Cache & Sync: An Alternative to FTP

There are numerous articles written documenting why FTP is not a good solution for the use cases in which it is deployed. So why is it that businesses, even though they have first-hand experience with why FTP is not a suitable solution, continue to use FTP today?

The reason is that the traditional alternatives to FTP have only solved one aspect of the FTP workflow, which is, un-ironically, the file transport portion of the workflow. Such solutions focus on how to move files from point A to point B, but they do not address the workflow of the users transferring the files. Even worse, those solutions addressing only the point to point transfer that exist today are geared towards enterprise-sized organizations, leaving SMBs priced out of those solutions.

What is File Transfer Today?

File transfer is about moving files from one file store to another for the purposes of file distribution or collaboration. Even though there are file sharing and file hosting services available today, they are not effective at handling file transport for businesses whose files fall under the following categories: Many little files, Some very big files, or Many big files.

The overhead to complete the task of transferring files is compounded when users have internet connections with low bandwidth, high latency, or both. Even with decent internet connections, users that handle transferring many large files are tasked with one very important requirement: files must arrive in a timely manner and in their entirety.

To ensure files arrive in their entirety, the file transfer workflow requires the following steps:

1. Sender generates an MD5 checksum for each file that needs to be uploaded.
2. Sender transfers the files up (user babysits the upload)
3. Verify the checksums of the uploaded files.
4. Contact the recipient that files are ready for download.
5. Recipient transfers the files down (user babysits the download).
6. Recipient verifies the checksums of the downloaded files.

Most file transfer solutions, including point-to-point UDP file dumps or cloud-based file sharing / hosting solutions handle only Step 2 and Step 5 without handling the other 4 steps which are the most time-consuming part of that process: preparing and monitoring the transfer for completeness.

Because of this, it is no surprise that many SMBs continue to use FTP to transfer files. With traditional replacement solutions, the users still must verify that file transfers are completed in their entirety requiring users to monitor those uploads or downloads because any interruptions will only delay the arrival of the files. It's the worst of both worlds.

Examining the workflow from end-to-end revealed that by improving the process for the users outside of the transfer portion, productivity improves much more than the benefits of implementing today's alternatives to FTP, making these alternatives an add-on rather than a necessity.

A True Alternative to FTP

Cache and Sync technology is truly an alternative way to transfer files. Storing information locally for faster access with the benefit of a unified file system creates a new way of managing files and their transfer.

The Cache and Sync process utilizes a CacheDrive (Cache) and the Morro Sync Engine with Global File System (Sync) to improve the file transfer process for both the senders and the recipients. CacheDrives are deployed on the local network and appear as local storage drives. With the drive letter interface for PC, or the mounted drive interface for Mac and Linux, senders can simply drag and drop their files into a predefined share in a network folder. Once the file is copied, the CacheDrive uploads the file to the cloud and the Sync Engine transfers the file to the recipient's locally accessible CacheDrive. Recipients can simply copy the files from their CacheDrive to the location on their network where they need to work with those files.

To successfully upload, sync, and download files, the system must perform checks to ensure files are transported correctly. In addition, controlling both points of the transfer means knowing when files have completed their journey accurately. Using Cache and Sync, the File Transfer workflow for the sender and recipient becomes:

1. Sender saves file over the LAN.
2. Recipient accesses files over the LAN when alerted that transfer is completed.

A workflow of six steps is reduced to two. Users no longer need to extensively monitor their ends of the process and files are checked automatically by the system to ensure transfer is complete and accurate and can alert users to any issues that may have arisen to prevent transfers from completing successfully. The user and workstation are no longer burdened with the transfer and are free to continue working. Transport speeds are near the potential maximum of the network connection (you can still use those accelerators to improve Internet transfer speeds), and by taking the user out of most of the steps of the workflow, productivity increases for users even with the natural bottlenecks that exist in today's internet infrastructure.

Morro Data's CacheDrives work nicely with your current solution and are simple to setup and use, saving much of the hassle of transitioning to a new system. Virtual Machine (VM) variants are also available for sites with infrastructure already in place. Those who wish to access or share files from offsite can simply use the Morro Connect desktop software or web interface to directly download, upload, and create links to share individual files.

FTP is a productivity sink because of the way it's designed to work. SMBs must use complex workflows to accommodate the limitations of FTP even with traditional alternatives to FTP. Rather than rely on complex workflows that must be executed by users, SMBS should be selecting a tool that improves workflow. Such an investment pays back again and again by giving users back their time to work on other more important projects.