

StoreGrid Sizing Table WDS Specified Back-up Servers

The following table illustrates how the StoreGrid performance parameters change depending upon the average data transfer rate from backup clients - for a given 'remote server' system configuration.

Underlying Assumptions:

1. **The average data transfer rate** is the effective upstream data transfer rate at which the laptop/desktop/server is sending data to your remote server. Note that most broadband service plans are asymmetric wherein the upstream data transfer rate is far lower than the download rate (which is often mentioned in marketing collateral). Typically, ADSL is sold in the upstream vs. downstream ratio of 1:4.

2. **Each client transfers approx. 10 MB of incremental data per day.** This will take an average of about 15 minutes on a 128 kbps upstream connection and 25 seconds on a 4 Mbps upstream connection (10 MB is the average amount of incremental data you can expect to be transferred for 3 GB of data configured to do a daily incremental backup). **Note that StoreGrid backs up only the changes for a file (using the Rsync algorithm) and also compresses the data before transferring it to the server. So the 10 MB incremental data transfer will mean approximately 15 MB of data everyday (assuming 33% compression), which is 0.5% of the original 3 GB data.**

3. **All clients insist on backing up within a 10-hour window (only) each day. The estimates provided below are not 'stretch estimates'; they are safe estimates and are more pessimistic than optimistic. StoreGrid is capable of handling the numbers cited below.**

Average Data Transfer Rate From Each Backup Client (see assumption 1)	Approximate time taken to backup 10 MB of data (see assumption 2)
128 Kbps (Kilo bits per second)	15 minutes
256 Kbps (Kilo bits per second)	8 minutes
768 Kbps (Kilo bits per second)	150 seconds
1.5 Mbps (Mega bits per second)	75 seconds
4 Mbps (Mega bits per second)	25 seconds