



Alliance Partner

Overview

The need

Transferring large core files from customers around the world to the NetApp ingest site.

The solution

A comprehensive solution that enhances the web portal to upload core files and creates automated workflows that quickly interface with NetApp systems for case ID validation, core file checking and file routing.

The benefit

Automatically forward uploaded core files to the appropriate destination based on NetApp workflows.

Achieve transfer speed increase of up to 10 times that of HTTPS.

Clients can upload files that often reach 130 GB to the NetApp ingest site in Sunnyvale from anywhere in the world.

NetApp

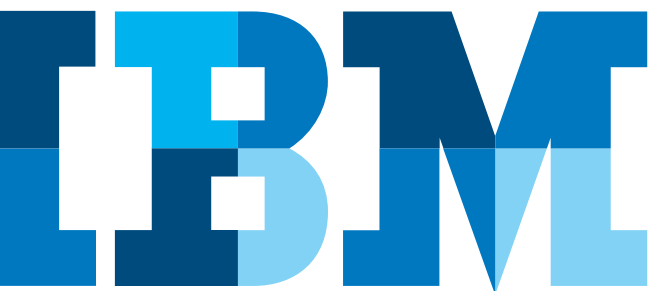
Delivering critical data to the customer success team at maximum speed

NetApp Customer Success Services (CSS) provides around-the-clock support for customers using NetApp comprehensive storage and data management solutions.

To assess and solve technical issues, the NetApp CSS team needs to acquire specific information from their customers. The key artifact needed is the core file – a log that is created when a program encounters an error and terminates unexpectedly – which is then analyzed to discover the root of the problem and develop a diagnosis and repair plan.

CSS uses the patented Fast, Adaptive, Secure Protocol (FASP®) technology to transfer core files and related support data ranging from KBs to hundreds of GBs at maximum speed from customer locations around the world to NetApp service center facilities ensuring timely diagnosis and speedy resolution.

*“With the speed that FASP offers, you don’t need a local ingest site. You can actually transfer data from anywhere in the world.”,
Suresh Babugudumbi, Senior Manager, NetApp.*



Solution components

Software

- IBM® Aspera® Point-to-Point
 - IBM® Aspera® Console Application
 - IBM® Aspera® Connect Server
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Uploading multi-gigabyte size files globally at high speed with reliability and ease

Previously, NetApp used a web-based upload site (HTTPS) to upload clients' core files. However, the upload site could only support transfer of files up to 4 GB in size; anything larger would fail. This became a critical problem when customers presented core files of up to 130 GB.

Unable to rely on HTTPS transfers for large data files, NetApp would direct customers to a standard FTP upload site, but they quickly found FTP lacked continuity and reliability – if a connection broke and the transfer failed, the customer would have to start over from the beginning causing delays, and extending the time it took to diagnose the problem. Also, both HTTPS and FTP transfer speeds across the Internet were unacceptably slow.

As a last resort for high-priority cases, NetApp occasionally retrieved core files by sending a support engineer to the customer site to physically load the data onto a drive. But this method was expensive, time consuming and did not meet the stringent security that NetApp requires.

NetApp sought a file-transfer solution to provide speed, reliability, security, and the flexibility for customers to send data from anywhere in the world, whether they are located in Amsterdam, New York, or Singapore.

Enhancing core file uploads and creating automated workflows with NetApp systems

After reviewing their requirements and considering all available solutions, NetApp selected Aspera, based in part on prior successful experience using Point-to-Point clients to transfer files from Mountain View to Hyderabad. NetApp successfully implemented a software suite from Aspera that included IBM® Aspera® Point-to-Point, IBM® Aspera® Connect Server, and the IBM® Aspera® Console Management Application.

NetApp relied on Aspera Professional Services to create a comprehensive solution. This included enhancing the web portal to upload core files via the IBM® Aspera® Connect Browser Plug-in and creating workflows to interface with NetApp systems for case ID validation, core file checking and file routing. The Connect browser plug-in allows users to upload core files to a centralized Connect Server, while Aspera Point-to-Point transfers files to the appropriate internal destination. This is determined by a series of complex algorithms automatically triggered upon file upload.

Depending on whether it is a core file, a data file, or a different classification, each file will take the required route to one of the NetApp facilities. Aspera Console monitors the transfer environment and adjusts transfer rates as needed to make sure time-critical projects are prioritized.

Previously, NetApp support engineers had to search through hundreds of directories to find a customer file after it was uploaded. With the Aspera solution, the file is automatically directed to where it needs to go at maximum speed; no time is wasted sorting through directories, or back-and-forth communication with the customer before a file's location can be determined.

The automated workflows also detect whether the issue is a new or existing bug, and if it is a known problem, the client is automatically directed to a knowledge-based article discussing the known issue and how to resolve it.

Improved customer upload experiences and major infrastructure cost reductions

One of the central strengths of NetApp agile data management solutions is the ability to be deployed in many different infrastructure environments, and Aspera works in all of them without needing any fine-tuning. Also, Aspera's distance-agnostic solution allows NetApp CSS to ingest data at a central location. While CSS's original plan was to build out a datacenter in Bangalore to support APAC customers, this costly and time-intensive endeavor was no longer needed. Thanks to Aspera, customers could easily send files from APAC to the NetApp ingest site in Sunnyvale, where the Aspera Connect Server scales to accommodate very dense traffic.

"With the speed that FASP offers, you don't need a local ingest site," said Suresh Bahugudumbi, Senior Manager at NetApp. "You can actually transfer data from anywhere in the world." Avoiding the Bangalore build-out resulted in cost savings of approximately \$1 million.

Aspera maximizes available bandwidth, even on low-capacity networks, allowing NetApp customers to achieve transfer speed increases of 9 to 10 times, bumping up average transfer rates from 1.5 Mbps with HTTPS to 15.5 Mbps using FASP.

Benefitting both NetApp and their customers, Aspera software provides the flexibility, speed, and security for clients to send their files to NetApp dependably, and in turn NetApp is able to offer the quick turnaround times and simple, easy-to-use transfer process that makes their support solution an industry leader.

Other notable benefits include the following:

- **High-speed transfers:** Regardless of file size, distance or network conditions, Aspera moves files at maximum speed.
- **Distance-agnostic:** NetApp customers can upload their large files from anywhere in the world, removing the need for expensive localized infrastructure build-outs.
- **Enterprise-grade security:** Built-in security keeps valuable digital assets safe from the customer to NetApp ingest and beyond with SSH authentication, encryption in transit and at rest, and data integrity verification for each transmitted block.
- **Reliability:** With automatic retry and resume of failed transfers, NetApp customers do not have to start a transfer over from the beginning in the event of a connection break.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

About Aspera, an IBM Company

Aspera, an IBM company, is the creator of next-generation transport technologies that move the world's data at maximum speed regardless of file size, transfer distance and network conditions. Based on its patented, Emmy® award-winning FASP® protocol, Aspera software fully utilizes existing infrastructures to deliver the fastest, most predictable file-transfer experience. Aspera's core technology delivers unprecedented control over bandwidth, complete security and uncompromising reliability. Organizations across a variety of industries on six continents rely on Aspera software for the business-critical transport of their digital assets.

For more information

For more information on IBM Aspera solutions, please visit ibm.com/cloud-computing/products/high-speed-data-transfer/ and follow us on Twitter [@asperasoft](https://twitter.com/asperasoft).



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