

# Using Globus to Transfer Files to the Stanford Digital Repository

[Process Review](#)

[What Is Globus?](#)

[Depositing with Globus](#)

[Create a new item in the SDR](#)

[Use Globus to transfer from Oak, Sherlock, OneDrive or Google Drive](#)

[How to determine if your transfer is complete](#)

[Complete deposit to SDR](#)

[Appendices](#)

[Appendix 1: Personal or individual computer setup and transfer](#)

[Option 1: Transfer via Globus Connect Personal](#)

[Option 2: Direct upload](#)

[Appendix 2: Campus server setup and transfer](#)

[Appendix 3: Checksums for file transfers](#)

## Process Review

Depositing content to the Stanford Digital Repository (SDR) using Globus requires you to perform tasks in both the SDR and Globus web applications. An overview of the process is described below.

1. SDR web app: Create a new item, select the option to use Globus to transfer files, and then select the appropriate link to go to Globus.
2. Globus web app: Complete setup tasks if needed and then transfer your files.
  - a. **We strongly recommend that you do NOT use the "Upload" option.** [Here's why not.](#)
3. SDR web app: Complete the form for your item and deposit. Files will automatically be moved from Globus to the SDR for preservation.

Your exact tasks for Globus setup in the second step will depend on whether you've signed into your Stanford Globus account before, where your content is located, and whether you need to install Globus software. All of these steps are covered in this document.

► **Size limitations:** Please do not attempt to transfer more than 4TB of total content, a single file of more than 4TB, or more than 25,000 files. If your content is larger than this, please consider:

- **For large amounts of total content:** dividing up your content into multiple deposits
- **For very large individual files:** creating smaller zip files or splitting up large files into pieces
- **For lots of files:** zipping up directories or subdirectories to decrease the total number of files

► **High-risk data:** Do not transfer high-risk content to Globus for deposit to the SDR. The SDR is not approved for high-risk content, nor is Globus Connect Personal, which is required in some cases.

For assistance with using Globus to deposit to the SDR, please contact us at <https://sdr.stanford.edu/contacts/new>.

## What Is Globus?

Globus is a non-profit, high-performance data-transfer platform provided by University IT, Stanford Libraries, and the Genetics Bioinformatics Service Center in the School of Medicine and is administered by the Stanford Research Computing Center for use by members of the Stanford community. If you have a full-service SUNet ID (i.e. one that includes Stanford email), you can use the Globus service for free to transfer data to the SDR.

► If you have a sponsored SUNet account but not email, find out [how to log in to Globus](#).

If you are submitting files larger than 10GB in size to the SDR, you will need to send them to us using the Globus service.

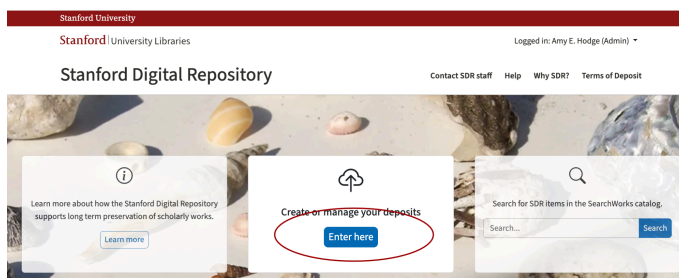
► We use the term "Globus collection" throughout this documentation, but you may see the term "endpoints" in other documentation. These two terms are essentially interchangeable.

# Depositing with Globus

## Create a new item in the SDR

Create an item for deposit in the SDR by using our web application at [sdr.stanford.edu](https://sdr.stanford.edu).

1. Click "Enter here" to log into the site. If you are unable to log in, or if when you log in you do not see any collections, use the [Contact SDR staff link](#) to request permission to make a deposit.



2. Find the collection you want to deposit to and click "Deposit to this collection."

Deposit to this collection

3. In the "Manage files" section of the deposit form, you'll see that the button to "Use Globus to transfer files" is inactive. You must save a draft of this deposit before you can upload via Globus. Click the "Next" button to move to the "Title and contact" section of the form.

A screenshot of the 'Manage files' section of the deposit form. It has a title 'Manage files' and a large grey box with an upload icon and the text 'Drag and drop your files here, up to 10GB or 25,000 files. or Select files to upload'. Below this, there is a note: '\* If you have more than 10GB but less than 4TB and fewer than 25,000 files, you can use Globus to upload your files. For anything larger, contact us.' The button 'Use Globus to transfer files' is circled in red. To its right is the text 'Save a draft to enable Globus file deposit.' Below this is a section titled 'Your files' with the text 'Your files will appear here once they have been uploaded.' At the bottom, there are three buttons: 'Cancel', 'Next ->' (circled in red), and 'Save as draft'.

Help is available at <https://sdr.stanford.edu/contacts/new>

4. Enter a title. A title is required to save a draft. You may change this later. Click "Save as draft."

**Title of deposit and contact information**

Title of deposit ⓘ  
A unique, descriptive title may improve discovery of your work in web searches.

Data related to research project

Contact email (one per box) ⓘ  
amyhodge@stanford.edu

+ Add another contact email

Cancel Previous **Next →** **Save as draft**

5. You'll be taken to the view page for the deposit. Click the "Edit or Deposit" button at the top right of this page.

**Data related to research project** Draft - Not deposited

**Edit or deposit** Discard draft

**Details**

Public webpage ⓘ	<a href="https://sul-purl-stage.stanford.edu/zb640hr4588">https://sul-purl-stage.stanford.edu/zb640hr4588</a>
DOI ⓘ	<a href="https://doi.org/10.80343/zb640hr4588">https://doi.org/10.80343/zb640hr4588</a>
Collection	A collection for testing Globus uploading and more

6. In the "Manage files" section of the deposit form, click the button that says "Use Globus to transfer files."

**Manage files**

Drag and drop your files here, up to 10GB or 25,000 files.  
or  
[Select files to upload](#)

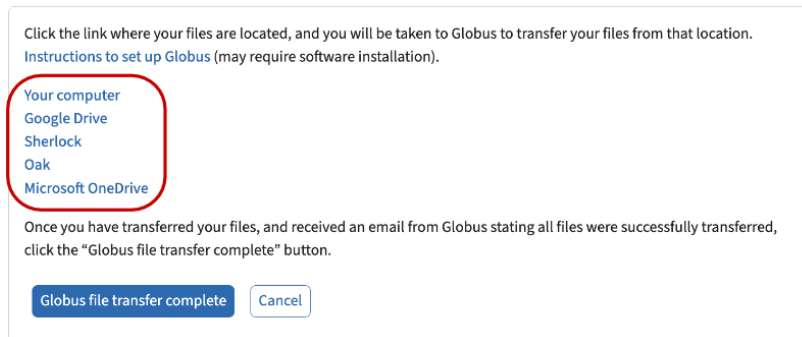
\* If you have more than 10GB but less than 4TB and fewer than 25,000 files, you can use Globus to upload your files. For anything larger, [contact us](#).

**Use Globus to transfer files** [Instructions to set up Globus \(may require software installation\)](#)

**Your files**  
Your files will appear here once they have been uploaded.

Cancel **Next →** **Save as draft**

7. You will see a list of links. Click on the one that corresponds to the location of the files you will be transferring to the SDR.



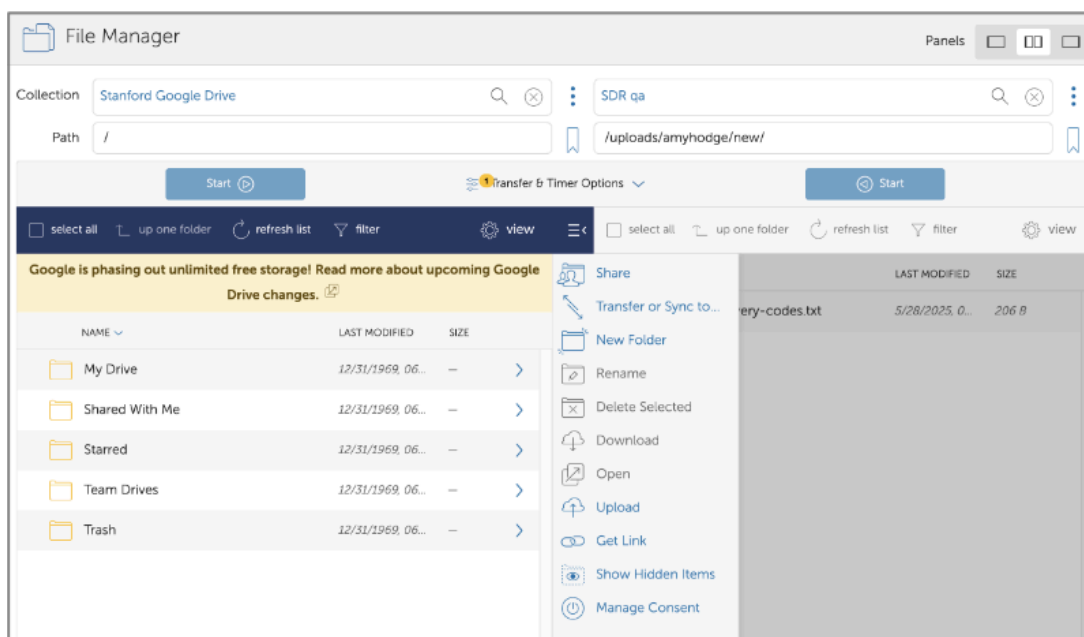
► There are [limitations](#) when transferring from Google Drive, including a limit to the amount of data that can be uploaded to Google Drive per day (if your content is not already there).

8. The links above will open the Globus web interface so that you can transfer your files. If you are using Oak, Sherlock, OneDrive, or Google Drive, proceed to the next section of this document.

► **Not using Oak, Sherlock, OneDrive or Google Drive?** Skip the section below and go to our instructions on [completing setup and transferring content from a personal computer](#) or [completing setup and transferring content from a server on campus](#).

## Use Globus to transfer from Oak, Sherlock, OneDrive or Google Drive

1. When you click on the link for either Oak, Sherlock, OneDrive, or GoogleDrive, a Globus browser tab will open with that file location on the left side of the screen and your destination folder for the SDR on the right side of the screen.



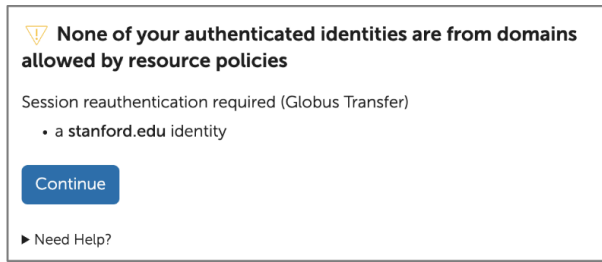
► **If you have never set up a Stanford Globus account**, you will be asked to do so when you click the shared folder link mentioned in Step 4 above.

- **You must log in using your Stanford SUNet ID in order to transfer files for SDR deposit.** Do not sign in with Google or your ORCID iD. Accounts set up at other institutions or via [globus.com](https://globus.com) will not work for this process.
- For more details or if you need assistance with this step, see the [instructions on Globus@Stanford on how to create a Globus account](#).
- You may choose to [link to other existing Globus accounts](#) you have during this process. The linked instructions are also helpful if you initially set up your account with Google or ORCID and need to link it to your Stanford account in order to make your SDR deposit.
- **Approve and complete all the authorization steps** (it might seem redundant but they are all necessary).
- You may want to refer to the [Globus@Stanford page on using Google Drive with Globus](#).

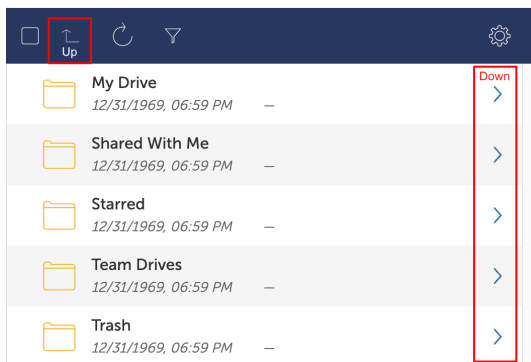
► **Users setting up new Globus accounts:** At the end of the authentication process you may find that Globus is no longer showing you your file location (Oak, Sherlock, OneDrive or Google Drive)

on one side of the transfer panel and the folder we created for you on the other. **If this happens**, please return to your item in the SDR and click the link again to reload the proper page.

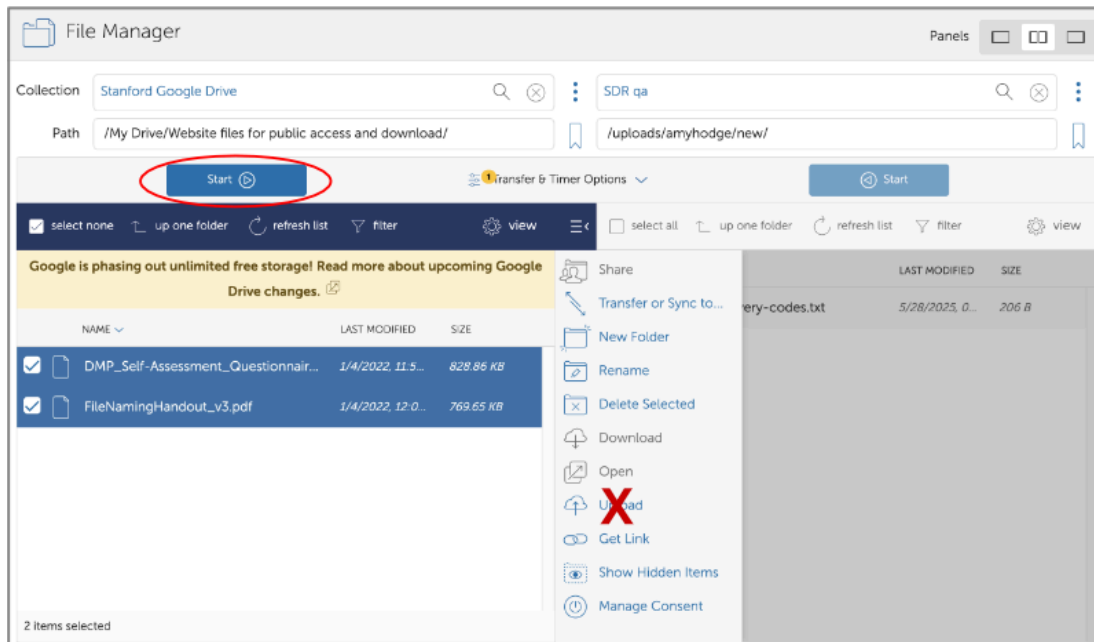
► **If you have a Globus account, make sure you are authenticated into that account.** If you have not authenticated into a valid account for the link you selected but you do have an account, you will see a message indicating "Session reauthentication required." Click the Continue button to proceed with reauthentication.



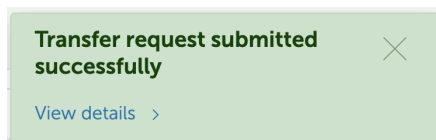
2. On the left, click in the gray area displaying the files to activate that panel and navigate to the directory containing the files you want to transfer.
  - a. **To view files within a folder**, either double-click on the name of the folder or click on the blue arrow to the right of that folder.
  - b. **To navigate back up a directory**, use the up arrow in the horizontal blue menu bar



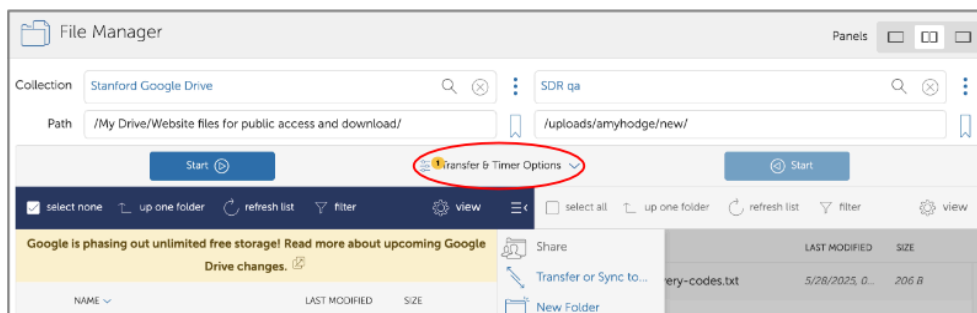
3. Check the boxes next to the file names to select the files you want to transfer to the SDR, then click the "Start" button on the left side of the screen.



If you have successfully started the transfer, you will see the following message pop up on your screen:



If you encounter problems and your transfer fails to start, please click on "Transfer & Timer Options" and check the box to encrypt your transfer.



## How to determine if your transfer is complete

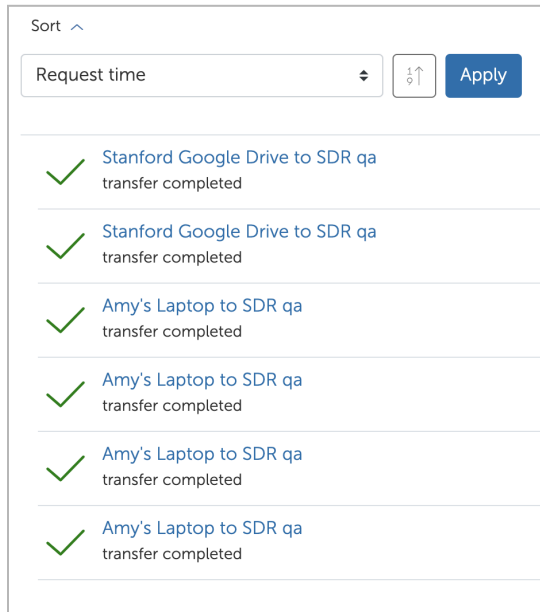
If your files are large, transfer can take several hours. If you let your computer go to sleep, the transfer will pause. Once your laptop is awake again, the transfer should resume IF you used the "Start" button, not the "upload" button, to move your files.

- Globus will send you an email when your transfer is complete.

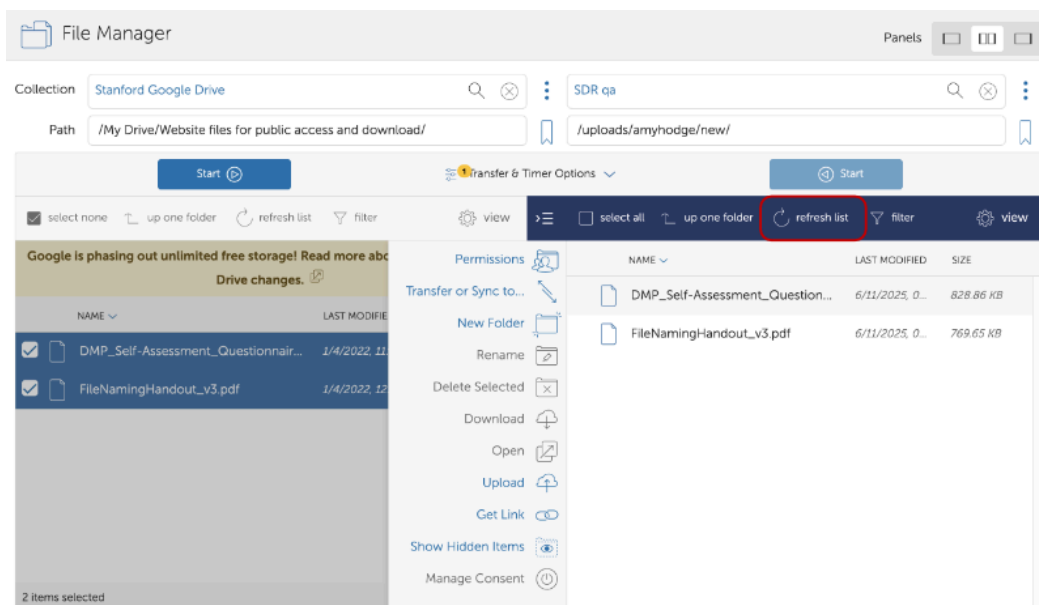
Help is available at <https://sdr.stanford.edu/contacts/new>



- Check the "Activity" section via the left navigation bar to see if your transfer is complete.



- View your files in the destination folder by clicking on the grayed out panel for the destination folder to activate it, then clicking on the "refresh list" button in the blue bar to see the file list.

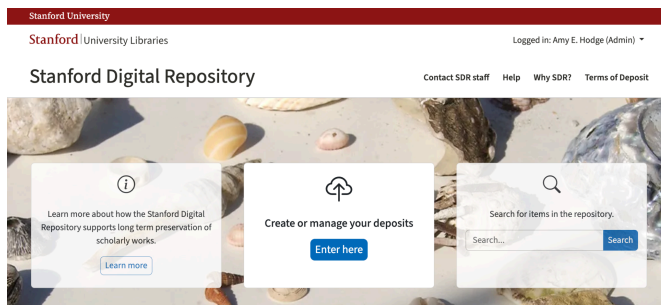


Please be sure that all of your files have completed the transfer to Globus before proceeding to the [Complete deposit to SDR](#) section of these instructions.

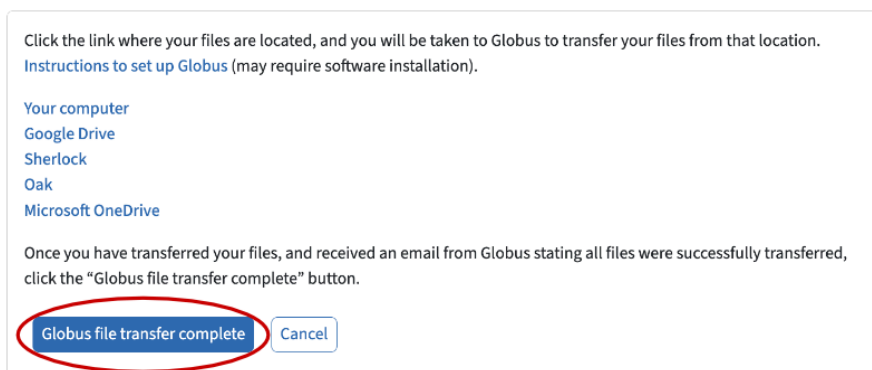
Help is available at <https://sdr.stanford.edu/contacts/new>

## Complete deposit to SDR

Once the transfer of your files to Globus is complete, return to [sdr.stanford.edu](https://sdr.stanford.edu).




1. If you did not leave the form for your item open while you did the tasks in the Globus interface, click on the title of your item, and then on the "Edit or Deposit" button on the top right to continue editing.
2. Click the button in the "Manage files" section of the form that says "Globus file transfer complete." **Do not click this button until you are sure the transfer is complete.** See [How to determine if your transfer is complete](#).



A list of your files will be retrieved from Globus and displayed in the lower portion of this page. If the number of files is large, it may take some time for the list of files to display.

### Manage files



Drag and drop your files here, up to 10GB or 25,000 files.  
or





Select files to upload

\* If you have more than 10GB but less than 4TB and fewer than 25,000 files, you can use Globus to upload your files. For anything larger, [contact us](#).

Use Globus to transfer files      [Instructions to set up Globus](#) (may require software installation)

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#### Your files

File Name	Description 	Hide 	Action
DMP_Self-Assessment_Questionnaire_v4.pdf	<a href="#">Add description</a>	<input type="checkbox"/>	
FileNamingHandout_v3.pdf	<a href="#">Add description</a>	<input type="checkbox"/>	

Cancel
Next →
Save as draft

- Make sure the rest of the form is filled out. Use the left navigation tabs or the "Next" buttons at the bottom of the page to get to the "Deposit" section of the form, and click the "Deposit" button.

### Submit your deposit

Be sure you have completed all the required sections. Your deposit may take several hours to complete if your file size is larger than 10GB. You have accepted the [Terms of Deposit](#).

Cancel
Previous **Deposit**
Save as draft

Congratulations on completing your SDR deposit!

Help is available at <https://sdr.stanford.edu/contacts/new>

# Appendices

## Appendix 1: Personal or individual computer setup and transfer

### Option 1: Transfer via Globus Connect Personal

**We strongly recommend that you use this option for transferring content from your personal machine, particularly for large amounts of content. By using Globus Connect Personal, any interruptions in your transfer will be resumed automatically when the connection is restored, and the integrity of your files will be verified when the transfer is complete.**

► You may consider [Option 2: Direct upload](#) below only if you have a small amount of content to transfer and a highly reliable connection, such as a campus connection, and you can manually verify the successful transfer of all your files.

► You may also want to consider [Option 2: Direct upload](#) if you are having difficulty installing Globus Connect Personal, but note that your transfer could be interrupted and file integrity post-transfer will not be verified.

Be sure that you have internet access and administrator privileges for your machine. If not, you may need to talk to your local IT contact for assistance.

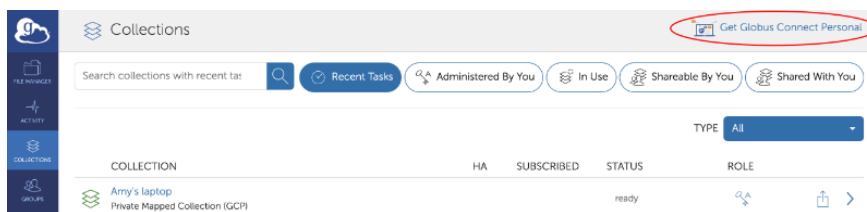
You must install Globus Connect Personal software on your personal computer in order to create the necessary collection for transferring files.

► Globus Connect Personal software is not for use with [High Risk data](#).

► For more details on this step, see the [Installing Globus Connect Personal](#) website.

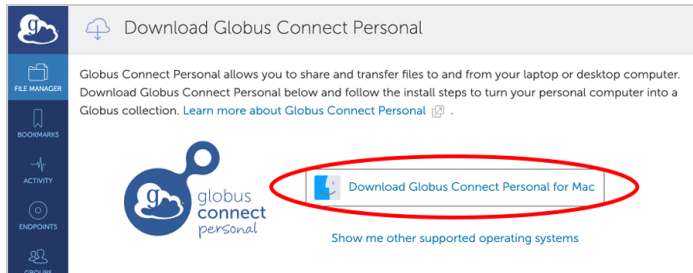
You can access the Globus Connect Personal download link in one of two ways:

1. From the File Manager page where you end up after creating your account, select "Collections" from the left-hand menu and click "Get Globus Personal Connect" at the top right.



Help is available at <https://sdr.stanford.edu/contacts/new>

2. You can also get [directly to this page](#). You will see the download button that is appropriate for the operating system on your computer. Click this button to begin the installation.



Select your operating system and follow the appropriate instructions below for your operating system to install and configure the software on your machine.

- [Mac OS instructions](#): complete all steps under "Installation" and "Configuration"
- [Windows instructions](#): complete all steps under "Installation" and "Configuration"
- [Linux instructions](#): complete all steps under "Installation" and "Running"

Once you have completed the setup:

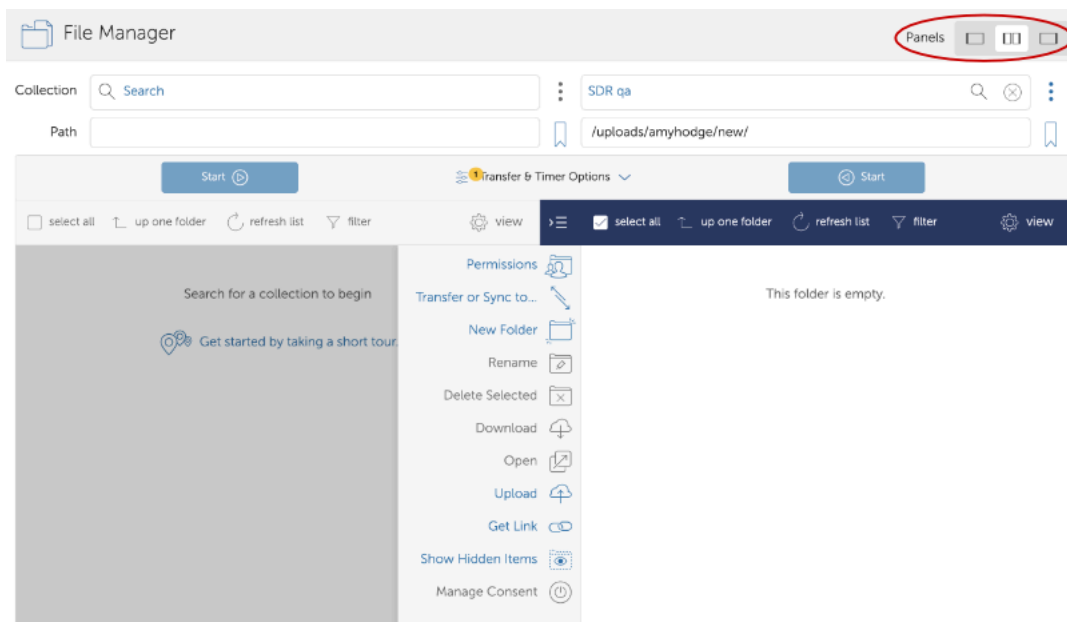
1. Return to your item at [sdr.stanford.edu](https://sdr.stanford.edu). In the "Manage files" section of the form, click on the "Your computer" link.

► *If you are not already logged in, you will be taken to the Globus login page. Be sure that you have also started Globus Connect Personal.*

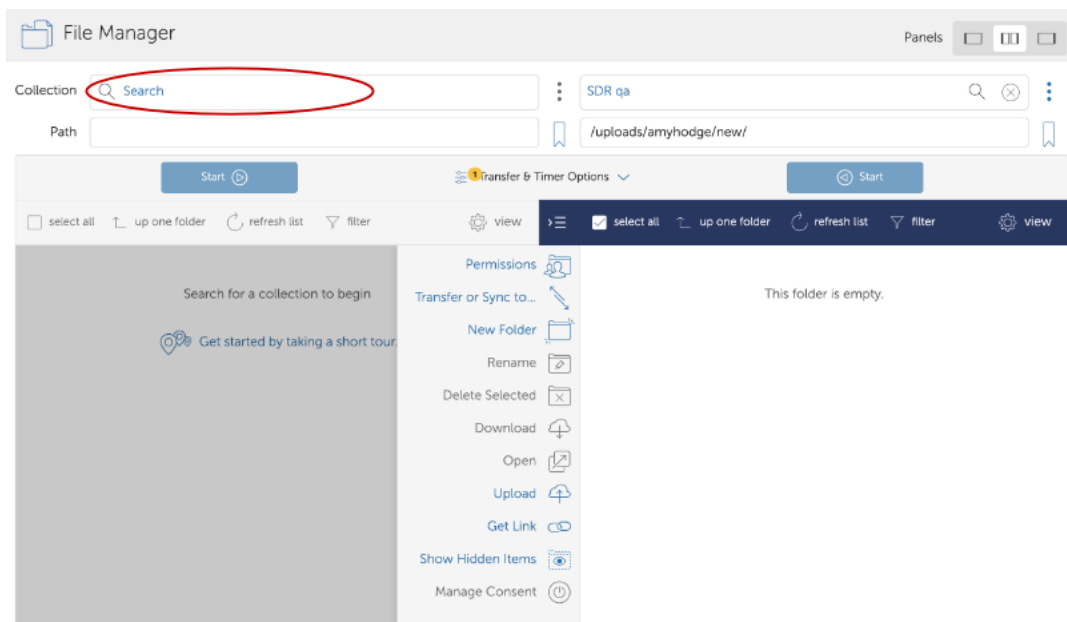
The shared SDR collection will open on one side of the Globus window. The name of that collection will be displayed in the "Collection" box at the top of that side, and the panel below it should be empty with a message saying "This folder is empty."

► *Your screen may be reversed from the images shown below. The SDR collection is shown on the right below, but for you it may show up on the left.*

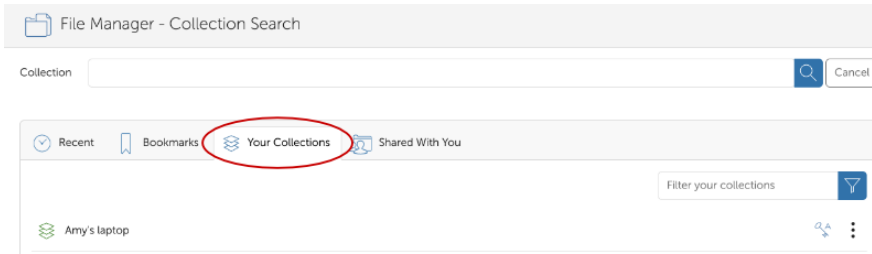
2. If you only see one panel, select the middle option from the "Panels" selector at the top right of the screen.



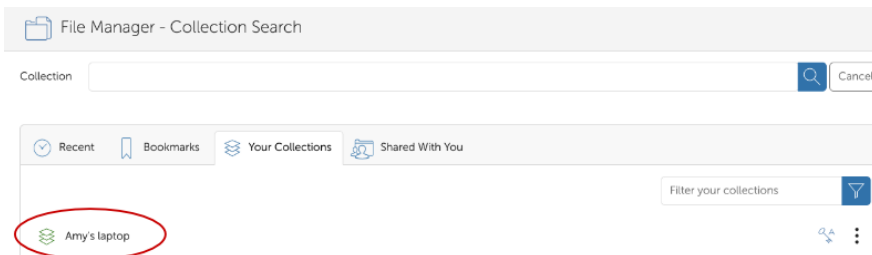
3. Click in the search box at the top of the other side of your screen that does not have a collection listed. This will take you to a search of your collections.



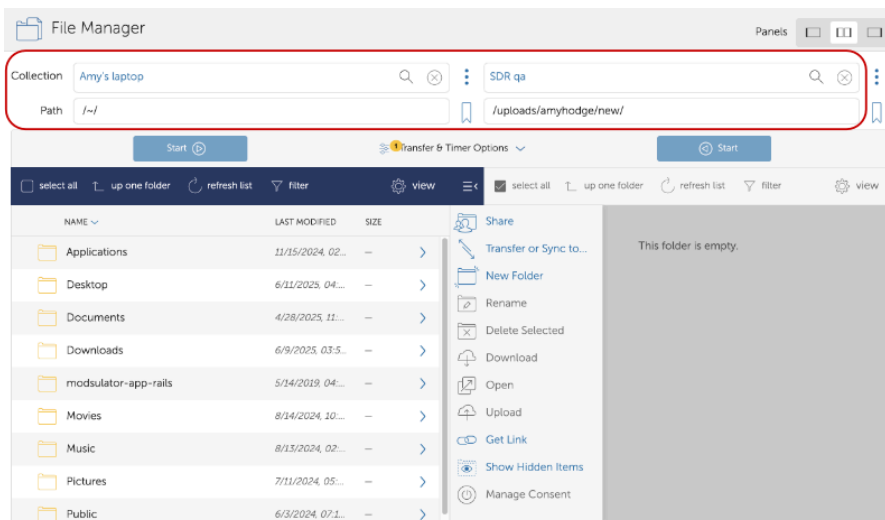
You may immediately see the collection containing your files, or you may need to choose the "Your Collections" tab in order to find your collection. You are looking for the collection that you set up when you installed Globus Connect Personal.



4. Click on the name of your collection.

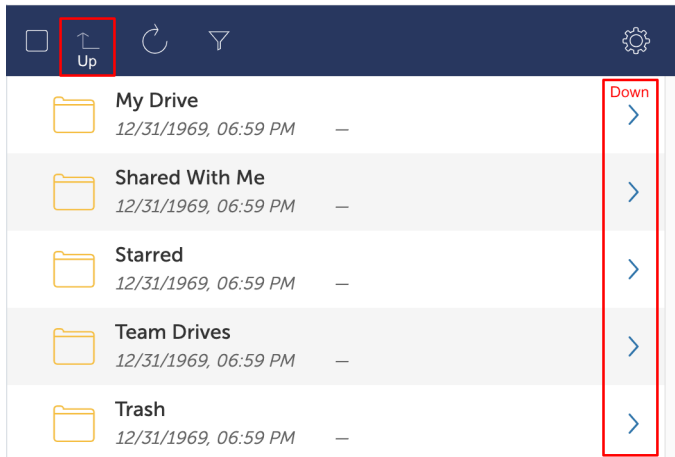


5. You should be returned to the File Manager view with the SDR collection displayed in the "Collection" box on one side and your collection displayed in the box on the other side.

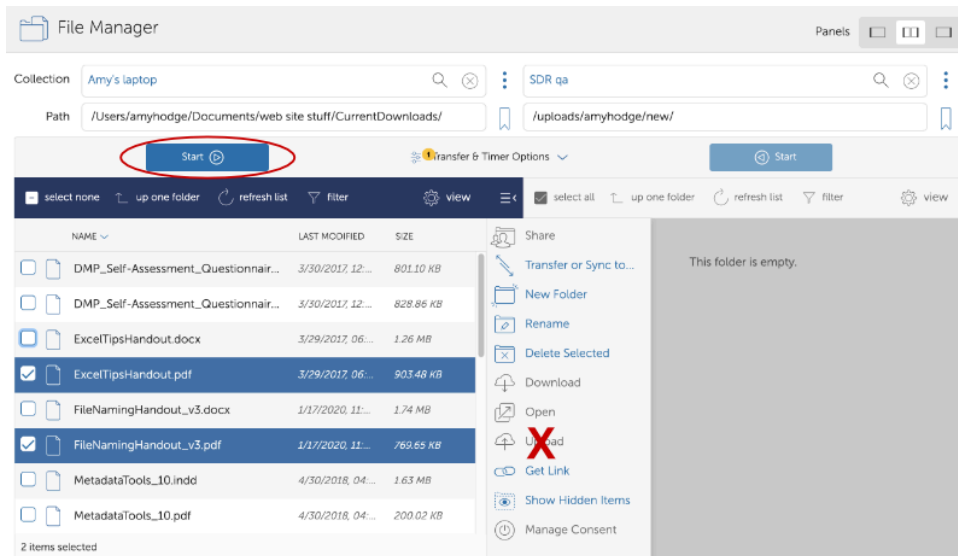


6. Make sure the panel showing your files is white, indicating it is active. If the panel with your files is gray, click on the gray area to make the panel active.
7. Navigate to the directory containing the files you want to transfer.
  - **To view files within a folder**, either double-click on the name of the folder or click on the blue arrow to the right of that folder.

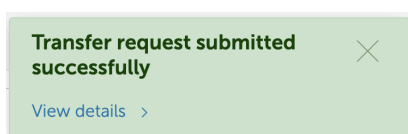
- **To navigate back up a directory**, use the up arrow in the horizontal blue menu bar



8. Check the boxes next to the file names to select the files you want to transfer to the SDR and click the "Start" button on the side of the screen where your collection is. Your files should start to transfer immediately.

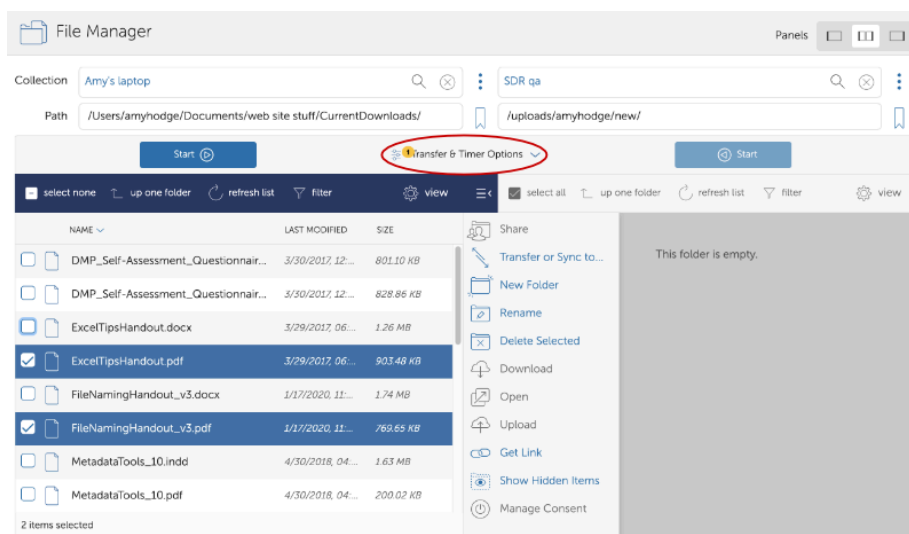


If you have successfully started the transfer, you will see the message below pop up on your screen:





If you encounter problems, please click "Transfer & Timer Options" and check the box to encrypt your transfer.



Once you have completed the above steps, [make sure the transfer is complete](#) and then proceed to the [Complete deposit to SDR](#) section of these instructions.

## Option 2: Direct upload

We strongly recommend that you use [Option 1: Transfer via Globus Connect Personal](#) for transferring content from your personal machine, particularly for large amounts of content. By using Option 1, any interruptions to your transfer will be resumed automatically when the connection is restored and the integrity of your files will be verified when the transfer is complete.

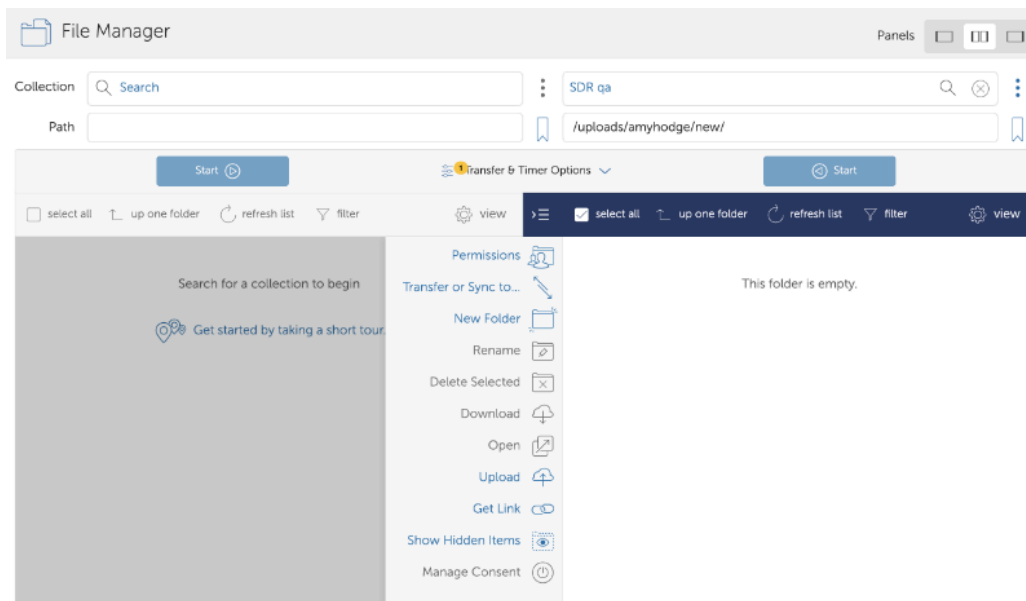
- Consider Option 2: Direct upload only if you have a small amount of content to transfer and a highly reliable connection, such as a campus connection, and you can manually verify the successful transfer of all your files.
- You may also want to consider Option 2: Direct upload if you are having difficulty installing Globus Connect Personal, but note that your transfer could be interrupted and file integrity post-transfer will not be verified.

Be sure that you have internet access.

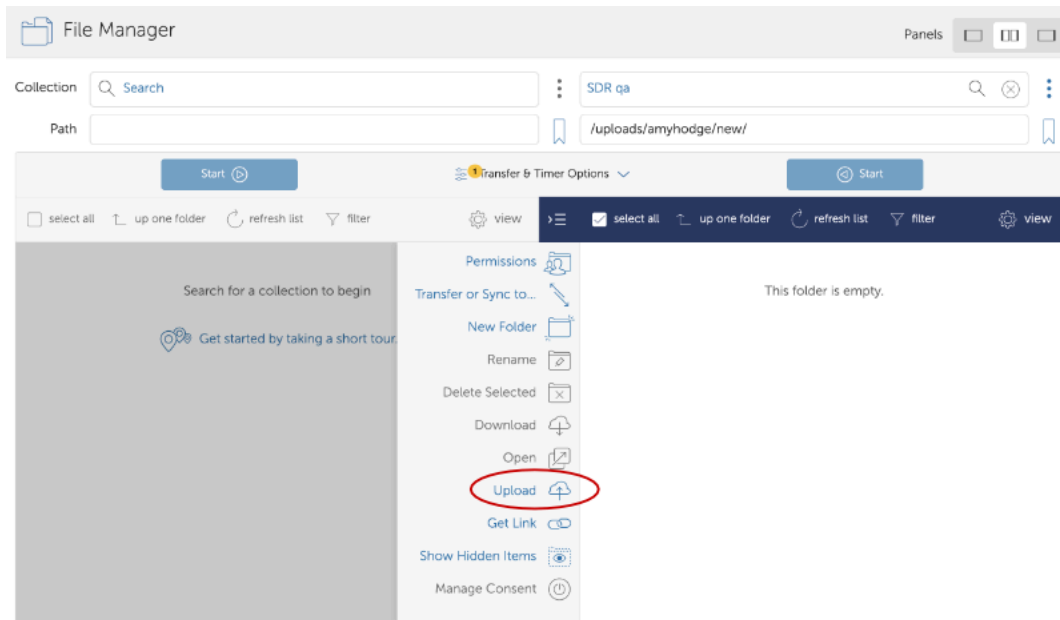
1. Return to your item at [sdr.stanford.edu](https://sdr.stanford.edu). In the "Manage files" section of the form, click on the "Your computer" link.

The shared SDR collection will open on one side of the Globus window. The name of that collection will be displayed in the "Collection" box at the top of that side, and the panel below it should be empty with a message saying "This folder is empty." Click on the panel where this message is displayed to make sure it is active.

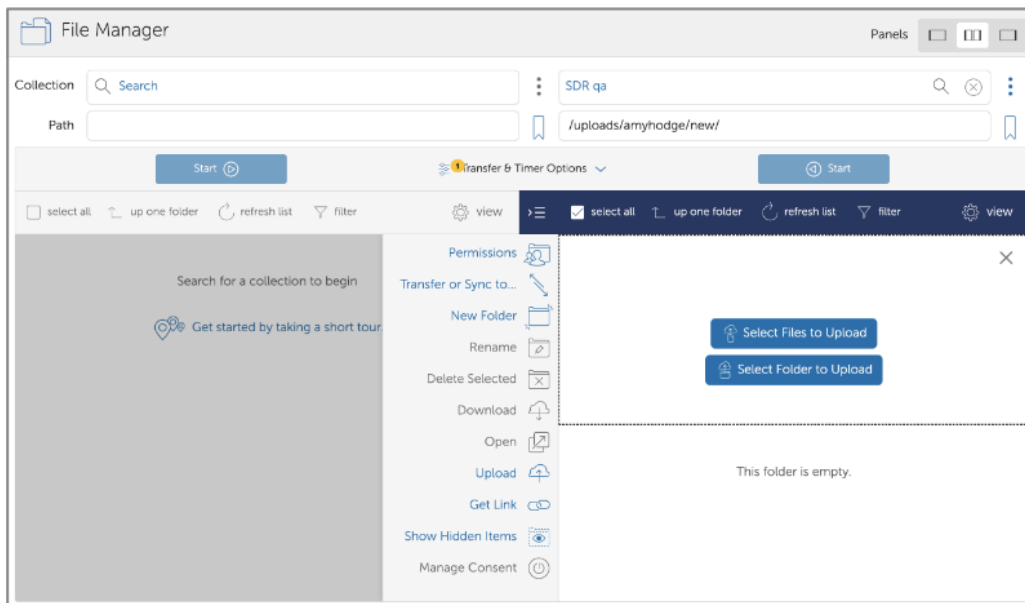
► Your screen may be reversed from the images shown below. The SDR collection is shown on the right below, but for you it may show up on the left.



3. In the center panel near the bottom, click the "Upload" button. You may need to authenticate and then click the "Upload" button again.



4. Click "Select Files to Upload" or "Select Folder to Upload," depending on your content.



You will see a new window with a file manager where you can select the files you want to upload. When done selecting files, click "Open."

You will see a status box at the bottom left of your screen when upload begins. When upload is complete, you will see green checkmarks next to all of your files or folders.

Please be sure that all of your files have completed upload to Globus before proceeding to the [Complete deposit to SDR](#) section of these instructions.

## Appendix 2: Campus server setup and transfer

If your files are on a server and you do not have administrator privileges for that server, you will need to talk with your server administrator to get access to the Globus collection on that server and/or to request a Globus collection be set up.

► For further information see [Globus Connect Server Version 4](#).

Once you have completed the server setup, the steps needed to transfer your files should be similar to those described in Appendix 1 for personal or individual computers.

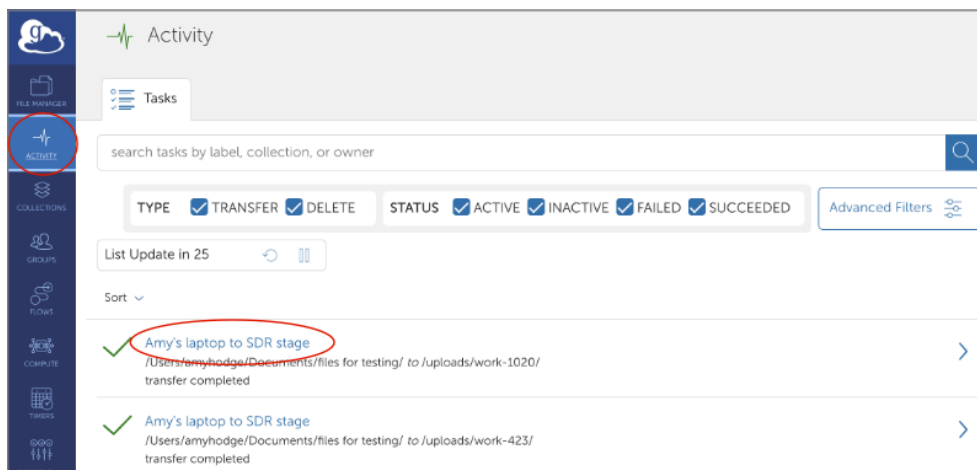
If you have issues, we recommend that you contact your server administrator, as they will better understand your system and should be able to provide you with the best support. If you continue to have problems, please [contact us](#) and we will do our best to help.

Once you have completed the above steps, [make sure that transfer is complete](#) and then proceed to the [Complete deposit to SDR](#) section of these instructions.

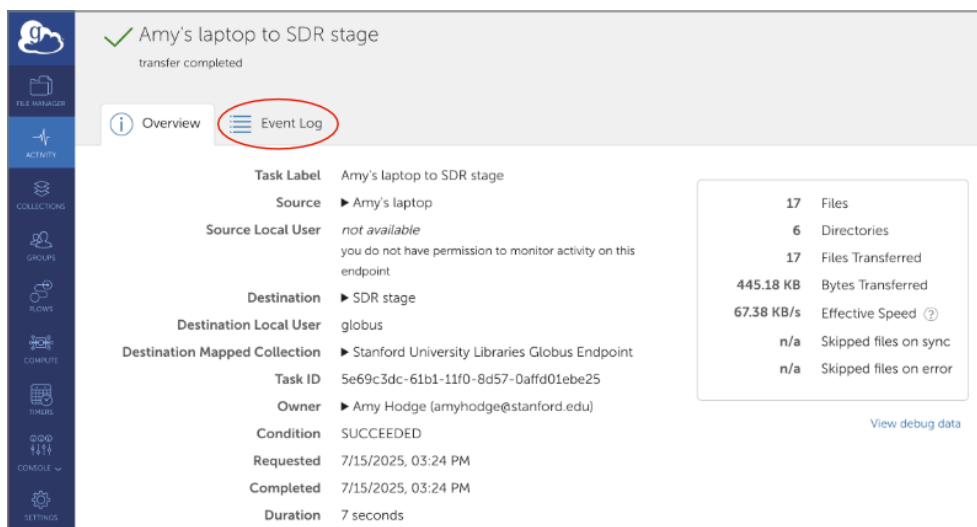
## Appendix 3: Checksums for file transfers

Checksums for all of the files transferred via Globus are available via the Globus interface. You may want to compare these checksums with the checksums for your copies of the files to make sure the Globus transfer has completed properly. The steps below describe how to find these checksums on Globus.

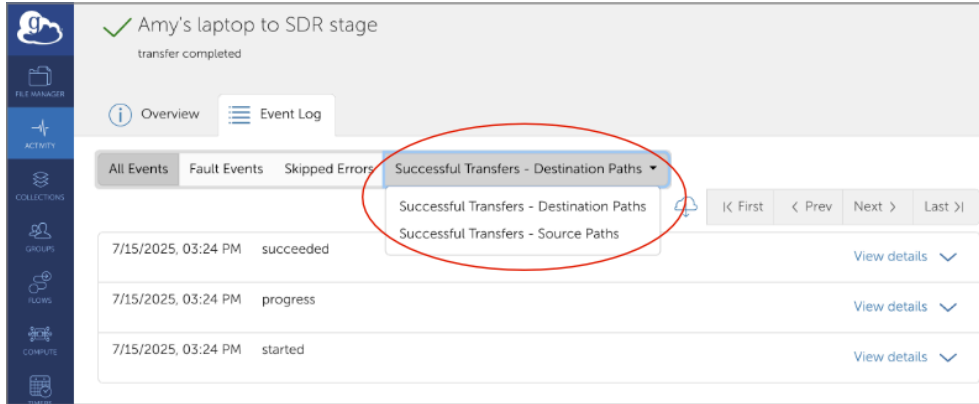
1. Select "Activity" from the left navigation in the Globus interface. Then on the Activity page, click on the name of the transfer you want to verify.



2. Select the "Event log" tab near the top of the screen.



3. In the horizontal navigation bar below the tabs, click on "Successful Transfers - Destination Paths" choose whichever option you is appropriate.



4. To the left of the navigation buttons, click on the download icon (looks like a cloud with a down arrow) to download a .csv file listing all the files transferred and their checksums and other information.

