

Datasheet

NetApp E-Tiering Cloud Appliance

Effortless Tiering of Inactive file data with a single appliance

KEY BENEFITS

A single appliance for Tiering and storing of Inactive file data which is quick to implement, easy to use, cost effective and simple to buy. Just plug in power and your network, and start Tiering in an instant!

THE NETAPP E-TIERING CLOUD APPLIANCE OFFERS:

- Single appliance to manage all Tier 2 file data from almost any source
- Simple Installation - Plug in power and your network, and you're one simple setup away from production
- Comprehensive feature set to address almost any customer Tiering challenge
- Highly scalable for small systems up to the large enterprise (multiple TB to multiple PB)

The Challenge

Managing the Inactive file data explosion

- Companies are grappling with the explosion of file data. More and more are turning to Tier II solutions for the bulk of their Inactive file data.
- Today, file data is on average 85% of all corporate data and is growing by 40% - 50% per year.
- The challenge facing storage administrators is providing an appropriate platform for this Inactive file data.
- Inactive file data growth on Primary Storage is prolonging back-up cycles, consuming resources designed to maximise end user performance, consuming unnecessary management overhead and costing millions in unnecessary primary storage extensions and upgrades.
- Past archiving solutions burden networks with repetitive file system scans while providing limited end user access for the archived data.
- Past archiving solutions are often very expensive and complex to implement leading to unattractive ROI.
- In certain sectors, where storage

environments are dominated by machine generated data like medical scans, satellite imagery and video surveillance, the growth rate is as high as 300% per year.

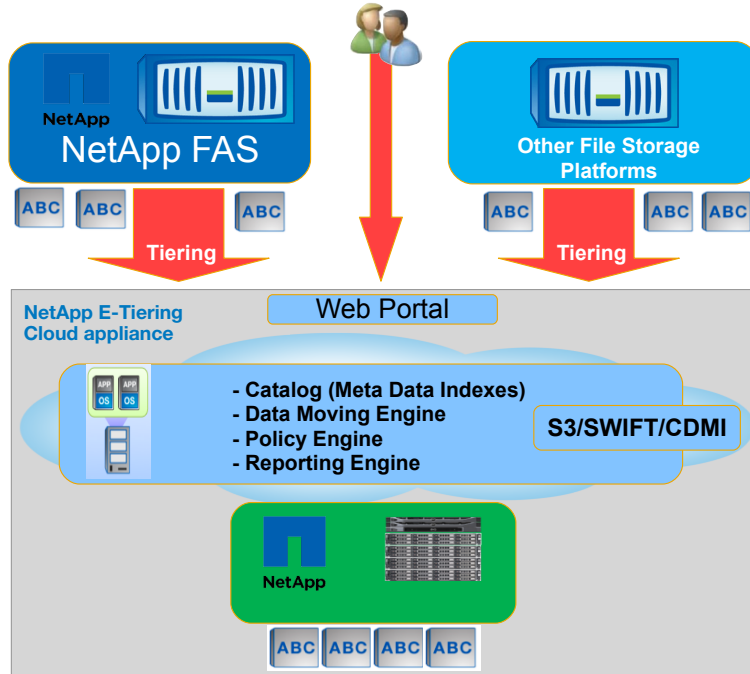
- After creation, less than 10% of this file data will ever be accessed by an end user again.

The Solution

One appliance to deliver a comprehensive solution for the management of inactive files

- The NetApp E-Tiering Cloud appliance offers an all-in solution with unbeatable features and benefits including quick deployment, infinite scalability, automated lifecycle management, extended Metadata capture, Cloud Connectivity (i.e. S3) and much more.
- The appliance can Tier file data from almost any platform that stores Files including CIFS/NFS, NetApp, EMC, HDS, LTFS, S3/SWIFT/HDMI.

System Configuration



This fully automated, highly scalable solution allows users to understand the makeup of their file data and save time and money by seamlessly moving their inactive files out of their backup cycle and into NetApp's secure environment. The appliance support stubs on any platform or a stubless environment that enables access through the appliance Web Portal.

Together it allows flexible file data archiving utilising several "what to move" methods:

- Automated policy-driven data movement (for example - by age, last access, group)
- Project based (for example - by oil well, medical case, research project)
- Manual user-driven data movement (quota/end-user clean up)
- Instant Tiering from HPC platforms that need storage on demand

The NetApp E-Tiering Cloud appliance is unique in the marketplace in that it allows users to:

- Save time and money by replacing repetitive file system scans with real-time data migration based on storage events, administrator policies, projects, HPC feeds, or end-user activity.
- Automatically drive lifecycle management policies and extended metadata into the repository solution, including integration with third-party project management system.
- Enable complete insight and visibility into the total data environment by providing access to archived data through a variety of access methods, including Primary Storage stubbing, Web Portals, mobile phones, and the cloud.

This new age of big data requires the most advanced technology and experienced industry-leading experts to deliver solutions that can span the largest global enterprises. Work continues uninterrupted, networks are unburdened, and the file data is managed on a lifecycle-appropriate platform. NetApp and its partners have combined their expertise to deliver this one-of-a-kind solution.

Why not try a real appliance in your data center this month? Setup in minutes, test in hours, production tiering in days!

SOLUTIONS AVAILABLE

Create any TB configuration and Geo deployment scenario with the E Tiering cloud appliance. Sizes start from:-

- 48TB scalable to multiple Petabytes
- Prices are by appliance and TB based
- Comprehensive appliance Support and maintenance (single point of contact) for 3 years is included

CUSTOM OPTIONS

- NetApp StorageGRID Object Storage Platform
- S3/SWIFT/CDMI Gateways
- LTFS Tape Support for Tier III

Stubbing

One of the great strengths of the NetApp E –Tiering Cloud Appliance is the ability to manage end user access.

Stubbing is managed in one or more of three ways:

- 1 Classic Stubs or Pointers for NetApp, Windows and Celler. These utilise storage operating system support with features like an off-line attribute so virus scans do not try and rehydrate files.
- 2 URL Stubs for all storage operating systems that do not support classic stubbing such as Isilon, HDS, Dell FFS, all NFS, most HPC, etc.
- 3 Stubless Access through a Web Portal for customers who do not want stubs left in the user directories.

The NetApp E-Tiering Cloud Appliance unique Catalog is the secret sauce to end user access.

- A SQL Server based engine stores a record of all meta data, sub-directory information and user information about every file.
- This allows you to find the 100 files you need amongst potentially billions (PBs).
- It also enables user access through the Web Portal directly to archive - this is the 'stubless' option.
- The catalog is SQL and can be backed up using SQL replication - usually to your existing SQL farm.
- Requirements are about 1GB per TB of file data.

HA and Disaster Recovery

- The Appliance is very resilient as it uses DDP (effectively RAID 6). Along with best practice primary back up policies, this is sufficient for most customers.
- Multi Replica can also be implemented for further protection.
- The Replicas can be distributed within the same site or geographically.
- Two or more Enterprise Appliances can be configured as a cluster for scalability and performance.
- The E-Tiering Enterprise Appliance also allows for partitioning of the catalog and files (one catalog for all, stored in segments, with different files on each system).
- The E-Tiering Pro Appliance supports DR with its ability to mirror content.
- Automatic failover can be achieved by clustering the systems.

Secure Multi-tenancy

- This can be implemented in a variety of ways depending on the customer requirements.
- Separate systems on the primary and/or secondary and our solution can move data from different shares to a choice of secondaries or to their choice of destinations on the Appliance.
- Configure the Appliance to preserve the directory structure for Tiered files and to set permissions on secondary.
- For environments with a full PKI infrastructure we can work with it to use certificates and encryption to secure tenants.
- Full billing/chargeback is supported by the implementation of specific add on modules.

Appliance Models and Features

Feature Description	Appliance Pro	Appliance Enterprise	Add Ons
Age Based File Tiering Policies	✓	✓	
Comprehensive Meta Data Catalog	✓	✓	
Dynamic Ingest Scheduling	✓ (day and time)	✓	
Automatic Error Notification	✓	✓	
Retention and Legal Hold Policies	✓ (v2)	✓ (v2)	
Administrator Archive Portal	✓	✓	
Active Stubs™ (for Storage O/S which support Classic Stubbing)	✓	✓	
URL Stubs™ (for Storage O/S which do not support Classic Stubs)	✓	✓	
End User Archive Portal - Direct (Stubless) End User Access to File Archive	✓	✓	
HTML Stubs (for Storage O/S which do not support Classic Stubs)		✓	
Multiple Archive Replicas		✓	
Catalogue Replication		✓	
Dynamic Rehydration Control		✓ (v2)	
Background Rehydration Processing and Notification		✓	
Advanced File Tiering Policies		✓	
Life Cycle Management Policies		✓	
LFTS Tape Connector			✓
Right Click - End User Driven Tiering			✓
Extended Reporting, Billing & Chargeback			✓
File Activity Auditing			✓
Cloud Replication			✓
S3 Connector			✓

About NetApp

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at www.netapp.com.

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