Grouper Working Group

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Bill Thompson, Lafayette
AGENDA

• Welcome
• Agenda Bash
• Core Team
• What is Grouper
• Grouper and TIER
• Roadmap and Scheduling
• Grouper Deployment Guide Work (Bill Thompson)
• Community Contributions
• Discussion
Grouper Core Team

- Bert Bee-Lindgren (Georgia Tech) - provisioning
- Misagh Moayyed (Unicon) works on Grouper/TIER, initially focused on build/package management
- Vivek Sachdeva (independent) - WS
- Chris Hyzer (Penn) - Grouper lead, API, WS, and UI
- Shilen Patel (Duke) - API and everything else
- Emily Eisbruch (Internet2) - work group support
What is Grouper?

- Central authorization
- Groups
- Permissions
- Provisioning
- Auditing
- Delegation and distributed management
TIER

• Trust and Identity in Education and Research
• Provides:
  – Governance
  – Funding
  – Requirements
  – Standard tools, infrastructure, collaboration utilities
  – Software
Grouper Roadmap

- Grouper 2.4 to be released Spring 2017 before TIER release
Grouper Roadmap in v2.4

• Refine next generation provisioning
• Add new messaging strategies
  – e.g. ActiveMQ, RabbitMQ/AMQP, Azure, AWS, others?
• Grouper loader real time updates
• Grouper instrumentation
• TIER packaging
• TIER SCIM API implementation
Grouper Roadmap in v2.4 (continued)

- Provisioning by message
- Upgrade vt-ldap to ldaptive (PSPNG to use ldaptive)
- Revise build environment and dependency retrieval (gradle)
- Box integration
- Improve GSH
- Transition all configuration to be properties overlays
- UI accessibility
Grouper Roadmap potentially for v2.4

- Administrative configuration UI  User interface for administration and configuration of Grouper
- Finish the new UI, replace admin and lite UI
Grouper Roadmap unscheduled

- Add remaining attribute/permission operations to WS
- Improve pagination in WS
- Add ability for users to register to be notified of changes to specified objects
- Expire dates on groups and attributes
- Rules on memberships
Instrumentation

• TIER interested in collecting metrics for TIER components including Grouper.
• May help inform us of how Grouper is being used and where improvements can be made.
• Grouper 2.3 has a recent patch to send TIER basic information about your deployment. Currently disabled by default.
  – Version
  – Patches
  – OS
  – Number of recent changes
  – Total registry size
  – PSP/PSPNG running
• Still to do - add web service and UI information
Instrumentation
Other recent updates

- Bad membership finder daemon
  - Automatically detect and fix membership issues
- Rules and effective memberships
- Control which attributes are displayed for a subject and in which order
Grouper loader real time updates (2.4)

• Loader jobs currently do full comparisons

• Can potentially be time consuming for large groups so the frequency of the job may be less than ideal.

• Provide a way for incremental updates
  – Change log
  – Messaging
Provisioning: PSPNG Roadmap

Now (2.3):

- Integration Tests, Bug Fixes/Patches, Videos, Support
- Performance Measurement & Improvements

2.4?:

- Feedback, refactoring, etc
- Deprovisioning Safety Nets
- Grouper Messaging: Message Skip/Retry
- New Endpoints? SCIM?
## Provisioning Architectures

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changelog Reader, Grouper Java API</td>
<td>PSPNG 2.3, Duo, Many Others</td>
<td>OOTB, &lt;Parts, Only Grouper</td>
</tr>
<tr>
<td>Messaging Using Grouper Java API</td>
<td>PSPNG, 2.4?</td>
<td>&gt;Triggering, Retry, API Performance &amp; Power</td>
</tr>
<tr>
<td>Messaging Using Grouper WS</td>
<td>Box, Lafayette, Others</td>
<td>&gt;Triggering, &gt;Languages, &gt;Delegation, Use Other Data</td>
</tr>
</tbody>
</table>
TIER API

- Worked on by Vivek
- TIER API is SCIM with extensions and resources types
- Based on Penn State’s J2EE SCIM implementation
- GET/PUT/POST/DELETE on Groups (with TIER extension)
- GET on Users (with TIER extension)
- GET/PUT/POST/DELETE on Memberships (new resource type)

- What’s next?
Grouper Deployment Guide

TIER Grouper Deployment Guide 1.0

- TIER Grouper Deployment Guide Proposal
- Expand the Columbia Grouper Deployment Guide to cover TIER recommendations
- Work with the TIER community on shared vocabulary, practice and strategies
- Distill community best practices from Community Contributions into specific guidance
- Expand IAM capabilities/use cases

Timeline/Milestones

- TIER working group charter and community team formation - Aug 2016
- 0.5 draft outline TIER Grouper Deployment Guide - Sep 25, 2016
- 2016 Internet2 Technical Exchange presentation/discussion/feedback - Sep 25-28, 2016
- 0.7 draft release Dec 2016
- 0.9 draft release and final comments period Feb-Mar 2017
- 1.0 final release Internet2 Summit Apr 2017
Grouper Deployment Guide

Discussion at TechEx
- Grouper BOF - Tue 2:30pm @ Bayfront B
- ACAMP Session
- Find me in the hall :) 

Discussions after TechEx
- Grouper Deployment Guide Work - TIER Program
- NIST 800-162 ABAC
- Columbia Grouper Deployment Guide
  - What do you wish you knew before you started your Grouper deployment?
  - What is missing from an initial deployment perspective?
  - What should we work on in the way of recommended / best practices?
- Grouper wiki examples (folders, community examples, etc)
  - Good examples of use cases? Good presentation/format?
Grouper Community Contributions

Share your Grouper experience on the Grouper wiki
• Update it from time to time
• https://spaces.internet2.edu/display/Grouper/Community+Contributions
• See or email Emily Eisbruch (emily@internet2.edu) for help setting up your Grouper contributions page

Thanks to all those who have recently updated their Grouper Contrib page!
Grouper Community Contributions

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...

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

Oregon State University *(Updated June 2015)* - Using Grouper for video access, Canvas, and Google Apps

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

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

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

University of Arizona Grouper Pages *(Updated 2014)* - A self-service utility allows FERPA-trained faculty and staff members to manage ac-

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

University of California, Berkeley *(Updated Oct. 2014)* - Grouper in production with CalMessages email broadcast

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.
Staying Informed/Get Involved with Grouper

• Join the Grouper-Users email list
  – To subscribe:
    Email pubsympa@internet2.edu with the subject (case insensitive):
    subscribe grouper-users

• Join the effort to create Grouper Deployment Guide as part of the TIER work, led by Bill Thompson
  – To subscribe:
    – Email pubsympa@internet2.edu with the subject (case insensitive):
      subscribe tier-deploy-guide
Questions/Comments/Feedback