

PoINT Storage Manager Software

Scheduled, Policy based Data Archiving

Product Overview

PoINT Software & Systems GmbH
November 2017

PoINT - The Company

Origin in Storage and Archiving Market (1985)

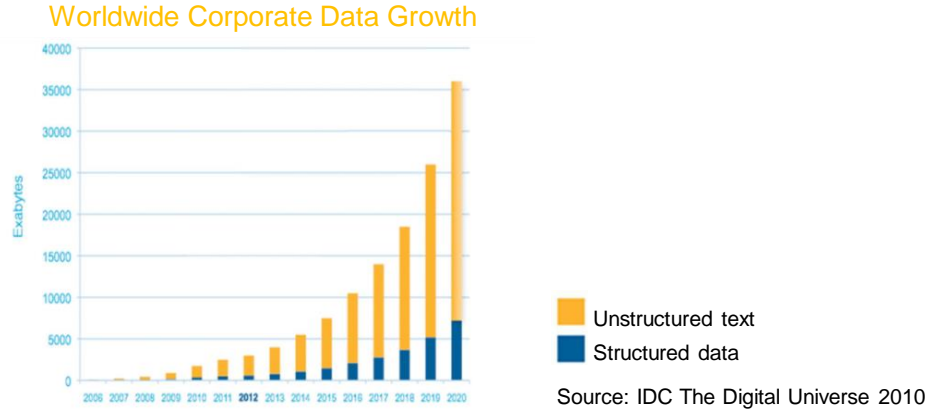
- “World-Wide Competence Center“ of Philips
- “European Project Organization“ of Digital Equipment (DEC)

Foundation of PoINT Software & Systems GmbH (1994)

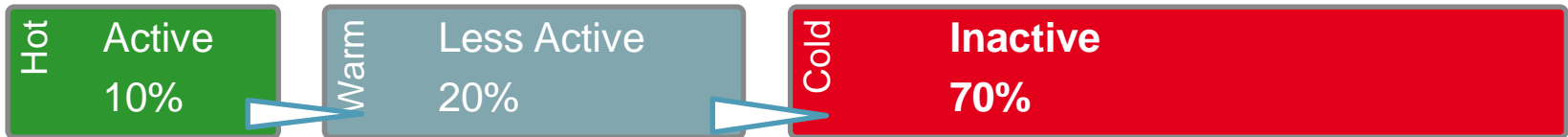
- Market leader in management and archiving software for optical libraries
- Certified by major storage system vendors (EMC, Fujitsu, HDS, NetApp, ...)
- 30 years of experience in storage management software
- 2,000,000+ installations of PoINT software (professional and consumer)



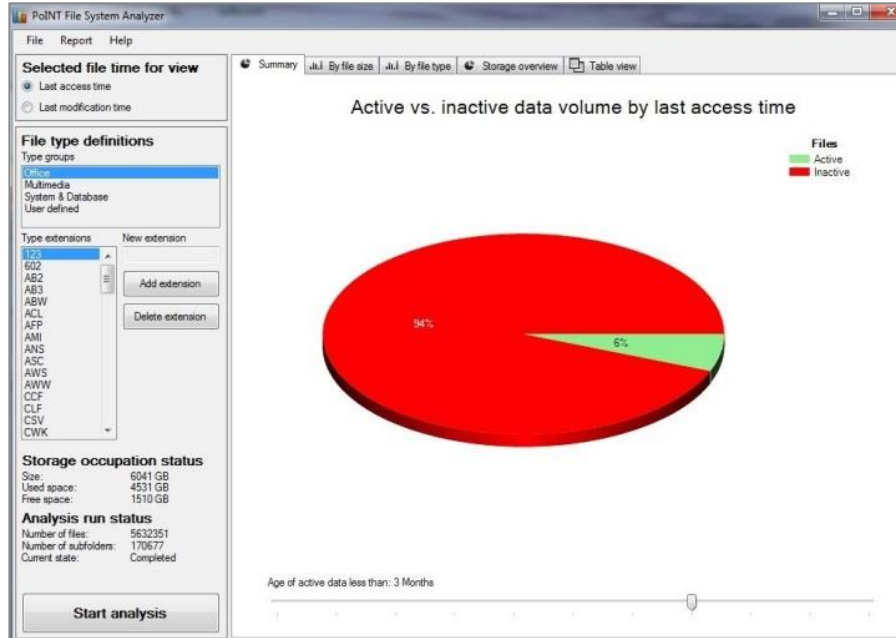
The Challenge



80% of Corporate Data is Unstructured File Data



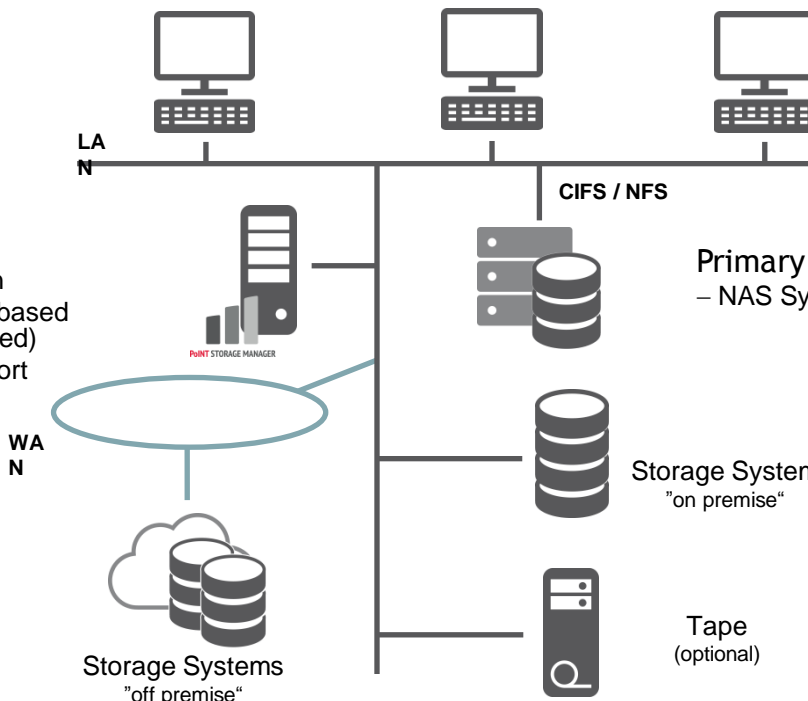
PoINT File System Analyzer



Conceptual Overview

PoINT Storage Manager

- Software Solution
- Windows Server based (VMware supported)
- MS Cluster Support



Client and application transparency

- Archived files are visible through primary storage
- No need to adopt or modify applications

Primary Storage

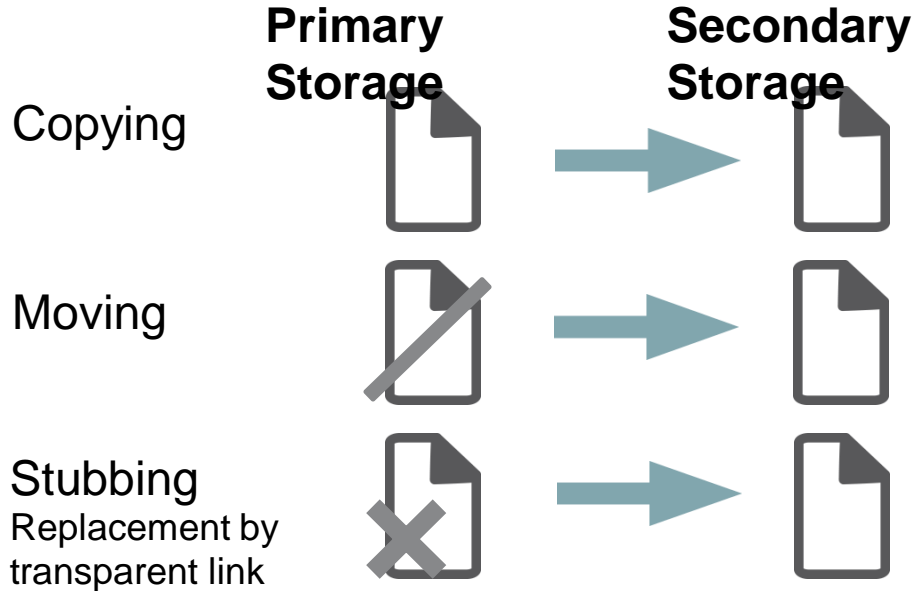
- NAS Systems

File Tiering & Archiving
Policy-based archiving of inactive files from primary to secondary/archive storage

Connectors

- HP MSL, IBM, Overland, Quantum Scalar, Qualstar, StorageTek, ...
- DISC, HIT, Panasonic, ...
- Amazon S3, Amplidata AmpliStor, CDMI, Caringo Swarm, EMC Centera/Atmos/ECS, HDS HCP, HGST Active Archive, NetApp StorageGRID Webscale, Quantum Lattus¹⁾, Scality RING, ...
- Crossroads StrongBox, EMC Data Domain, FAST LTA, NetApp SnapLock, PoINT Jukebox Manager, Quantum Artico¹⁾, ...

Methods



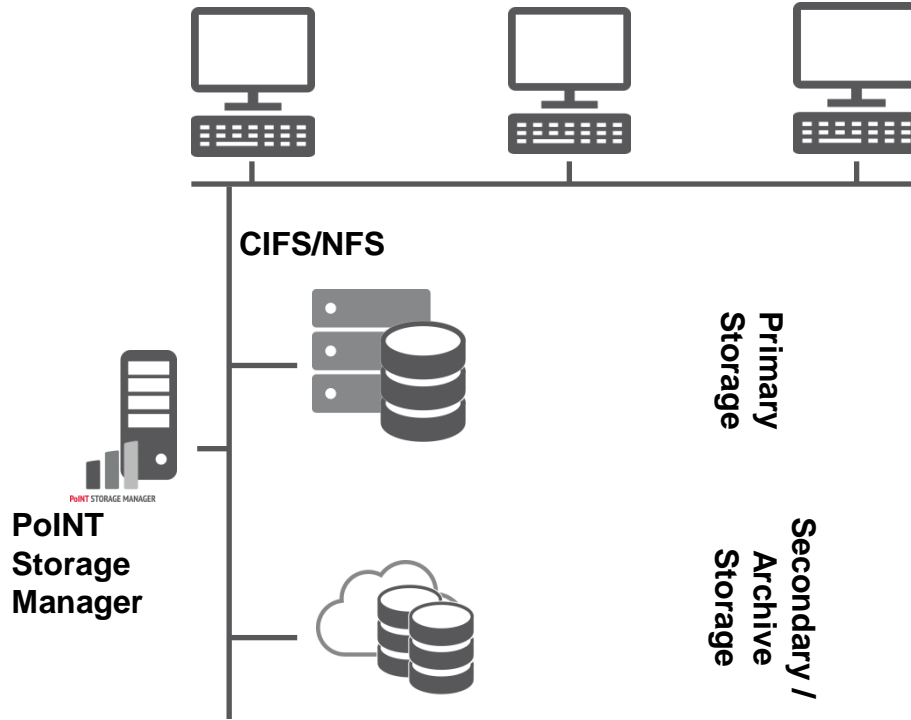
Archiving Features

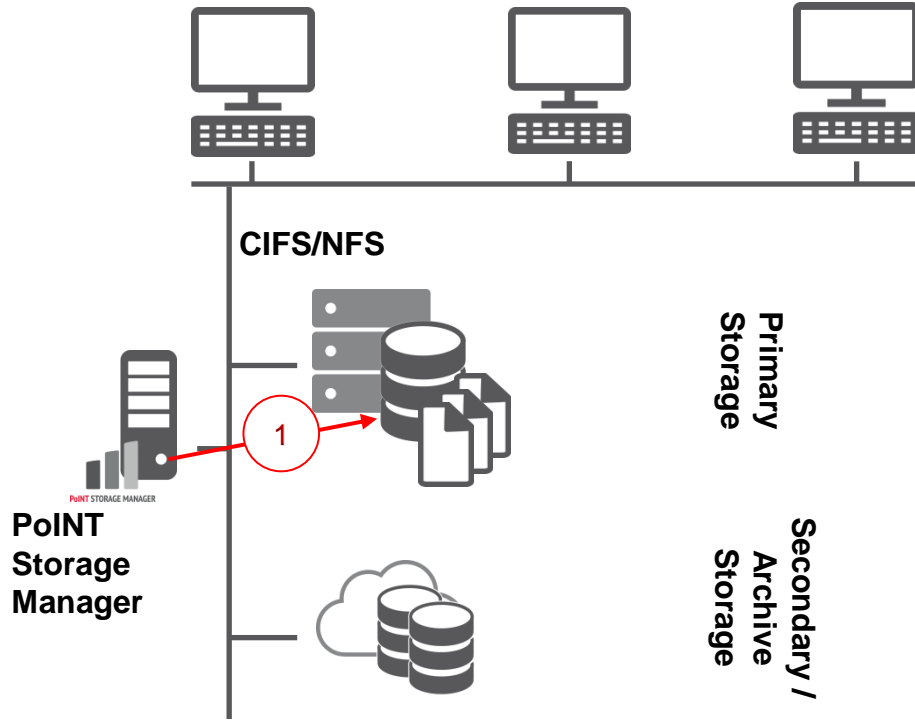
- Software based
 - Independent from storage technology, systems and devices
 - No vendor lock-in
- “Archive Volume” concept
 - “Containerization” of files into objects (adjustable size)
 - UDF (Universal Disc Format) – standardized format
 - Authentication
 - Encryption
- WORM
- Retention management¹⁾
- Authentication
- Versioning
- Background migration



1) Under development

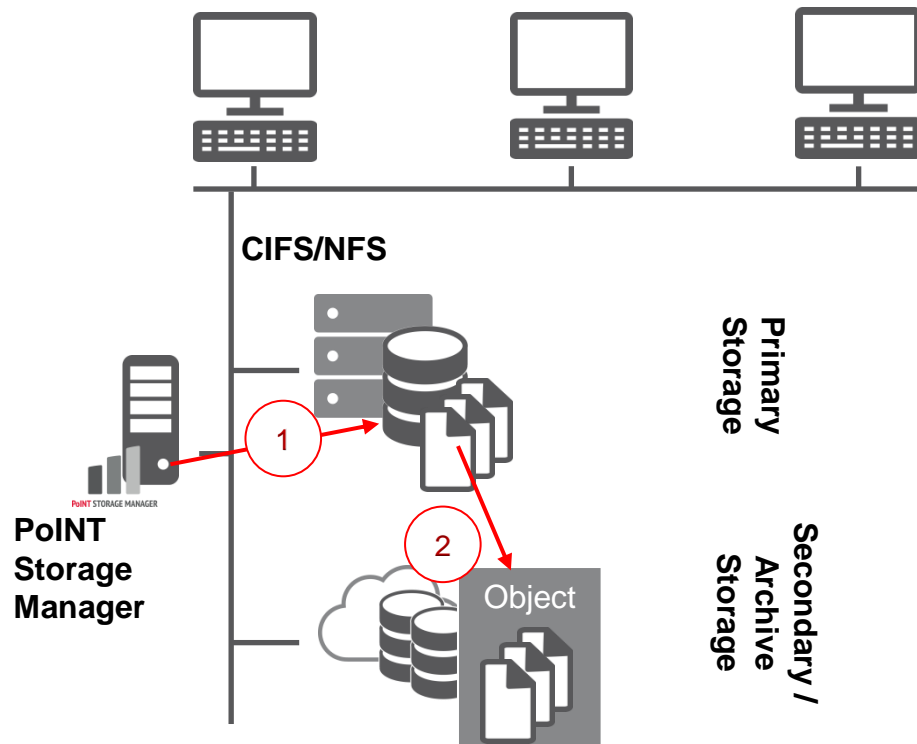
Tiering- How It Works





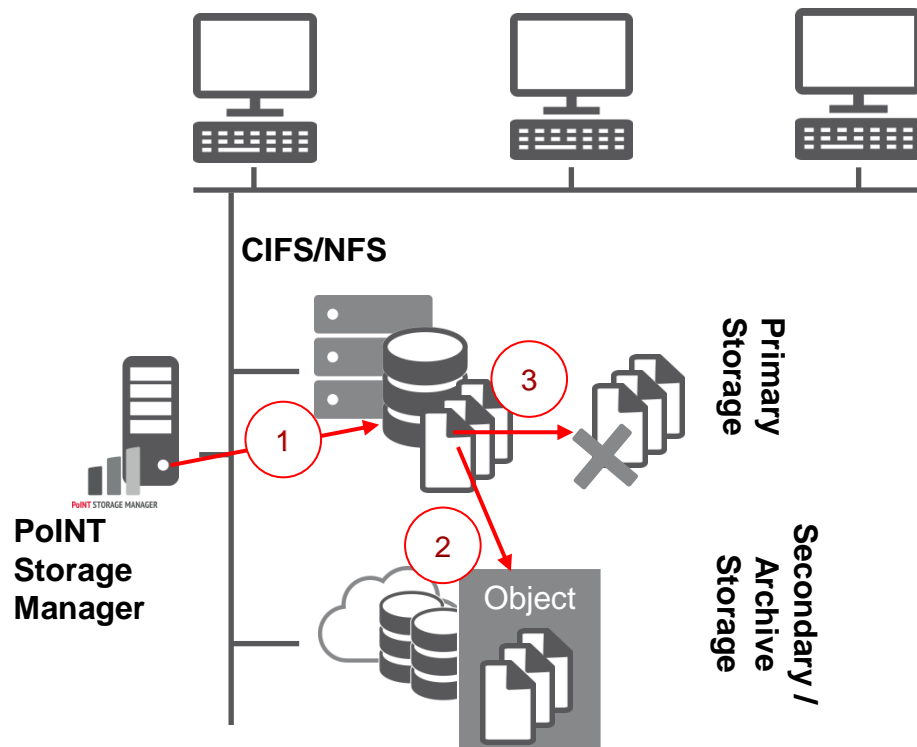
How It Works

- 1 – Monitoring primary storage and classifying files to be archived



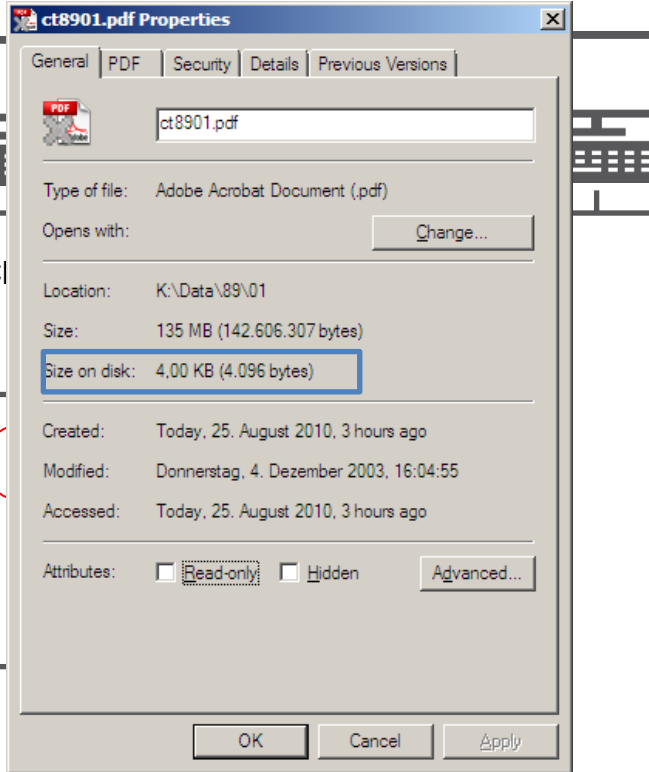
How It Works

- 1 – Monitoring primary storage and classifying files to be archived
- 2 – Copying classified files to secondary storage / archive device



How It Works

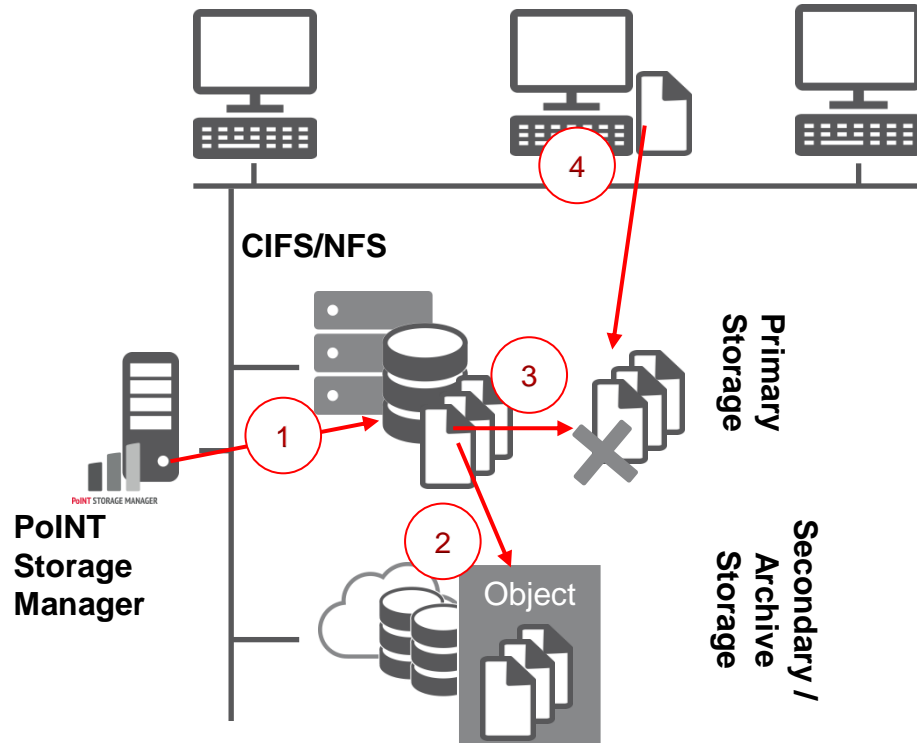
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- 2 – Copying classified files to secondary storage / archive device
- 3 – Replacing original file by stub file and retain transparent access



**PoINT
Storage
Manager**

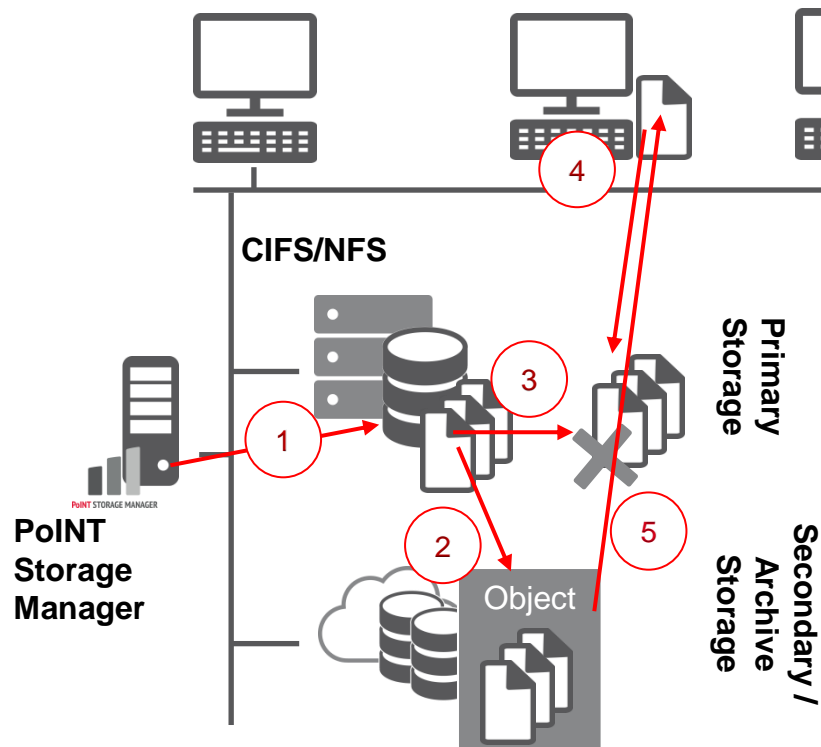
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- 4 – Accessing archived / stubbed files by applications through primary storage



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- 5 – Providing archived file to application / “pass through read”

Primary Storage Systems Supported for Tiering

- EMC Celerra / VNX
 - Copy/Move/Stubbing Methods
 - EMC File Mover Support
- Microsoft Windows NTFS/ReFS based Storage
 - Copy/Move/Stubbing Methods
 - Windows Filter Driver based on “Reparse Points”
- NetApp FAS (7-Mode, Cluster Mode)

 - Copy/Move/Stubbing Methods
 - NetApp FPolicy Support
- Other NAS Systems
 - Copy/Move Methods



Cloud/Object Storage Support

Native Connectors

- RESTful HTTP
- Amazon S3, Amplidata, AmpliStor, CDMI, Caringo Swarm, EMC Centera, Atmos, ECS, HDS HCP, HGST Active Archive, NetApp StorageGRID, Webscale, Quantum Lattus, Scality RING, ...

Archive Volumes

- “Containerization” of files in Archive Volumes (objects)
- UDF (Universal Disc Format)
- Adjustable size
- Authentication

Replication

- e.g. parallel archiving Tape, Cloud ...
- Automatic synchronization



Tape Support

Drives, Loaders, Libraries

- Native support (no additional software or appliance required)
- IBM, HP, Overland, Qualstar, Quantum, Spectra Logic, StorageTek (including ACSLS), ...

Archive Volume (“container”)

- includes authentication and encryption

Versioning

Standard Formats

- Physical - LTO (Linear Tape Open)
- Logical - LTFS (Linear Tape File System) / MTF (Microsoft Tape Format)
- Volume - UDF (Universal Disc Format)

Replication

- e.g. parallel archiving to Tape Library, Cloud ...



Software Architecture

Primary Storage
Performance
Tier



EMC VNX



Windows NAS
Systems
PoINT NTFS
Agent



NetApp FAS
PoINT NetApp
FAS
Agent



Generic
Network Share



Virtual „WORM“ File
System

PSM Agents

PoINT EMC
FileMover Agent

PoINT NTFS
Agent

PoINT NetApp
FAS
Agent

PoINT Copy/Move
Agent

PoINT VFS Agent

PSM Services

PoINT Storage
Manager

Storage Agent Service and Storage Manager Core Service

PSM Storage
Connectors

Object Store
Connectors

Tape Library
Connectors

Optical
Library
Connectors

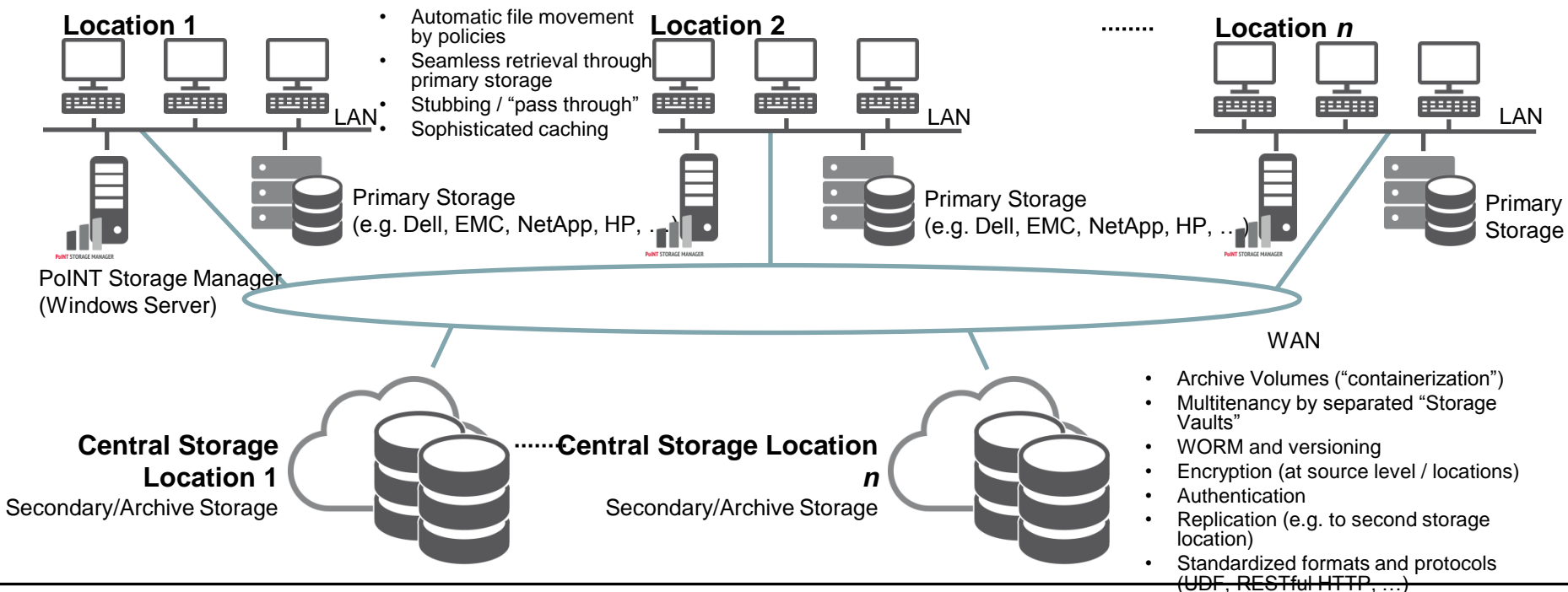
HDD / NAS
Connectors

Appliance
Connectors

Secondary /
Archive Storage



Configuration Example



Benefits

- ✓ Cost savings by efficient use of primary storage
- ✓ High productivity by single path access to all data
- ✓ Reduced management effort by automation
- ✓ Cost and time savings by reduced backup volume
- ✓ Reduced risk of litigation by archiving of data
- ✓ Cost savings by homogenously integrated tiered storage

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