

## Organising Groups within Grouper

The organising of groups within a group management toolkit such as Grouper is important. Effective structuring of groups can allow groups to be re-used or referenced by more than one application and removes any unnecessary duplication of data. At Newcastle University, after discussions we have implemented the following structure of groups to allow an effective method of delegating access control. This document will discuss the structure we have implemented and why.

Groups have been broken down into three main stems, User Groups, Applications, and Corporate data.

### Corporate Data

This is where we store any groups which have been created using HR, Student management or other corporate data sources. These structures are non-editable and are loaded in with either the use of the Grouper Loader or other data integration tools such as Talend. All users of Grouper have read only access to these groups.

This stem allows us to represent key Institutional data from the University's HR systems, for example

- Organisational Structure
- Mapping students to their modules
- Mapping module leaders/lecturers/contributors to their modules

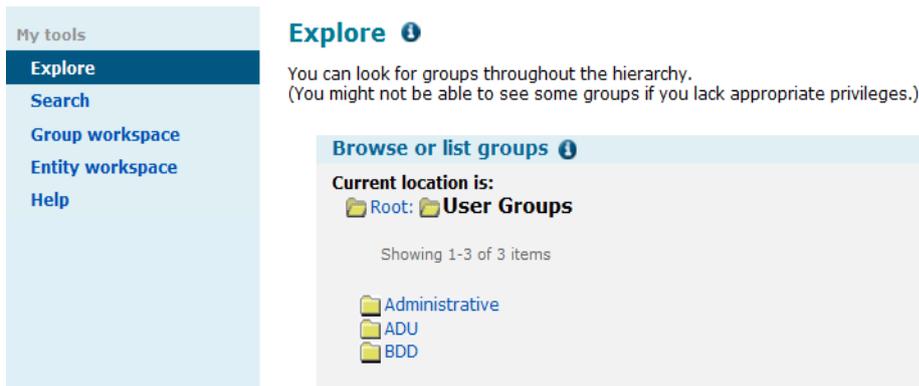


Figure 1: Corporate Data

We are always investigating which Institutional data to represent within Grouper, and have come across scenarios where we did not believe it was worthwhile. As part of a new room booking system, we decided against creating a structure of mapping staff members to the buildings/rooms where they reside, instead we have approached this differently with the use of user created groups. By making this institutional data available we are able to provide administrators of systems more flexibility to delegate access to applications, whilst removing some administrative burden by providing pre-populated groups.

### User Groups

This area is for groups of users or departments to create their own group structure. By default a new stem is set up for the user where they are provided with privileges to create groups/stems within that working area. They are able to then delegate privileges to other users to administer their created groups. They are able to assign memberships on an individual basis or more ideally make use of the groups within the Corporate Data stem.



**Figure 2: User Groups**

This stem is particularly important for representing groups of users which are not represented within our HR systems. For example we do not have a data feed available which says who the members of a particular research group are, and similarly with University societies. In these cases user managed groups can be created with the members of these lists being manually administered, and then subsequently used to provide access control to applications represented within the “Applications” stem.

## Applications

Groups within this stem make use of the groups created in the preceding stems to delegate access to different systems. They provide access lists for applications and resources such as our wiki service, site manager etc. An example for this would be with wikis, we are able to provide access to all of Computing Science by using source group from Org\_Structure, and also a research group created and managed within the user group stem.



**Figure 3: Applications stem**

The above structure has provided a good starting point for us to allow delegation of access control with a combination of pre-loaded and user managed groups, yet it is something we are always monitoring to see if we can improve it. The GRAND project will continue to investigate the structuring of groups to enable more effective delegation of access control.