

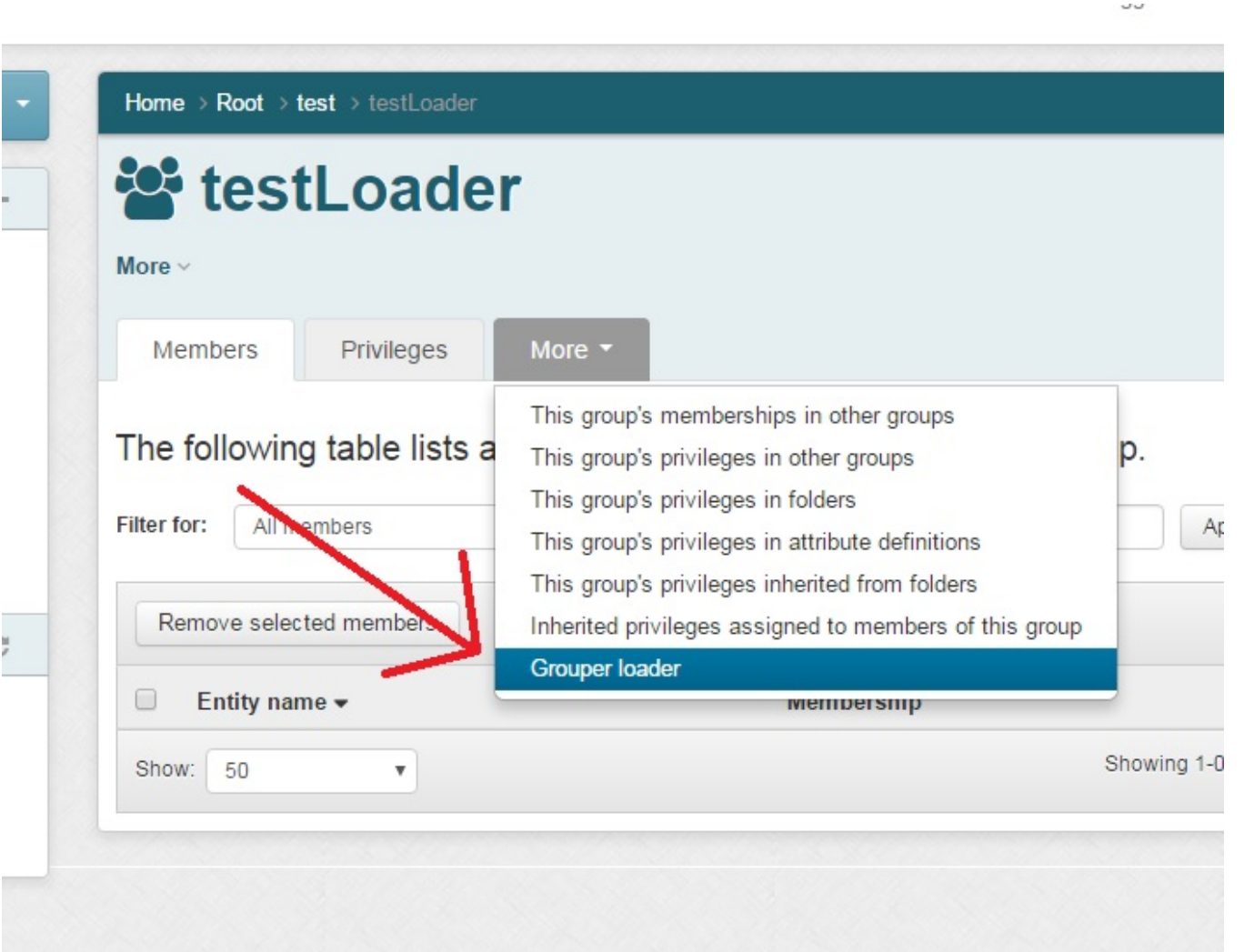
Grouper loader on UI view

Wiki Home	Grouper Release Announcements	Grouper Guides	Grouper Deployment Guide	Community Contributions	Internal Developer Resources
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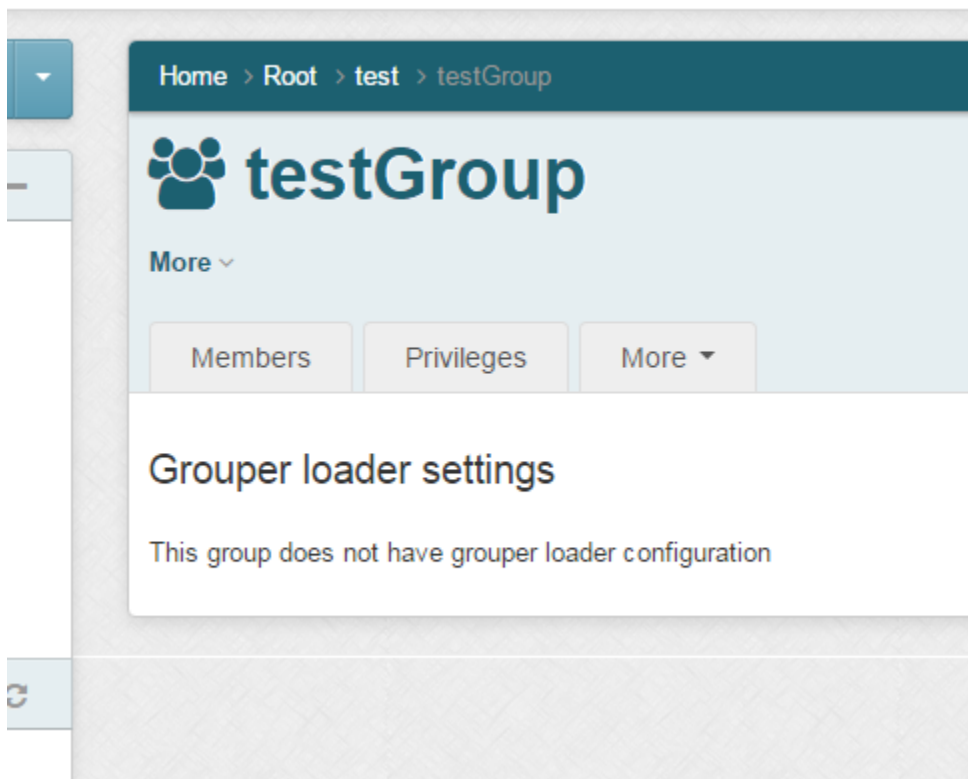
This view of loader settings will show the settings for the job and show documentation on each setting. If there is no loader job it will indicate that. There is a drop down menu on the right for more loader actions.

Access the settings screen

Click on the grouper loader tab in a group that has loader configuration, you will see this screen.



No loader job screen



SQL SIMPLE job screen



More actions ▾

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Grouper loader settings

This group has grouper loader configuration

Source type	SQL pull the members from a SQL database. Can be SQL or LDAP
Loader type	SQL_SIMPLE the SQL query loads the members of this group. Can be SQL_SIMPLE or SQL_GROUP_LIST
Database name	grouper jdbc:mysql://localhost:3306/grouper_v2_3 server ID that is configured in the grouper-loader.properties that identifies the connection information to the database server. Note: "grouper" means use the Grouper registry database connection.
SQL query	select subject_id from whatever query for memberships. Since this is SQL_SIMPLE, the SUBJECT_ID or SUBJECT_IDENTIFIER or SUBJECT_ID_OR_IDENTIFIER column is required, and the SUBJECT_SOURCE_ID column is optional (but recommended for better performance). SUBJECT_ID has the best performance, and SUBJECT_IDENTIFIER and SUBJECT_ID_OR_IDENTIFIER are slower since they require subject API lookups. If the data has group names as members, it must be in a SUBJECT_IDENTIFIER column.
Schedule type	START_TO_START_INTERVAL Runs a certain amount of seconds from last run. Can be CRON (recommended) or START_TO_START_INTERVAL
Schedule interval (seconds)	7200 2 hours 0 minutes 0 seconds
Priority	3 this job has lower than the default and middle priority of 5
Require members in other group(s)	test:testGroup, abc, 9c42abca956e4776a50ec558505cf6da 👤 testGroup Unknown 👤 testGroup2

SQL group list job screen

Grouper loader settings

This group has grouper loader configuration

Source type	SQL pull the members from a SQL database. Can be SQL or LDAP
Loader type	SQL_GROUP_LIST the SQL query loads the members of multiple groups
Database name	grouper jdbc:mysql://localhost:3306/grouper_v2_3 server ID that is configured in the grouper-loader.properties that identifies the connection information to the database server. Note: "grouper" means use the Grouper registry database connection.
SQL query	select * from query query for memberships. Since this is SQL_GROUP_LIST, the required GROUP_NAME column holds the group system name of the membership. the SUBJECT_ID or SUBJECT_IDENTIFIER or SUBJECT_ID_OR_IDENTIFIER column is required, and the SUBJECT_SOURCE_ID column is optional (but recommended for better performance). SUBJECT_ID has the best performance, and SUBJECT_IDENTIFIER and SUBJECT_ID_OR_IDENTIFIER are slower since they require subject API lookups. If the data has group names as members, it must be in a SUBJECT_IDENTIFIER column.
Schedule type	CRON Cron setting runs on a certain schedule. Can be CRON (recommended) or START_TO_START_INTERVAL
Schedule	0 0 06 * * ? At 6:00 AM
Priority	5 this job has the default and middle priority of 5
Require members in other group(s)	test:testGroup, abc, 9c42abca956e4776a50ec558505cf6da testGroup Unknown testGroup2
Group query (metadata on groups)	select * from whatever query (optional) for SQL_GROUP_LIST which should return cols: group_name, group_display_name (optional), group_description (optional). This should return all groups managed by this job. The name and display name are the full folder path. If there is a column named any of the following: readers, viewers, admins, updaters, optins, optouts, group_attr_readers, group_attr_updaters, then the data in the column (comma separated subjectId's or subjectIdentifiers which can include group names) will be assigned to that group's privilege list. Note you can use inherited privileges on a folder instead.
Groups like sql part	groupsLike sql like string (e.g. school:orgs:%org%_systemOfRecord), and the loader should be able to query group names to see which names are managed by this loader job. So if a group falls off the loader resultset (or is moved), this will help the loader remove the members from this group. Note, if the group is used anywhere as a member or composite member, it wont be removed.
Grouper types applied to groups	thisType, thatType comma separated GroupTypes which will be applied to the loaded groups. e.g. addIncludeExclude

LDAP simple job screen

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[Privileges](#)
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Grouper loader settings

This group has grouper loader configuration

Source type	LDAP pull the members from an LDAP server. Can be SQL or LDAP
Loader type	LDAP_SIMPLE loaded from LDAP filter which returns subject ids or identifiers. Can be LDAP_SIMPLE, LDAP_GROUP_LIST, or LDAP_GROUPS_FROM_ATTRIBUTES
Server ID	personLdap ldap://ldap.andrew.cmu.edu/dc=cmu,dc=edu server ID that is configured in the grouper-loader.properties that identifies the connection information to the LDAP server
LDAP filter	(& (cmuAndrewCommonNamespaceId=*dest*) (objectClass=cmuPerson)) LDAP filter returns objects that have subjectIds or subjectIdentifiers
Subject attribute name	guid attribute name of the returned object the holds subject IDs or identifiers
Search base DN	ou=person location that constrains the subtree where the filter is applicable. Note, this is relative to the base DN in the ldap server config in the grouper-loader.properties for this server. This makes the query more efficient
Schedule	0 0 8 * * ? At 8:00 AM
Subject source ID	source ID from the sources.xml that narrows the search for subjects. This is optional though makes the loader job more efficient
Subject lookup type	can be either: subjectId (most efficient, default), subjectIdentifier (2nd most efficient), or subjectIdOrIdentifier
Search scope	how deep to search in LDAP. Can be OBJECT_SCOPE, ONELEVEL_SCOPE, or SUBTREE_SCOPE (default)
Priority	this job has the default and middle priority of 5
Subject expression	JEXL expression language fragment that processes the subject string before passing it to the subject API. e.g. \${loaderLdapElUtils.convertDnToSpecificValue(subjectId)}

LDAP groups from attributes job screen

Grouper loader settings

This group has grouper loader configuration

Source type	LDAP pull the members from an LDAP server. Can be SQL or LDAP
Loader type	LDAP_GROUPS_FROM_ATTRIBUTES returns subjects which have a multi-valued attribute e.g. affiliations where groups will be created based on subject who have each attribute value. Can be LDAP_SIMPLE, LDAP_GROUP_LIST, or LDAP_GROUPS_FROM_ATTRIBUTES
Server ID	personLdap ldap://dap.andrew.cmu.edu/dc=cmu,dc=edu server ID that is configured in the grouper-loader.properties that identifies the connection information to the LDAP server
LDAP filter	(&(objectClass=cmuPerson)(cmuAndrewId=al*)((cmuDepartment=Mechanical Engineering) (cmuDepartment=Biological Sciences)(cmuDepartment=English))) LDAP filter returns objects which are subjects, and the subjects have attributes which will be the groups they are in
Subject attribute name	cmuAndrewCommonNamespacedId attribute name of the returned users which holds subject ID or identifier
Search base DN	ou=person location that constrains the subtree where the filter is applicable. Note, this is relative to the base DN in the ldap server config in the grouper-loader.properties for this server. This makes the query more efficient
Schedule	0 0 8 * * ? At 8:00 AM
Subject source ID	cmuDirectory source ID from the sources.xml that narrows the search for subjects. This is optional though makes the loader job more efficient
Subject lookup type	subjectIdentifier can be either: subjectId (most efficient, default), subjectIdentifier (2nd most efficient), or subjectIdOrIdentifier
Search scope	how deep to search in LDAP. Can be OBJECT_SCOPE, ONELEVEL_SCOPE, or SUBTREE_SCOPE (default)
Priority	this job has the default and middle priority of 5
Attribute filter expression	grouper loader LDAP JEXL expression to filter attributes in LDAP_GROUPS_FROM_ATTRIBUTES. e.g. \${attributeValue == 'a' attributeValue == 'b'} \${attributeValue != 'a' && attributeValue != 'b'} \${attributeName.toLowerCase().startsWith('st')} \${attributeName =~ '^fa.*\$' }
Subject expression	JEXL expression language fragment that processes the subject string before passing it to the subject API. e.g. \${loaderLdapEiUtils.convertDnToSpecificValue(subjectId)}

Extra LDAP attributes	attribute names (comma separated) to get LDAP data for expressions in group name, displayExtension, description
Group attribute name	cmuDepartment attribute name of the filter result objects that holds the group name. Note, you can put multiple attribute names here comma separated
Require members in other group(s)	
Groups SQL 'like' configuration	sql like string (e.g. school.orgs:%org%_systemOfRecord), and the loader should be able to query group names to see which names are managed by this loader job. So if a group falls off the loader resultset (or is moved), this will help the loader remove the members from this group. Note, if the group is used anywhere as a member or composite member, it wont be removed.
Group name expression	groupsFromAttributes:\${groupAttribute} JEXL expression language fragment that evaluates to the group name (relative to the stem of the group which has the loader definition). groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Group display name expression	JEXL expression language fragment that evaluates to the group display name. groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Group description expression	JEXL expression language fragment that evaluates to the group description. groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Grouper types applied to groups	comma separated GroupTypes which will be applied to the loaded groups. e.g. addIncludeExclude
Readers	comma separated subjectIds or subjectIdentifiers who will be allowed to READ the group memberships
Viewers	comma separated subjectIds or subjectIdentifiers who will be allowed to VIEW the groups
Admins	comma separated subjectIds or subjectIdentifiers who will be allowed to ADMIN the groups
Updaters	comma separated subjectIds or subjectIdentifiers who will be allowed to UPDATE the group memberships
Opt ins	comma separated subjectIds or subjectIdentifiers who will be allowed to OPTIN to the group
Opt outs	comma separated subjectIds or subjectIdentifiers who will be allowed to OPTOUT from the group
Attribute readers	comma separated subjectIds or subjectIdentifiers who will be allowed to READ the group attributes
Attribute updaters	comma separated subjectIds or subjectIdentifiers who will be allowed to UPDATE the group attributes

LDAP group list job screen

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Grouper loader settings

This group has grouper loader configuration

Source type	LDAP pull the members from an LDAP server. Can be SQL or LDAP
Loader type	LDAP_GROUP_LIST filter returns group objects, and the group objects have a list of subjects. Can be LDAP_SIMPLE, LDAP_GROUP_LIST, or LDAP_GROUPS_FROM_ATTRIBUTES
Server ID	personLdap ldap://ldap.andrew.cmu.edu/dc=cmu,dc=edu server ID that is configured in the grouper-loader.properties that identifies the connection information to the LDAP server
LDAP filter	(&(objectClass=cmuGroup)(cn=softdist2:system*)) LDAP filter returns objects which are groups which have subjects in an attribute of each group
Subject attribute name	member attribute name of the returned groups which holds subject IDs or identifiers
Search base DN	ou=group location that constrains the subtree where the filter is applicable. Note, this is relative to the base DN in the ldap server config in the grouper-loader.properties for this server. This makes the query more efficient
Schedule	0 0 8 * * ? At 8:00 AM
Subject source ID	cmuDirectory source ID from the sources.xml that narrows the search for subjects. This is optional though makes the loader job more efficient
Subject lookup type	subjectId can be either: subjectId (most efficient, default), subjectIdentifier (2nd most efficient), or subjectIdOrIdentifier
Search scope	how deep to search in LDAP. Can be OBJECT_SCOPE, ONELEVEL_SCOPE, or SUBTREE_SCOPE (default)
Priority	this job has the default and middle priority of 5
Subject expression	<code>\${loaderLdapEIUtils.convertDnToSpecificValue(subjectId)}</code> JEXL expression language fragment that processes the subject string before passing it to the subject API. e.g. <code>\${loaderLdapEIUtils.convertDnToSpecificValue(subjectId)}</code>

Extra LDAP attributes	attribute names (comma separated) to get LDAP data for expressions in group name, displayExtension, description
Group attribute name	attribute name of the filter result objects that holds the group name. Note, you can put multiple attribute names here comma separated
Require members in other group(s)	
Groups SQL 'like' configuration	sql like string (e.g. school:orgs:%org%_systemOfRecord), and the loader should be able to query group names to see which names are managed by this loader job. So if a group falls off the loader resultset (or is moved), this will help the loader remove the members from this group. Note, if the group is used anywhere as a member or composite member, it wont be removed.
Group name expression	groupList:\${loaderLdapEIUtils.convertDnToSpecificValue(groupAttributes['dn'])} JEXL expression language fragment that evaluates to the group name (relative to the stem of the group which has the loader definition). groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Group display name expression	JEXL expression language fragment that evaluates to the group display name. groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Group description expression	JEXL expression language fragment that evaluates to the group description. groupAttributes['dn'] is a variable in scope as is groupAttributes['cn'] etc
Grouper types applied to groups	comma separated GroupTypes which will be applied to the loaded groups. e.g. addIncludeExclude
Readers	comma separated subjectIds or subjectIdentifiers who will be allowed to READ the group memberships
Viewers	comma separated subjectIds or subjectIdentifiers who will be allowed to VIEW the groups
Admins	comma separated subjectIds or subjectIdentifiers who will be allowed to ADMIN the groups
Updaters	comma separated subjectIds or subjectIdentifiers who will be allowed to UPDATE the group memberships
Opt ins	comma separated subjectIds or subjectIdentifiers who will be allowed to OPTIN to the group
Opt outs	comma separated subjectIds or subjectIdentifiers who will be allowed to OPTOUT from the group
Attribute readers	comma separated subjectIds or subjectIdentifiers who will be allowed to READ the group attributes
Attribute updaters	comma separated subjectIds or subjectIdentifiers who will be allowed to UPDATE the group attributes