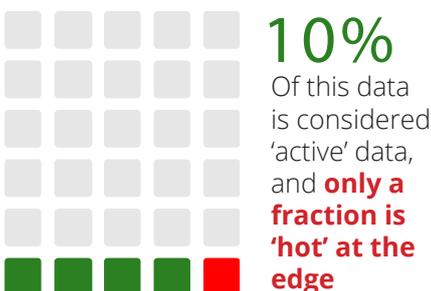
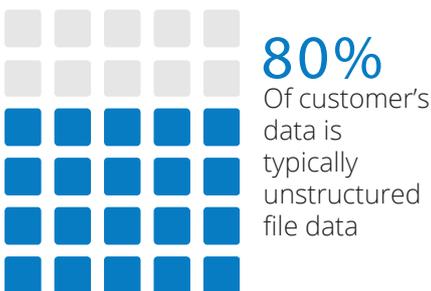


# Consolidate Data into the Cloud, FAST™

Today's global enterprises face the ever-increasing growth of unstructured data. Data is everywhere, and it requires a modernized approach when it comes to data storage, management, security and business continuity. Talon provides an unparalleled data consolidation strategy for global enterprises. Our software allows organizations to centralize and consolidate IT storage infrastructure into your global (cloud) platform of choice while delivering fast and secure access to data for users.

## Reasons to Modernize Distributed Storage

- Are you struggling with managing “Islands of Data” in branch offices?
- Are duplicate files and shadow IT causing file storage to grow exponentially?
- Do you need to modernize storage by separating active from archive data?
- Do you need a centralized data set for file security and compliance agreements?
- Are your IT costs increasing drastically as your performance degrades?



### Consolidate Data into the Cloud

Consolidate and centralize your data into the cloud and leverage data tiering, snapshots, and deduplication with industry-standard technology.

### Streamline Distributed Storage

Rely on a self-sustaining, self-managing cache, and completely eliminate local backups. Utilize local file caching for currently active project data and cut storage costs by up to 70%

### Empower your Business

Create a “Single Set of Data” in a centralized cloud platform for users globally. Leverage FAST™ Intelligent File Caching to increase business productivity and performance by 400%.

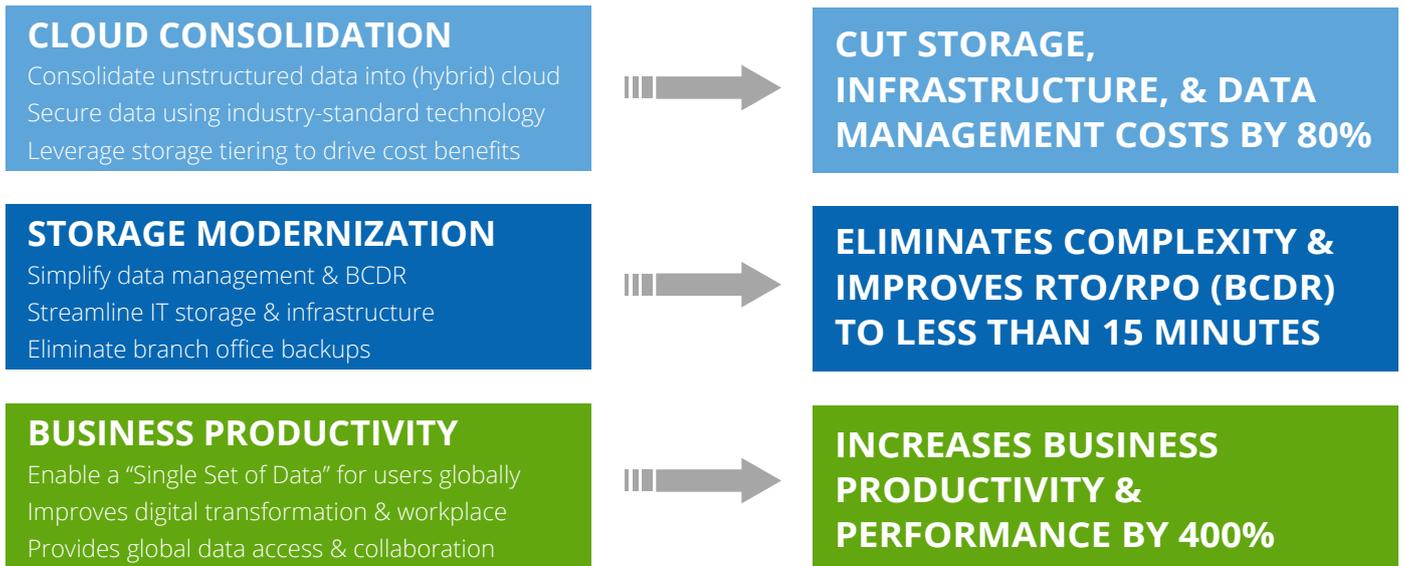
**Do you need** consistent file access, file deduplication, and all the advantages of the cloud without sacrificing local branch performance?

**Do you need** a centralized data set in the cloud to meet compliance and security agreements and reduced IT and infrastructure costs?



## Take the Next Step Towards Cloud Consolidation

By 2025, 49 percent of data will be stored in public cloud environments. IDC also predicts by 2024, the amount of data stored in the core will be more than double the amount stored in the endpoint, “completely reversing the dynamic from 2015” as the core becomes the repository of choice. Over 80% of customer data is unstructured and unused, while only 10% of that data is in active use. Simplify storage costs and consolidate data into the cloud for better file security, global collaboration, and massively reduced storage costs.

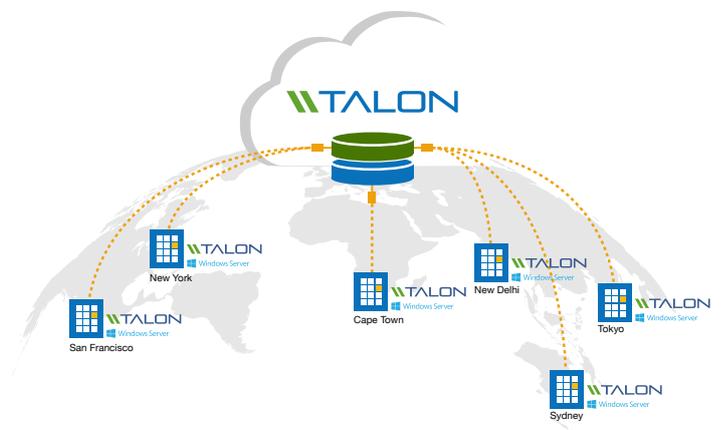


## A Flexible, Scalable Solution

FAST™ is designed to scale alongside your enterprise and simplify global data management through Intelligent File Caching at your remote branch offices. Intelligent File Caching ensures that you only store active data locally in your distributed locations, so your data will always be centralized and secured in your cloud platform, making it easy to scale as your distributed locations expand.

FAST™ creates an end-to-end data fabric that integrates with ANY hyperscaler, making cloud data management easy. Leverage cloud data management solutions like Azure NetApp Files, Amazon EC2, NetApp Cloud Volumes ONTAP, or Cloud Volumes Service for enterprise storage features like snapshots, deduplication, and data tiering.

With this end-to-end solution approach, leveraging enterprise scale and flexibility in the cloud/datacenter, enterprise storage, and Intelligent File Caching at the edge, users are guaranteed a consistent and optimal experience regardless of their geographical location.



## FAST™ Software

## Key Features

	<b>Flexible &amp; Scalable</b>	<ul style="list-style-type: none"> <li>• Cloud &amp; storage agnostic, fully integrates with SMB</li> <li>• Scales up to 100's of distributed sites and at multi-PB scale</li> </ul>
	<b>Intelligent</b>	<ul style="list-style-type: none"> <li>• Caches only what's needed at the edge, 'active' data only</li> <li>• On-demand or through pre-population of 'active' project / data sets</li> </ul>
	<b>Transparent Integration</b>	<ul style="list-style-type: none"> <li>• Honors all SMB principles, including global file locking</li> </ul>
	<b>High Performance</b>	<ul style="list-style-type: none"> <li>• Caches 'active' data locally, compresses, streams &amp; reduces data over the WAN</li> </ul>
	<b>Zero-touch</b>	<ul style="list-style-type: none"> <li>• Keeps active data sets hydrated, cleans stale data, separates active from archive</li> </ul>
	<b>Commodity Hardware</b>	<ul style="list-style-type: none"> <li>• Leverage existing hardware or VM infrastructure</li> </ul>

## Ensure your Data Security

A centralized cloud data set provides ease of access, simplified data management, but most importantly data security.

Consolidating your data into the cloud ensures that it isn't threatened by malware, ransomware, theft, or loss at your distributed locations. FAST™ encrypts your data on-site, so your data is always protected and secured, even in the event of a disaster. FAST™'s systems make DR failover easy, ensuring that you're back up and running in less than 15 minutes.

With FAST™ you will always have complete control of what your data resides on, where it resides, and how it's backed up, archived, and secured to meet your organizations specific needs for RTO/RPOs, SLAs, BCDR strategies, etc. Since the solution sits transparently on top of the Microsoft Windows Server Operating System, all existing ACL's, permissions, AD authentication, and any environmental controls are passed on from the central data center to all branch offices, even in locations that are challenged with low bandwidth or high latency. Your data is always protected on-site, so you don't have to worry about IP theft or data breaches ever again.

## Simplified Cloud Storage for the Modern Enterprise

Centralize and consolidate distributed IT services and data into a central cloud platform that best fits your needs and extend your data to remote locations while reducing major egress and IT costs.

Transform your enterprise storage with:

- ✓ A consolidated, centralized storage environment leveraging the benefits and scalability of the public cloud
- ✓ A reduced storage infrastructure footprint at distributed locations through Intelligent File Caching
- ✓ Significant cost savings for on-premise hardware and cloud data egress costs
- ✓ Enhanced security by removing the risk of data loss/leak at distributed locations through error, disaster, and intrusion
- ✓ Increased flexibility and agility through enhanced global collaboration

## Compatible Cloud Providers



## Features

<b>Caching</b>	<ul style="list-style-type: none"> <li>• Intelligent File Caching</li> <li>• Flexible Cache Management (i.e. Office A: 500GB, Office B: 2TB)</li> <li>• Automated Cache Purging (Least Recently Used algorithm)</li> </ul>
<b>Virtual File Share</b>	<ul style="list-style-type: none"> <li>• Presented at each branch office that is associated with the FAST™ fabric (core instance)</li> <li>• \\Edge\FASTData\[datacenter]\[fileserver]\[share]\[folder]\[file]</li> </ul>
<b>File Locking</b>	<ul style="list-style-type: none"> <li>• Distributed File Locking (Central)</li> <li>• Native Microsoft Windows File Sharing (SMB) Locking</li> </ul>
<b>Optimization</b>	<ul style="list-style-type: none"> <li>• Data streaming</li> <li>• Compression</li> <li>• Delta-differencing</li> </ul>
<b>Advanced Features</b>	<ul style="list-style-type: none"> <li>• License Management Server Services (site-based licensing service)</li> <li>• Auto-Configuration</li> <li>• Global Exclusion List</li> <li>• Server Exclusion List</li> <li>• Remote Inclusion List</li> <li>• Selectable File Handling</li> <li>• Pre-population of (META) data</li> <li>• User Throttling</li> <li>• Customized Cache Purging</li> <li>• Statistics &amp; Analytics UI</li> <li>• PowerShell Integration (CLI/cmdlets)</li> </ul>
<b>User Access</b>	<ul style="list-style-type: none"> <li>• DFS Namespace Integration</li> <li>• Drive Mappings</li> </ul>

## Software Specifications

<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Microsoft Windows Server 2019 Standard/Datacenter (Core)</li> <li>• Microsoft Windows Server 2016 Standard/Datacenter (Core)</li> <li>• Microsoft Windows Server 2012 R2 (Core)</li> </ul>
<b>Supported Hypervisor Platforms</b>	<ul style="list-style-type: none"> <li>• VMware vSphere 6.5+</li> <li>• Microsoft Hyper-V 2016</li> <li>• Microsoft Hyper-V 2012 R2</li> </ul>
<b>Supported Cloud Platforms</b>	<ul style="list-style-type: none"> <li>• Microsoft Azure</li> <li>• Amazon Web Services (AWS)</li> <li>• Google Cloud Platform (GCP)</li> </ul>
<b>Storage Platforms</b>	<ul style="list-style-type: none"> <li>• Azure NetApp Files</li> <li>• Amazon Web Services EC2/EBS/Storage Gateway</li> <li>• Dell/EMC</li> <li>• HPE</li> <li>• Microsoft Azure Disk / Files / StorSimple Hybrid Cloud</li> <li>• Microsoft Windows Server (Cluster)</li> <li>• Nutanix</li> <li>• NetApp A-Series / FAS Hybrid Storage Series</li> <li>• NetApp Cloud Volumes ONTAP / Cloud Volumes Service</li> </ul> <p><i>Contact us for more options</i></p>
<b>Storage Protocols</b>	<ul style="list-style-type: none"> <li>• SMB v1</li> <li>• SMB v2.x</li> <li>• SMB v3.x (including Azure Files)</li> <li>• iSCSI (Direct-Attached Storage)</li> </ul>
<b>Network Connectivity</b>	<ul style="list-style-type: none"> <li>• MPLS</li> <li>• Azure ExpressRoute</li> <li>• Site-to-Site/Point-to-Site VPN</li> <li>• Public Internet (SSL)</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Active Directory Integration (Kerberos/NTLM)</li> <li>• Multi-domain support</li> <li>• ACL/NTFS Permissions</li> <li>• SSL Encryption (SHA256)</li> <li>• BitLocker Drive Encryption</li> </ul>
<b>FAST™ Form Factor / Software Availability</b>	<ul style="list-style-type: none"> <li>• Virtual Appliance Template (.ova / .vhdx)</li> <li>• Software Installation Package (.exe)</li> </ul>
<b>FAST™ Roles</b>	<ul style="list-style-type: none"> <li>• Core Instance, deployed in cloud platform</li> <li>• Edge Instance(s), deployed at each branch location</li> </ul>