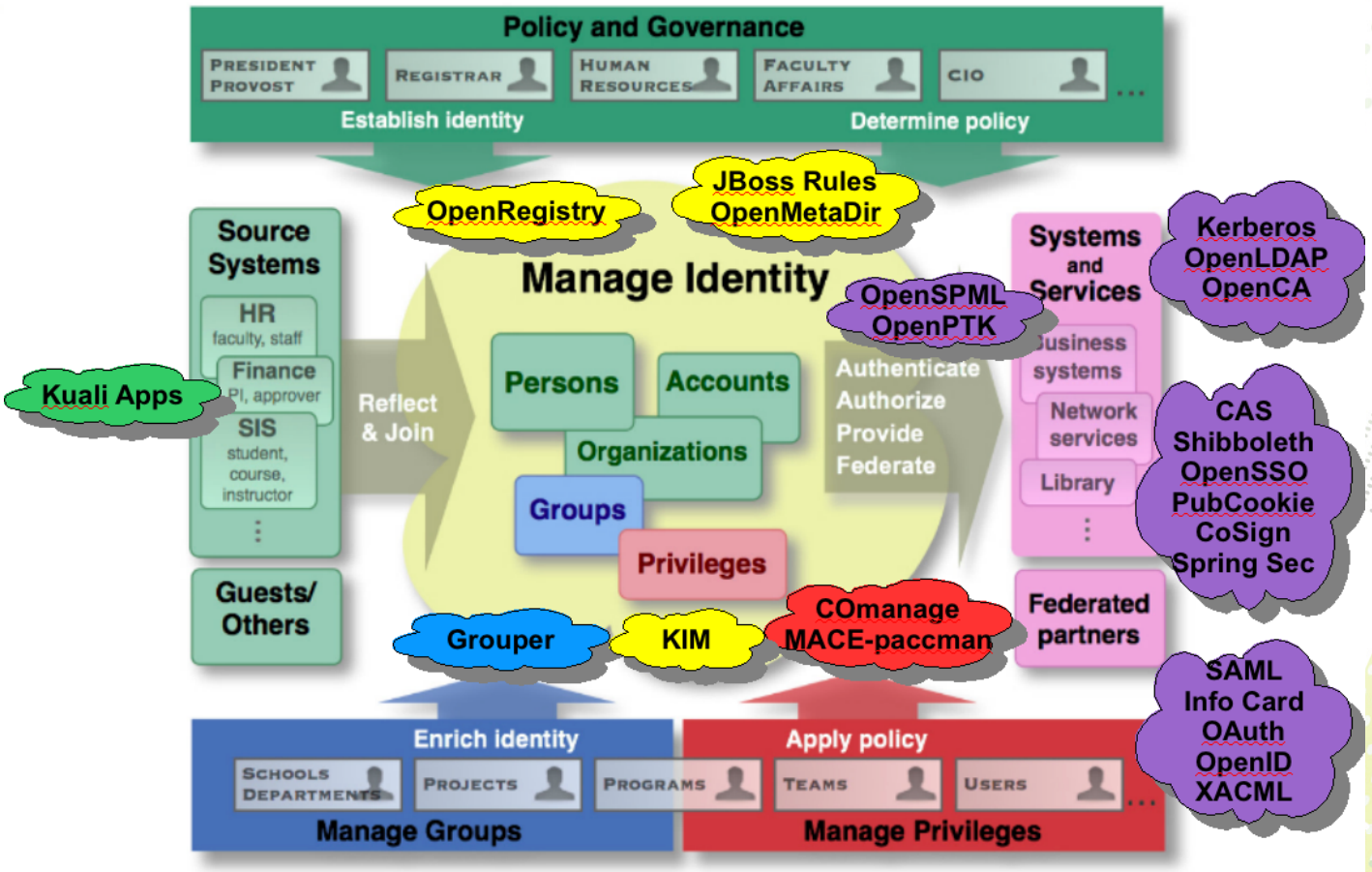
Intro to Grouper

There's nothing fishy about Identity Management with Grouper

What is Grouper

?

Grouper in the Identity Ecosystem



Grouper (Internet2)

- Core functionality:
  - Groups provisioning & de-provisioning engine
  - Downstream Provisioning Service
  - Standardized API
  - Web and Shell front-end
  - Rich privilege-based access control permits delegated management of groups
- Key component in Access Management

What IS Access Management?

In Short: Grant authenticated User A the right to perform Operation B on Resource C according to Policy D

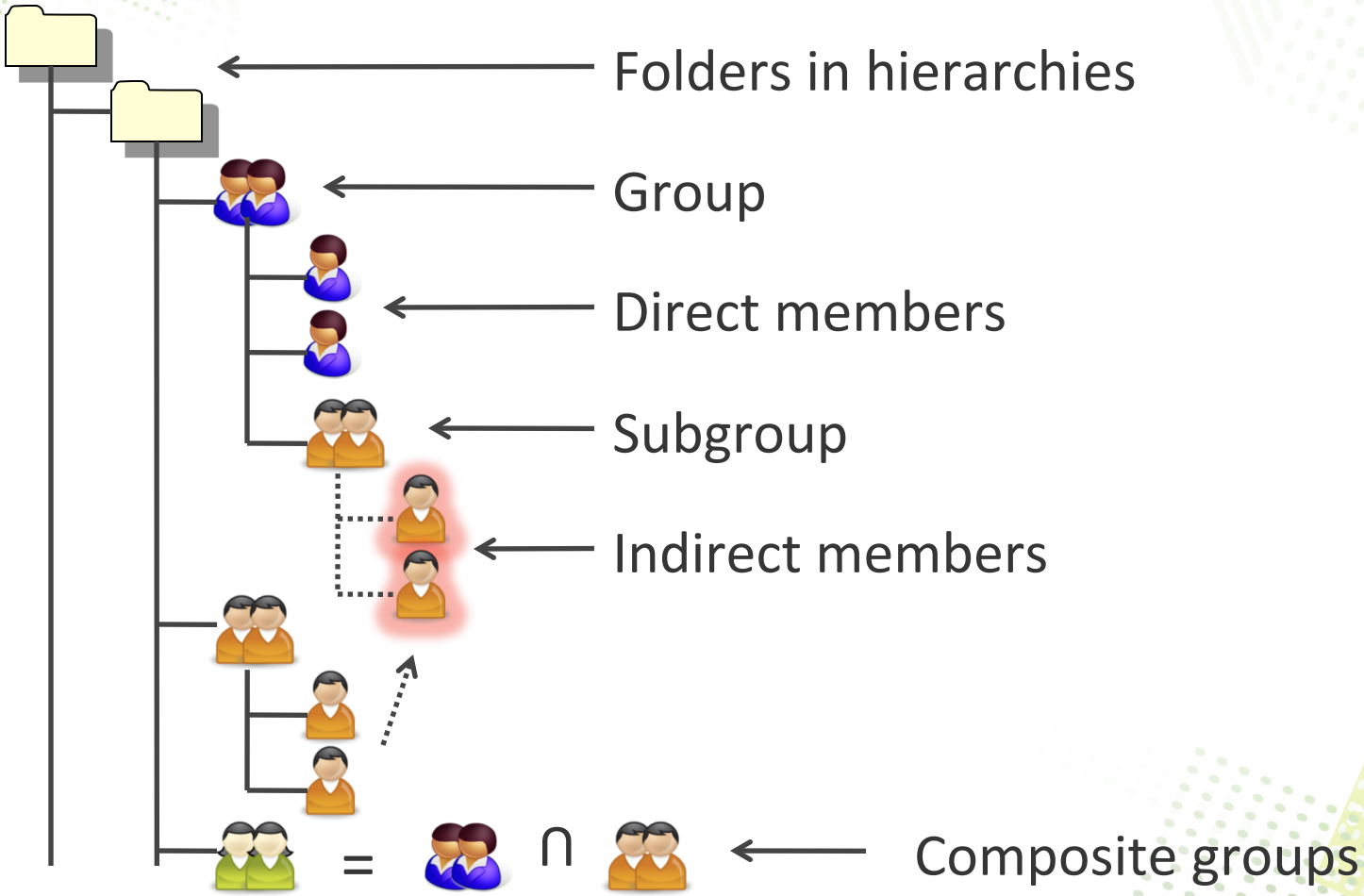
- Stage 1: Authenticate, provide common attributes
- Stage 2: Group entities based on Systems of Record
- Stage 3: Delegate Group and Resource Management
- Stage 4: Move Access Mgmt decisions from services to central system(s)

Stage 1

- LDAP
- CAS
- Shibboleth
- Kerberos
- Mostly solved

Stage 2: Groups

Grouper: Basics



Grouper: Attributes

mailingList

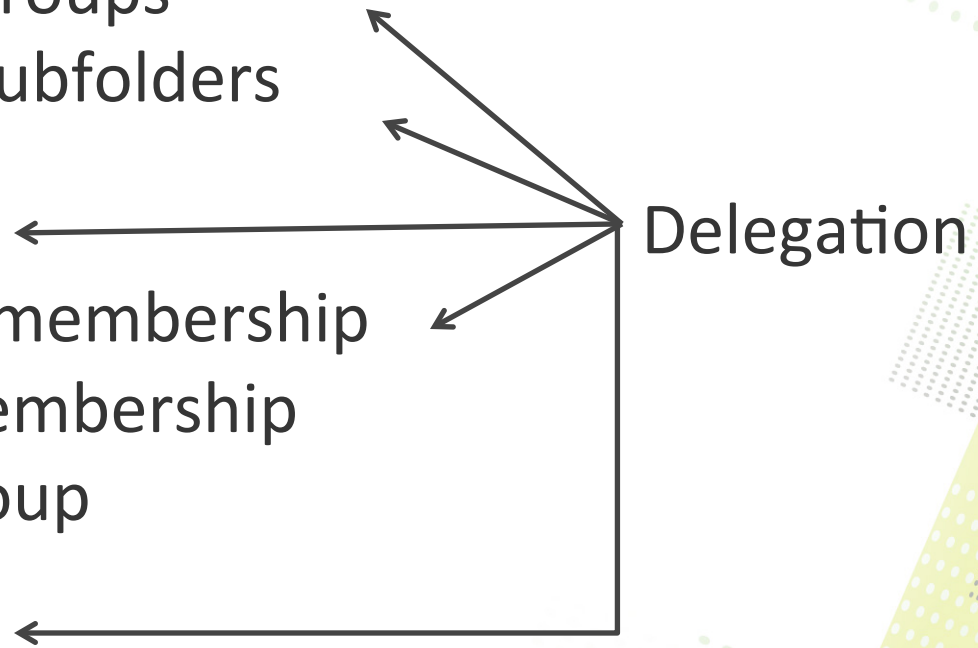
Field	Type	Required	Nullable	Read privilege	Write privilege
alias	attribute	false	true	read	update
allowAttachments	attribute	false	true	read	update
approvers	list	false	true	read	update
mailers	list	false	true	read	update
moderated	attribute	false	true	read	update

Stage 3: Delegate

Grouper delegation

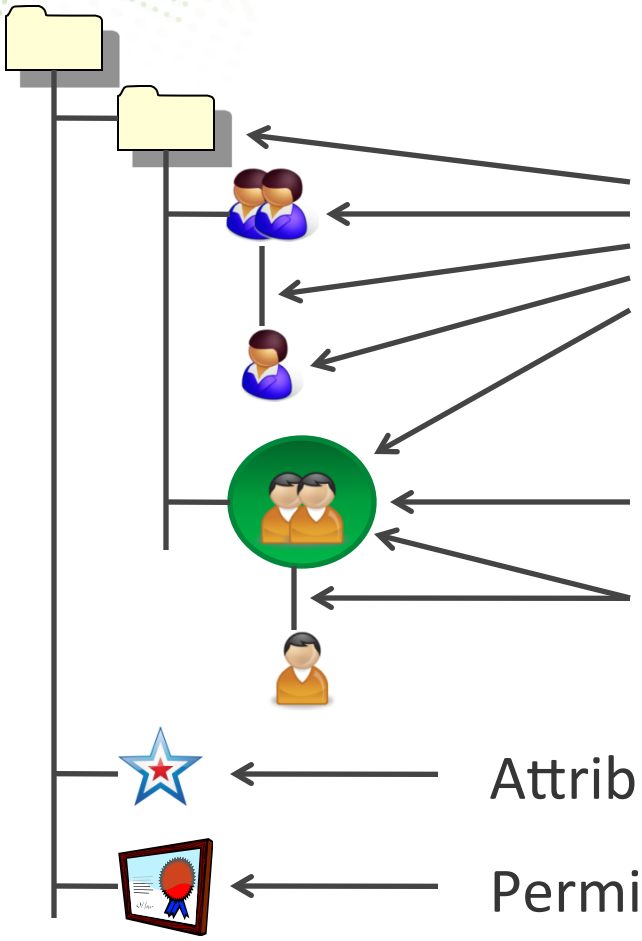
- Create groups
- Create subfolders

- Admin
- Update membership
- Read membership
- View group
- Opt-in
- Opt-out



Stage 4: Centralized Permissions Management

Permissions



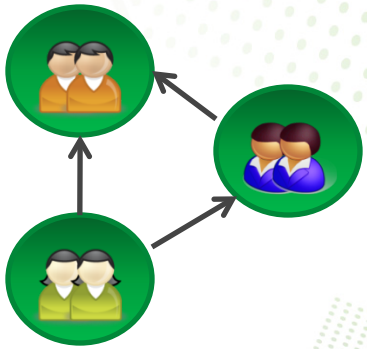
Attributes

Roles

Permissions

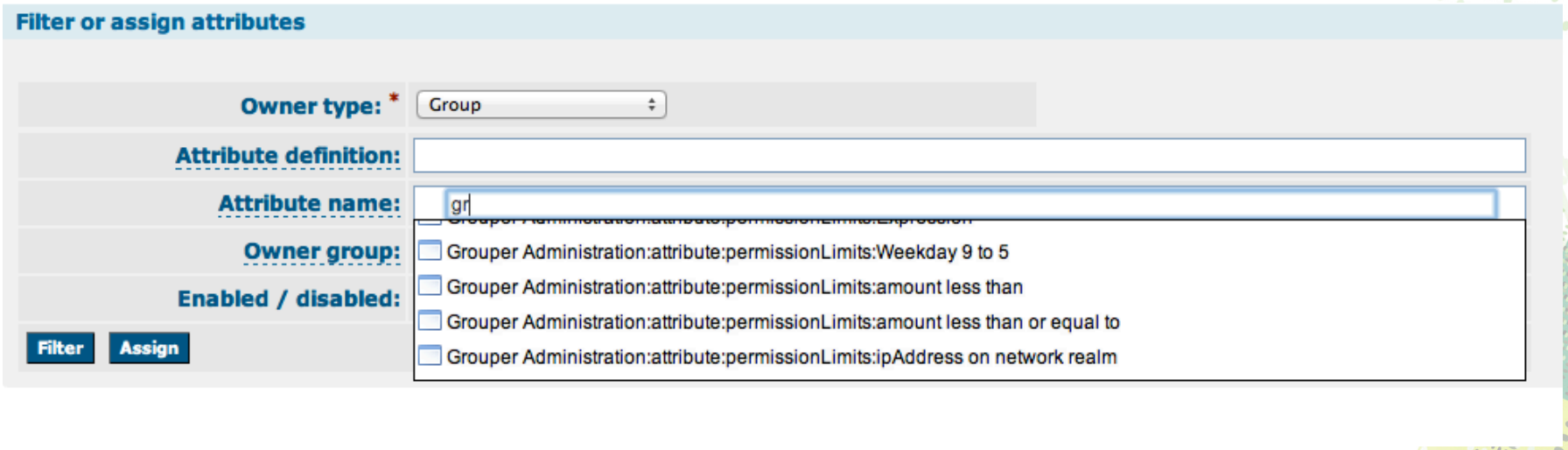
Attribute definition

Permission definition

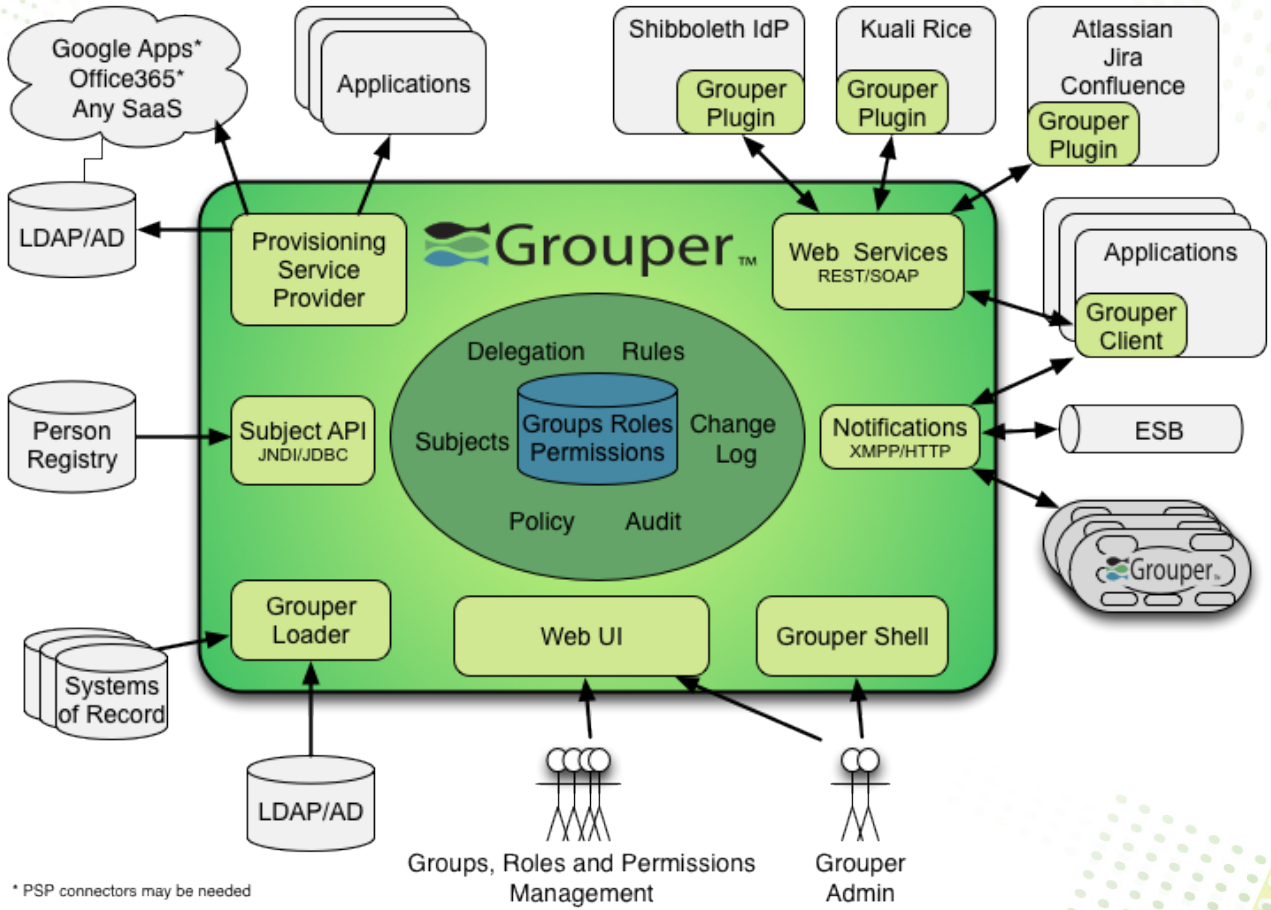


Role inheritance

Permission Attributes



Grouper Components



Grouper Loader

- Grouper's populating engine
- Load from LDAP
- Load from AD
- Load from SQL (Tables or Views)
- Write your own import code

Grouper Quickstart

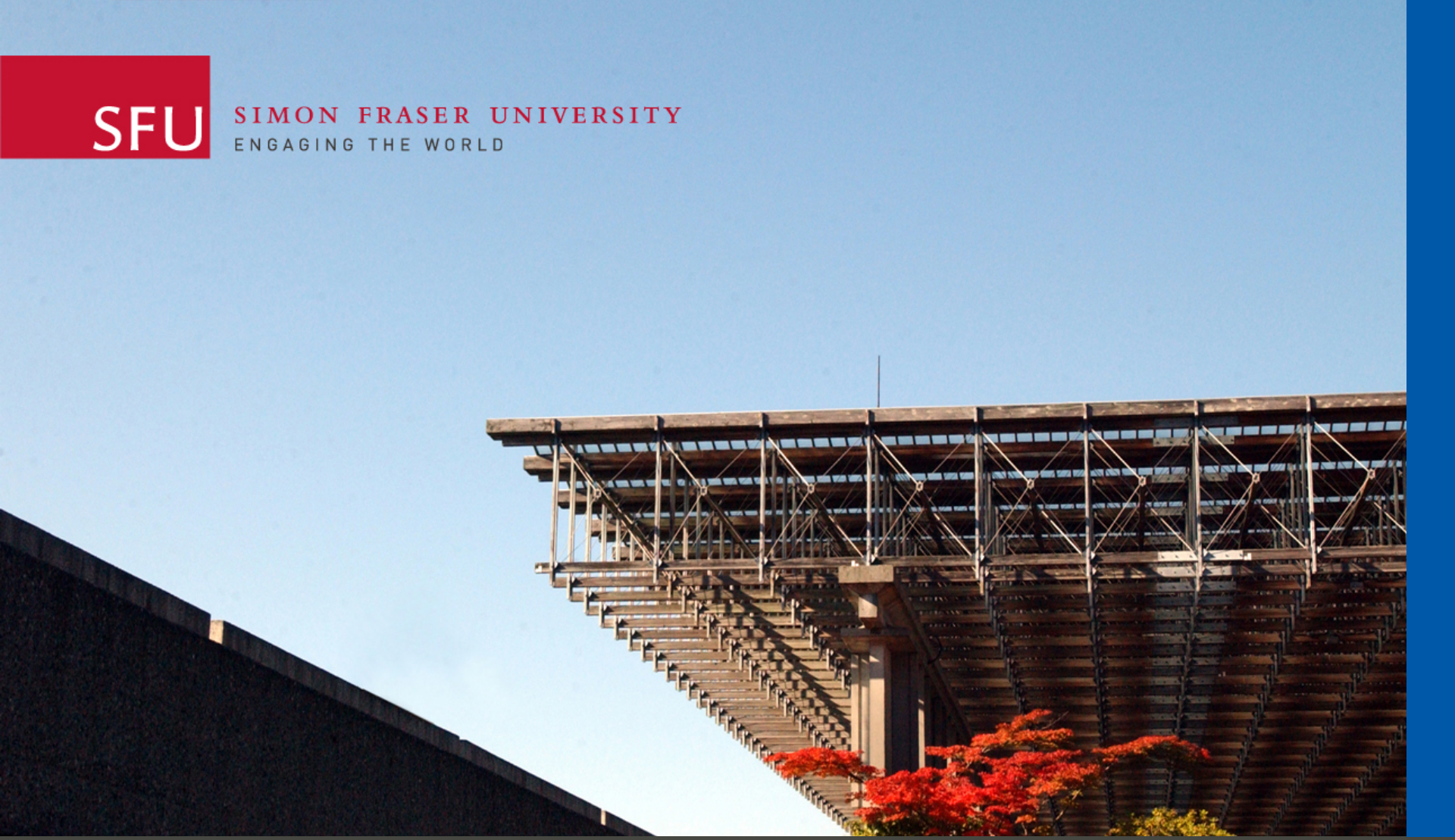
- New version with v2.1. Download the JAR and run
- Install in under 10 minutes on Linux, OS X (suggest Xcode first)
- Automatically grabs pieces that it needs (Tomcat, Ant, libraries)
- Pre-populates example DB

Grouper Challenges

- Documentation is “OK”
- UI is weak (but being rewritten)
- Change is quick – could be hard to keep up

Why Grouper?

- Open source, community-driven project of the Internet2 Middleware Initiative
  - Initial release v0.5 in December 2004
  - v2.1 released in 2011
  - v2.2 due 2012Q4
- Mature code base with at least 20 Higher-Ed contributing sites world-wide
- Developed By and For Higher-Ed



Grouper At SFU

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