Duke University uses groups to authorize access to applications that are used extensively by faculty and students. This collaborative environment includes services such as Apple’s iTunes U, Duke’s calendaring system, and their portal. A direct feed from PeopleSoft provides the instructor and student information to a central repository to maintain the course groups, which are, in turn, provisioned to the above applications.

The Problem
Duke University’s academic departments also wanted to maintain their own group information or add other members, such as teaching assistants, to the centrally provisioned course groups. They asked for more control over managing their project- and local-based groups, used for authorizing access to departmental resources. However, as the number of groups grew, so did the difficulty in maintaining them. Keeping the membership rosters consistent across multiple services was quite a challenge.

Duke set forth to find a consolidated way to manage the large numbers of class-, department- and project- based groups. Duke needed to provide an interface for academic-support staff to create and manage department group information.

The Solution
After assessing the Identity Management infrastructure, with the assistance of key campus stakeholders, Duke’s IT staff determined that the Grouper Groups Management Toolkit, developed by the Internet2 Middleware Initiative, would best meet their need for unified group management. Grouper provided a mechanism for managing groups with memberships determined by data in the ERP system, those maintained by academic-support staff, or a hybrid of the two.

Since 2006, Duke has used Grouper to populate course memberships through feeds from PeopleSoft and then used the information to provision applications. After Grouper was deployed to manage these institutional groups, the next phase was to implement distributed management of the department groups. This step required providing training for department staff on the use of the Grouper Toolkit, establishing policies and procedures for group stewardship, and putting the technology infrastructure in place.

The Result
Grouper has helped Duke implement a comprehensive group management system and scale their infrastructure to support over 250,000 course, dynamic and local groups. The system supports over 1.7 million group membership entries used to control access and enhance interaction with various applications, including Confluence, Jabber, Lectopia, Sympa, and online personal and shared storage using WebFiles. Individuals can also view their memberships and enjoy departmental control of this important collaboration function and the accuracy that comes with it.

“Grouper has made a tremendous difference in our ability to support both departmental needs and central services, while simultaneously creating a more integrated and robust authorization and collaboration infrastructure.”
— Tracy Futhey
CIO, Duke

About Grouper
Want to learn more about what Grouper can do for your campus? Read more about Grouper on the back of this page and at grouper.internet2.edu.

Grouper Groups Management Toolkit provides group management capabilities with a common user interface. Groups are made available to multiple applications. Grouper is available through Internet2. grouper.internet2.edu.
Grouper Groups Management Toolkit

Giving Stewards Control of Groups to Manage Membership and the Resources They Access

Internet2’s Grouper Groups Management Toolkit enables project managers, departments, institutions and end users to create and manage institutional and personal groups. It puts the control of a group in the hands of its steward and enables the person to manage the membership and the resources a group can access.

Why Should I Use Groups?
Separate applications may use groups to track an individual’s role, or to determine which users are authorized to access the resource. Because groups are managed separately in each application, keeping the membership roster consistent across these services becomes very difficult. If a member left a project, for example, the group’s email list, wiki space, calendar, research database and other shared resources needed to be updated separately.

Grouper provides a way to define a group once and use that group across multiple applications.

Manage from One Location
Grouper consolidates group information and creates a single point of management. Membership changes are done once and provisioned to the applications. A group owner can define membership, create a group structure within a domain, or delegate all of this to someone else.

Distribute Control
Grouper keeps the group membership decisions in the hands of the business/group owners, access control in the hands of the application owners, and the technology management in the hands of the technologists. Individuals can also use the system to review their group memberships.

IT administrators are relieved from the burden of keeping up with the day-to-day group changes and Grouper increases the overall integrity of the policy and technology interaction.

Help Collaboration Happen
With Grouper, an owner sets up a group in one spot, feeding membership information to applications like email lists and calendars. The owner needs no technical skills to create, change or delete groups or members. For example, a researcher might create a group and enable members to participate on an email list or view a web site. Students use Grouper to set up and manage groups for similar applications as they work together on shared projects and class work.

Grouper enables group management institution-wide and on an individual level, providing more secure, robust and responsive methods to control access to resources.

Ease Staff Support Load
Grouper separates the management of groups from the technical system, so a change in technology has no effect. This reduces the end-user support calls associated with underlying infrastructure changes. Removing IT from the middle of managing groups will help ease your helpdesk headaches as well.

How Do I Get Started?
To learn more about the Grouper Groups Management Toolkit, visit the Grouper website (http://grouper.internet2.edu) and join the community by participating on the email lists and attending the workshops and presentations offered around the country.

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