SpaceShuttle

User guide

SpaceShuttle is a storage solution that enables researchers to securely transfer, store, manage and share large amounts of active research data. Data can be read, written, copied or moved over the internet at maximum speed.

SpaceShuttle provides a suite of tools to help move your data to and from active storage, share your data, leveraging IBM Aspera's Fasp™ transfer technology to achieve speeds hundreds of times faster than FTP/HTTP*. Visit asperasoft.com for more details.

SpaceShuttle uses Aspera Shares as the web user interface that allows you to upload, download and share your data. The Aspera Connect™ plug-in is the key underlying software tool that facilitates the data transfer.

This guide is based on information available at: http://asperasoft.com/software/web-applications/aspera-shares/#resources-391.

If you experience a problem while using SpaceShuttle, please contact the Intersect system administrator via help.intersect.org.au.

1.Get Started with SpaceShuttle

1.1 For Windows

How to download and install Aspera® Connect™
1. Set up an account
2. Meet the firewall requirements
3. Meet the system requirements
4. Install Aspera® Connect™ browser plug-in
5. Connect and transfer

1.1.1 Set up an account

SpaceShuttle products are authenticated by the Australian Access Federation (AAF), so you can login by using your existing credentials (your own institutional username and password).

To access specific data collections, you have to request access directly from the nominated data collection owner or custodian, who is also likely to be a SpaceShuttle Shares Manager.

1.1.2. Meet the firewall requirements

SpaceShuttle's Aspera® transfers use one TCP port for session initialisation and control, and one UDP port for data transfer. It is configured to use TCP and UDP port 33001.

Please contact your IT department to open TCP and UDP port 33001 to dtn-1.intersect.org.au and dtn-2.intersect.org.au (203.161.182.179 and 203.161.182.180).

1.1.3. Meet the Aspera® Connect system requirements

SpaceShuttle (Aspera® Shares) requires an Intel processor and Aspera® Connect™ plug-in to securely move files and folders of any size. The following web browsers are supported by Connect Server:

Supported OS	Supported Browsers
Windows 2008r2, 2012	Internet Explorer 8+, Firefox 27+, Google Chrome 32+
Linux 64-bit	Firefox 27+

Note: Aspera® Connect™ does not support the 64-bit IE 10 browser on Windows 8. The detailed user guide for Aspera® Connect™ including network requirements and firewall specifications, can be found as a PDF Guide *__here__*.

1.1.4. Install Aspera® Connect™ browser plug-in

Aspera® Connect™ is a simple, self-installing browser transfer plug-in that performs the transfers from clients to the server. You only need to install this plug-in once.

1. Make sure that your computer meets the above requirements. If you do not have the required browser, install one. For example, Google Chrome can be installed *__here__* and Firefox can be installed *__here__*.
2. Depending on your browser settings, you may have to "allow" the plug-in for the connect browser to work.
3. Visit the Aspera® Connect™ website *__here__* and click the "Aspera Connect (latest suitable version for your Operating System)" Install button to download Aspera® Connect™.
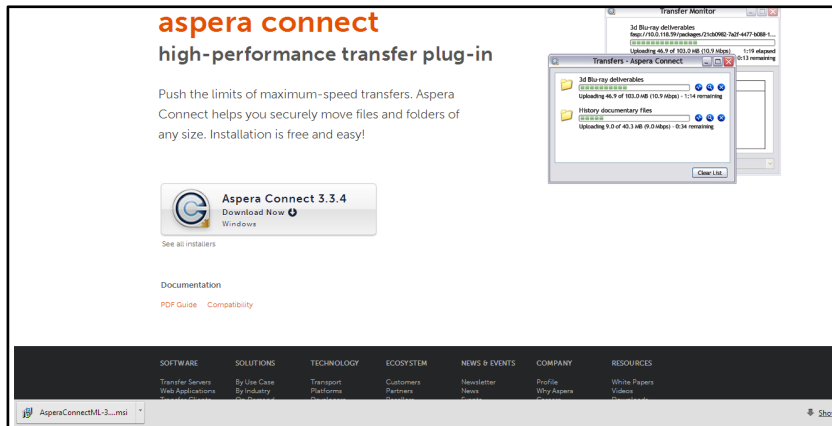
4. Once the download is completed, the installation wizard should open automatically. If not, double-click on the file to install the plug-in. Then, follow the wizard steps to complete the installation.

5. You are now ready to use SpaceShuttle.
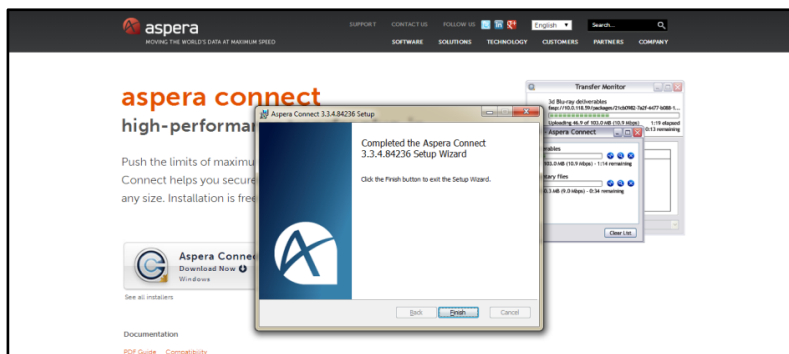
1.2 For Mac

How to download and install Aspera® Connect

1. Set up an account
2. Meet the firewall requirements
3. Meet the system requirements

4. Install Aspera® Connect™ browser plug-in
5. Connect and transfer

1.2.1. Set up an account

SpaceShuttle products are authenticated by the Australian Access Federation (AAF), so you can login by using your existing credentials (your own institutional username and password).

To access specific data collections, you have to request access directly from the nominated data collection owner or custodian, who is also likely to be a SpaceShuttle Shares Manager.

1.2.2. Meet the firewall requirements

SpaceShuttle transfers use one TCP port for session initialization and control, and one UDP port for data transfer. It is configured to use TCP and UDP port 33001.

Please contact your IT department to open TCP and UDP port 33001 to dtn-1.intersect.org.au and dtn-2.intersect.org.au (203.161.182.179 and 203.161.182.180).

1.2.3. Meet the system requirements

Aspera Shares requires an Intel processor and Aspera® Connect™ plug-in to securely move files and folders of any size. The following web browsers are supported by Connect Server:

Supported OS	Supported Browsers
Mac OS X 10.7+	Safari 6+, Firefox 27+, Google Chrome 32+
Linux 64-bit	Firefox 27+

Note: On OS X 10.6, Connect 3.5.1+ is supported on 32-bit browsers only.

1.2.4. Install Aspera® Connect™ browser plug-in

1. Make sure your computer meets the above requirements. If you do not have the required browser, install one. For example, Google Chrome can be installed **_here_** and Firefox can be installed **_here_**.
2. Depending on your browser settings, you may have to "allow" the plug-ins for the connect browser to work.

3. The detailed user guide for Aspera® Connect™, including network requirements and firewall specifications, can be found as a PDF Guide _here_.

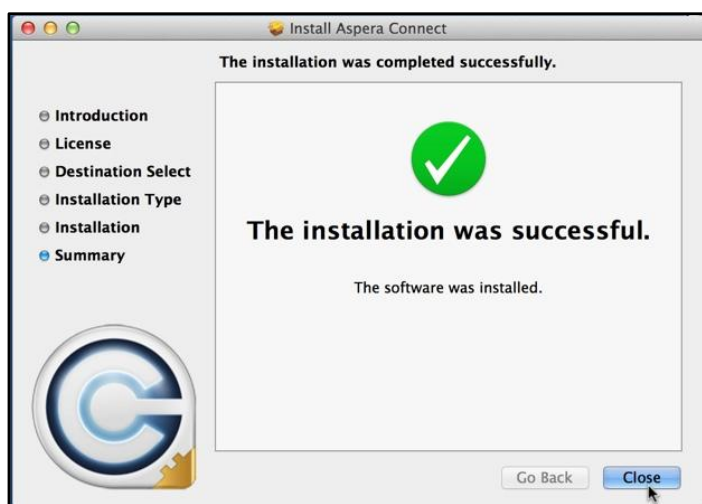4. Visit the Aspera® Connect™ website _here_ and click the "Aspera Connect" (latest version for your Operating System) Install button to download Aspera® Connect.
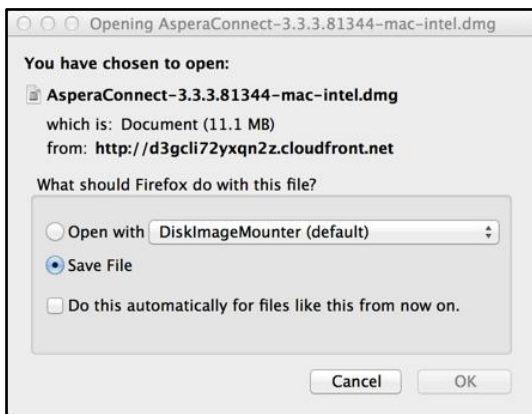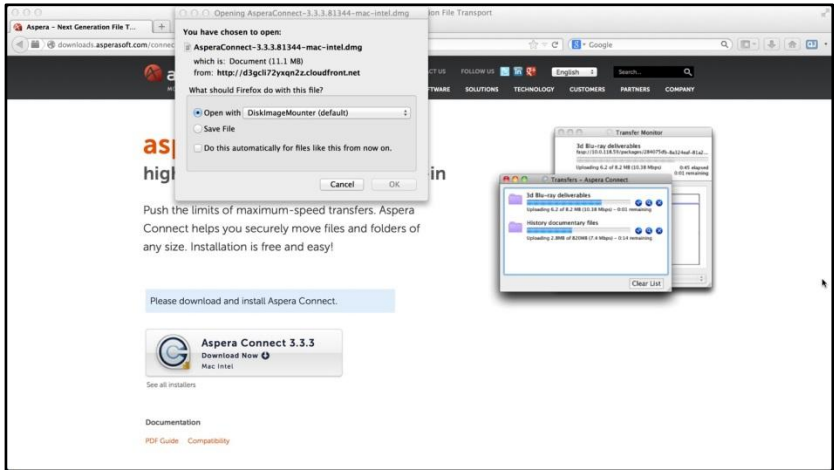
5. Once the download is completed, the installation wizard should open automatically. If not, double-click on the file to install the plug-in. Then, follow the wizard steps to complete the installation.

You are now ready to upload, download or access data using SpaceShuttle.

2. Accessing SpaceShuttle Shares

2.1 Connect and transfer

1. Make sure to restart your browser (e.g., Chrome) before taking the following steps.

2. Access SpaceShuttle *here*. If you get a certificate warning, please proceed with the request. The SpaceShuttle server is currently using a "self-signed" SSL certificate, and all communication between the user's browser and the website is encrypted.

3. To access your data, you first need to login. Enter your usual AAF details to login: First enter your University/Institution, then your usual Institution login name & password. If you don't have an AAF login, you'll need to get your affiliated University/Institution System

Administrators to add you to the organisation's directory service (LDAP) or get them to create an account for you in https://vho.aaf.edu.au/

4. If you want your collaborators to access SpaceShuttle and they are not part of an AAF affiliate institution, you need to contact your affiliated University/Institution System Administrators to create an account for your collaborator in https://vho.aaf.edu.au/. The detailed FAQs on this can be found here. If you are still in doubt, please do not hesitate to contact help.intersect.org.au or your eResearch Analyst for help.

5. Your Share Manager now needs to provide you with access to the data within the share on your request. You will then be able to see the research data.
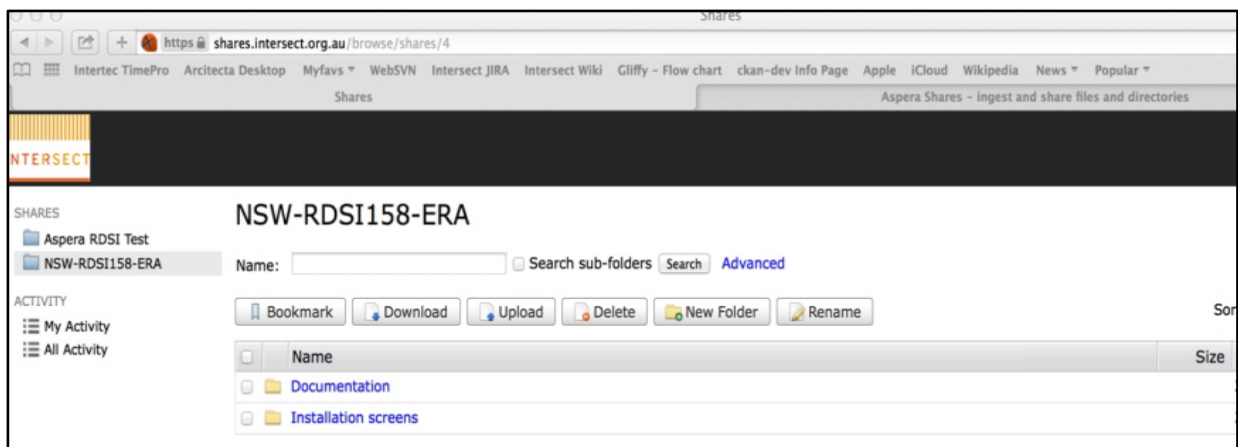
5. Depending on your access rights, you can use different functionalities of SpaceShuttle, such as creating folders, downloading, uploading, renaming, and bookmarking files and folders. Enjoy!

3. Browsing SpaceShuttle Shares

When you browse a Share, you see all files and directories within that Share.
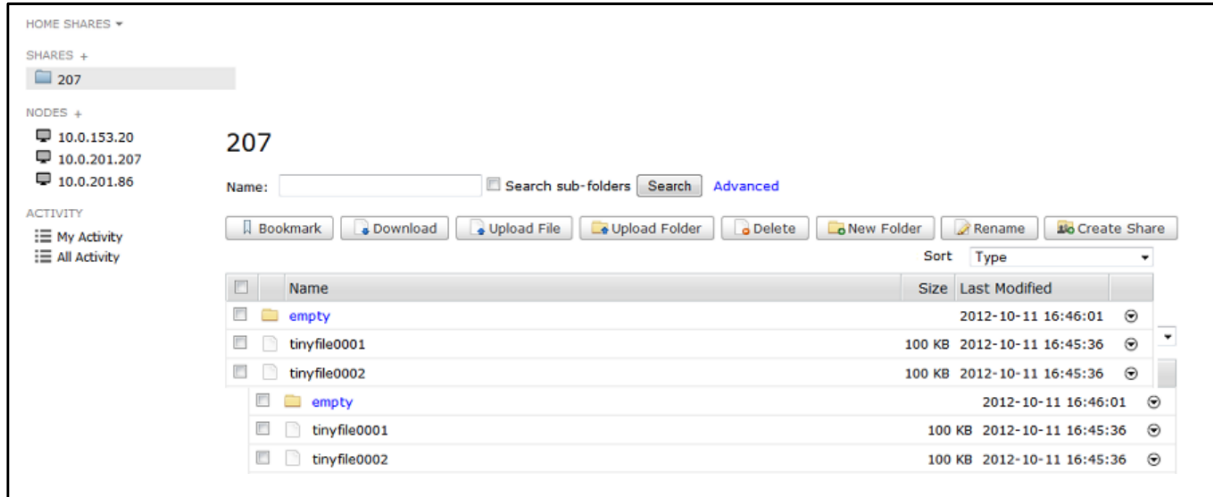
Note: You might not see all the options listed. You will only see options that you have permissions to access. If you believe that you have restricted access in error, contact your system administrator.

You can also search for a directory name and sort the directory list. You can perform following actions on a directory or directories:

Action	Description
Bookmark	Create a shortcut to the selected directory. If you do not select any directory, the bookmark is the node's root directory.
Download	Download the selected directory or directories using the Aspera® Connect™ browser plugin.
Upload	Upload a file or folder from another machine to this node using the Aspera® Connect™ browser plugin.
Delete	Delete the selected directory or directories.
New Folder	Create a new directory on the node
Rename	Rename an existing directory on the node. Ensure naming does not include the "/" symbol.
Create Share	Create a share for the selected directory. Ensure naming does not include the "/" symbol. You can only select one directory at a time. Click Create Share to open the New Share dialog. This dialog is pre-populated with the

	node and directory information. To complete the other fields, you must be an administrator.

4. Searching SpaceShuttle Shares

You can perform simple or advances searches in your Share. To perform a search on a share or node, select a share or node on your Home page, then within the Name: box, enter a keyword for your search. You can also enable or disable the Search sub-folders option. SpaceShuttle appends any keyword that you enter with *. Therefore, if you enter the keyword "Dec", the search actually performs as "*Dec*" and SpaceShuttle returns any string that contains this word.
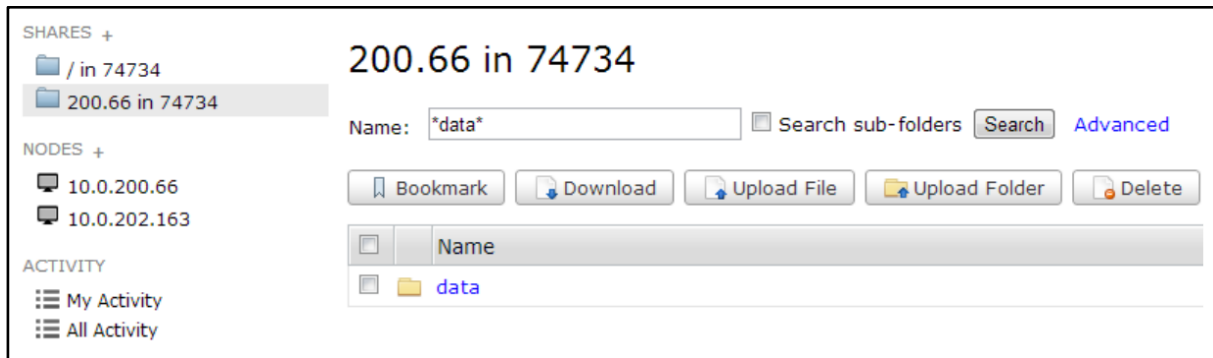
To perform a keyword search and limit the number of results, use Advanced search. You can set the following filters:

- *Size* - Enter minimum or maximum values. Include the unit of measure as bytes, MB, or GB.
- *Last Modified* - Enter from date or to date. Select a date from the pop-up calendar.

5. Using SpaceShuttle Shares

Use the drop-down menu to the right of the SpaceShuttle share's name to browse, view activity, make comments, and choose notification options.

These drop-down options are described in detail below:

Function	Description
Browse Share	See Browsing Shares
Activity	Select **Activity** from the drop-down list to the right of the Share's name. A list of all activity that has occurred on the selected Share appears. You can also search for activity based on tagged events or a date range
Comments	Select **Comments** from the drop-down list to the right of the Share's name. A list of any comments that have been made about the Share appears. You can also add your own comments
Notifications	Select **Notifications** to choose to be notified when new content has been added to your Share. **NOTE:** This needs to be done for the individual Share Permission <u>as well as</u> in the User Preferences at top right (Drop down from User name)

If you are one of the Share Managers, you are also able to Create Shares by selecting the check box next to the folder to be shared & clicking on the "Create Share" icon. Create a share for the selected directory. You can only select one directory at a time. Click "Create Share" to open the New Share dialog. This dialog is pre-populated with the node and directory information. To complete the other fields, you must be an administrator.
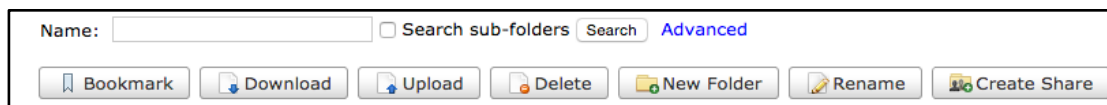
6. Transferring Data

6.1. Set up your bandwidth limits

Aspera is configured by default to use the maximum available bandwidth within your network, which

https://docs.google.com/document/d/13E_wPGK4fzd7rrmb8wh0d-YiSwra7nxV_z9ARXKbmCs/edit?usp=sharing

can potentially saturate the entire network traffic. Hence, we recommend you to check with your Institution's System Administrators the bandwidth limits available for your transfers.

To set up a bandwidth limit:

1. Select **Preferences > Bandwidth.**

2. Change the transfer speed settings to control transfer speed.
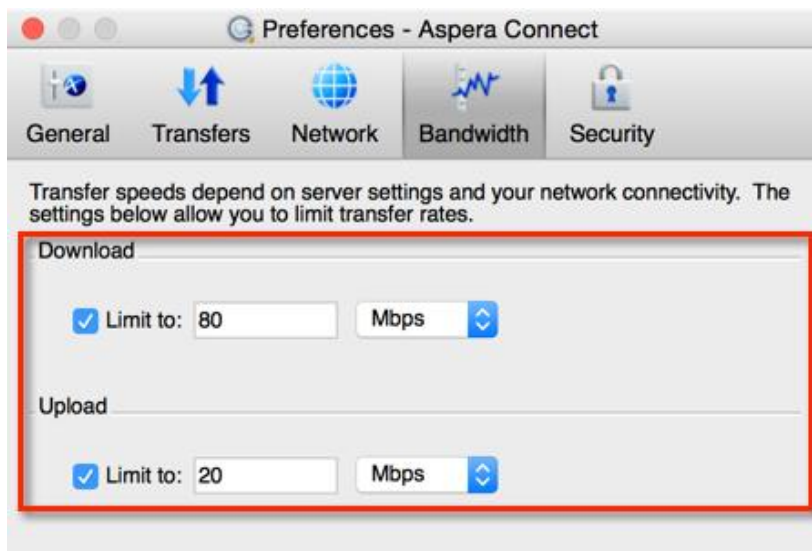

Your System Administrator may also allow you to use higher bandwidth during low-traffic times of day (i.e. outside normal business hours or weekends).

Follow the same instructions to adjust the bandwidth settings.

6.2. Set up your download location

By default, Aspera Connect downloads files to the current user's desktop. You can change the download location within the 'Downloads' section as follows:

1. Select **Preferences > Download**

2. To save a default location, select **'Save downloaded files to'** and specify the path to save the downloaded files.

3. Alternatively, to manually choose a location for each download session, select **'Always ask me where to save downloaded files'**.
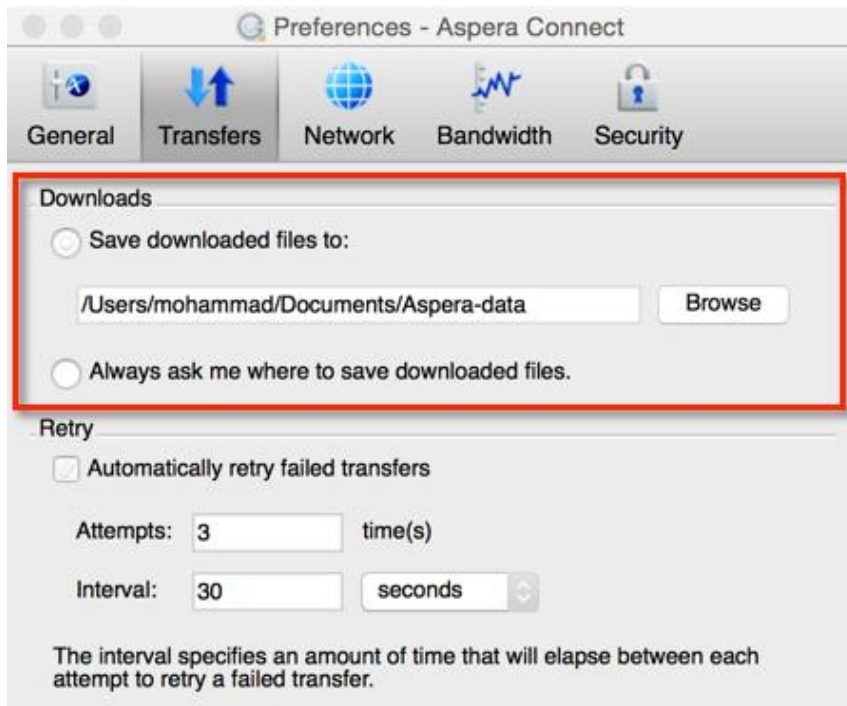
You can set the retry rule within the 'Retry' section to automatically restart the failed transfer by enabling or disabling: **Automatically retry failed transfers box** and filling in the appropriate values.

6.3. Initiate a transfer

You can upload or download data from any Share for which you have permissions.

Select one or more files or folders from an Share for which you have download permission.
    1. Drag the files or folders to an Share for which you have upload permission, or to a bookmark. When a transfer occurs, a transfer window opens showing the current status of each transfer that is being made.
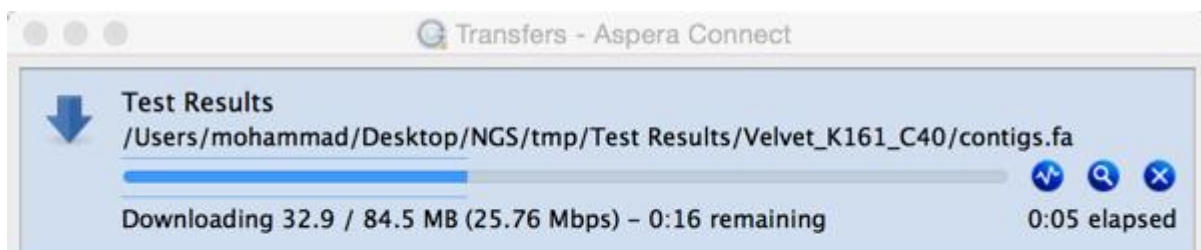
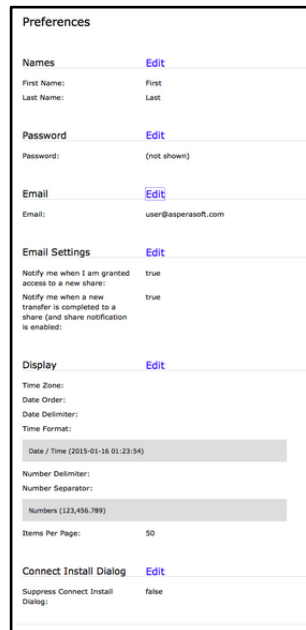In the Transfer dialog, you can also perform the following actions:

Action	Description
Pause	Temporarily pause a transfer.
Resume	Resume a previously paused transfer.
Clear all	Clear transfers from the list.
Remove	Remove transfer from the list. (This will also cancel any paused transfers.)

If you have an upload or download 'hang' without completing, try the 'restart' button in the Connect transfer window and wait. Only do this one time! - if the item remains 'hanging', please contact help.intersect.org.au.

7. Configuring User Preferences in Shares UI

To configure your individual user Share's settings, select your username in the top right corner and select **Preferences**.

Here you can change general settings such as your first and last name, your password, and your email address. You can also change your email notification options, configure your system display, and choose to suppress the Aspera® Connect™ install dialog.

7.1 Email Settings

Users can personalise the email notifications they receive from SpaceShuttle Shares by selecting Email Settings => Edit (Note: All notifications are enabled by default).

- "Notify me when I am granted access to a new Share" - Receive an email whenever you are given access to a new Share.
- "Notify me when a new transfer is completed to an Share" (Note: Share notification must also be enabled) - Receive an email when new content has been added to your Share. An admin must enable notifications for that Share for you to receive an email.

7.2 Display Settings

Time Zone	The time zone for your system
Date Order	The order that date, month, and year are displayed
Date Delimiter	Separates the date, month, and year
Time Format	Displays a 12-hour time format or a 24-hour time format
Number Delimiter	Denotes the thousands place in a number. For example, if a comma (,) is chosen as the delimiter: "1,000". *Note*: Number delimiter and separator cannot be the same.
Number Separator	Denotes the decimal place in a number. For example, if a period () is chosen as the delimiter: "10.25". *Note*: Number delimiter and separator cannot be the same.
Items Per Page	The number of items the Share will display per page. The default is 50.

7.3 Connect Install Dialog

As you navigate through the Share web UI, each page checks for the presence of the Aspera® Connect™ browser plug in. If the plug in is not present, it will show a message asking to download the plug in.
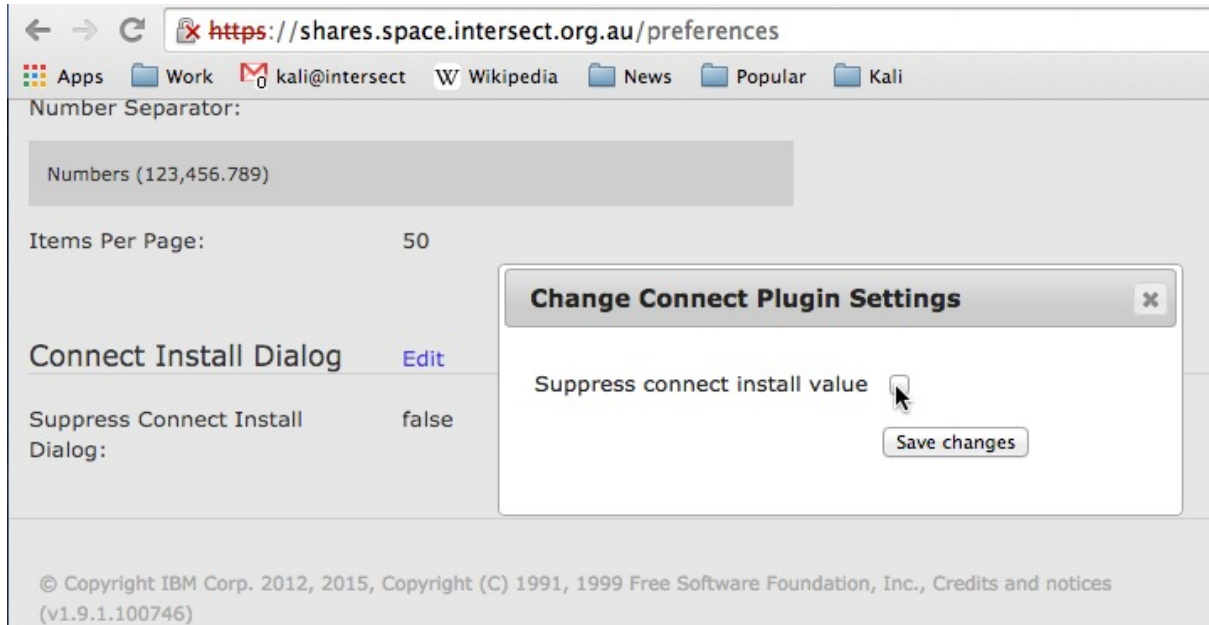
To suppress this pop-up, select your username in the top right corner, and select Preferences=> The lowest setting is "Connect Install Dialog".

Changing the value for this option from the default "false" to "true" will stop Shares from auto-prompting re Connect on each visited page.

If Connect continues to remind you to install Connect when you have already installed it, try this workaround:

http://www.intersect.org.au/content/aspera-issue

7.4 Technical Support

If you need any assistance with SpaceShuttle, please contact the eResearch Analyst at your local institution or contact help.intersect.org.au