

The HDFS capture method uses NFS shares on the Transfer Appliance, which allows you to copy data from HDFS to the Transfer Appliance by exporting directories on the Transfer Appliance via NFS. You can mount the NFS shares to HDFS, and then copy data to the Transfer Appliance.

Data copied onto the exported NFS share is encrypted and saved in a staging area on the Transfer Appliance.

You need to know the following information to export an NFS share:

- The URL for Transfer Appliance, which is presented when you [connect the Transfer Appliance](/transfer-appliance/docs/2.0/connect-appliance) (/transfer-appliance/docs/2.0/connect-appliance).
- The capture user credentials, which are initially supplied to you by Google. You can [change the capture password](/transfer-appliance/docs/2.0/resetting-password) (/transfer-appliance/docs/2.0/resetting-password).

In addition, make sure that:

- You have [prepared for data transfer](/transfer-appliance/docs/2.0/preparing-data-transfer) (/transfer-appliance/docs/2.0/preparing-data-transfer).
- The [appliance is unpacked and configured](/transfer-appliance/docs/2.0/preparing-to-unpack) (/transfer-appliance/docs/2.0/preparing-to-unpack).

NOTE: The maximum usable capacity of Transfer Appliance when using NFS share capture method is:

- **TA100** – 74TB
- **TA480** – 400TB

When using the TA480 and NFS share capture method, you must create a minimum of four shares that are each 100TB. You can create more shares, as long as the total size of all shares is 400TB or less. We recommend that you arrange your data in chunks to fit on the NFS shares for the sizes that you create. For example, if you create four 100TB shares, you'd arrange your data to fit within 100TB or smaller chunks.

- You have identified the directories of HDFS you will transfer.

To create NFS shares:

1. Open the Transfer Appliance Web User Interface.
2. Click **Menu** .
3. Select **Export NFS Share**.

The **NFS Share** window appears and displays any currently available NFS shares.

4. Click **Create Share** to create a new NFS share.
5. Enter the NFS share name.
6. For the NFS client name(s) or IP Address(es), enter the comma separated client names or IP addresses on which you wish to mount and access the NFS share.
7. If the share is to be accessible for all clients, click the **Accessible to all clients** checkbox.
8. Click **Create** to create the new NFS share on Transfer Appliance.
9. If you want to access the NFS share from additional NFS clients, click the **NFS Share** radio button and edit the client name or IP address.

★ **Note:** You can view, edit, delete, and process NFS shares in the **Job Status** window.

To capture data from the HDFS, you mount each of the NFS shares on the Transfer Appliance to each Hadoop worker nodes and to the edge node of the Hadoop cluster. Mounting the NFS shares on the edge node allows you to view the files on the Transfer Appliance from the edge node.

Run the following command on each worker node and the edge node to mount the NFS share on each of the nodes:

For example, where `share1` is the share name and `/mnt/nfs1/` is the mount path:

To transfer data, run the following command from the edge node:

You can execute the command in parallel or serially, depending on the resources in your cluster.

You can use the command `hdfs dfs -put` to copy small files. However, this command copies data using only the local disk where the command is run, therefore the transfer speed is limited.

Processing an NFS share compresses and deduplicates the previously encrypted data stored on the NFS share staging area.

Once you start processing, you cannot copy data to the NFS share. When processing is complete, the NFS share is deleted from the Transfer Appliance.

To process NFS exports:

1. Open the Transfer Appliance Web User Interface.
2. Go to the **Job Status** window to monitor changes to the data size for NFS exports. The data is compressed as part of its processing.
3. Click **List** .
4. Select **Process**.

The **Process an NFS Share** window appears.

5. If you want to exclude symbolic links, click the **Exclude symlinks** checkbox.
6. Click **OK**.

If you have data on NFS you'd like to capture, see [Exporting an NFS share](#)
(/transfer-appliance/docs/2.0/exporting-nfs-share).

To monitor data capture jobs, see [Monitoring data capture jobs](#)
(/transfer-appliance/docs/2.0/monitoring-capture-jobs).

If you are done capturing data, see [Preparing and shipping an Transfer Appliance](#)
(/transfer-appliance/docs/2.0/shipping-appliance).