

SpeedSync Process

SpeedSync is a process by which a backup snapshot is sent from a local device to an cloud storage location, such as the Datto Cloud. The snapshot, which is Datto's way of storing backups, has already been tested and proven to be a good backup, so the SpeedSync process is simply packaging and sending the snapshot.

Not every snapshot is sent to the cloud, so a special marker is attached to snapshots that are designated to be sent to the cloud, such as at the end of the day or week. SpeedSync finds snapshots with this marker and sequentially prepares the snapshots to be sent to the cloud. The Datto device checks to see if there is enough space on the device to start packaging the file, and if so, the Datto device creates a special **send file** that will serve as the snapshot's container.

A Linux process called **RSYNC** takes the send file with the snapshot in it and transfers it to the cloud storage location. The transfer speed for this process depends on a user's bandwidth and the settings set on the Datto device.

Once the send file and the snapshot has fully transferred to the cloud storage location, the send file is sent to a holding area if earlier snapshots are still being filed into the **Inverse Chain** on the cloud server. Each snapshot is sequentially unpackaged from their send file and filed in the correct order. Since some snapshots take longer than others and many snapshots can be sent to the cloud at the same time, the holding area serves as a queue in order to keep the Inverse Chain viable.

At the end of the SpeedSync process, there is a complete Inverse Chain on the local device as well as on the cloud server.