features and VPN delegation.

University of Colorado Boulder (Updated Sept. 2016) - Grouper with Exchange / Office 365

University of Edinburgh (Added April 2015) - Learn about the deployment of Grouper 2.2 with Tomcat 8/Java 8.

University of Florida (Added October 2018) - Extending the Grouper UI using directed graphs. First a prototype. Later, maybe included in Grouper?

University of Hawaii - (Updated October 2018) - See how Grouper is used to augment ListServes and enhance daily termination reports.

University of Illinois Urbana-Champaign - (Updated June 2019) Deploying Grouper in Amazon Web Services

University of Maryland Baltimore County - (Updated May 2018) - using Grouper Docker containers

University of Maryland College Park - (Updated Nov. 2018) - Running Grouper in production integrated with various systems.

University of Memphis - (Brief note added Nov. 2014) Running Grouper API in production.

University of Michigan - (Added Feb 2018) Using containerized Grouper

University of Minnesota - (Added Oct. 2014) Using Grouper to manage access to BPEL workflows, VPN groups and more.

University of Montana - (2019) Using Grouper containers

University of Montreal - (2013) Using Grouper for automatic and delegated group and membership management

University of Nebraska (Updated July 2020) Using Grouper to manage student, employee and residence hall data.
University of North Carolina-Chapel Hill  (Updated May 2019) - custom sync, multiple subject types, building with Maven, deploying to Glassfish

University of North Carolina-Greensboro  (Added August 2018) - Grouper with TIER containers

University of Pennsylvania  (Updated July 2019) -- Read about Penn's advanced Grouper usage, including handling external users and addressing other permissions use cases.

University of Toronto  (Added November 2016) - Using Grouper for distributed/delegated role-based access control

University of Tulsa (2013) - Using Grouper with Shibboleth and Box.com.

University of Utah - (Updated June 2014) A proof-of-concept project within the University of Utah IT department.

University of Waterloo (Added June 2020) - Using affiliation populations to build access definitions

University of Washington (Updated July 2018) - Read about the U-Washington approach to Groups and provisioning and about the upgrade to Grouper 2.3

University of Wisconsin - Madison (Updated Sept. 2016) - Grouper is a component of the Manifest application enabling people to protect apps using a group as well as request campus services for their group.

University of West Bohemia - Look here for several useful items. (note: last update 2009)

Uppsala University in Sweden (Updated Nov. 2014) - View UI screens for adding groups and members.

Université de Lille1 (2012) - Adapting and Frenchify LiteUI / Adaptation et Françisation de LiteUI

Yale - (Added February 2018) - Banner integration, Canvas integration and more

Adopter Sketch Archives

Adopter Sketch Archives - from sites where Grouper is no longer in production

Case Studies

- Brown Extends Grouper Use Across Applications - Brown University
- Grouper Scales Group Management - Duke University
- Newcastle Selects Grouper to Support Collaborative Research - Newcastle University (UK)
- GIP RECIA case study
- LIGO case study
- Northern Arizona University case study

Statistics from the Community

See the table of interesting Grouper statistics

Use Cases

Have a use case that you would like to share or suggest? Detail it here by Adding a Page, selecting the "Grouper-std" template option. To review use cases by category, see this page.

Presentations

Link to the Presentations Page

Guidelines for Contributions to Grouper

Code contributions are more likely to be accepted into Grouper if:

- Uses similar technologies
  - e.g. Java
- Has similar requirements
  - e.g. Java version, database agnostic, etc
- Follow Coding Standards
- Does not add many dependencies (especially specific dependencies)
- Does not add a lot of extra jars
- Has been discussed on the grouper-core list (or dev)
- Uses Grouper framework code
  - e.g. config overlays
- Has compatible open source license
• Does not require expensive licenses
• Has unit tests
• Has a quick start (if applicable)
• The contributor can provide at least minimal ongoing support
• Solves generic problems
• Code is reviewed by Grouper team

See Grouper Developers Coding Standards.

**Code Contributions**

Please attach related materials and provide links. *NOTE: The below contributions may not all be verified by the Grouper development team.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Code Contribution</th>
<th>Description</th>
<th>Contributor</th>
<th>Contributor Home</th>
<th>Grouper Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/2014</td>
<td><a href="https://github.com/cmu-ds/Grouper-ActiveMQ-Provisioner">https://github.com/cmu-ds/Grouper-ActiveMQ-Provisioner</a></td>
<td>Grouper-ActiveMQ-Provisioner (GAP): GAP is written in perl. CMU runs three instances of GAP and we configure it differently to provision Grouper groups in 389, AD and isMemberOf attribute in 389. GAP also supports batching changelog messages to provision large groups.</td>
<td>Rahul Doshi</td>
<td>Carnegie Mellon University</td>
<td></td>
</tr>
<tr>
<td>6/12/14</td>
<td><a href="https://bitbucket.org/uwitiam/group-sync">https://bitbucket.org/uwitiam/group-sync</a></td>
<td>The University of Washington's Groups Service sends all group change events to Amazon SNS. An Amazon SQS queue listens on this topic and is read by a .Net program called the UWWI Group Sync Agent. The source code is available under an Apache 2.0 license on BitBucket</td>
<td>Eric Kool-Brown and Jim Fox</td>
<td>University of Washington</td>
<td></td>
</tr>
<tr>
<td>10/04/12</td>
<td>Unicon Grouper Contributions</td>
<td>Proof of concept integrations to use Grouper groups (or more) in Apache Shiro, Spring Security, and .NET development frameworks</td>
<td>Unicon, Inc. (Bill Thompson, Dmitriy Kopylenko, Misagh Moayyed)</td>
<td>Unicon, Inc.</td>
<td></td>
</tr>
<tr>
<td>06/28/11</td>
<td>Provisioning Consumer</td>
<td>Expose a simple API for creating connectors that push data from Grouper to external systems. Similar to (and based on) the ChangeLog Consumer API, but easier to implement.</td>
<td>Nathan Kopp</td>
<td>Campus Crusade for Christ</td>
<td></td>
</tr>
<tr>
<td>06/29/09</td>
<td>ldap source adapter</td>
<td>Source adapter utilizing VT’s ldap library</td>
<td></td>
<td>University of Washington</td>
<td></td>
</tr>
<tr>
<td>06/29/09</td>
<td>struts-patch</td>
<td>Ensures that the current Strut's 'module' is maintained in links and internal forwards / includes. This enables Strut's modules to be used to provide multiple user interfaces in one web application instance.</td>
<td></td>
<td>University of Bristol, UK</td>
<td></td>
</tr>
<tr>
<td>06/29/09</td>
<td>yale-cas-auth</td>
<td>Provides the CAS client library and configures Servlet API Filters to manage authentication.</td>
<td></td>
<td>University of Bristol, UK</td>
<td></td>
</tr>
</tbody>
</table>

**Documentation Contributions**

When you create a new Grouper documentation page on the Confluence wiki, please do this to ensure that the new page has the `correct horizontal menu/banner` across the top of the page:

• Click the three dots to the right of "Create" in horizontal menu at top of Confluence page
• There’s a popup where "Grouper_std" will be the default template
• Choose the "Grouper_std" template and then click the Create button at bottom right of the popup.
See Also

- Grouper Developers Coding Standards
- Documents and Presentations