University of Washington
Groups Service
Groups at UW

- 40,000 course groups
  - Keep only one year of courses
- 2,000 institutional groups
  - No manual maintenance
- 4,000 ad hoc groups
  Anyone with UWNetId can create
Subjects

- 600,000 UW NetIDs (people and things)
- 1,500 DNS names
- 50,000 groups
- 1,200 AD computer names
- 100 ePPNs
Clients

- Anyone with a uwNetID
  - Get the GUI representations
- Any app with a UWCA certificate
  - Get the plain representations
Group Registry

- Prior to this year used LDAP as DB
- Since 07/2010 using Grouper as registry
  - Mostly use the Java API
  - Some use of gsh (me only)
- Auto-convert ‘:’ to ‘_’
- All subject sources in Grouper DB
GWS service

- Provided by Spring and Velocity
- RESTful service resources:
  - Group
  - Member(s)
  - Search
  - (AJAX queries also)
- GUI by embedded javascript
Activity

- 93% GET
  - 66% Effective groups for member
  - 13% Effective membership of a group

- Shibboleth client requires quick response
  - Effective groups for user
  - < 100ms response
  - 100% availability
Dependent systems - I

- Activity table in Grouper DB
  - Updated by hook classes
  - Group info change
  - Membership change
  - Affiliate attributes
    - e.g. provision-to-google
Dependent systems - II

- Provisioner daemon monitors activity
  - Local LDAP updated directly
  - Other affiliates by RMS messaging
Dependent systems - III

Message headers:
- Target system
- Group name
- Type of activity

Message body (encrypted)
- Details of activity
Institutional groups

- Groups auto-generated from UW data
- Courses (keep one year)
- Students by major
- Departments by employee, budget, etc
- Person categories
  - Grad-student, staff, …