

When you receive Transfer Appliance, you must first configure it and connect it to your network. Once that is done, you use Transfer Appliance utilities to capture and stream data to Transfer Appliance. Transfer Appliance can capture any data that can be accessed as a file in a POSIX compliant file system, whether attached directly or mounted over network shares.

Before being stored on Transfer Appliance, all captured data is deduplicated, compressed and encrypted with an industry standard [AES 256 algorithm](https://en.wikipedia.org/wiki/Advanced_Encryption_Standard) (https://en.wikipedia.org/wiki/Advanced_Encryption_Standard) using a password and passphrase that you specify. You must specify the same password and passphrase to rehydrate – unencrypt, uncompress, and reconstruct – your data once it is uploaded to Google Cloud Platform (GCP).

⚠: The data on Transfer Appliance is not recoverable if you forget the password or passphrase used to encrypt it. Make a note of the password and passphrase and store it in a secure location.

Once all of your data is loaded onto Transfer Appliance, you will ship Transfer Appliance back to Google. Once Google receives Transfer Appliance, the encrypted data is copied from Transfer Appliance to your Cloud Storage staging location. You will receive an email from Google when all of your data is available and you can start the rehydration process.

To rehydrate your data, you run the Transfer Appliance Rehydrator application and specify a Cloud Storage destination bucket. Once all of your data is rehydrated to the destination bucket, run data integrity checks to make sure everything transferred completely and with no corruption.

After you complete your data migration project, the appliance is securely wiped and re-imaged.

To prepare for your transfer, see [Before you order an Appliance](/transfer-appliance/docs/2.0/preparing-data-transfer) (/transfer-appliance/docs/2.0/preparing-data-transfer).