

# Grouper UI - Types on objects

|                           |                                               |                                |                                          |                                         |                                              |
|---------------------------|-----------------------------------------------|--------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------------|
| <a href="#">Wiki Home</a> | <a href="#">Grouper Release Announcements</a> | <a href="#">Grouper Guides</a> | <a href="#">Grouper Deployment Guide</a> | <a href="#">Community Contributions</a> | <a href="#">Internal Developer Resources</a> |
|---------------------------|-----------------------------------------------|--------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------------|

- [Overview](#)
- [Attribute definitions](#)
- [Attribute names](#)
- [Assign type on UI](#)
- [View on UI](#)
- [Available Types](#)
- [Screenshots](#)
- [Keep inherited attributes up do date](#)
- [To do now](#)
- [To do later](#)

## Overview

Grouper allows you to assign tags (called types) to objects such as folders and groups. There can be metadata on the assignment.

Grouper types helps support and clarify the usage of types as defined in the [Grouper Deployment Guide](#).

This is a more structured and consistent way of accomplishing what could also done through the [attribute framework](#).

## Attribute definitions

| Definition                | Assigned to                         | Purpose               | Value  | Cardinality                  |
|---------------------------|-------------------------------------|-----------------------|--------|------------------------------|
| grouperObjectTypeDef      | folder, group                       | identify a group type | marker | Multi assign                 |
| grouperObjectTypeValueDef | folder assignment, group assignment | name/value pairs      | String | Single assign, single valued |

## Attribute names

| Name                                | Definition                | Value                                                                                                                            |
|-------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| grouperObjectTypeMarker             | grouperObjectTypeDef      | <none>                                                                                                                           |
| grouperObjectTypeName               | grouperObjectTypeValueDef | ref, basis, policy,etc, bundle, org, test, service, app. See the <a href="#">TIER Grouper Deployment Guide</a> for descriptions. |
| grouperObjectTypeDataOwner          | grouperObjectTypeValueDef | e.g. Registrar's office owns this data                                                                                           |
| grouperObjectTypeMembersDescription | grouperObjectTypeValueDef | human readable description                                                                                                       |
| grouperObjectTypeDirectAssignment   | grouperObjectTypeValueDef | if this is directly assigned or inherited                                                                                        |
| grouperObjectTypeServiceName        | grouperObjectTypeValueDef | name of the service that this app falls under                                                                                    |
| grouperObjectTypeOwnerStemId        | grouperObjectTypeValueDef | if this is not a direct assignment, then this is the stem id where it is inherited from                                          |

## Assign type on UI

On a folder or group, a menu item under the "more actions" button will say "Type." (Shown in screenshot below.) This "Type" option will only show if user can edit types.

Table should show which are assigned, if inherited or not. There is also the option to add more assignments. If assigned, call the keep inherited method below.

Note: implement the attributes like "Deprovisioning" used attributes

Group or Folder ADMINS can assign types

## View on UI

Note, if a user can view a group, they can view this attribute assignment from a high level.

On the group or folder screen show what type(s) this group is

Show the data owner and service description if applicable

Show this all in one paragraph. Show tooltips on each type

As part of types, the loader summary should be moved from the loader "view" screen to this paragraph too. It should read as follows: This group is managed by loader group [testSqlSimple](#), last fully loaded on Sat Dec 01 06:00:04 UTC 2018 with summary: 167 total, 0 inserted, 5 deleted, 2 updated.

E.g. shows on group UI: Group types: ref, readonly. The data owner is: the registrar's office. The member description is: faculty, staff, temps.

If the type is "app", and it is an indirect assignment, and the folder which assigns it has a display extension of "Wiki", then followup with a sentence (note, the folder should be linkable to that folder): This is in the Wiki app.

If the type is "service", and it is an indirect assignment, and the folder which assigns it has a display extension of "Student systems", then followup with a sentence (note, the folder should be linkable to that folder): This is the Student systems service.

## Available Types

| Type     | Owner type    | Tooltip                                                                                                                                                      |
|----------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ref      | group /folder | Reference groups are institutionally meaningful cohorts used in access policy.                                                                               |
| basis    | group /folder | Basis groups represent arcane codes or attributes from external systems are used generally in reference groups and not directly in access policy.            |
| readonly | group /folder | Read-only groups should not have membership changes except by the process that manages the group; perhaps external from the central authorization system     |
| policy   | group /folder | Access policy groups are used by downstream systems to allow or deny users access to services or resources.                                                  |
| bundle   | group /folder | Bundles are reference groups which aggregate multiple other reference groups. Reference groups are institutionally meaningful cohorts used in access policy. |
| security | group /folder | Security groups are collections of entities who have from access privilege on a group/folder/attribute, e.g. studentSystemAdmins.                            |
| org      | group /folder | "Org" or organization groups or folders are delegated to and owned by organizations in the community.                                                        |
| test     | group /folder | Test groups or folders are not used in production systems. They could be for dev, test, performance, etc environments.                                       |
| app      | group /folder | App groups or folders exist to be used in a specific application.                                                                                            |
| service  | group /folder | A service is a collection of one or many apps that comprise of a service offered to users.                                                                   |

## Screenshots

Use the "More actions" button to access Type.

Home > Root > test-type4 > folder1 > folder2 > folder3

## folder3

More ▾

Folder contents Privileges More ▾

Filter for:

Name ▾

^ Up one folder

■ folder4

Show:

More actions ▾

- Add to my favorites
- Create new folder
- Create new group
- Create new attribute definition
- Create new attribute name
- Attribute assignments
- Copy folder
- Delete folder
- Edit folder
- Move folder
- Attestation
- Deprovisioning
- View audit log
- New template
- Type

List of available Type settings for a folder

My activity

Miscellaneous

Browse folders

Root

app

basis

bundle

etc

org

ref

security

service

test

test-type4

folder1

folder2

folder3

folder4

tier

Folder type settings

Type actions

Type: ref

Has configuration

Yes, there is configuration on this object or ancestor folder

If there is configuration for this type directly assigned to the object or assigned to an ancestor folder.

Direct configuration

No, does not have direct type configuration

If this group/folder has type configuration directly assigned

Folder with settings

folder2

This object inherits type settings from this folder

Data owner

folder2 ref do

e.g. Registrar's office owns this data

Member description

folder2 ref md

Human readable description of the members of this group

Type: basis

Has configuration

Yes, there is configuration on this object or ancestor folder

If there is configuration for this type directly assigned to the object or assigned to an ancestor folder.

Direct configuration

Yes, has direct type configuration

If this group/folder has type configuration directly assigned

Data owner

folder3 do basis

e.g. Registrar's office owns this data

Member description

folder3 md basis

Human readable description of the members of this group

Type: policy

Has configuration

No, there is not configuration on this object or ancestor folder

If there is configuration for this type directly assigned to the object or assigned to an ancestor folder.

Type: etc

Has configuration

No, there is not configuration on this object or ancestor folder

If there is configuration for this type directly assigned to the object or assigned to an ancestor folder.

Assigning a Type setting to a folder

+ Create new group

Quick links

My groups

My folders

My favorites

My services

My activity

Miscellaneous

Browse folders

Root

app

basis

bundle

etc

org

ref

security

service

test

Home > Root > test-type4 > folder1 > folder2 > folder3

folder3

Edit folder

More actions

Folder contents

Privileges

More

Folder type settings

Type actions

Type name

ref

Tag you want to assign

Type

No, does not have direct type configuration

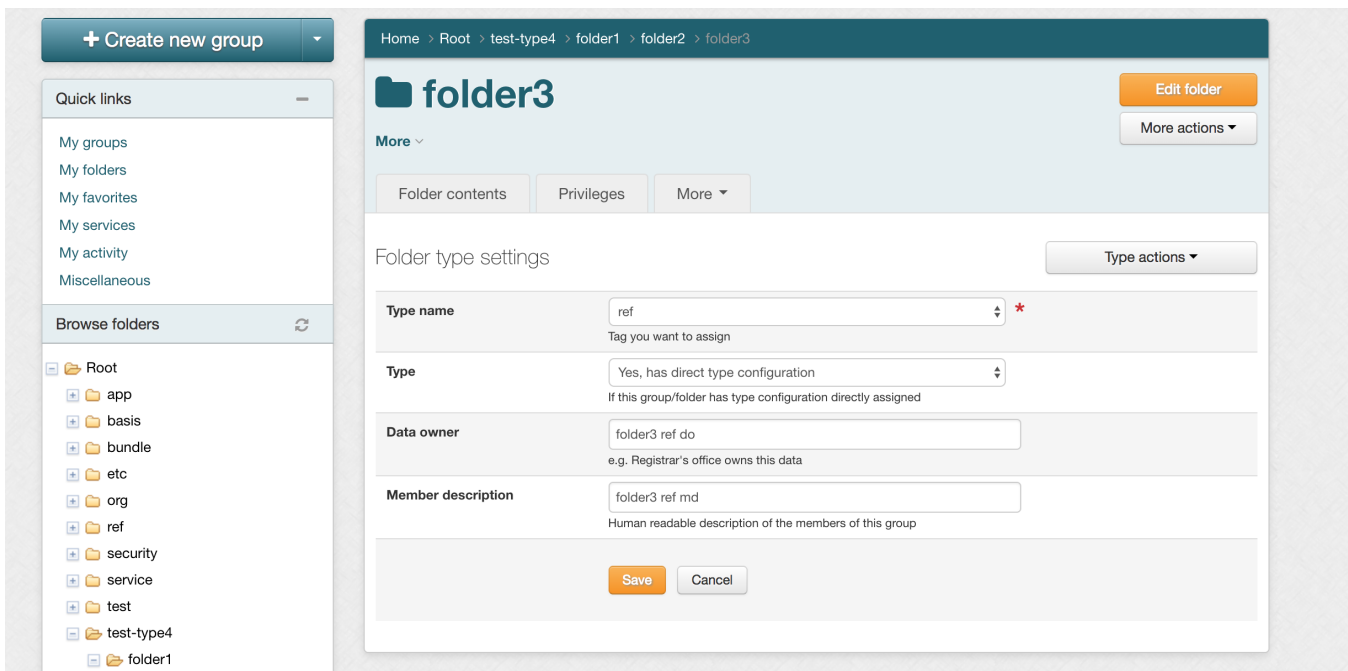
Yes, has direct type configuration

Save

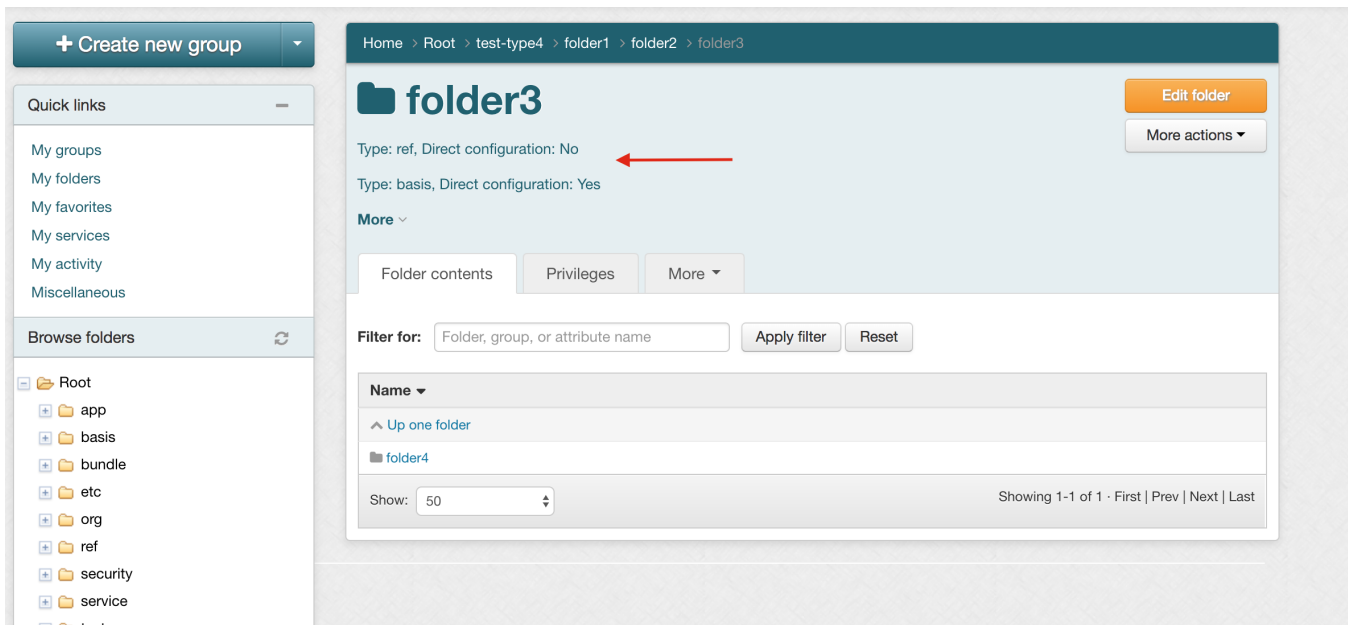
Cancel

Shows Type setting and specifies if inherited or not.

Note, we plan to add text that states that type assignments and metadata can be viewed by anyone who can VIEW a group.



Type info is shown under the folder name to make it easily accessible.



The screenshots above show Types on folders. Similar Type configuration can be set on groups as well.

## Keep inherited attributes up do date

A daemon should work like [deprovisioning](#) where inherited attributes are kept up to date. When an attribute is assigned, it should call the propagate method for this object and subobjects if a stem.

## To do now

- Put type name first, then direct/indirect
- When settings changed, it should use logic like [deprovisioning](#) where it updates the hierarchy tree
- Types and metadata should be displayed on object page under the description (not in "more")

## **To do later**

- Source basis and ref metadata from loader
- Clarify the difference between app and service
- If there is a blank attribute, it should be unassigned
- Use this as a means to search for things