**Shared Folder Documentation**

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This Document Covers how to create a shared folder for Groups. By following these steps you can enable group members to view and change files contained within their group folders.

**Step 1:**

There are multiple steps you need to create a shared folder. First, create the folder

*mkdir folder*

For this example, we will create a folder for accounting.

*mkdir finance*

Explination:

mkdir creates folders for most linux systems.

**Step 2:**

Next, you need to configure the permissions on the directory. Start by adding this folder to the groups.

*sudo chgrp -R groupName sharedFolder/*

*sudo chgrp -R accounting finance/*

Explanation:

chgrp is the command used to modify file/folder attributed for groups.

-R makes the command apply recursively to all files and folders within the folder.

**Step 3:**

The last step is changing the file permissions:

sudo chmod -R 2775 sharedFolder/

sudo chmod -R 2770 *finance/*

Explanation of permission numbers:

2 – turns on the setGID bit which tells the system to make a subfiles/folders inherit the same group as the directory.

7 – apply rwx permissions for the owner

7 – apply rwx permissions for the group

0 – apply no permissions for the other people. This disallows users outside of the group from entering, much less viewing/changing/executing files and folders contained within.

The permissions you want will vary, so use the below table to help which is posted at:

<https://www.tutorialspoint.com/unix/unix-file-permission.htm>

|  |  |  |
| --- | --- | --- |
| **Number** | **Octal Permission Representation** | **Ref** |
| **0** | No permission | --- |
| **1** | Execute permission | --x |
| **2** | Write permission | -w- |
| **3** | Execute and write permission: 1 (execute) + 2 (write) = 3 | -wx |
| **4** | Read permission | r-- |
| **5** | Read and execute permission: 4 (read) + 1 (execute) = 5 | r-x |
| **6** | Read and write permission: 4 (read) + 2 (write) = 6 | rw- |
| **7** | All permissions: 4 (read) + 2 (write) + 1 (execute) = 7 | rwx |