

Grouper loader LDAP example from installer

Use mysql

```
Make a mysql schema, utf8, utf8_bin collation: grouper_temp.  
Make a user grouper_temp/grouper_temp.  
Grant all on grouper_temp schema to grouper_temp user.
```

Get the installer

```
[mchyzer@i2midev6 ~]$ cd /tmp  
[mchyzer@i2midev6 tmp]$ mkdir loaderExample  
[mchyzer@i2midev6 tmp]$ cd loaderExample/  
[mchyzer@i2midev6 loaderExample]$ pwd  
/tmp/loaderExample  
[mchyzer@i2midev6 loaderExample]$ wget https://software.internet2.edu/grouper/release/2.3.0/grouperInstaller.jar  
--2017-06-20 17:52:58-- https://software.internet2.edu/grouper/release/2.3.0/grouperInstaller.jar  
Resolving software.internet2.edu (software.internet2.edu)... 2001:48a8:68fe::52, 207.75.164.52  
Connecting to software.internet2.edu (software.internet2.edu)|2001:48a8:68fe::52|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 2411730 (2.3M) [application/x-java-archive]  
Saving to: 'grouperInstaller.jar'  
  
100%[=====>] 2,411,730 --K/s in  
0.03s  
  
2017-06-20 17:52:58 (90.9 MB/s) - 'grouperInstaller.jar' saved [2411730/2411730]  
  
[mchyzer@i2midev6 loaderExample]$ java -version  
java version "1.7.0_13"  
  
[mchyzer@i2midev6 loaderExample]$ java -jar grouperInstaller.jar
```

Generally accept the defaults except

```

Enter the database URL [jdbc:hsqldb:hsqldb://localhost:9001/grouper]: jdbc:mysql://localhost:3306/grouper_temp
Database user [sa]: grouper_temp
Database password (note, you aren't setting the pass here, you are using an existing pass, this will be echoed
back) [<blank>]: grouper_temp

[mchyzer@i2midev6 ~]$ cd /tmp
[mchyzer@i2midev6 tmp]$ mkdir loaderExample
[mchyzer@i2midev6 tmp]$ cd loaderExample/
[mchyzer@i2midev6 loaderExample]$ pwd
/tmp/loaderExample
[mchyzer@i2midev6 loaderExample]$ wget https://software.internet2.edu/grouper/release/2.3.0/grouperInstaller.jar
[mchyzer@i2midev6 loaderExample]$ java -version
java version "1.7.0_13"
[mchyzer@i2midev6 loaderExample]$ java -jar grouperInstaller.jar
Select the defaults except:

Do you want to use the default and included hsqldb database (t|f)? [t]: f
Enter the database URL [jdbc:hsqldb:hsqldb://localhost:9001/grouper]: jdbc:mysql://localhost:3306/grouper_temp
Database user [sa]: grouper_temp
Database password (note, you aren't setting the pass here, you are using an existing pass, this will be echoed
back) [<blank>]: grouper_temp
... install patches ...
Do you want to init the database (delete all existing grouper tables, add new ones) (t|f)? t
... install the test subjects and quickstart data ...
Do you want to install the user interface (t|f)? [t]:
What ports do you want tomcat to run on (HTTP, JK, shutdown): [8080, 8009, 8005]: 8600, 8601, 8602
... install ui patches ...
Enter the GrouperSystem password: pass
Do you want to install web services (t|f)? [t]: f
Do you want to install the web services client (t|f)? [t]: f
Do you want to install the provisioning service provider next generation (t|f)? [t]: f
Do you want to install the provisioning service provider (t|f)? [t]: f
Do you want to install the grouper ws scim (t|f)? [t]: f

```

Lets work from UI, set the log4j

```

[mchyzer@i2midev6 loaderExample]$ emacs grouper.ui-2.3.0/dist/grouper/WEB-INF/classes/log4j.properties

Add this line:

log4j.logger.edu.internet2.middleware.grouper.app.loader = DEBUG

```

Edit the sources

```

[mchyzer@i2midev6 loaderExample]$ emacs grouper.ui-2.3.0/dist/grouper/WEB-INF/classes/subject.properties

Add the source from here:

https://spaces.at.internet2.edu/display/Grouper/Grouper+Loader+LDAP+examples

#####
## Configuration for source id: cmuDirectory
## Source configName: cmuDirectory
#####
subjectApi.source.cmuDirectory.id = cmuDirectory

```

```

# this is a friendly name for the source
subjectApi.source.cmuDirectory.name = CMU Directory

# type is not used all that much. Can have multiple types, comma separate. Can be person, group, application
subjectApi.source.cmuDirectory.types = person

# the adapter class implements the interface: edu.internet2.middleware.subject.Source
# adapter class must extend: edu.internet2.middleware.subject.provider.BaseSourceAdapter
# edu.internet2.middleware.grouper subj.GrouperJdbcSourceAdapter2 : if doing JDBC this should be used if
possible. All subject data in one table/view.
# edu.internet2.middleware.grouper subj.GrouperJdbcSourceAdapter : oldest JDBC source. Put freeform queries
in here
# edu.internet2.middleware.grouper subj.GrouperJndiSourceAdapter : used for LDAP
subjectApi.source.cmuDirectory.adapterClass = edu.internet2.middleware.grouper subj.GrouperJndiSourceAdapter

# e.g. com.sun.jndi.ldap.LdapCtxFactory
subjectApi.source.cmuDirectory.param.INITIAL_CONTEXT_FACTORY.value = com.sun.jndi.ldap.LdapCtxFactory

# e.g. ldap://localhost:389
subjectApi.source.cmuDirectory.param.PROVIDER_URL.value = ldap://ldap.andrew.cmu.edu:389

# e.g. simple, none, sasl_mech
subjectApi.source.cmuDirectory.param.SECURITY_AUTHENTICATION.value = none

# ldap attribute which is the subject id. e.g. exampleEduRegID Each subject has one and only one subject
id. Generally it is opaque and permanent.
subjectApi.source.cmuDirectory.param.SubjectID_AttributeType.value = guid

# if the subject id should be changed to lower case after reading from datastore. true or false
subjectApi.source.cmuDirectory.param.SubjectID_formatToLowerCase.value = false

# attribute which is the subject name
subjectApi.source.cmuDirectory.param.Name_AttributeType.value = cn

# attribute which is the subject description
subjectApi.source.cmuDirectory.param.Description_AttributeType.value = cn

# the 1st sort attribute for lists on screen that are derived from member table (e.g. search for member in
group)
# you can have up to 5 sort attributes
subjectApi.source.cmuDirectory.param.sortAttribute0.value = cn

# the 1st search attribute for lists on screen that are derived from member table (e.g. search for member in
group)
# you can have up to 5 search attributes
subjectApi.source.cmuDirectory.param.searchAttribute0.value = searchAttribute0

# attribute name of the email attribute
subjectApi.source.cmuDirectory.param.emailAttributeName.value = mail

#searchSubject: find a subject by ID. ID is generally an opaque and permanent identifier, e.g. 12345678.
# Each subject has one and only on ID. Returns one result when searching for one ID.

# sql is the sql to search for the subject by id. %TERM% will be subsituted by the id searched for
subjectApi.source.cmuDirectory.search.searchSubject.param.filter.value = (& (guid=%TERM%)
(objectclass=cmuPerson))

# Scope Values can be: OBJECT_SCOPE, ONELEVEL_SCOPE, SUBTREE_SCOPE
subjectApi.source.cmuDirectory.search.searchSubject.param.scope.value = SUBTREE_SCOPE

# base dn to search in
subjectApi.source.cmuDirectory.search.searchSubject.param.base.value = ou=person,dc=cmu,dc=edu

#searchSubjectByIdentifier: find a subject by identifier. Identifier is anything that uniquely
# identifies the user, e.g. jsmith or jsmith@institution.edu.
# Subjects can have multiple identifiers. Note: it is nice to have if identifiers are unique
# even across sources. Returns one result when searching for one identifier.

# sql is the sql to search for the subject by identifier. %TERM% will be subsituted by the identifier searched
for

```

```

subjectApi.source.cmuDirectory.search.searchSubjectByIdentifier.param.filter.value = (&
(cmuAndrewCommonNamespaceId=%TERM%) (objectclass=cmuPerson))

# Scope Values can be: OBJECT_SCOPE, ONELEVEL_SCOPE, SUBTREE_SCOPE
subjectApi.source.cmuDirectory.search.searchSubjectByIdentifier.param.scope.value = SUBTREE_SCOPE

# base dn to search in
subjectApi.source.cmuDirectory.search.searchSubjectByIdentifier.param.base.value = ou=person,dc=cmu,dc=edu

# search: find subjects by free form search. Returns multiple results.

# sql is the sql to search for the subject by free form search. %TERM% will be subsituted by the text searched
for
subjectApi.source.cmuDirectory.search.search.param.filter.value = (& (|(guid=%TERM%)(|(cn=%TERM%*)
(cmuAndrewCommonNamespaceId=%TERM%*))) (objectclass=cmuPerson))

# Scope Values can be: OBJECT_SCOPE, ONELEVEL_SCOPE, SUBTREE_SCOPE
subjectApi.source.cmuDirectory.search.search.param.scope.value = SUBTREE_SCOPE

# base dn to search in
subjectApi.source.cmuDirectory.search.search.param.base.value = ou=person,dc=cmu,dc=edu

# attributes from ldap object to become subject attributes. comma separated
subjectApi.source.cmuDirectory.attributes = cn, guid, cmuAndrewCommonNamespaceId, mail

# internal attributes are used by grouper only not exposed to code that uses subjects. comma separated
subjectApi.source.cmuDirectory.internalAttributes = searchAttribute0

```

```

[mchyzer@i2midev6 loaderExample]$ mv grouper.ui-2.3.0/dist/grouper/WEB-INF/classes/sources.xml grouper.ui-2.3.0
/dist/grouper/WEB-INF/classes/sources.xml.bak

```

Edit the grouper loader properties

```

[mchyzer@i2midev6 loaderExample]$ emacs grouper.ui-2.3.0/dist/grouper/WEB-INF/classes/grouper-loader.properties

#####
## LDAP connections
#####
# specify the ldap connection with user, pass, url
# the string after "ldap." is the ID of the connection, and it should not have
# spaces or other special chars in it. In this case is it "personLdap"

ldap.personLdap.url = ldap://ldap.andrew.cmu.edu/dc=cmu,dc=edu
ldap.personLdap.user =
ldap.personLdap.pass =

```

Add the LDAP from attributes source from here

[Grouper Loader LDAP examples#LDAPgroupsfromattributes](#)

```
[mchyzer@i2midev6 loaderExample]$ ./apache-tomcat-8.5.12/bin/shutdown.sh
Using CATALINA_BASE:   /tmp/loaderExample/apache-tomcat-8.5.12
Using CATALINA_HOME:   /tmp/loaderExample/apache-tomcat-8.5.12
Using CATALINA_TMPDIR: /tmp/loaderExample/apache-tomcat-8.5.12/temp
Using JRE_HOME:        /home/mchyzer/software/java
Using CLASSPATH:       /tmp/loaderExample/apache-tomcat-8.5.12/bin/bootstrap.jar:/tmp/loaderExample/apache-
tomcat-8.5.12/bin/tomcat-juli.jar
[mchyzer@i2midev6 loaderExample]$ ./apache-tomcat-8.5.12/bin/startup.sh
Using CATALINA_BASE:   /tmp/loaderExample/apache-tomcat-8.5.12
Using CATALINA_HOME:   /tmp/loaderExample/apache-tomcat-8.5.12
Using CATALINA_TMPDIR: /tmp/loaderExample/apache-tomcat-8.5.12/temp
Using JRE_HOME:        /home/mchyzer/software/java
Using CLASSPATH:       /tmp/loaderExample/apache-tomcat-8.5.12/bin/bootstrap.jar:/tmp/loaderExample/apache-
tomcat-8.5.12/bin/tomcat-juli.jar
Tomcat started.
[mchyzer@i2midev6 loaderExample]$
```

Login and make a loader folder / group

localhost:8600/grouper/grouperUi/

Authentication Required

http://localhost:8600 requires a username and password.

User Name:

Password:

New folder

Create in this folder:

Root

Enter a folder name or [search for a folder where you are allowed to create new folders](#).
Enter 'Root' for the top level folder

Folder name:

loader

Name is the label that identifies this folder, and might change.

Folder ID:

loader

☐ Edit the ID

ID is the unique identifier for this folder. It should be short and simple, and might have character restrictions. The ID should rarely change, if ever.

Description:

Description contains notes about the folder, which could include: what the folder represents, why it was created, etc.

Save

Cancel

New group

Create in this folder:

Enter a folder name or [search for a folder where you are allowed to create new groups](#).

Group name:

Name is the label that identifies this group, and might change.

Group ID:

☐ Edit the ID

ID is the unique identifier for this group. It should be short and simple, and might have character restrictions. The ID should rarely change, if ever.

Description:

Description contains notes about the group, which could include: what the group represents, why it was created, etc.

[Show advanced properties](#) ▾

Save

Cancel