Cloud Tiering

Extend your data to the cloud

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House Keeping

Before we get started…

Recording & Slides

- Yes! The session is being recorded
- A link to the recording and slides will be sent to you and will be available on our web site

Q & A

- Questions can be sent through the Go-To-Webinar questions section at any time
- We'll address them during or at the end of the session

Agenda

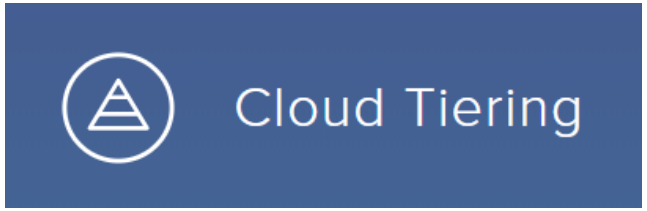
1) Cloud Tiering Service Overview
2) FabricPool
3) Demo
4) Key Takeaways
5) Q & A

Cloud Tiering Service

Overview

Cloud Tiering Overview

Extending your data to the cloud



- A service in the public cloud
- Enables easy setup and management of data tiering
- Tiering infrequently used data automatically and seamlessly
- From on-prem ONTAP to low-cost public cloud object storage
  - AWS S3 and Azure Blob, GCS coming soon
- Available in two license models
  - PAYGO - Consumption based
  - BYOL - Upfront, termed based
- Data is managed by the existing workflows and processes
- leveraging NetApp's proven FabricPool technology

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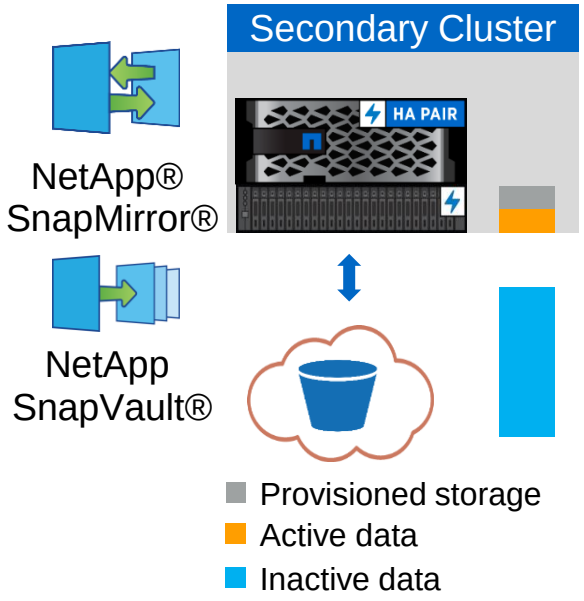
Cloud Tiering Use Cases

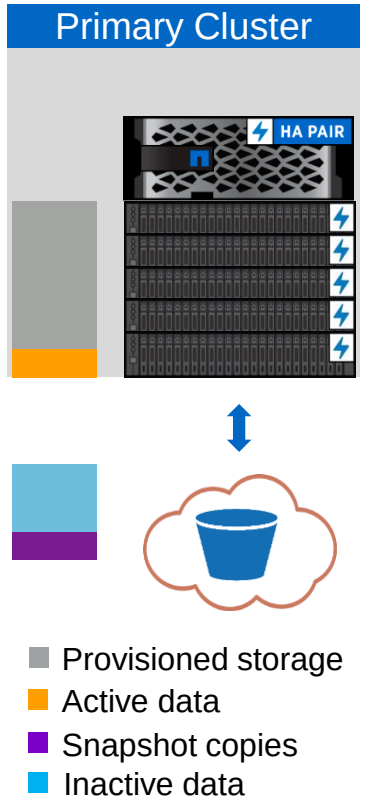
Reclaiming space on primary storage systems

- Tiering all inactive data
  - Inactive data > 50%
- Tiering inactive snapshots data
  - ~10% used by NetApp® Snapshot™ copies

Shrinking secondary storage

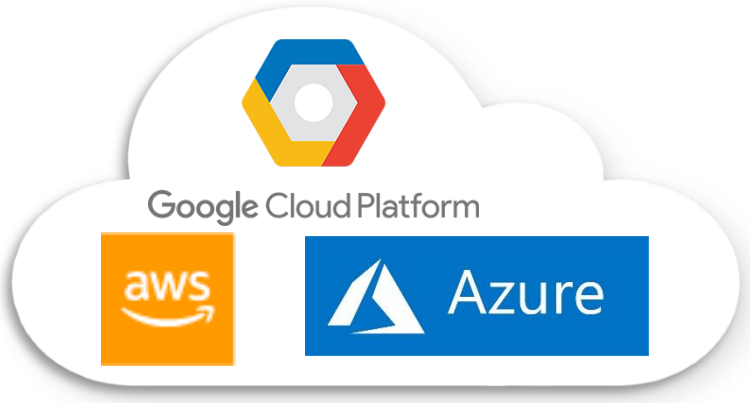
- Tiering DR and Backup data
  - SnapMirror destinations
- > 1:1 ratio





Customer Example – Media Files Use Case

- **Challenge**: Meet Data growth requirements, while reducing DC footprint and Capex spend.
- Staging environment for video and image shooting
- Editing takes about a week
- Requirement to keep that data accessible



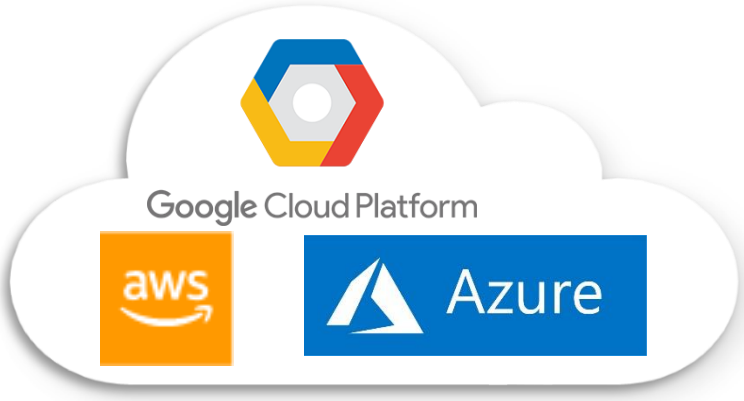
Value proposition:

- Moving to OPEX instead of Capex
- Aligning with the corporate strategy of migrating to the Cloud

Customer Example - eLearning Use Case

- **Challenge:** CIO decision to adopt a Cloud first strategy. Migrating 20 applications to the Cloud by end of the year
- Online courses are prepared 1 month in advance, and consumed mostly during the following semester
- Courses required to be available after Semester ends, although very low chances they will be accessed afterwards

Value proposition: No change to the application layer



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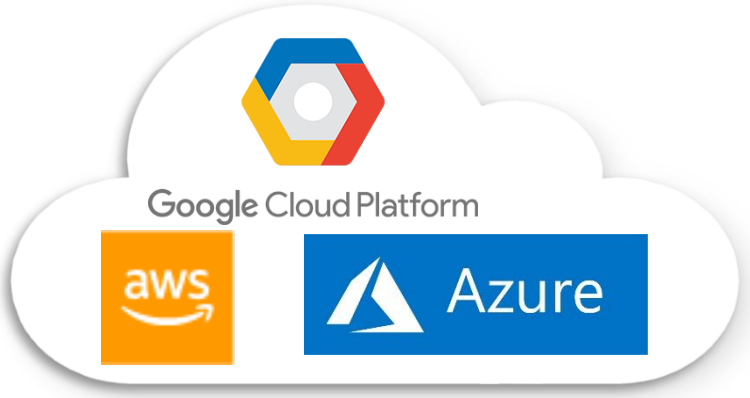
Customer Example - Health Care

- **Challenge:** Data grows too quickly to be kept in data center
- Data growth: 1TB / day
- Medical records being used after the first few days of patient visit, but very rarely after
- Data required to be kept available indefinitely



Value proposition: Easily scale Data Center footprint, while reducing AFF TCO

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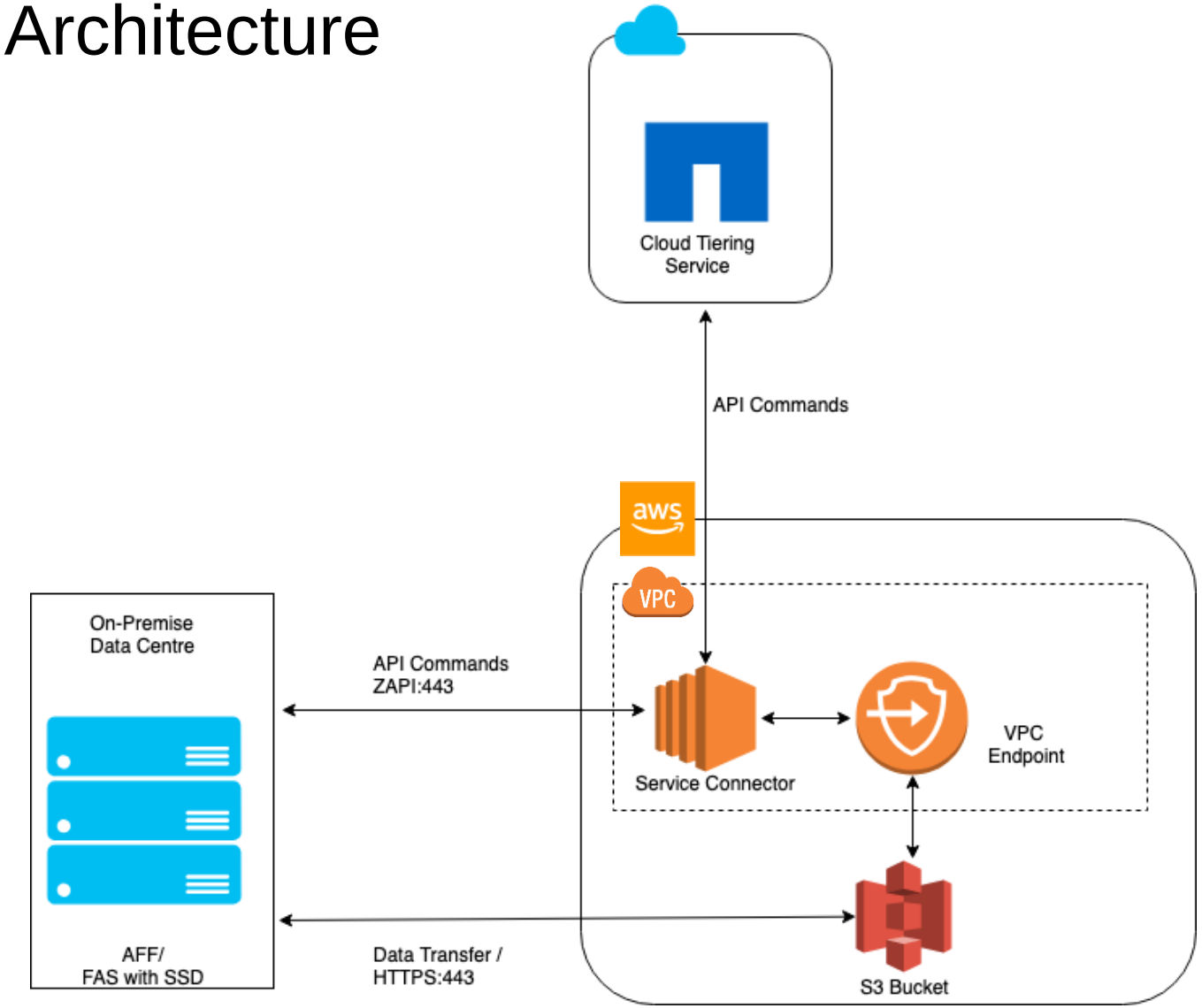
Cloud Tiering Architecture



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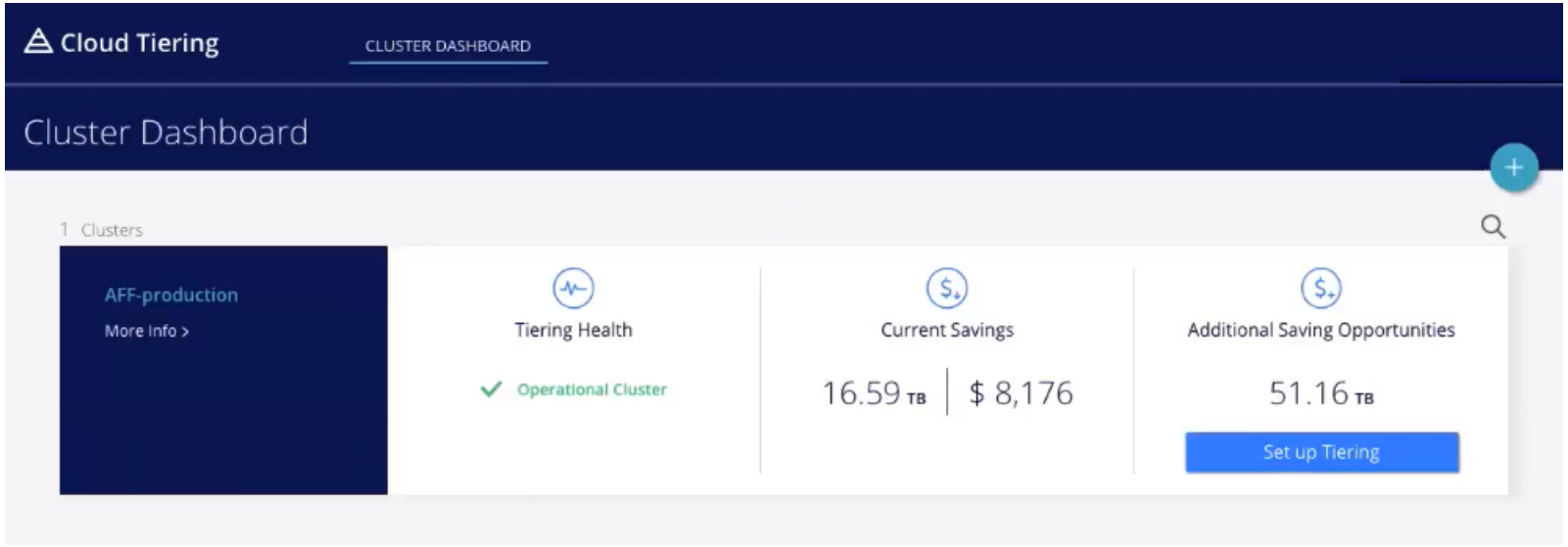
Cloud Tiering Benefits

- Zero-effort data center extension to the cloud
  - No changes to the application layer
  - Maintain current workflow and processes
  - Same ONTAP technology and tools
- Enables AFF storage capacity optimization and scaling
  - Free up valuable AFF space and use for more workloads – do more with less
  - Scale your capacity by up to 20x
- Cost reduction
  - Reduce expensive data center footprint
  - Shift most of the data (avg 80%) to low-cost storage in the public cloud
  - No upfront costs, pay as you go and only for data that is tiered

Additional Benefits

- Cloud technology benefits
  - OPEX vs. CAPEX
  - Mix-and-match BYOL and PAYGO
  - Easy and safe first-step to a cloud strategy
- Management layer and tools enable
  - Unified, friendly user interface
  - Automation of cloud settings
  - Monitoring and reports
  - Tiering policy configuration and optimization



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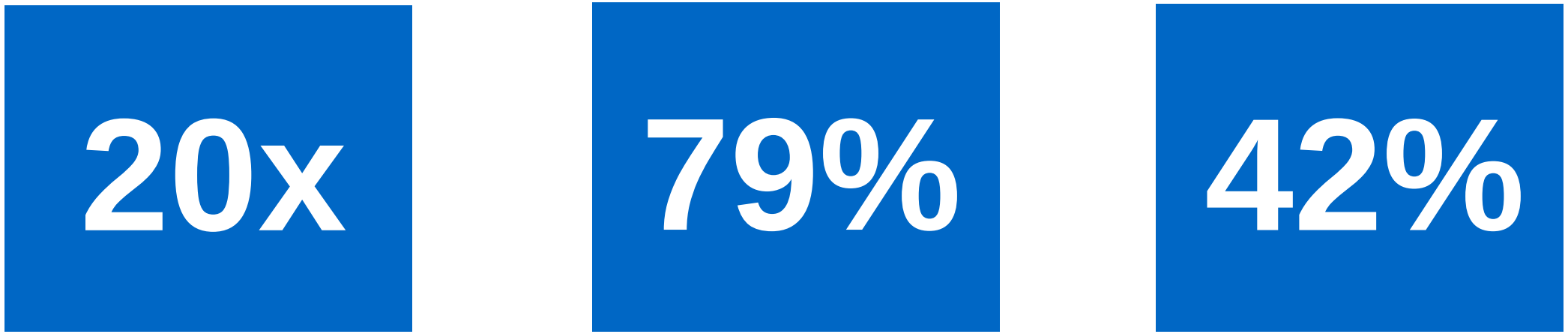
Cloud Tiering by the Numbers



FabricPool

Overview

Modernize Your Data Center

What Is FabricPool?

Performance Workloads on High-Performance Flash Aggregates

Inactive/Cold Data Moves to the Cloud

All Flash

Cloud

FabricPool

Combines **performance** and **cloud** tier

into one storage pool that manages data seamlessly

and reduces the total cost of ownership

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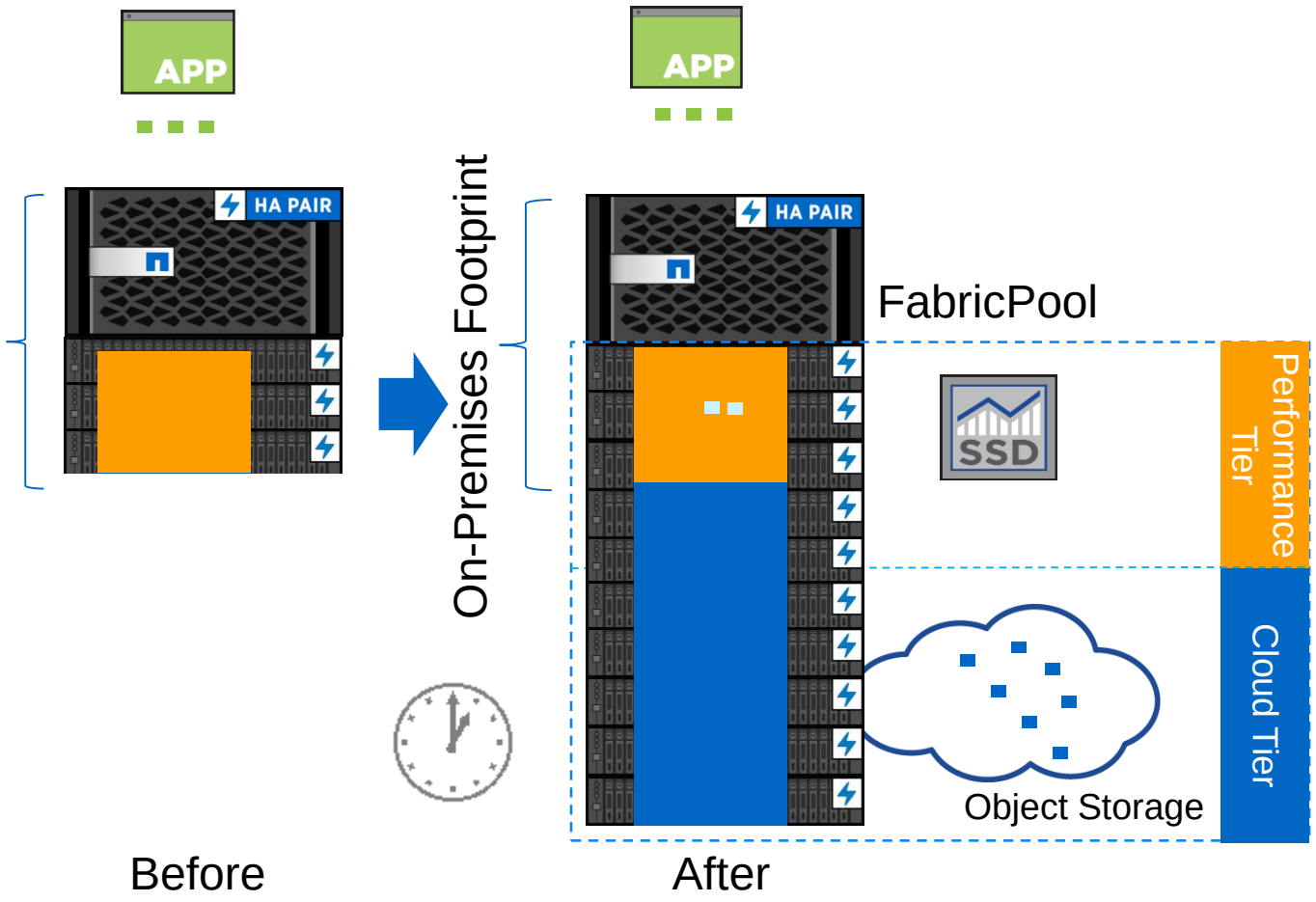
The FabricPool Solution

What Is FabricPool?



- Automatic tiering
- Zero-touch management
- Preserves file system
- Lower cost of ownership

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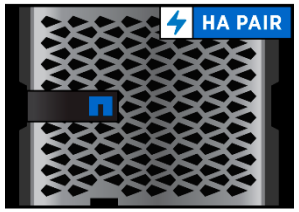
End-to-End Security

What Is FabricPool?



Performance Tier

- NetApp® Volume Encryption (NVE)
- NetApp Storage Encryption (NSE)
- AES-256 encryption

Over the Wire

- TLS 1.2
- AES-256 encryption

Cloud Tier

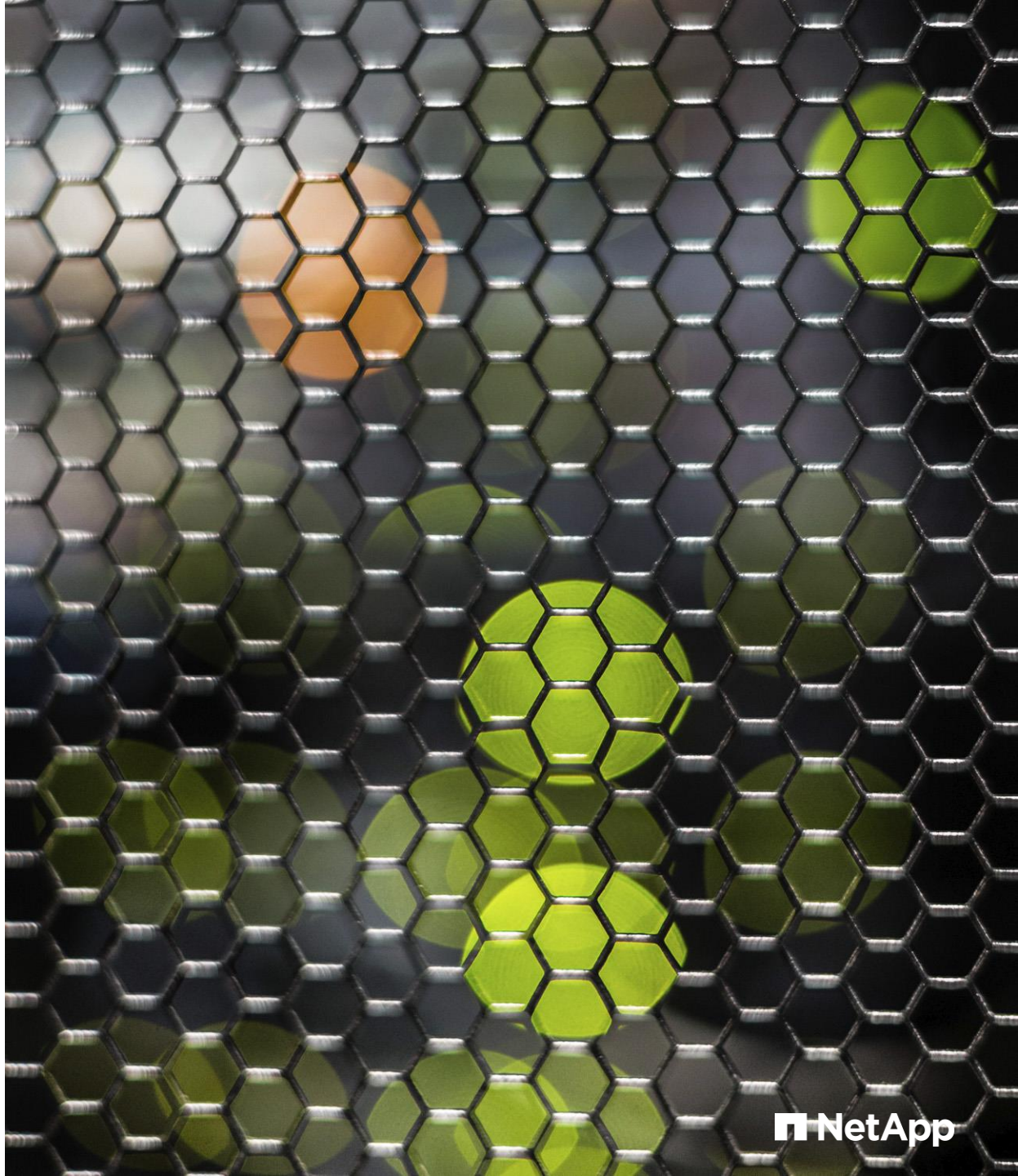
- Client-side encryption (NVE)
- Server-side encryption
- AES-256 encryption

Storage Efficiency

What Is FabricPool?

- Compression
- Deduplication
- Compaction

- Efficiencies carry over to the cloud tier



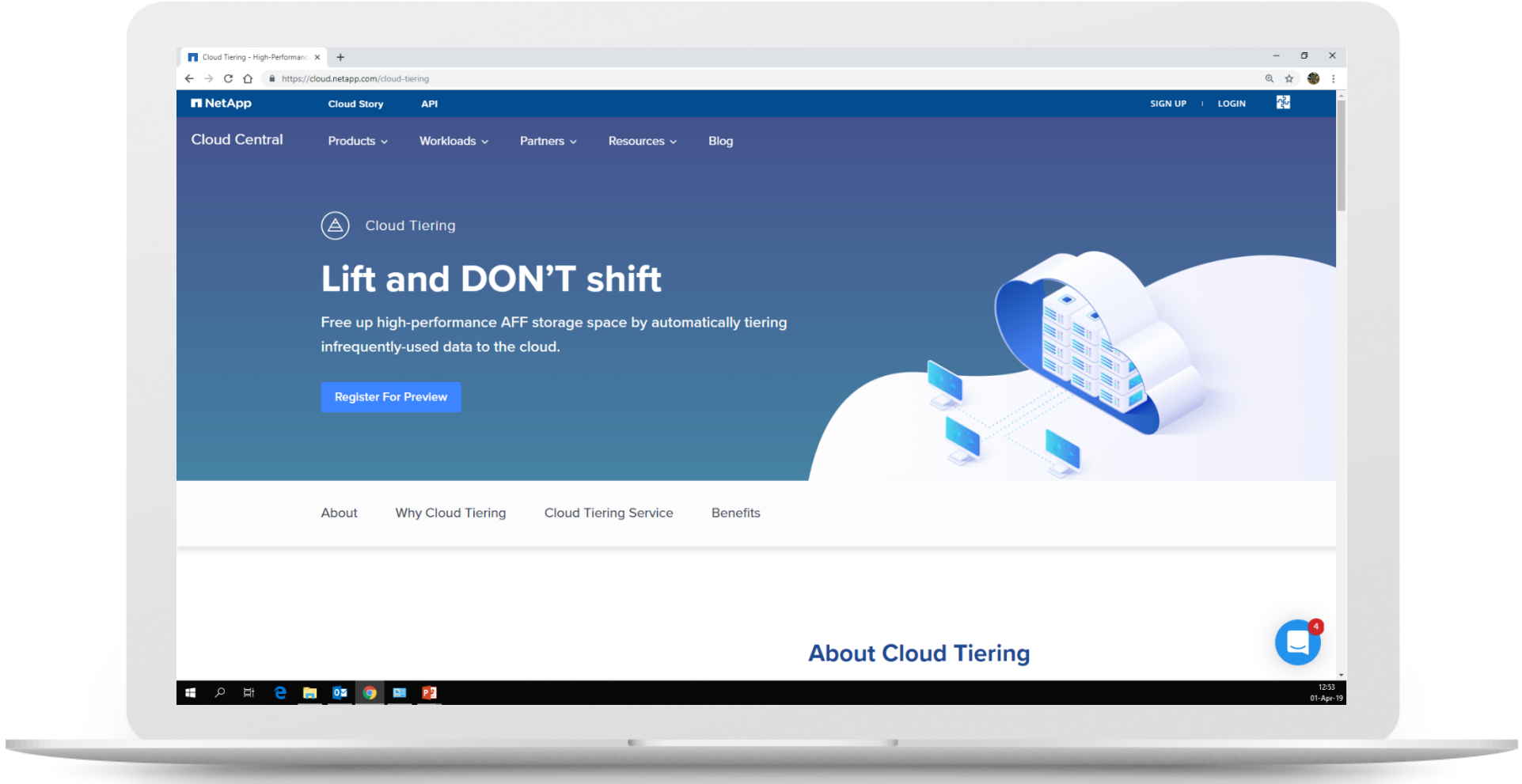
Demo

Cloud Tiering Service in action

Key Takeaways

- Lift and DON’T shift
- Zero-effort freeing up expensive data center space
- Leverages NetApp’s proven FabricPool technology

Visit NetApp Cloud Central: cloud.netapp.com



https://cloud.netapp.com/cloud-tiering

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Q & A

Thank You