DSS How DSS Container Auto Group Links work

In the following, we want to provide you with an overview how DSS Container Auto Group Links work.

Let's suppose, we start with the following (existing) groups in TUMonline:

- **GROUP1**: Alice, Bop, Cesar
- **GROUP2**: Bop

And let's suppose that Cesar has already **READ_WRITE** access to our DSS Data Container pr74qo-dss-0003.

Now suppose, we want to give **GROUP1** **READ_ONLY** access to the DSS Data Container pr74qo-dss-0003. So we link **GROUP1** to the DSS Data Container with access mode **READ_ONLY**, using the DSSWeb Self-Service portal.

Now what happens is that a regularly running Update Job will detect this new Group Link, compare the access rights that result from the group link with the already existing container access rights and create the still missing invitations or update changed ones. When computing required creations/updates, the Update Job follows the following rules:

1. Manual invitations take precedence over automatic invitations
2. **READ_WRITE** invitations take precedence over **READ_ONLY** invitations

So in our example the Update Job would create two new **READ_ONLY** Invitations for Alice and Bop. As Cesar already has an invitation on the container, the update job will skip Cesar as **manual invitations take precedence over automatic invitations**.

Now suppose, we also link **GROUP2** to the DSS Data Container with access mode **READ_WRITE**. What will happen the next time the Update Job is running is, that it changes the invitation for Bop from **READ_ONLY** to **READ_WRITE** as **READ_WRITE** invitations take precedence over **READ_ONLY** invitations.

Now suppose, Alice is removed from **GROUP1**. Next time the Update Job is running it will delete Alice's invitation for pr74qo-dss-0003 as she is no member of any group anymore.

Now suppose, we remove the Link between **GROUP1** and pr74qo-dss-0003. In this case, the Update Job will leave Cesar's invitation untouched, as **manual invitations take precedence over automatic invitations**. And it will downgrade Bops invitation from **READ_WRITE** to **READ_ONLY** because Bop is also a member of **GROUP2**, which is still linked with **READ_ONLY** permissions.

Now suppose, we also remove the Link between **GROUP2** and pr74qo-dss-0003. In this case, the Update Job will revoke Bop's access rights for the container completely.

Related articles

- DSS How to apply for storage on TUM-DSS
- DSS How to transfer data between SuperMUC and DSS
- DSS Understanding DSS on DGX-1
- DSS How an external invited user get's started with Globus Online
- DSS How DSS Container Auto Group Links work