

# Groups Module

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## Overview

EMu has allowed user to assign a name to a group of records and subsequently retrieve that group since its first version. Users have also been able to add records to a group, allowing a complex set of records to be assembled over time. Information about a group is stored in the **egroups** table but until EMu 3.2.04 this table has been hidden and maintained via the EMu client: when a user adds to or saves a group, the corresponding entry in the **egroups** table is adjusted automatically.

EMu 3.2.04 adds a module interface to the **egroups** table and it is now possible to insert, update and delete groups through the Groups module as well as through the *Tools>Group* set of menu commands. A new group type, **query**, allows a *texql* statement to be stored with the group name. When the group is retrieved, the statement is executed and resulting records displayed.

There are now three types of groups supported:

- **static** - list of record IRNs
- **terms** - list of columns and associated query terms
- **query** - a *texql* statement

Finally, group permissions have been changed to use Record Level Security to determine which operations are available for which users. The creator of a group, or someone with permission to alter security settings, can now assign other users the ability to manipulate the group. The available permissions are:

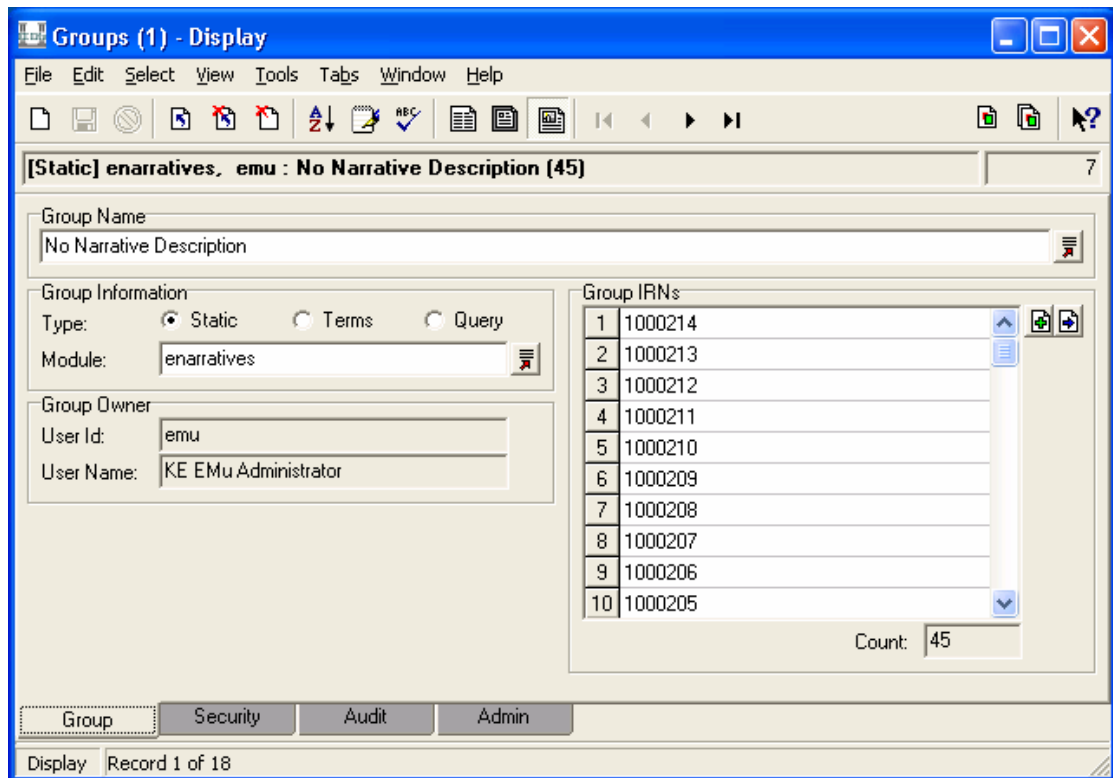
- **display** - user can retrieve the group
- **edit** - user can add or replace records in the group
- **delete** - user can delete the group


The new Groups module provides a convenient way to create, manipulate and remove groups.


## Static Groups

A **static** group stores the IRNs of records that make up the group. Records in the list must be from the same module.

The Groups module displays a static group as a Linkgrid with one IRN per row. A count is also shown indicating how many records are in the group. The module name and the owner of the group are also stored:



The View Attachment  button can be selected to display an instance of the source module and retrieve all records in the group. In this example, the Narratives module would display with 45 records listed.

The Add Attachment  button can be used to add new records to the group. In this example, selecting this button would open the Narratives module in Search mode. Records can be found and attached in the usual way. If the Narratives module is already open, it is possible to use the *Drag and Drop* method to add records to the group. To delete a record, or series of records, the Linkgrid context menu can be used (right click in the *Group IRNs* Linkgrid and select **Delete**).

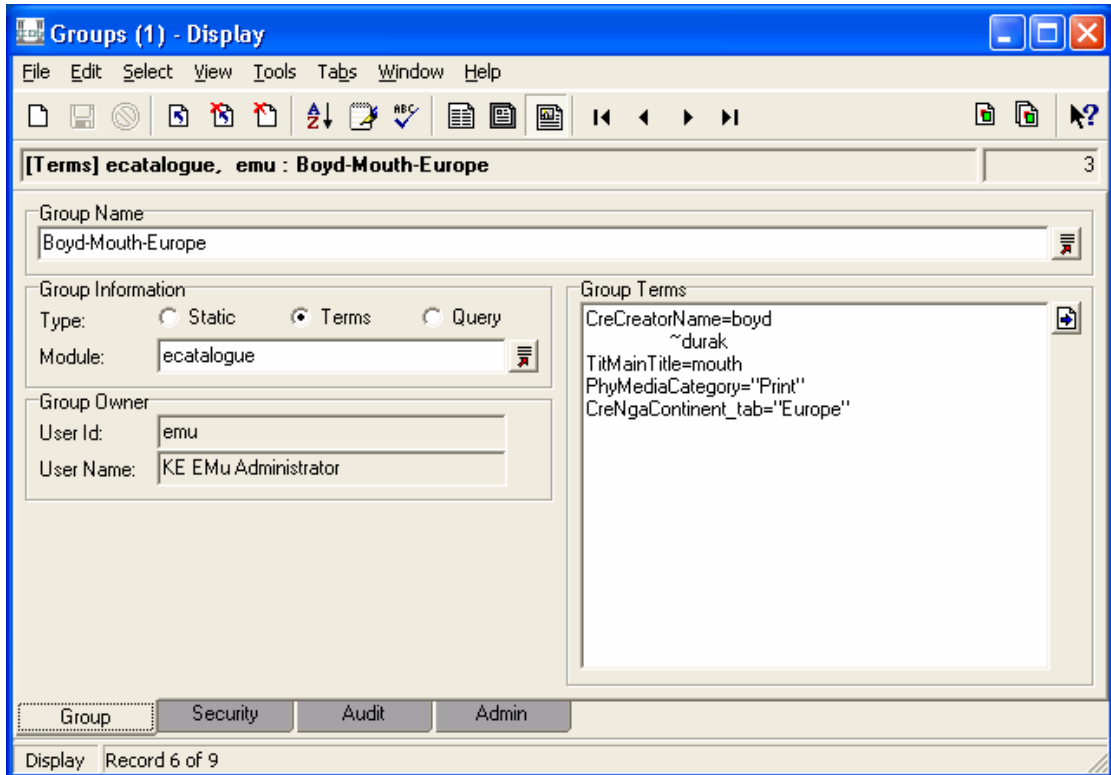
A new **static** group can be created using the *File>New Record* command and selecting the **Static** Radio button. A **Group Name** is mandatory. It is not possible to attach records to the group until a **Module** name has been supplied. Deleting a group record is performed via the usual command (*File>Delete>Current Record*).

**Static** groups are also created / updated / deleted via the *Tools>Groups>Current Record*, *Tools>Groups>Selected Records*, *Tools>Groups>All Records in Results* menu commands from within the source module (Narratives in the example above).

## Terms Groups

A **terms** group consists of the query terms and column(s) in which to search for the terms. As the records in the group are determined by a query, the number of records in the group may vary as records are added / modified / deleted. **Terms** groups are thus a form of *dynamic* group as the records within the group vary dynamically depending on the records in the module.

The screenshot below shows a typical **terms** group:



The main difference with a **static** group is that the *Group IRNs* Linkgrid has been replaced with the *Group Terms* Richedit control. The *Group Terms* control contains the query terms that generate the group. The format of an entry is:

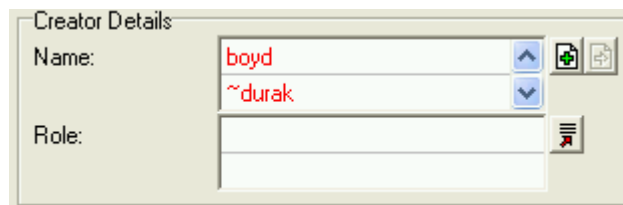
```
colname=term [term]
           [term]
. . .
```

where:


*colname* is the name of the column into which the query terms will be placed. To determine the name of a column the EMu *What's this help?* facility can be used.

*term* is a query term as it is entered into the client and corresponds to one line in a query Linkgrid control. If the query terms continue over more than one line (that is an OR query), the second and subsequent terms must be indented by one tab stop.

The first two lines in the example above would look like:



in the Catalogue query tab. Any column in the module may be queried using this group type, including reference columns (that is, columns that access data in another module, such as the *Name: (Creator Details)* field above).

The View Attachment  button is used to retrieve all the records in the group in a new instance of the module (in this case the Catalogue module). This is the same as selecting the **Retrieve** command when retrieving the group. Note that it is not possible to click the View Attachments button until a *Module* has been specified.

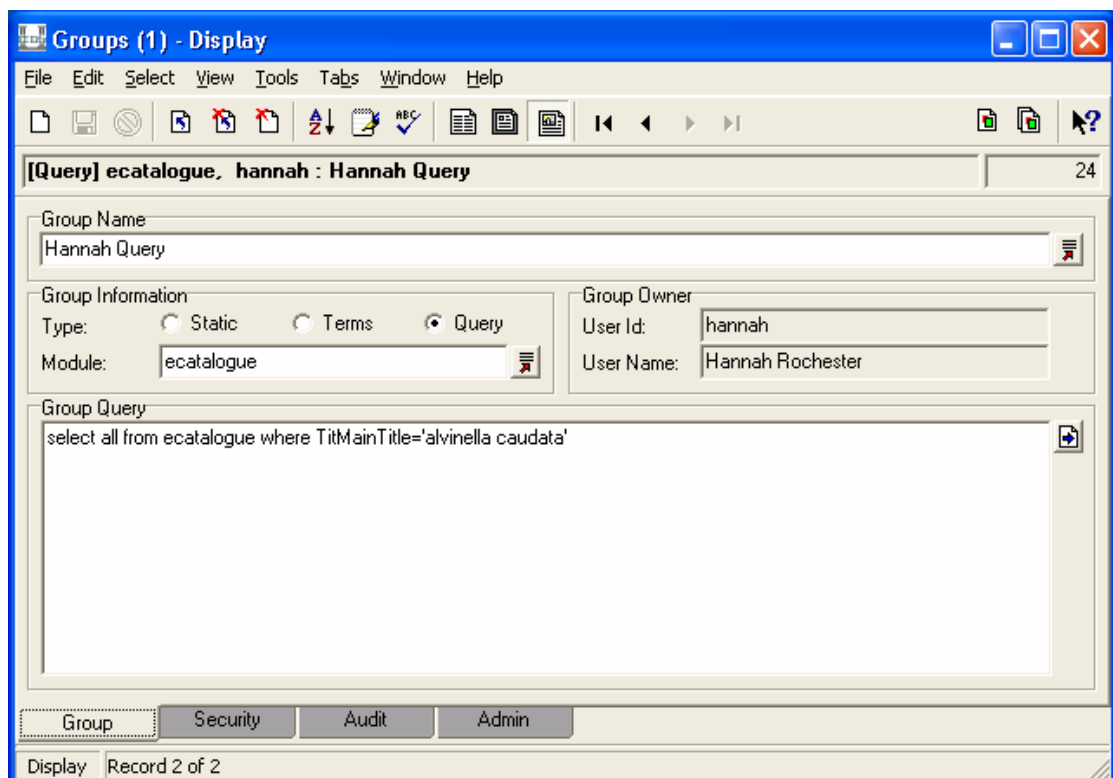
A new **terms** group is created in the same way as for a **static** group, except that the *Group Type* must be set to **Terms** rather than **Static**. To alter the query terms the *Group Terms* Richedit control text is altered directly. Deleting a group is the same as for deleting a **static** group.

**Terms** groups can also be created / updated / deleted via the *Tools>Groups>Save Search Criteria* menu command from within the source module (Catalogue in the example above).

## Query Groups

A **query** group contains a *texql* query statement. When the group is retrieved the query statement is executed and the resulting records displayed. The *texql* statement can contain any **where** clause with any operators to define the records to be retrieved.

The screenshot below show a typical **query** group:



The information stored is similar to a **terms** group except that the *Group Terms* Richedit is replaced with the *Group Query* Richedit, in which the *texql* statement is stored.

The format of the *texql* statement must be:

```
select all
from table
where clause
```


where:

*table* is the name of the module in which the search will be executed. The name can be determined by using the EMu *What's this help?* facility on a field in the required module and must be the same as the value in the *Module: (Group Information)* field in the Groups module.  
*clause* can be any valid *texql* query clause and may include references to other modules (*joins*) and operators.

In the previous example the query statement is:

```
select all from ecatalogue where TitMainTitle='alvinella  
caudata'
```

which indicates that Catalogue records with a *Main Title* of **alvinella caudata** will be found.

Select the **View Attachment**  button to execute the *texql* statement and display any matching records in a new instance of the queried module.

A new query group is created in the same way as for a **static** group, except that the *Group Type* must be set to **Query** rather than **Static**. To alter the query the *Group Query* Richedit control text is altered directly. Deleting a group is the same as for deleting a **static** group.

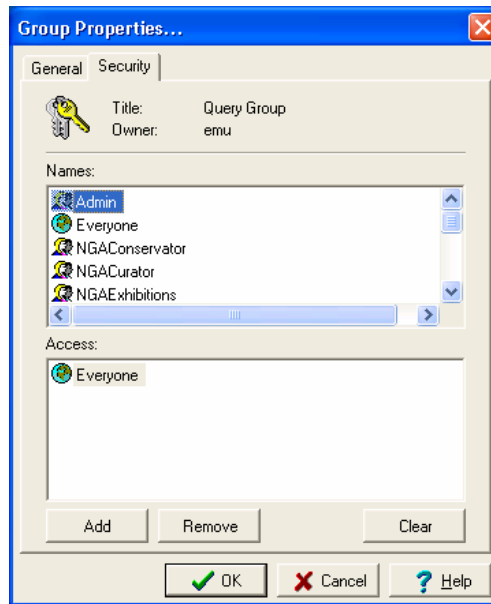
Query groups can only be created in the **Groups** module.

## Groups Security

The EMu Groups facility has been updated to use Record Level Security permissions to control access to groups. This results in greater flexibility as it allows users other than the owner of a group to manipulate it. The three Record Level Security privileges, **Display**, **Edit** and **Delete** are discussed below in relation to groups.

### Display

The **Display** security privilege determines which users / groups can view and retrieve a group. It can be set on the *Security* tab of the group record in the Groups module, or on the *Security* tab of a group's **Group Properties** box (which is accessed by selecting **Tools>Groups>Retrieve Group** from a module Menu bar, selecting a group in the Restore Group box and then selecting the **Properties** button):

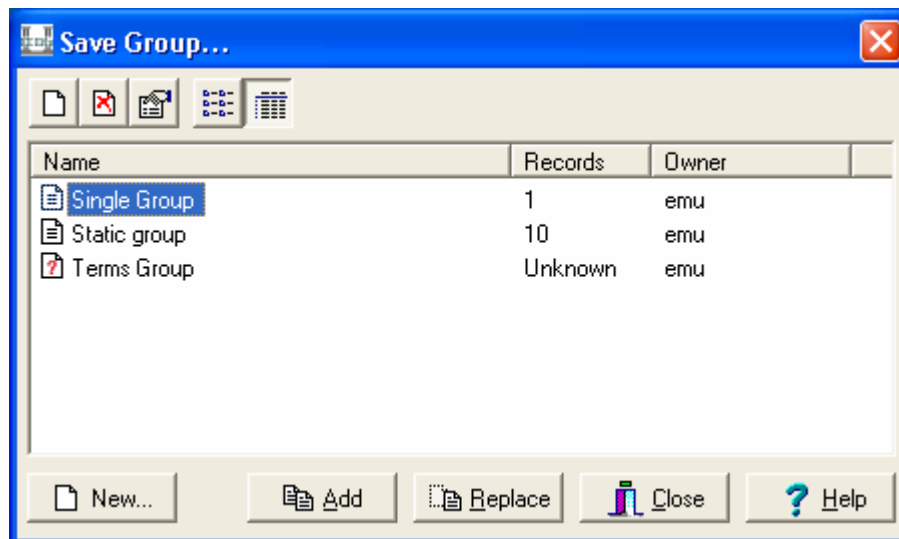


If you do not have this permission, you will not be able to see the group listed in the **Restore Group** or **Save Group** dialogue boxes.

## Edit

The **Edit** security privilege is allocated to all users and groups who are allowed to add, replace or remove records from the group. The only way to give users or groups this permission is to change the setting on the *Security* tab of the group record in the Groups module.

Users or groups with this permission can select the **Add** and **Replace** buttons on the **Save Group** box.



## Delete

The **Delete** security privilege is used to determine who is allowed to delete the group. The only way to grant this permission is to change the settings on the **Security** tab for the group record in the Groups module.

Users or groups with this permission can select the **Delete** button or command from the **Retrieve Group** or **Save Group** dialogue boxes:

