

Two Steps to Cut Your NAS Costs

IBM and Komprise

IBM and Komprise address challenges to becoming agile



Massive data growth

90% of data created in last 2 years



Flat budgets

25% on storage, 80% of which is in managing data



Storage innovation

Cloud and Object Storage



User experience

Migration cannot disrupt users

Problem

Store Everything on Production Storage



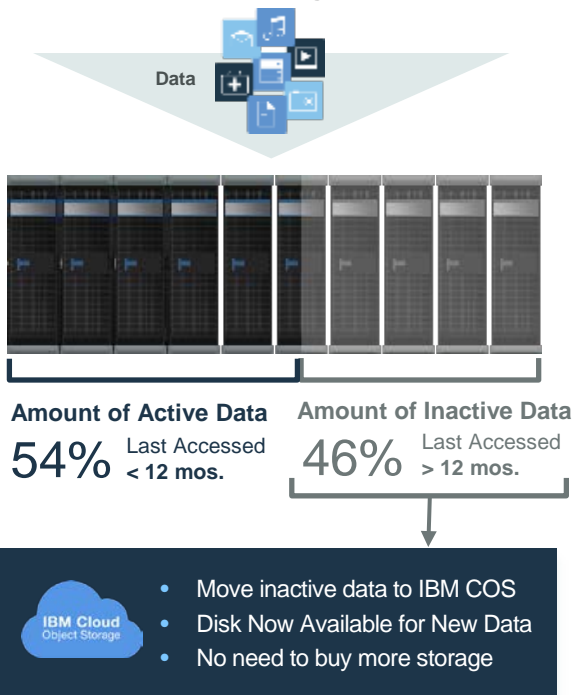
- Large amounts of inactive data consuming expensive storage
- Multiple copies of the data on primary storage (mirror, backup, snapshots)
- Unsure what data to move to IBM Cloud Object Storage (COS)
- Replacing Tier 1 NAS systems can be disruptive, complicated and prohibitive
- Building company policies and strategies to archive inactive data is functionally challenging or impossible

The Solution

Optimize your primary NAS storage with IBM Cloud Object Storage and Komprise Data Management

Traditional Storage makes Big Data even bigger

Multiple copies, more storage, more overhead



- **Postpone/Reduce New Storage Purchase**

Identify inactive data across primary storage that is consuming expensive resources and move this data by policy to IBM Cloud Object Storage.

- **Simplify Backup and Recovery Process**

Store backup of hot data in IBM Cloud Object Storage for redundancy and disaster recovery

Seamless Path to the Cloud

Seamlessly extend existing on premise storage to IBM Cloud Object Storage without any changes to user or application access

- **Reduce Operational Costs (Backup, DR)**

Eliminate cold data from the actively managed footprint and a significant amount of the data being backed up is eliminated, thus speeding up backups and reducing backup costs

Existing data management and legacy storage were not designed for the needs of today's business

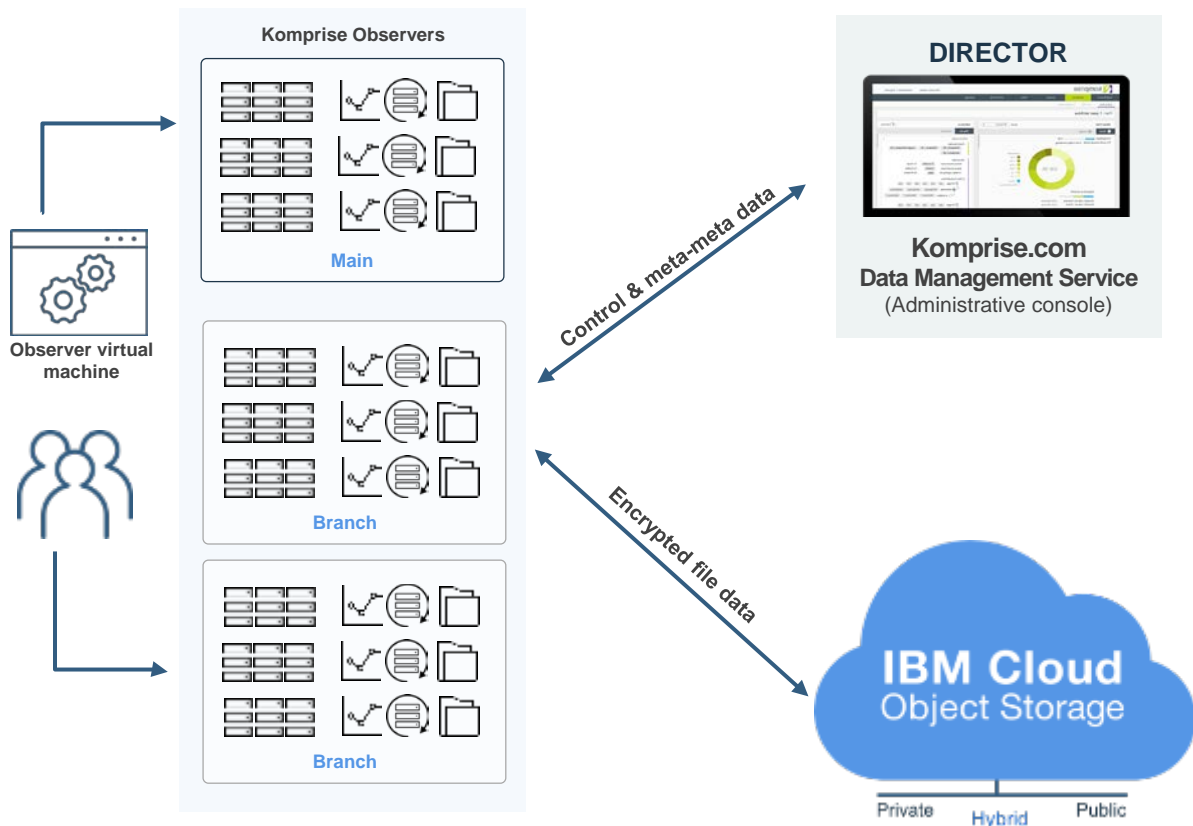
Existing archive data migration and legacy storage solutions

- Do not provide automated insight to the economics of archive
- Do not scale on demand
- Disrupt storage system performance
- Create static stubs that can be corrupted, orphaned and go missing
- Not designed or optimized for unstructured content
- Expensive, proprietary



A new data management and storage architecture is needed.

Modern Solution Architected for to Scale Easily



Scalable Solution

Komprise Data Management

- Deploys in minutes
- No hardware
- Data lifecycle management
- Auto load-balanced grid
- Managed as one system

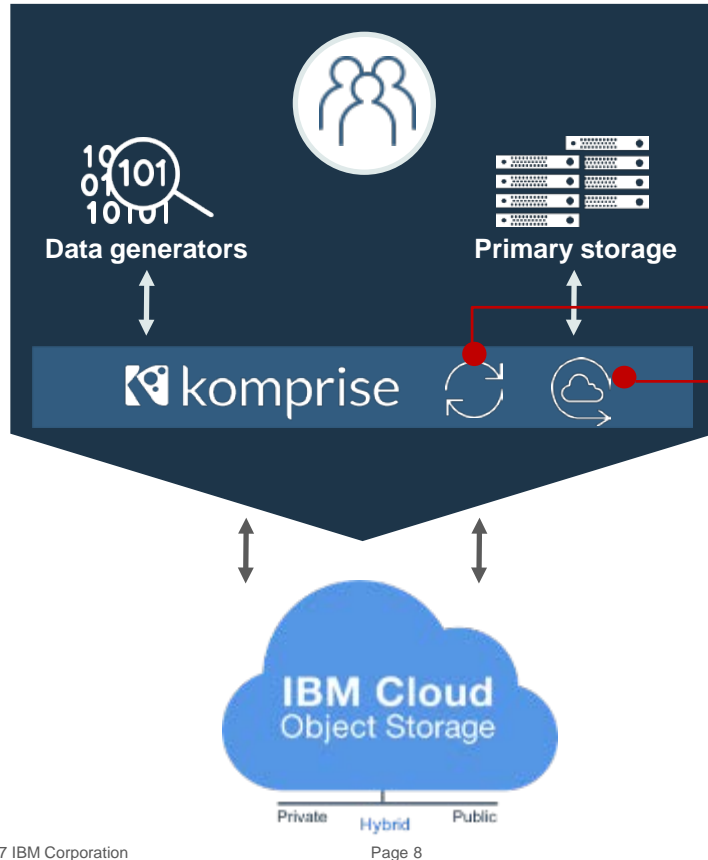
IBM Cloud Object Storage

- Flexible deployment options: on-premises, private cloud, public cloud
- Scale Leader - only vendor with multiple 100-petabyte customers deployed.
- Shared nothing architecture, with strong consistency
- Scalable namespace mapping with no centralized metadata
- Highly reliable and available without replication

Demo

Komprise and IBM

Transparently move data to IBM Cloud Object Storage



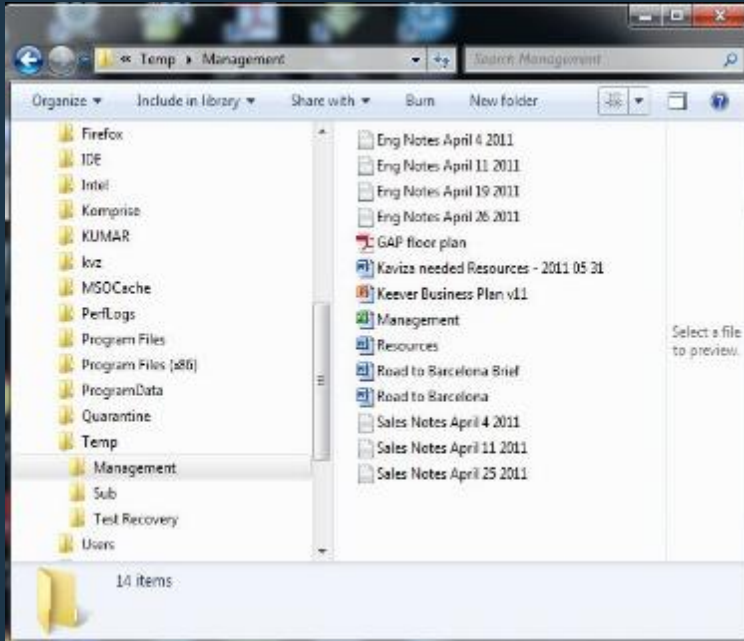
- Automated, transparent data movement of inactive data to IBM Cloud Object Storage
- Each Observer in a Komprise cluster asynchronously reads filer data and processes it for transfer to IBM COS over S3 API



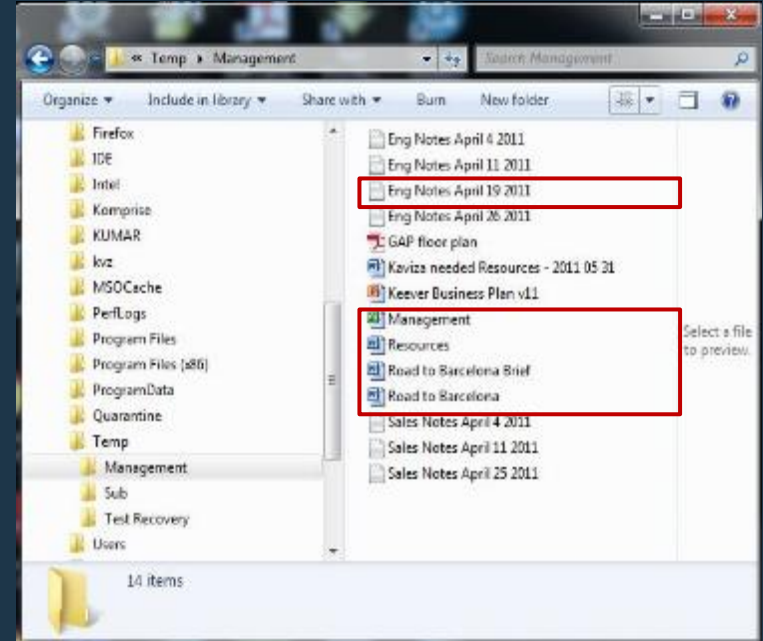
- Move a DR copy of hot data to IBM Cloud Object Storage
- Komprise copy policy continuously copies data to IBM Cloud Object Storage to provide a replication site

No changes to user or application access

Before migration



After migration



IBM Cloud Object Storage with Komprise Data Management

Optimize your primary NAS storage with analytics-driven, transparent data movement to IBM Cloud Object Storage

✓ **Understand data usage and growth.**

Get insights into data usage and growth across all your NFS and CIFS storage.

✓ **Plan capacity.**

Interactively visualize the projected impact and ROI of different policies for moving data to IBM Cloud Object Storage to plan how to best scale your capacity.

✓ **Deliver access without disruption.**

Provide end users and applications with transparent access to the archived data.

✓ **Seamlessly extend existing capacity.**

Automate continuous movement of data according to your policies and objectives using Komprise from any NFS/CIFS storage to IBM Cloud Object Storage.

✓ **Deliver instant ROI.**

Leverage the scale, security, and cost efficiency of IBM Cloud Object Storage combined with the scale-out architecture and subcloud pricing of Komprise to meet proliferating capacity needs while gaining instant return on investment



The innovations that make it possible



Komprise

Redefines intelligent data management

- Connects to any storage share via **NFS, CIFS or S3** vs. storage agents
- Not in **hot data path** vs. in line of hot data
- Uses **dynamic links** vs. static stubs
- **Resilient, shared nothing, stateless architecture** vs. legacy architecture and database bottlenecks
- **Komprise moves files that are always accessible from IBM Cloud Object Storage** vs. Array tiering and vendor file system limitations

“

Komprise appeals to IT organizations with growing unstructured data – it gives a new weapon in the arsenal for IT leaders to make decisions on data.

”

Gartner
Cool
Vendor
2017

Vice-President, Gartner

IBM Cloud Object Storage

Redefines availability, security and economics of data storage.

Always-on Availability

- Tolerates a catastrophic regional outage without down time or intervention
- Continuous availability architecture
- Some legacy providers place the burden of data management and cost for creating and maintaining an out of region second copy on the client

Built-in Security

- Protects against digital and physical breaches
- Provide strong data-at-rest confidentiality by combining encryption and information dispersal

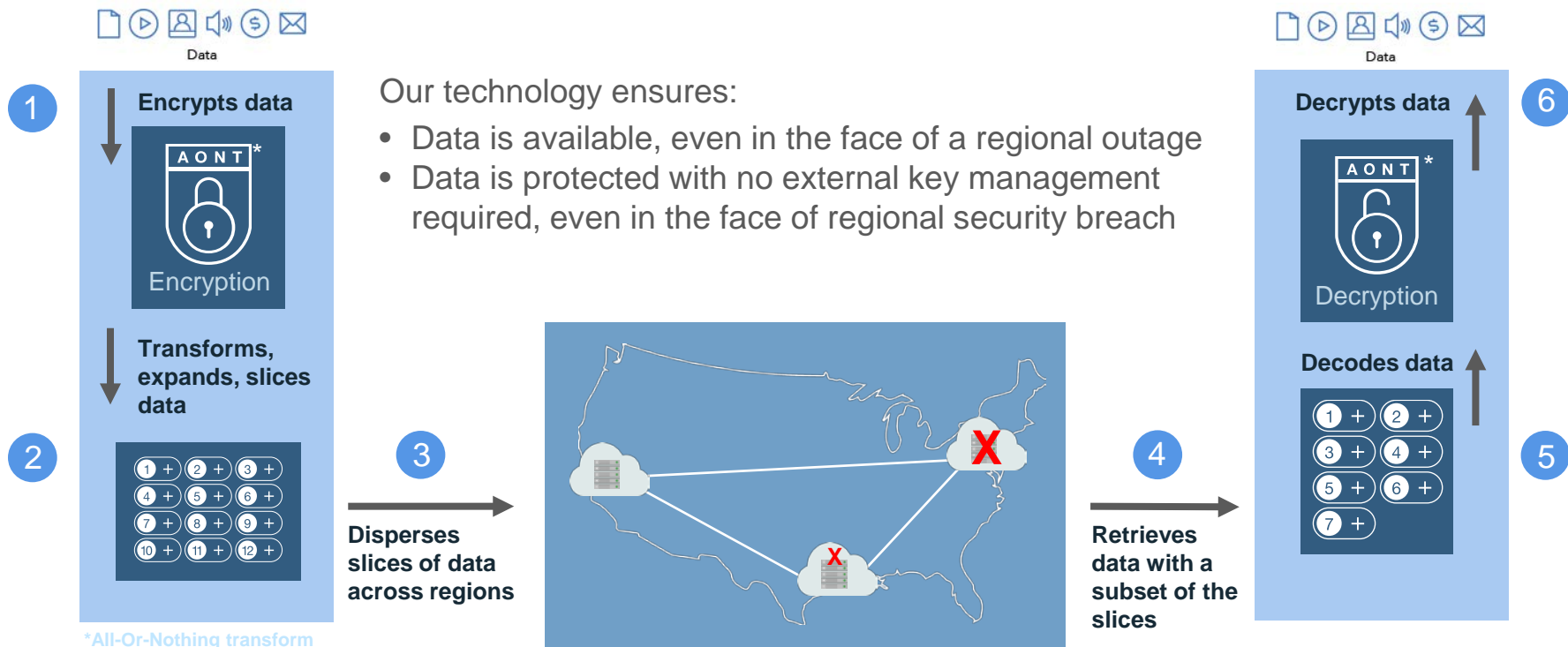
Better Cloud Storage Economics

- More cost-efficient than competitors
- Enterprise class support, at no additional cost
- We cap costs for workloads with unpredictable data access pattern

Simplicity

- Immediate consistency (v. eventual consistency) simplifies app development
- Integrated with the rest of IBM Cloud, IBM Bluemix, IBM Watson, IBM Video Services
- No “black boxes,” we share how our technology delivers durability, availability, security

Our SecureSlice and information dispersal technology redefine security and availability of stored data



Our technology ensures:

- Data is available, even in the face of a regional outage
- Data is protected with no external key management required, even in the face of regional security breach

*All-Or-Nothing transform



Delivering
unmatched value



IBM and Komprise: Redefine intelligent data management

“ We have been living in the dark and Komprise shone a light into our data – now suddenly we see how much we can save! ”

— VP Global Storage, Financial Services, Fortune 100 Insurance Company

Challenge

- Corporate mandate to cut costs, but data growing at 30%+ yoy
- Data needs to be retained for 15+ years, \$7M/yr alone on storing ex-employees' data
- Limited visibility across storage silos into how data is being used
- Moving data cannot disrupt users or applications

Solution

- Identified 60%+ of data is inactive, can be moved to IBM Cloud Object Storage
- Move petabytes of data from 73,200 shares across multiple sites from NetApp, EMC, Windows file servers
- Transparent access to moved data without any changes to users or applications

Use cases: Reduce primary storage, Archive to on premise cloud



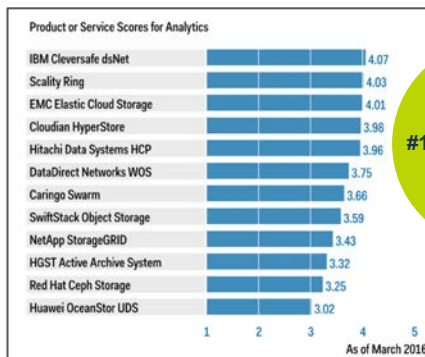
Delivering
greater advantages
from market innovators



IBM is the clear market leader for object storage

Gartner

Critical Capabilities for Object Storage, March 2016



#1 Overall
And
#1 Cloud Storage
#1 Analytics
#1 Archiving

“Cleversafe’s acquisition by IBM bears watching, because this could affect future development for enterprise customers.” **Gartner**

“Cleversafe dsNet is cited for its scalability and ease of management. The management interface contains features offered in functional tabs that enhance productivity.” **Gartner**

Gartner

MQ for Distributed File Systems and Object Storage, Oct. 2016



“IBM Cloud Object Storage delivers a differentiated way to secure data at rest. It’s all or nothing (AONT) encryption is integrated with its information dispersal algorithm to lower the potential for data breaches, and it obviates the need for external key management.”

IDC MarketScape Worldwide

Object-Based Storage Vendor Assessment, Dec. 2016



#1
Capabilities
and Strategy

“IBM makes clever, safe acquisition, swallows object storage market”



Dec. 2016

Source: Gartner Published: 31 March 2016 ID: G00271719

Source: IDC, IDC MarketScape: Worldwide Object-Based Storage 2016 Vendor Assessment, #US41918416

Take the next step!

Contact Komprise and IBM for a free assessment

- Free assessment of up to 100TB
- Deploys in 15 minutes with just a Virtual Machine
- Moves data from NFS/CIFS to IBM Cloud Object Storage
- Analyzes and transparently archives data
- Simply enable the shares you want to analyze, and within minutes, even on petabytes of data, you will start getting analytics into how data is growing, how it is being used, and who is using it.



www.komprise.com/try-komprise-data-management-ibm

Thank You