Use the following procedures to capture data by using a Microsoft Windows workstation. See choosing a capture method (/transfer-appliance/docs/2.0/choosing-capture-method) for more information on data capture options.

You need to know the following information in order to capture data from a Windows workstation:

- The URL for Transfer Appliance. This is the URL presented when you connect Transfer Appliance (/transfer-appliance/docs/2.0/connect-appliance).

- The capture user credentials. These credentials are initially supplied to you by Google, but you can change the capture password (/transfer-appliance/docs/2.0/resetting-password).

In addition, make sure that:

- You are using a supported version of Microsoft Windows. See supported operating systems (/transfer-appliance/docs/2.0/specifications).

- You have prepared for data transfer (/transfer-appliance/docs/2.0/preparing-data-transfer).

- You are using the correct data transfer method (/transfer-appliance/docs/2.0/choosing-capture-method).

- Your network meets Transfer Appliance requirements (/transfer-appliance/docs/2.0/preparing-data-transfer#prepare-network).

- Transfer Appliance is unpacked and configured (/transfer-appliance/docs/2.0/preparing-to-unpack).

Use the following procedure to install the Capture Utility on a Microsoft Windows workstation. The Capture Utility contains configuration information specific to the Transfer Appliance from which it was downloaded. Always download the Capture Utility from the web user interface on the appropriate Transfer Appliance.

1. Open the Transfer Appliance Web User Interface.

2. Select **Windows** from the **Data Capture** menu to download the Capture Utility installer.

⭐ **Note:** Perform a fresh download and installation of the Capture Utility for each appliance you work with.

3. Unzip the downloaded file. This creates the `CaptureUtility` directory containing the installer `TACaptureUtilitySetup.exe`.

4. Open the installer to start the installation process.

5. Click **Next**.

6. On the **Choose Install Location** screen, **Destination Folder** defaults to `C:\Program Files\TA`. To change the destination folder, click **Browse** and locate the folder where you want to install the Capture Utility.

7. Click **Install**.

8. Click **Finish** to close the install wizard.

9. Click **OK** to close the **Install Confirmation** dialog.

Before running your first data capture job, check to make sure the workstation can connect to the Transfer Appliance.

1. To run the Capture Utility, locate the **Transfer Appliance Capture Utility** icon on your Windows desktop, right-click the icon, and choose **Run as administrator**. This opens a command prompt.

2. Test connectivity with the Transfer Appliance by running `tacapture.exe` with the `-t` option.

3. You are prompted to enter the capture user password provided to you by Google.

The utility tests connectivity between the workstation and Transfer Appliance and returns results similar to the following:

If the connectivity test fails, refer to the error message returned to determine the cause. The most common reason for connectivity test failure is a firewall blocking the ports needed for data capture. See Preparing the network (/transfer-appliance/docs/2.0/preparing-data-transfer#prepare-network) for details on which ports need to be open.

Before you start a Microsoft Windows workstation capture, make sure you have the following permissions to your data source:

- Read and execute permissions for folders.

- Read permissions for files.

If you are only capturing data that you own, you already have the required file and folder permissions. If you want to capture data owned by other people, contact your IT administrator and ask for an account that grants you access to the data. If you are in IT administrator in charge of moving other people's data, use a backup operator or service account that has read access to all of the data.

After checking connectivity, use the Capture Utility to start a data capture job.

1. Run `tacapture.exe` and specify a job name and capture target to run a data capture job:

   where `[JOB NAME]` is the name of the data capture job and `[CAPTURE DIRECTORY]` is the directory that contains the data to capture. The Capture Utility recursively captures all data in the directories under the one specified.

   Use a meaningful job name. A job name is used to identify a capture job and the files it contains for the rest of the data migration project. A job name can contain alphanumeric, underscore, and hyphen characters.

> ⭐ **Note:** While capturing data using Transfer Appliance, it is recommended that you launch a maximum of 1,000 jobs. If the number of capture jobs exceeds 1,000, the rehydration process can experience degraded performance.

2. Enter the capture user password provided to you by Google when prompted:

The capture job runs and displays a completion message when it is finished. Don't close the terminal window while the capture job is running or the job will be terminated. It takes up to ten minutes for Transfer Appliance Web User Interface to display a "Failed" status.

For example, the following command creates a job named `data-capture` to capture the data in the directory `D:\Data` and all subdirectories:

By default, the Capture Utility uses up to 8 parallel tasks for each capture job. To use fewer parallel capture tasks, use the `-m` option with `tacapture.exe`. Reducing the number of parallel tasks for each capture job is useful if you have poor network bandwidth.

For example, the following command creates a job named `dataFactory` that uses at most 6 parallel data capture tasks to capture the data in the directory `D:\Data` and all subdirectories.

For more information about the options for the Capture Utility, see Capture utility reference (/transfer-appliance/docs/2.0/capture-utility-reference).

You can specify data paths for capture in one of two ways:

- If you want to capture a single directory or file, provide a single directory when running a capture job. This method captures data from the specified directory and its subdirectories.

- To capture multiple target files and directories, run `tacapture.exe` with the `-f` option. You must provide a line delimited text file containing absolute paths to the files you want to capture.

The following is an example of the contents of the text file you must provide when you use the `-f` option.

The following command creates job `dataFactory` that captures data from the above targets specified in `C:\Documents\filespec.txt`.

For more information about the options for the Capture Utility, see Capture utility reference (/transfer-appliance/docs/2.0/capture-utility-reference).

To direct the Capture Utility to skip symbolic links to files, use the `-e` option with `tacapture.exe`. For example, the following command creates a job named `data-capture` to capture the data in the directory `D:\Data`, including its subdirectories, but skips symbolic links to files.

For more information about the options for the Capture Utility, see Capture utility reference (/transfer-appliance/docs/2.0/capture-utility-reference).

POSIX is the Portable Operating System Interface, a set of IEEE standards that maintain compatibility between operating systems.

The Capture Utility (`tacapture.exe`) preserves the following file metadata by default:

- The file permissions.

- The last modification time of the file.

- The last access time of the file.

For example, the following command creates a job named data-capture to capture the data and file metadata in the directory `D:\Data` and all subdirectories.

For more information about the options for the Capture Utility, see Capture utility reference (/transfer-appliance/docs/2.0/capture-utility-reference).

To perform a parallel data capture task, follow these instructions on a separate workstation. You can also perform a Linux workstation capture (/transfer-appliance/docs/2.0/capturing-data-linux) using the same Transfer Appliance.

If your data size exceeds the capacity of a single Transfer Appliance, capture your data using multiple appliances in succession (/transfer-appliance/docs/2.0/performing-serial-captures).

To retry a transfer job, see Retrying unsuccessful data capture jobs (/transfer-appliance/docs/2.0/retrying-failed-jobs).

To cancel a transfer job, see Canceling transfer jobs (/transfer-appliance/docs/2.0/canceling-jobs).

To monitor:

- data capture jobs, see Monitoring data capture jobs (/transfer-appliance/docs/2.0/monitoring-capture-jobs).

- Transfer Appliance storage usage, see Monitoring appliance storage usage (/transfer-appliance/docs/2.0/monitoring-appliance-storage).

- disk status, see Monitoring disk status (/transfer-appliance/docs/2.0/monitoring-disk-status).

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