

Consolidate scattered corporate data, multiple file systems,
Multiple storage systems, tape systems, archive data and more...

Into one Flash Accelerated Archive.

Super-easy to deploy and use.

IBM support!

Seamlessly combines NVMe Flash disk

And IBM tape libraries in a single view of the data.

FAAST™

Flash Accelerated Archive Storage™

- ▶ Object storage is a warm archive.
 - ▶ Single tier response times in the ~50-100ms range.
- ▶ Requires geo-disbursement and multiple physical locations to realize the “single copy” value proposition.
- ▶ On-prem or geo-disbursed, creates inter-node network reliance.
- ▶ Users may not trust their data to a single copy strategy...they are more comfortable with the traditional “working and backup copy” paradigm.

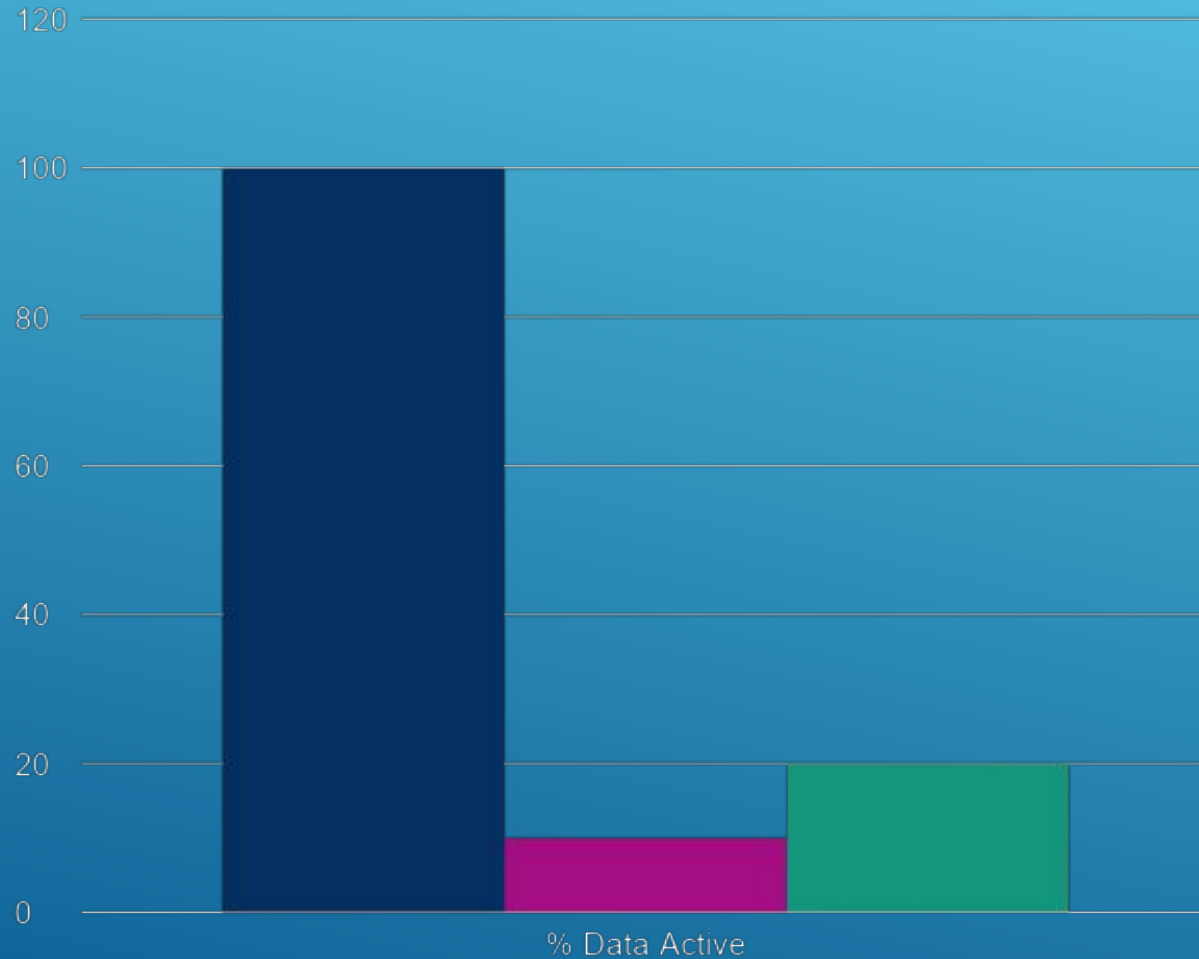
“OBJECT STORAGE ALONE LACKS KEY FUNCTIONALITY REQUIRED FOR AN ACTIVE ARCHIVE IN THE ENTERPRISE DATA CENTER”. **WHY?**

- ▶ Object storage is expensive for an incomplete solution.
 - ▶ ~\$1,000/TB for HW/SW (cost of acquisition).
 - ▶ SWMA adds significantly to TCO.
- ▶ Object storage is reliant on spinning disk.
- ▶ HDD's further negatively impact TCO.
- ▶ HDD's create "green" concerns....space, power consumption, heat dissipation, ambient sound.

OBJECT STORAGE HAS NOT GAINED TRACTION IN THE ENTERPRISE DATA CENTER. **WHY?**

Data is active for an initial period post-creation or access... and then falls into dormancy

Typical Data Use Pattern



DATA USE AND TRENDS

>90% of data, if not referenced for 90 days, will never be accessed again.

80% of existing data is dormant now.

Data doubles every two years.

Market Required

- ▶ Fast archive for initial use period.
- ▶ Semi-permanent archive for data useful life.
- ▶ Ease of deployment and use.
- ▶ Seamless desktop view of data across multiple storage tiers

Vendors Delivered

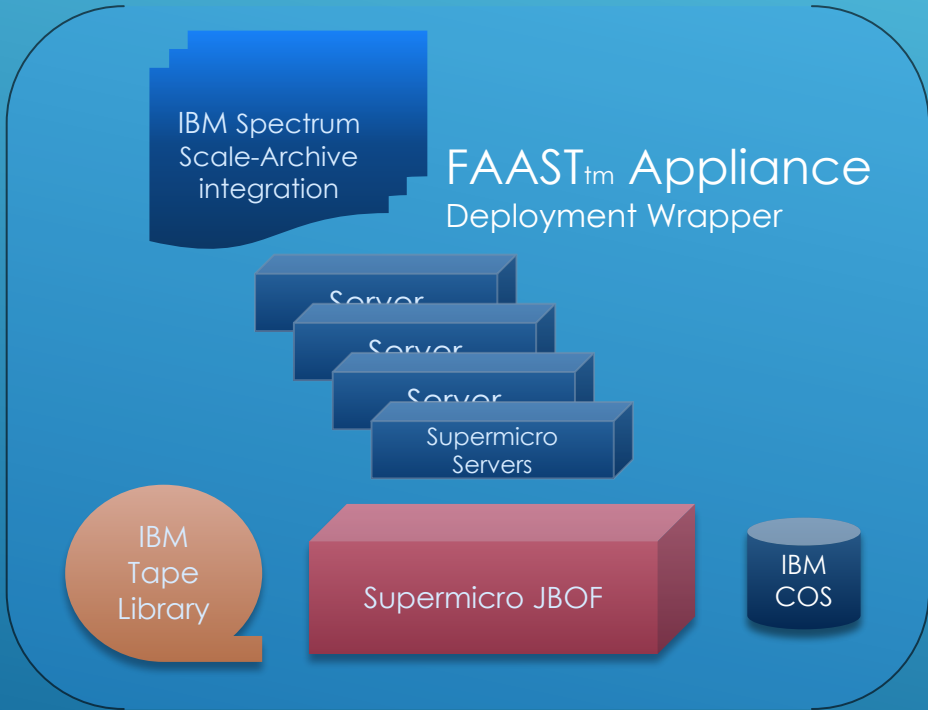
- ▶ Single tier, medium response profile
- ▶ Poor TCO.
- ▶ Complexity of deployment and management.

OBJECT STORAGE VENDORS GOT IT WRONG



FAAST™

FLASH ACCELERATED ARCHIVE STORAGE™



FAAST™

Combines three tiers of storage into a single, accelerated archive appliance:

Supermicro servers, Intel JBOF flash storage, IBM tape libraries and IBM Spectrum Scale-Archive-EE code

FAAST™

FLASH ACCELERATED ARCHIVE STORAGE™



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FLASH ACCELERATED ARCHIVE STORAGE™

Standardized Deployment Code

FAAST™ Appliance

IBM Spectrum
Scale-Archive
Integration

Erasure

Erasure

Erasure

Supernode
Servers

File Systems:
SMB, NFS

IBM
Tape
Library

Supernode JBOF

Native file
encryption and
secure erase.

Global data
access.



Limitless scaling with
commodity servers
and JBOF.

Ultra-fast response and
400 GBps performance.

Simplified deployment
and administration.

Integrated
information lifecycle
management

FAAST™

Consolidation Use Case

- ▶ 20 PB of critical data scattered across multiple storage and locations and file systems
- ▶ 300 active users on CFS,NFS File Systems
- ▶ Require 300 TB of Flash Storage for active data
- ▶ 20 PB to consolidate referenceable dormant data
- ▶ Green concerns
- ▶ Favor tape for long-term retention and portability
- ▶ Second-location copy of data

USER REQUIREMENT

EXAMPLE

(name available on request)



“

SPECTRUM SCALE SPECTRUM ARCHIVE-EE

”

FAASTTM CAPITALIZES ON IBM'S HUGE INVESTMENT IN INTEGRATING SPECTRUM SCALE AND ARCHIVE

..... IBM has done the integration to provide a seamless view of the data as if all on disk.

“

IBM SUPPORT

IBM WILL SUPPORT AND MAINTAIN THE CODE, TAPE LIBRARIES, OBJECT STORAGE AND MORE

Users will have great support from IBM SSR and field teams

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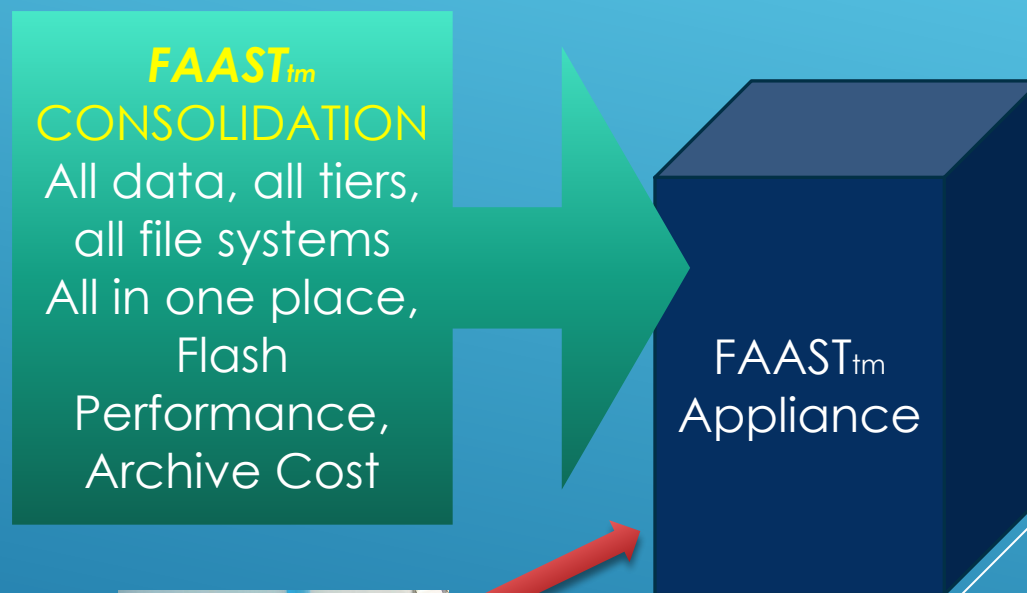
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Users see all Flash and Tape Data as if part of their regular Windows or Unix directory tree