

Group recent memberships / grace periods

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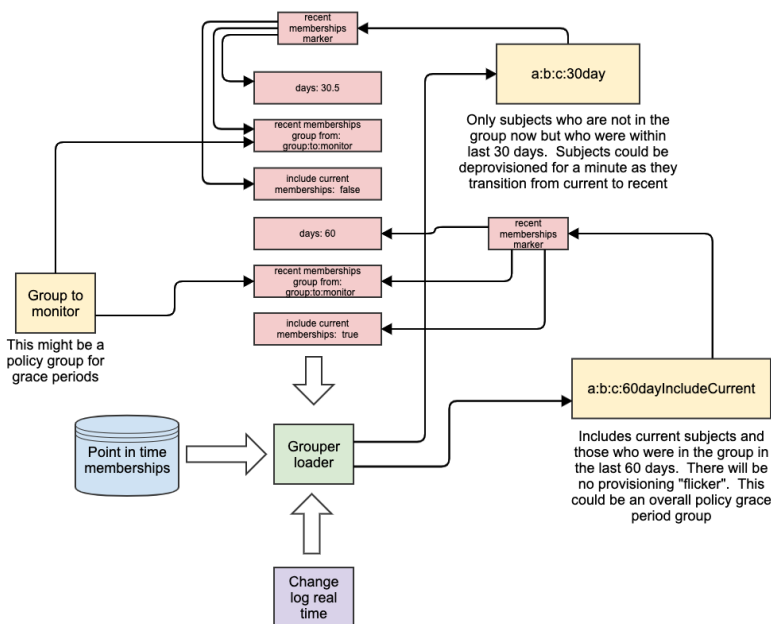
A recent-membership group is a group that contains members who used to be in a certain group a certain number of days ago. You can have multiple recent-membership groups on one group to monitor. (the recentMembershipMarker attribute is assigned to the target group). If a subject is added back to the group to monitor, they will be removed from the recent-membership group. If you want to delegate the ability to assign recent-memberships (by default only admins can do this), just add privileges to the three recentMembership attribute definitions (attr read and attr update).

Note: this feature is based on any type of memberships not just immediate memberships.

If you will have a policy group that includes the eligible group and the grace period (recent-memberships) group, you might want the grace group to include the current memberships. The recent-memberships group could be the overall policy group. Then if the group is provisioned to a system, there will be no "flicker". Flicker is the brief period of time after a subject is removed from the eligible group until it is added to the recent-memberships group (could take a few minutes). If current memberships are included in the recent-memberships group then when a subject is removed from the group to monitor they will be not removed from the recent memberships group (until X days passes).

If you want a grace period group, and you want to know if eligible or in grace, and you don't want flicker, then you need three groups:


1. Eligible group (policy without considering grace period)
2. Grace period policy group: recent-memberships including current memberships (eligible group)
3. Grace period only group: composite of recent-memberships-with-eligible minus eligible).




Create a new recent-memberships group

1. Create or navigate to the group which holds the recent memberships
2. Click on the More Tab Loader, and configure a recent memberships loader

Home > Root > test > groupTo


More actions ▾

groupTo auto-created by grouperLoader

This group is managed by loader group  **grouperRecentMembershipsLoader**. It was last fully loaded on Wed Jul 08 03:41:00 EDT 2020. Summary is: total: 0 inserted: 0 deleted: 0 updated: 0

More ▾

Members
Privileges
More ▾

Edit loader settings Loader actions ▾

Loader	Yes, has loader configuration ▾	
if this group has loader configuration		
Source type	Recent memberships ▾	*
pull members from an existing group's recent memberships		
From group	test:groupFrom	*
Group whose recent memberships should be populated in this group		
Days of recent memberships	5	*
Number of days of recent memberships included in this group. E.g. If 90 is entered then this group will contain members who were in the "from group" in the last 90 days.		
Include current members	Yes, include current members in this group since it is a policy group ▾	*
Include current members and recent memberships in this group. If this group is for grace periods, then including current members will prevent provisioning changes as members transition from current group to previous group.		

Save
Cancel

- Select the "from group"
 - Select the "days of recent memberships". Note, this can be a decimal
 - Identify if include current memberships
- Wait a minute and if the change log is up to date the recent-memberships group will be created and populated
 - Nightly loader job will sync things up but it should be up to date in near real time using the change log
 - Note, if you remove these recent-memberships attributes, the recent-memberships group and members will still be there. You will need to delete the orphaned recent-memberships group



More actions ▾

groupTo auto-created by grouperLoader

This group is managed by loader group **grouperRecentMembershipsLoader**. It was last fully loaded on Wed Jul 08 03:41:00 EDT 2020. Summary is: total: 0 inserted: 0 deleted: 0 updated: 0

More ▾

Members

Privileges

More ▾

Loader settings

Loader actions ▾

This loader group contains members who were recently and/or currently in another group

This group is managed by loader group **grouperRecentMembershipsLoader**. It was last fully loaded on Wed Jul 08 03:41:00 EDT 2020. Summary is: total: 0 inserted: 0 deleted: 0 updated: 0

From group

groupFrom

Group whose recent memberships should be populated in this group

Days of recent memberships

5

Number of days of recent memberships included in this group. E.g. If 90 is entered then this group will contain members who were in the "from group" in the last 90 days.

Include current members

Yes, include current members in this group since it is a policy group

Include current members and recent memberships in this group. If this group is for grace periods, then including current members will prevent provisioning changes as members transition from current group to previous group.

Configuration

To disabled the loader job edit this in grouper.properties

```
#####
## Recent-memberships
#####

# If the recent-memberships loader job should be created and scheduled nightly at 3:41am. It runs real time
# too so it shouldn't
# need to run frequently than daily
# {valueType: "boolean", defaultValue: "true"}
grouper.recentMemberships.loaderJob.enable = true
```

To edit the change log consumer edit this in grouper-loader.properties

```
# Recent-memberships consumer will update recent-memberships groups as memberships/attributes change
# {valueType: "class", mustExtendClass: "edu.internet2.middleware.grouper.changeLog.ChangeLogConsumerBase"}
changeLog.consumer.recentMemberships.class = edu.internet2.middleware.grouper.changeLog.esb.consumer.EsbConsumer

# recent-memberships runs as change log consumer
# {valueType: "string"}
changeLog.consumer.recentMemberships.quartzCron =

# if this many records happens in one change log session, just do a full loader job
# {valueType: "integer", defaultValue: "100"}
changeLog.consumer.recentMemberships.maxUntilFullSync = 100

# publishing class for recent-memberships
# {valueType: "class", mustExtendClass: "edu.internet2.middleware.grouper.changeLog.esb.consumer.EsbMessagingPublisher"}
changeLog.consumer.recentMemberships.publisher.class = edu.internet2.middleware.grouper.app.serviceLifecycle.GrouperRecentMembershipsChangeLogConsumer
```

Internal structures

- Configuration is stored in attributes on the "to" group

The screenshot shows the 'groupTo' interface in a web application. It displays a table of attribute assignments for the group 'groupTo'. The table has columns for Assignment type, Attribute name, Enabled?, Assignment values, Attribute definition, and Choose action. The assignments include metadata on assignment and direct assignment for various attributes like loaderMetadata, grouperRecentMembershipsMarker, and grouperRecentMembershipsMicros.

Assignment type	Attribute name	Enabled?	Assignment values	Attribute definition	Choose action
Direct assignment	loaderMetadata	enabled		loaderMetadataDef	Actions
Metadata on assignment	grouperLoaderMetadataGroupId	enabled	aebaab14a5724b3caa2736333d739c06	loaderMetadataValueDef	Actions
Metadata on assignment	grouperLoaderMetadataLastFullMillsSince1970	enabled	1594194060098	loaderMetadataValueDef	Actions
Metadata on assignment	grouperLoaderMetadataLastSummary	enabled	total: 0 inserted: 0 deleted: 0 updated: 0	loaderMetadataValueDef	Actions
Metadata on assignment	grouperLoaderMetadataLoaded	enabled	true	loaderMetadataValueDef	Actions
Direct assignment	grouperRecentMembershipsMarker	enabled		grouperRecentMembershipsMarkerDef	Actions
Metadata on assignment	grouperRecentMembershipsGroupUuidFrom	enabled	e8c7f3b3020243159a98c58301d27e13	grouperRecentMembershipsValueDef	Actions
Metadata on assignment	grouperRecentMembershipsIncludeCurrent	enabled	T	grouperRecentMembershipsValueDef	Actions
Metadata on assignment	grouperRecentMembershipsMicros	enabled	432000000000	grouperRecentMembershipsIntValueDef	Actions

- In order to make the loader query more efficient and simpler to troubleshoot, a view consolidates the attributes into one simple place to get recent membership configuration

The screenshot shows a SQL query result for the view 'grouper_recent_mships_conf_v'. The query is 'select * from grouper_recent_mships_conf_v;'. The result shows a single row with columns: group_name_from, group_uuid_from, recent_micros, group_uuid_to, group_name_to, and include_eligible. The values are: test:groupFrom, e8c7f3b3020243159a98c58301d27e13, 432000000000, 94329c81369f44168340c97b98aa86a8, test:groupTo, and T.

group_name_from	group_uuid_from	recent_micros	group_uuid_to	group_name_to	include_eligible
test:groupFrom	e8c7f3b3020243159a98c58301d27e13	432000000000	94329c81369f44168340c97b98aa86a8	test:groupTo	T

- This is synced to a table for performance reasons

select * from grouper_recent_mships_conf

Rows 1; select * from grouper_recent_mships_conf

Selected Rows: 0, Cols: 0
Position: Row: , Col:

group_uuid_to	group_name_to	group_uuid_from	group_name_from	recent_micros	include_eligible
94329c8136944168340c97b98aa86a8	test:groupTo	e8c7f3b3020243159a98c58301d27e13	test:groupFrom	43200000000	T

- The grouper_time table is consulted to make this database agnostic

select * from grouper_time;

Rows 1; select * from grouper_time;

Results Meta data In

time_label	the_utc_timestamp	this_tz_timestamp	utc_millis_since_1970	utc_micros_since_1970
now	2020-07-08 15:24...	2020-07-08 11:24...	1594221885012	1594221885012000

- A view on that table the PIT view will show the memberships to be loaded

select * from grouper_recent_mships_load_v;

Rows 0; select * from grouper_recent_mships_load_v;

Results Meta data Info Overview / Charts Rotated table Results as text

group_name	subject_source_id	subject_id
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Script a recent membership group

Just change the first 4 params and it will do the rest

```
String groupName = "ref:employee60dayNotIncludeCurrent";
String sourceGroupName = "ref:employee";
boolean includeCurrent = false;
int numberOfDays = 60;
GrouperSession grouperSession = GrouperSession.startRootSession();
Group destinationGroup = new GroupSave(grouperSession).assignName(groupName).assignCreateParentStemsIfNotExist(
true).save();
Group sourceGroup = GroupFinder.findByName(grouperSession, sourceGroupName, true);
long numberOfMicros = numberOfDays*24*60L*60*1000*1000L;
AttributeAssign attributeAssign = destinationGroup.getAttributeDelegate().assignAttributeByName("etc:attribute:
recentMemberships:grouperRecentMembershipsMarker").getAttributeAssign();
attributeAssign.getAttributeValueDelegate().assignValueString("etc:attribute:recentMemberships:
grouperRecentMembershipsGroupUuidFrom", sourceGroup.getId());
attributeAssign.getAttributeValueDelegate().assignValueString("etc:attribute:recentMemberships:
grouperRecentMembershipsIncludeCurrent", includeCurrent ? "T" : "F");
attributeAssign.getAttributeValueDelegate().assignValueInteger("etc:attribute:recentMemberships:
grouperRecentMembershipsMicros", numberOfMicros);
```

See Also

[Grouper Deprovisioning](#)