Grouper Duo provisioning (v2.5 provisioning framework)

Unable to render {include} The included page could not be found.

External System

- Grouper Duo External System

- Grouper Duo admin roles
- Grouper Duo provisioner configuration start with scaffolding
- Grouper Duo Provisioning groups and membership

Movie

Demo video of provisioning groups and memberships to Duo

This is the script to create users in the video

```
GrouperSession grouperSession = GrouperSession.startRootSession();
RegistrySubject.addOrUpdate(grouperSession, "mchyzer", "person", "Chris Hyzer", "Chris Hyzer", "mchyzer",
"Chris Hyzer", "mchyzer@upenn.edu");
RegistrySubject.addOrUpdate(grouperSession, "kwilso", "person", "Kate Wilson", "Kate Wilson", "kwilso", "Kate
Wilson", "kwilso@upenn.edu");
```

Provisioning attributes

Advice

- Provisioning type is membershipObjects
- Use group and entity link (since there are uuids in the target for groups and entities that need to be looked up)

Group attributes. API

Grouper name	Type	Required?	Duo API	Duo UI	Description
id	String	required	group_id	(in URL)	This is the UUID read from Duo. Select only. This should not be translated from Grouper and the target attribute should be cached.
name	String	required	name	Group Name	This is the name of the group on the Duo side.
description	String	optional	desc	Description	This is the description in Duo

Entity attributes. API

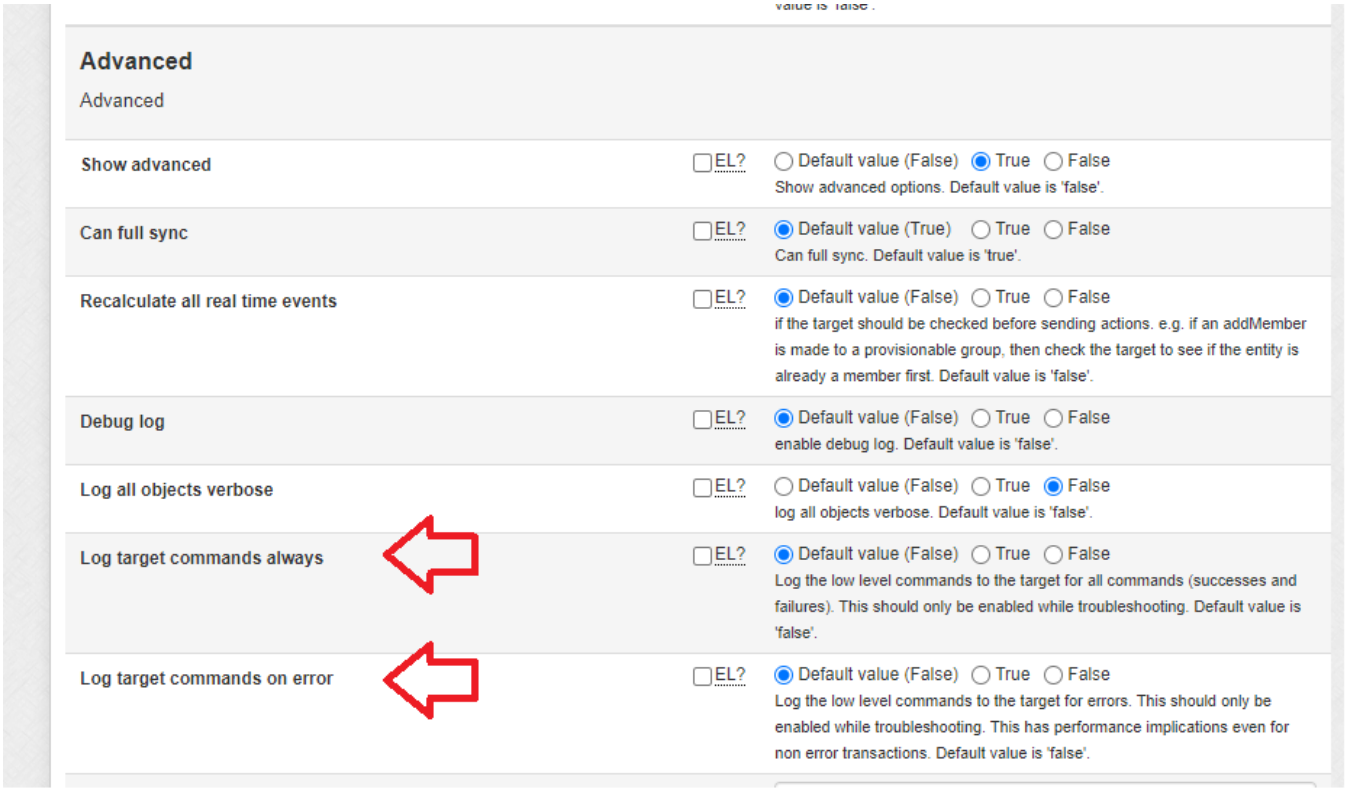
Grouper name	Type	Required?	Duo API	Duo UI	Description
id	String	required	user_id	(in URL)	This is the UUID read from Duo. Select only. This should not be translated from Grouper and the target attribute should be cached.
loginId	String	required	username	Username	This is the username in Duo. Note if you have upper case letters in this, you need to set the loginId attribute: advanced value settings case sensitive compare: false
name	String	optional	realname	Full name	First and last name
email	String	optional	email	Email	Email address for user
firstname	String	optional	firstname	NA	First name of user
lastname	String	optional	lastname	NA	Last name of user
alias1	String	optional	alias1	Username alias 1	Username alias 1 - It cannot be the same as username or any other username aliases
alias2	String	optional	alias2	Username alias 2	Username alias 2 - It cannot be the same as username or any other username aliases

alias3	String	optional	alias3	Username alias 3	Username alias 3 - It cannot be the same as username or any other username aliases
alias4	String	optional	alias4	Username alias 4	Username alias 4 - It cannot be the same as username or any other username aliases

Logging

Generally you will have logging setting set to off unless you are troubleshooting something.

If you want to see the HTTP traffic going to and from duo, set one of these options



You will see container logs that look like this

```
2021-11-06 13:54:04,854: [Thread-36] INFO  GrouperProvisioningLogCommands.infoLog(25) -  - Command log for
provisioner 'duoTest' - 'u5ydv5lk', retrieveAllData: HTTP method: get
HTTP URL: https://api-84f782e2.duosecurity.com/admin/v1/groups?limit=100&offset=0
HTTP request header: Authorization: *******
HTTP request header: Date: Sat, 06 Nov 2021 17:54:02 +0000
HTTP request header: Content-Type: application/x-www-form-urlencoded
HTTP response code: 200, took ms: 913
HTTP response header: Transfer-Encoding: chunked
HTTP response header: Strict-Transport-Security: max-age=31536000
HTTP response header: Server: Duo/1.0
HTTP response header: Cache-Control: no-store
HTTP response header: Etag: W/"198da276e78d748b76b7123456"
HTTP response header: Content-Security-Policy: default-src 'self'; frame-src 'self' ; img-src 'self'  ; connect-
src 'self'
HTTP response header: Connection: keep-alive
HTTP response header: Pragma: no-cache
HTTP response header: Date: Sat, 06 Nov 2021 17:54:03 GMT
HTTP response header: Content-Type: application/json
{
   "metadata":{
      "total_objects":11
   },
   "response":[
      {
         "desc":"",
         "group_id":"DGUCVTMOMM3UK7YHQ7ZE",
         "mobile_otp_enabled":false,
         "name":"duoGroupFromGrouper",
         "push_enabled":false,
         "sms_enabled":false,
         "status":"Active",
         "voice_enabled":false
      },
      {
         "desc":"This is a description",
         "group_id":"DGCVKVG5GQNG0Z4ZF13G",
         "mobile_otp_enabled":false,
         "name":"duoGroupFromGrouper2",
         "push_enabled":false,
         "sms_enabled":false,
         "status":"Active",
         "voice_enabled":false
      }
   ],
   "stat":"OK"
}
```

You can load duo users into grouper database into grouper_prov_duo_user table as shown below.

Entity configuration

Configuration dealing with entities in the target

Operate on entities	☐ EL?	○ Default value (False) ◉ True ○ False If the provisioner involves entity objects. This might not be true if you are provisioning memberships or groupAttributes without a target entity link. Default value is 'false'.
Select entities	☐ EL?	○ Default value (False) ◉ True ○ False If entities should be read from the target. Generally this will be 'true' except: 1. Messages are sent to the target without knowing the state of the target 2. Provisioning groupAttributes with no entity link 3. Provisioning membership objects with no entity link Default value is 'false'.
Select all entities	☐ EL?	○ Default value (False) ◉ True ○ False Select false if the target does not allow selecting all entities e.g AWS. Default value is 'false'.
Load entities into grouper table 	☐ EL?	○ Default value (False) ◉ True ○ False Load entities into grouper table for reporting and diagnostics. Default value is 'false'.
Insert entities	☐ EL?	○ Default value (False) ◉ True ○ False If provisionable entities in Grouper which do not exist in the target should be created in the target. This will not be true if all the needed entities exist in the target or if the target manages entities it another process. Default value is 'false'.
Delete entities	☐ EL?	◉ Default value (False) ○ True ○ False If you want to delete entities in the target. Note, there are a few types of "deletes" you can choose from if you select "true", you must pick which delete option below. Default value is 'false'.

grouper_prov_duo_user table is shown below

```
select * from grouper_prov_duo_user;
```

grouper_prov_duo_user 1 ×

select * from grouper_prov_duo_user | Enter a SQL expression t

Name	Value
config_id	myDuoProvisioner
user_id	123abc
aliases	abc,test
phones	123-456-7890
is_push_enabled	T
email	test.subject.0@test.com
first_name	first
last_name	last
is_enrolled	T
last_directory_sync	72832323223
notes	test notes
real_name	real name
status	active
user_name	user name
created_at	87877787878
last_login_time	78787777888