

Creating and Accessing Shares on your Network Drive

Being able to make shares on your network drive is a way to allow many different users to view and interact with a directory that is not their own.

This guide will help you create shares and change permissions on Windows, and create shortcuts to those shares with Linux.

For all Linux tutorials, [MobaXterm](#) will be used as the Linux Terminal. This section will also assume you have general knowledge of the Linux command-line.

If you are sharing a file/folder with someone else, read section “**Making a Share**”. If there is a file/folder that has been shared with you and you would like to access it, read section “**Create a Shortcut**”.

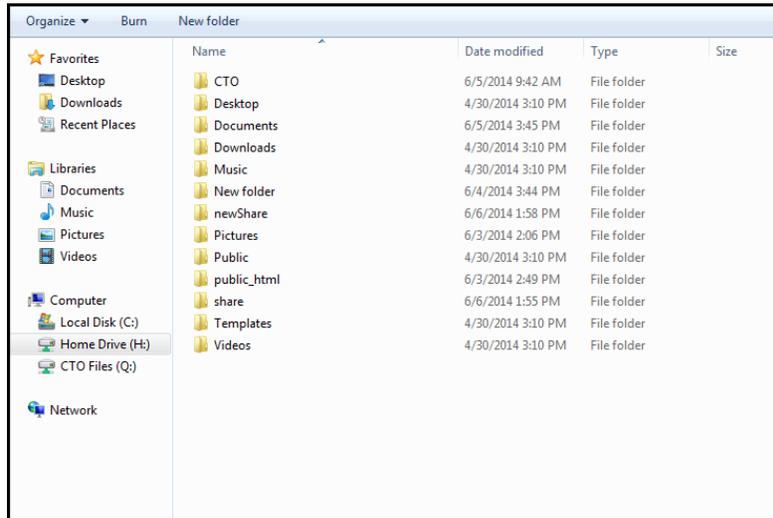
Making a Share

To share a folder with another user on the SECS network, you must use Windows.

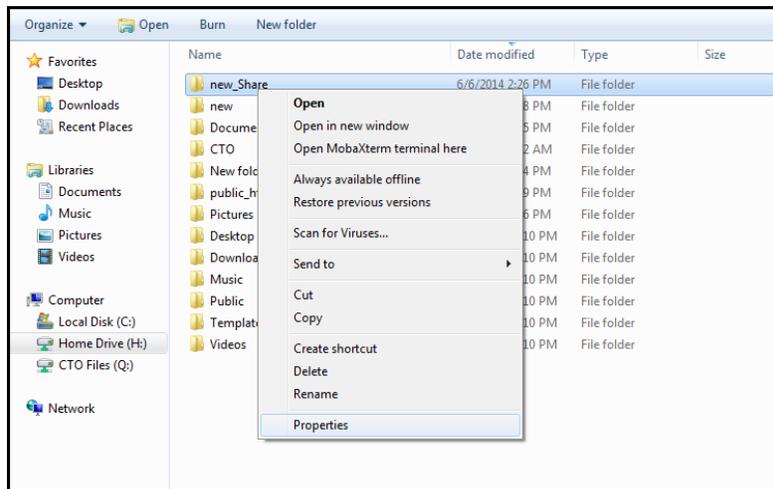
Before you begin, have the following information ready:

- The name of the file/folder you are planning on sharing
- The usernames of the people you wish to share with

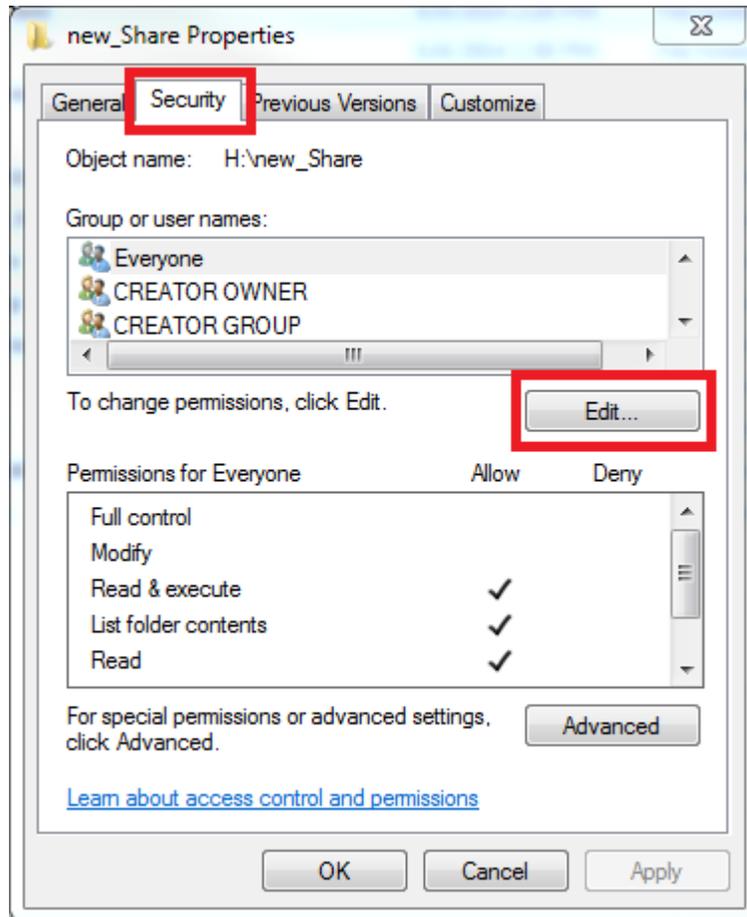
1. Navigate to your [SECS Network Drive](#) on Windows. If you are connected to the SECS network from a lab computer, this will be your *H:/* or *Home* drive. Your window should look like this:



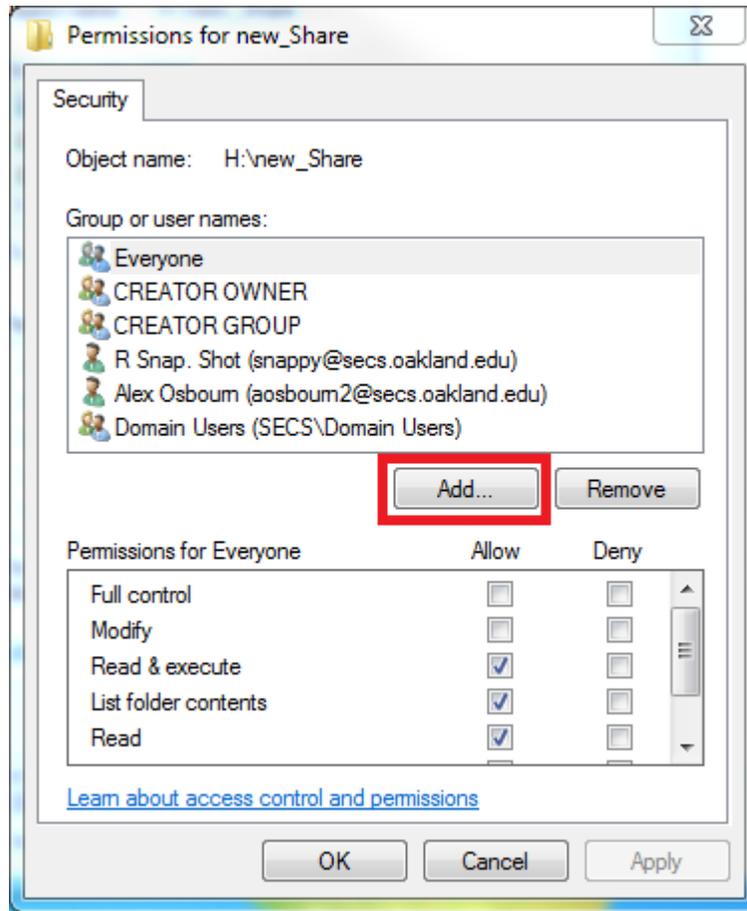
2. Right click on the file/folder you wish to share and select **'Properties'**. It is recommended that the file/folder you are sharing has the word "Share" within its name for easy identification.



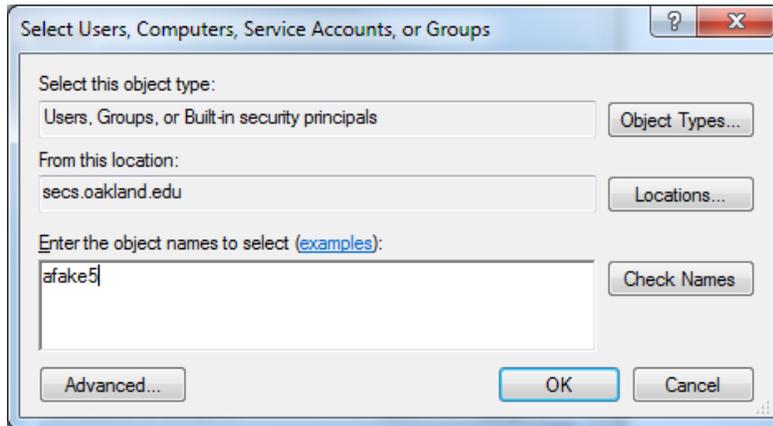
3. On the 'Security' tab, select 'Edit'.



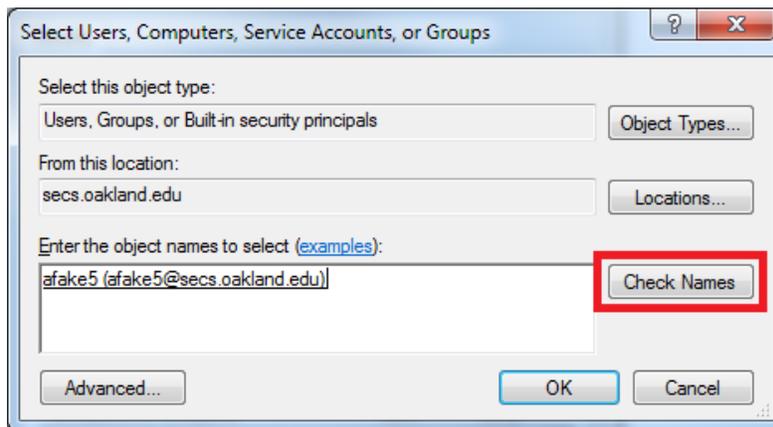
4. Next, click on 'Add...'.



5. Enter a SECS username within the **‘Enter the object...’** field. In the example, the share is being created for the user *afake5*.

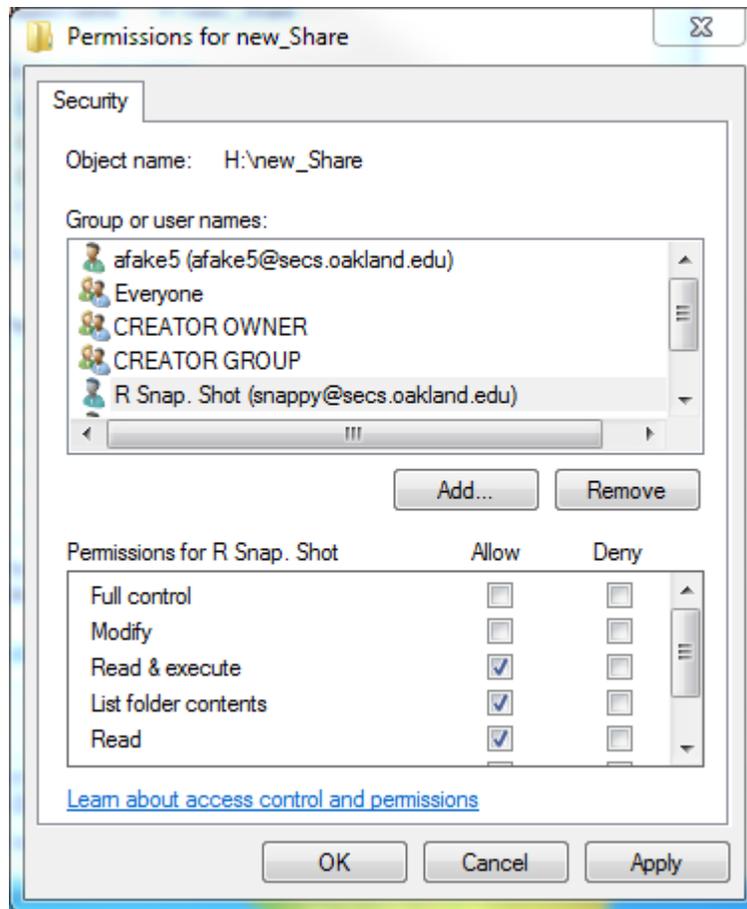


6. Click **‘Check Name’**. This searches the network for a valid user with the username entered. If one is found, the correct information will be auto-filled. A file/folder can be shared with many users. To enter more than one, enter each username into the field, separating them with a semicolon and a space (*afake5; afake6*).



Windows Pro Tip: Know some of the username but not the entire name? Entering part of a username will still auto-fill. If more than one user have the same partial information entered, a new window will open showing all the users matching the information provided.

7. Close this window by clicking **'Okay'**. On this next screen, you should see the name of the user(s) you shared with. This is where the permissions are set. Click on the name of the user(s) you just shared to. In the box below, check the boxes for the permissions you wish to grant them. For more information about what each of these mean, view [Microsoft's explanation](#).



Now, the share has been made. Now, direct those users who you created the share for to the section of this tutorial, **Create a Shortcut**.

Create a Shortcut

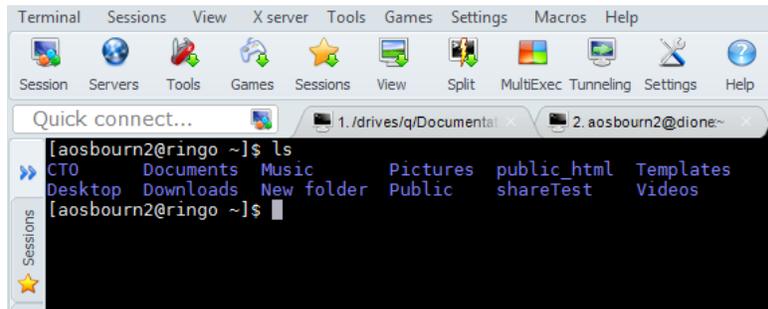
When a share with a user is created, they now have some control over what is being shared. For example, a user is given share rights to do whatever they want with a file/folder on another user's SECS Network Drive. However, they don't want to have to navigate to that share every time they want to access it. Making a link to the share is the perfect solution. The only way to do this is through Linux:

First you need to SSH to one of our general purpose Linux servers. Use server name **"beatles"** to automatically connect to any one. On successful connection, the default directory you land in is your SECS Network Drive.

Before you begin, you will need the following information:

- The username the person who created the share
 - The name of the share they created
 - The path to the share within their SECS Network Drive
1. Navigate to the the directory or parent directory of where you want the file/folder shared with you to go. In the example, the command 'ls' is performed to confirm the current directory is the root of the SECS Network Drive. This is where the share will be linked to.

ls

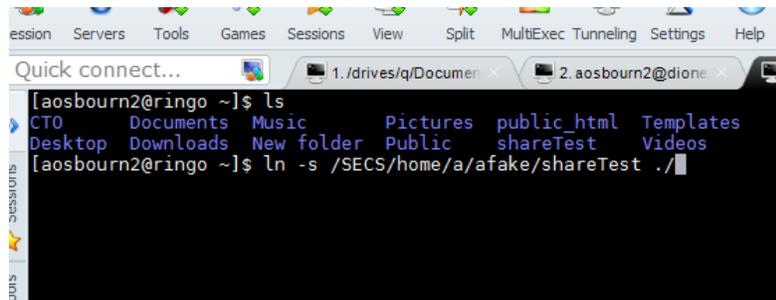


The image shows a terminal window with a menu bar (Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, Help) and a toolbar with icons for Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Settings, and Help. The terminal has two tabs: '1. /drives/q/Documenta...' and '2. aosbourn2@dione~'. The terminal content shows the user 'aosbourn2@ringo ~' running the command 'ls', which outputs a list of directories: CTO, Desktop, Downloads, New folder, Music, Public, shareTest, Pictures, Videos, public_html, and Templates. The prompt returns to 'aosbourn2@ringo ~'.

2. Enter the command below to link the share.

```
$FIRST_LETTER = "First initial of sharer's username"  
$USERNAME = "Username of sharer"  
$SHARENAME = "Name of the share"  
$DESTINATION= "Where the shortcut will be made"
```

```
ln -s /SECS/home/$FIRST_LETTER/$USERNAME/$SHARENAME $DESTINATION
```



The screenshot shows a terminal window with a menu bar at the top containing 'ession', 'Servers', 'Tools', 'Games', 'Sessions', 'View', 'Split', 'MultiExec', 'Tunneling', 'Settings', and 'Help'. Below the menu bar, there are two browser tabs: '1. /drives/q/Documen...' and '2. aosbourn2@dione...'. The terminal prompt is '[aosbourn2@ringo ~]\$'. The first command entered is 'ls', which outputs a directory listing: 'CTO', 'Documents', 'Music', 'Pictures', 'public_html', 'Templates', 'Desktop', 'Downloads', 'New folder', 'Public', 'shareTest', and 'Videos'. The second command entered is 'ln -s /SECS/home/a/afake/shareTest ./', which is executed successfully.

In the example, the user that had the share on their drive was *afake*. The share name was *shareTest*. Since the share will be created in the current directory, *./* is used to specify that. If the share was to go into a different directory, the path would be in place instead. Specifying a directory that is not there causes a directory to be created.

- Now, using 'ls -l', the share and where it is linked to is shown in the SECS Network Drive. In MobaXterm, linked folders/files are a light blue color.

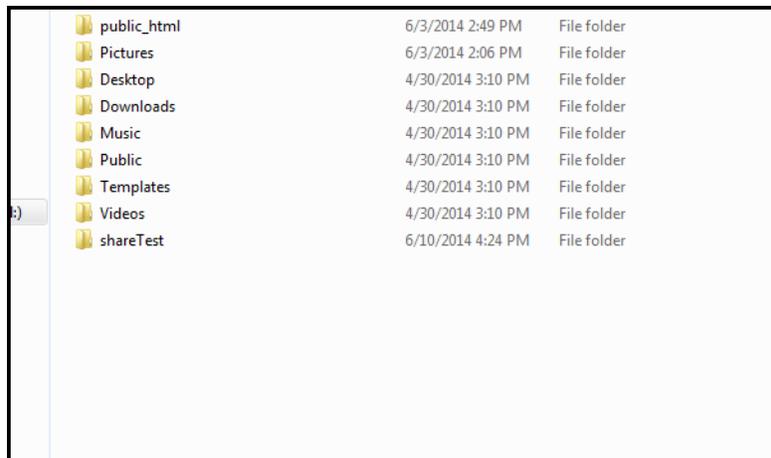
ls -l

```

[aosbourn2@ringo ~]$ ls
CTO  Documents  Music  Pictures  public_html  Templates
Desktop  Downloads  New folder  Public  shareTest  Videos
[aosbourn2@ringo ~]$ ln -s /SECS/home/a/afake/shareTest ./
[aosbourn2@ringo ~]$ ls
CTO  Documents  Music  Pictures  public_html  Templates
Desktop  Downloads  New folder  Public  shareTest  Videos
[aosbourn2@ringo ~]$ ls -l
total 88
drwxrwxr-x 2 aosbourn2 domain users 4096 Jun  5 09:42 CTO
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Desktop
drwxr-xr-x 4 aosbourn2 domain users 4096 Jun  5 09:38 Documents
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Downloads
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Music
drwxrwxr-x 2 aosbourn2 domain users 4096 Jun  4 15:44 New folder
drwxr-xr-x 2 aosbourn2 domain users 4096 Jun  3 14:06 Pictures
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Public
drwxr-xr-x 3 aosbourn2 domain users 4096 Jun  3 14:49 public_html
lrwxrwxrwx 1 aosbourn2 domain users  28 Jun  5 13:27 shareTest -> /SECS/home/a/afake/shareTest
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Templates
drwxr-xr-x 2 aosbourn2 domain users 4096 Apr 30 15:10 Videos
[aosbourn2@ringo ~]$

```

It is also visible in Windows within the SECS Network Drive!



Resources

[CTO Resources Page](#)

Collection of CTO information and documents.

[Microsoft Permissions](#)

Information about Microsoft Windows permissions. Linked above.

[Linux Commands](#)

List of common and important Linux commands for the command-line.

[ln Command Help](#)

In-depth article on the 'ln' command.

[MobaXterm CTO Guide](#)

CTO's guide on using MobaXterm and connecting to the SECS Linux servers. Linked above.