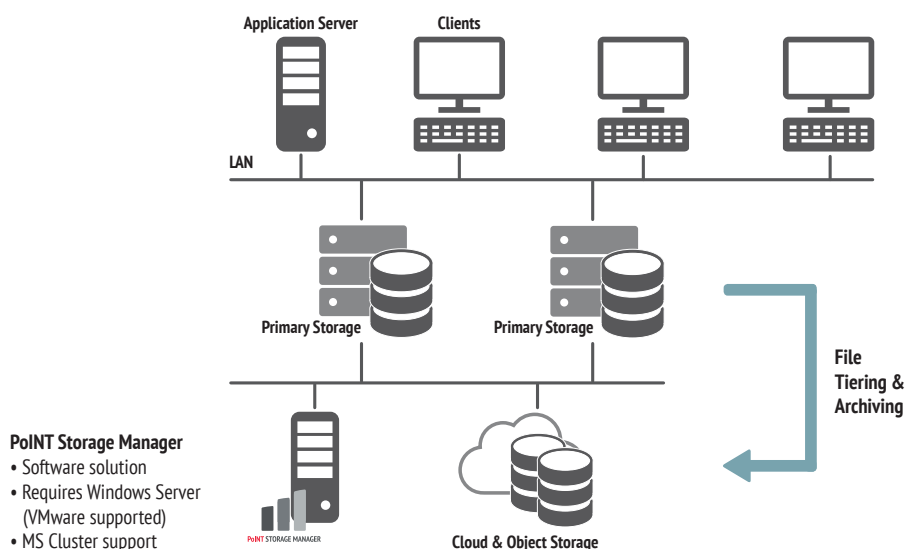


Object-based storage (Object Storage) is considered an emerging storage technology and becomes an alternative to file- and block based storage. Especially for public and private cloud storage infrastructures Object Storage is building the fundamental basis. The advantages of Object Storage compared to traditional storage are its scalability, as well as its way to process metadata and to simplify data protection. Therefore Object Storage is perfectly suited for

inactive data and data to be archived. Object Storage is a rather new storage technology with new interfaces and new protocols which also differ very much between the manufacturers of Object Storage systems. The software solution PoINT Storage Manager integrates Object Storage systems homogeneously into the existing storage infrastructure and makes the advantages of Object Storage useable without a need for costly changes and adaptations.

### FILE TIERING AND ARCHIVING TO OBJECT STORAGE

Most primary storage systems are overloaded with unstructured data being inactive or need to be archived. Very often this data has not been accessed for several months. Additionally inactive data can lead to the situation that backup windows cannot be met. Furthermore primary storage does not provide mechanisms to protect data against modifications and deletion. Therefore expensive primary storage is not the right system to store data which is inactive or need to be archived. On the other hand users and applications expect seamless access to all data. PoINT Storage Manager in combination with Object Storage systems provides the solution to this dilemma. The software performs policy-based file tiering and archiving from primary storage systems to Object Storage systems and keeps all data transparently accessible.



The HSM Mode is supported for the following primary storage systems:

- EMC Unity / VNX
- NetApp FAS
- Windows NTFS / ReFS based

#### Benefits

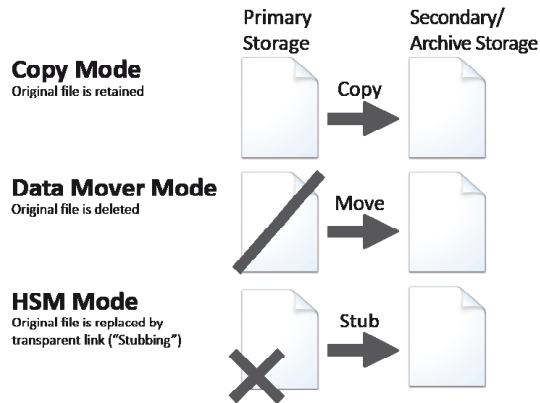
- Efficient use of primary storage
- Fulfillment of archiving requirements
- Independent of specific storage hardware vendor
- Reduced capital expenses
- Increased productivity

#### Features

- Policy-based file tiering & archiving to Cloud & Object Storage
- Transparent access by stubbing
- Data mover mode
- Retention management
- Archive browser
- Automated replication

### TIERING AND ARCHIVING METHODS

PoINT Storage Manager supports multiple tiering and archiving methods. This comprises copying of files (Copy Mode), moving of files (Data Mover Mode), and stubbing of files (HSM Mode).



### INDEPENDENT OF SPECIFIC STORAGE HARDWARE VENDOR

PoINT Storage Manager supports multiple Object Storage interfaces and multiple vendors of Object Storage systems. This prevents a proprietary hardware solution with long term dependency and unforeseeable support costs. Replacing the storage hardware is supported by PoINT Storage Managers built-in migration functionality and is possible at any time without interruption of operation.

### SEAMLESS MIGRATION

PoINT Storage Manager integrates Object Storage (and other storage devices) into to a tiered storage architecture which provides the basis for seamless migration. This scenario allows uninterrupted operation of applications and users even during the migration. No re-configuration is necessary.

### Technical Information

#### Cloud & Object Storage Connectors

- Amazon S3
- Amplidata Himalaya
- Caringo CAStor / Swarm
- Cloudian HyperStore
- EMC Atmos / ECS
- HDS HCP
- HGST Active Archive
- IBM COS
- Microsoft Azure Blob Storage
- NetApp StorageGRID Webscale
- Quantum Lattus
- SCALITY Ring
- SUSE Enterprise Storage

Note: This list is extended on a regular basis. Please contact PoINT Software & Systems for an up-to-date list of available connectors.

In addition the standard interfaces S3 and CDMI are supported.

#### System Requirements

Windows Server 2008 R2 / 2012 R2 (installed physically or on VMware) including Windows Failover Cluster

### CIFS ACCESS BY POINT VFS

Most applications do not support Object Storages natively and require a standard storage access interface like CIFS. PoINT VFS (Virtual File System) is an integral module of PoINT Storage Manager and implements a native Windows file system. It provides standard CIFS file system access to Object Storage systems. This means applications can make use of the benefits of Object Storage without adaptations.

### AUTOMATED REPLICATION

PoINT Storage Manager supports automated replication of data stored in Object Storage systems. The replication device can also be an Object Storage, e.g. in a remote location, but also devices with different storage technologies (e.g. tape or optical) are supported.

### SOFTWARE DEVELOPMENT KIT

The Software Development Kit (SDK) can be used by system integrators to incorporate the functionality of PoINT Storage Manager into applications by a suitable API. This API provides the control of policy-based file tiering and archiving as well as comprehensive query and administrative functions.

### ADDITIONAL INFORMATION

Additional information and a trial version of the software are available at [www.point.de](http://www.point.de). Information and trial versions of additional PoINT products are available there also.