



Change the World with Data

NetApp Lawrence Hsu

Unleashing the Earth's data to save our planet

Capture and distribute data from over 140 satellites imaging the Earth's 15 million square kilometers every day. **So disaster relief teams know where to send supplies, farmers know when and where to plant crops, and civil engineers know where and how to develop cities.**

Massive data to deepen our understanding of the universe

Map 1 billion stars, gather data from a robot on the Rosetta comet, and drive planetary missions to find more objects in the Solar System. Support astronomy missions that look at the Universe across different wavelengths. And make 2 PBs of data available to researchers and the general public **to know the next unknown.**

Those at the forefront of digital transformation use technology to radically improve the performance and reach of their enterprise



67% of Global 2000 CEOs will put digital transformation at the center of their growth and profitability strategies.

—Forbes, December 2015

By 2020 it is expected that...

50% of the G2000 will see the majority of their business depend on their ability to create digitally-enhanced products, services and experiences

—IDC Directions 02/17

Becoming a
data-centric organization
is no small undertaking

No longer is data locked away on devices hidden behind firewalls. Instead, it is becoming:



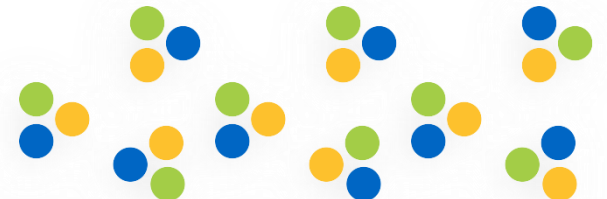
Distributed

Stored in multiple locations — on-premises, and multiple cloud locations



Dynamic

An influx of constantly changing data that requires you to know where the data is and its source



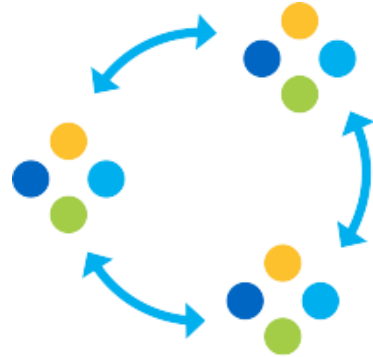
Diverse

Structured, unstructured, machine learning, and streaming — generated in and outside the organization

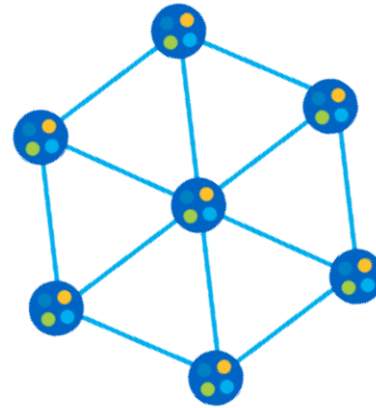
This requires a holistic approach to hybrid cloud data services that is:



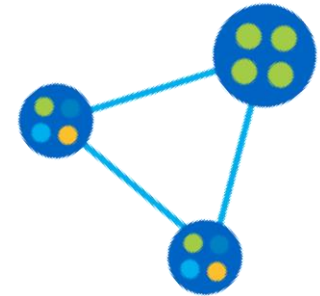
Secure



Efficient



Future-proof



Open

...and enabled by a Data Fabric

A faint, light gray world map is visible in the background of the slide. A solid blue horizontal band spans the middle of the slide, containing the main text.

Our Purpose

Empowering customers to
change the world with data

Digital is transforming business as we know it

Automated registration

Smart lighting

Global collaboration

Digital delivery

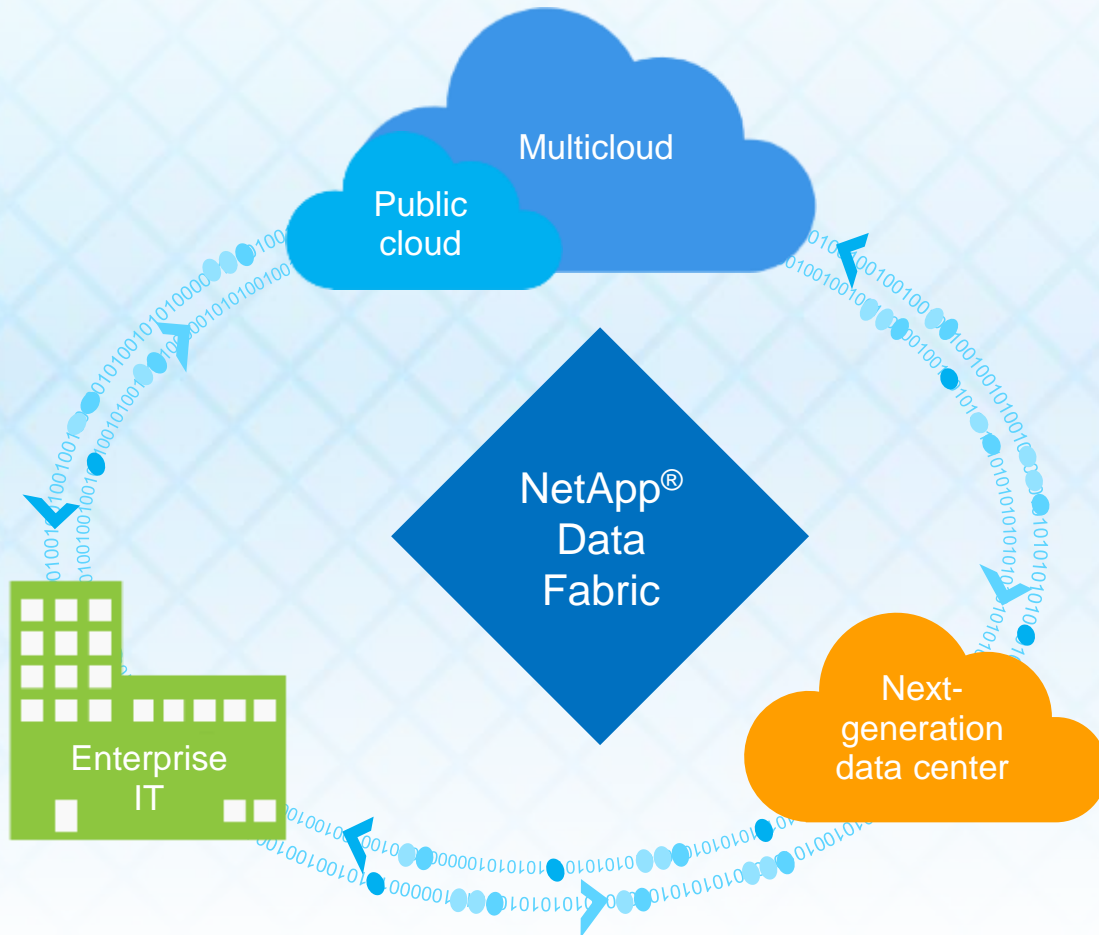
Customer service apps

CCTV and sensors

Automated data controls

NetApp Data Fabric

Helping customers unleash data to accelerate digital transformation and meet business imperatives



HARNESS
the power of the
hybrid cloud



BUILD
a next-generation
data center



MODERNIZE
storage through
data management



HARNESS the power of the hybrid cloud

Increase opportunities in your accounts
by targeting cloud buyers

Hybrid cloud data services

Subject to change

- New NFS data service for hyperscalers
- NetApp® OnCommand® Insight updates
- NetApp Cloud Control for Microsoft Office 365 updates
- NetApp AltaVault™ updates



Powering NFS in Azure with ONTAP—the world's #1 storage OS

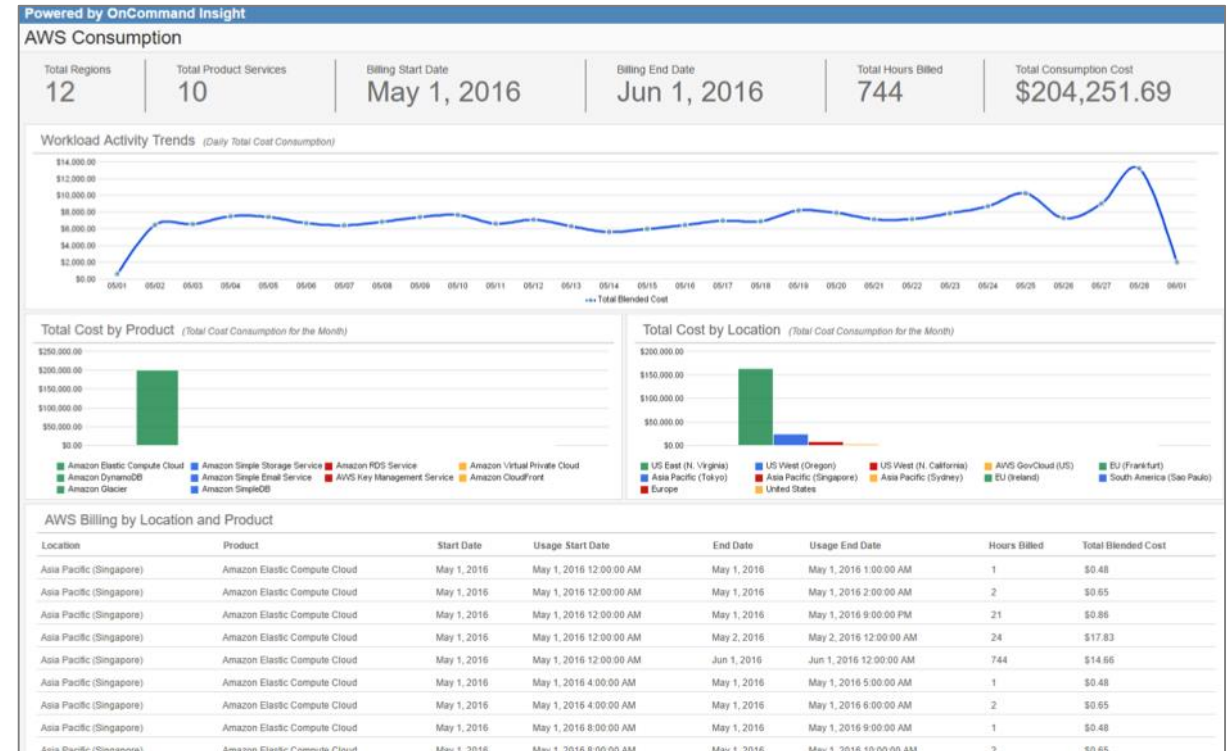


Register for a preview at netapp.com/azurepreview

Cost awareness and accountability for your hybrid cloud infrastructure

NetApp® OnCommand® Insight delivers

- Insights and control across your hybrid cloud infrastructure
 - On premises, Amazon Web Services (AWS), Azure...
- A single pane of glass to monitor and report on all AWS costs
 - Cloud cost optimization
 - Governance and cloud policy
 - Right-sizing reports



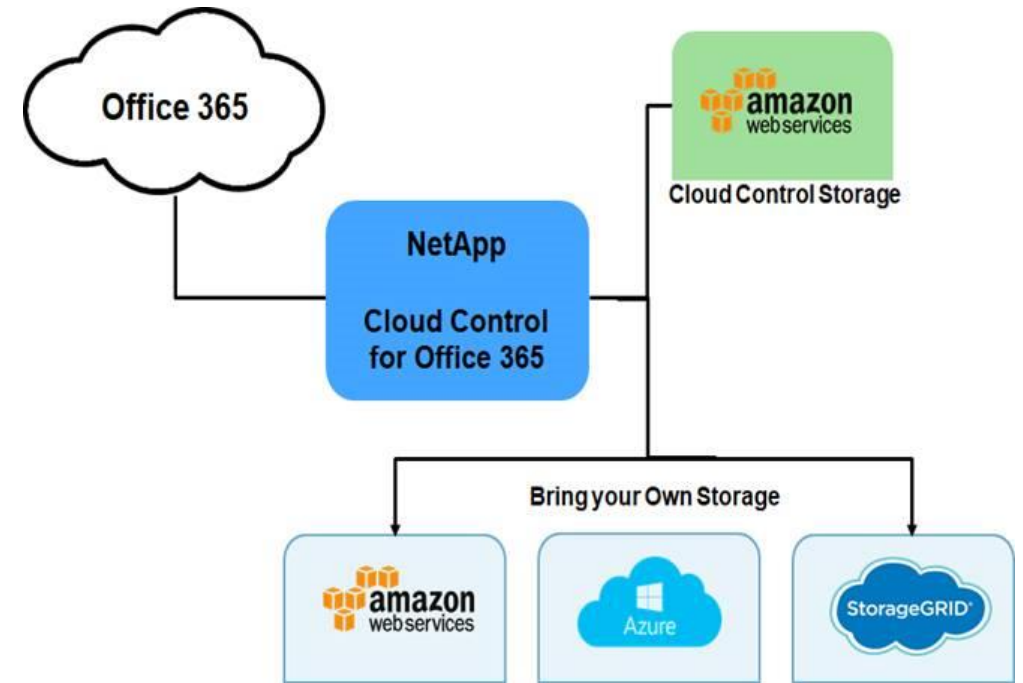
Cloud Control for Microsoft Office 365

Guard your SaaS data

New cloud control features released

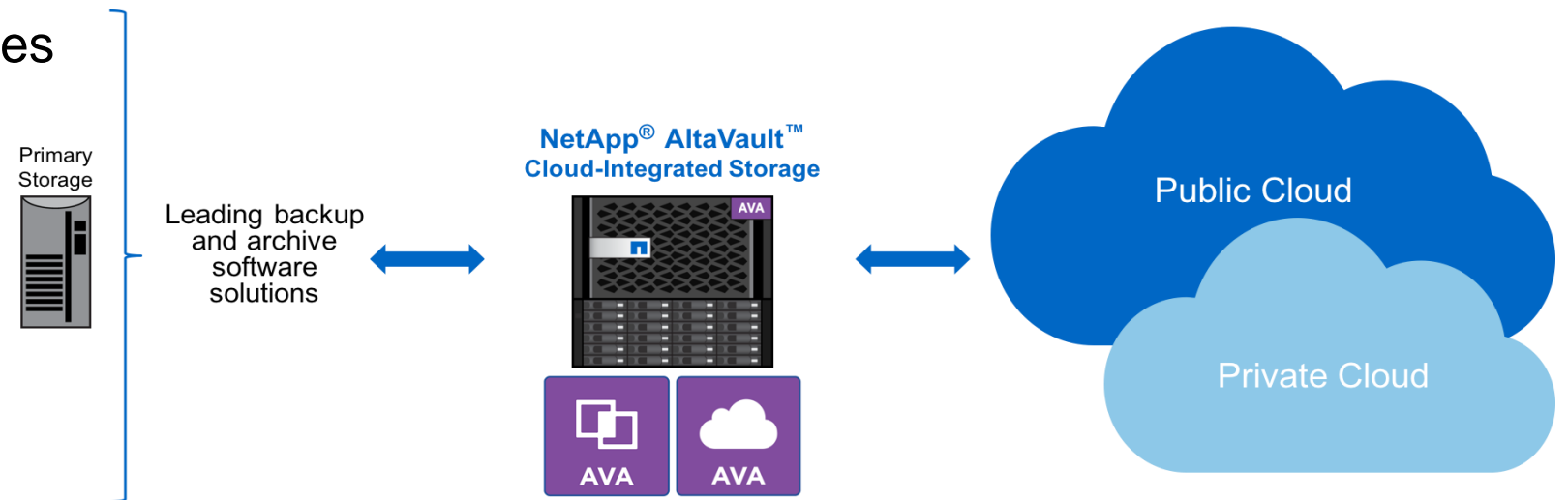
- Azure storage target
- EMEA location (Dublin)
- APAC location (Sydney)

Delivered as software as a service (SaaS)



AltaVault announcements

- Support for Microsoft Azure archive storage
 - Select Hot, Cool, or Cold storage according to your data protection needs
- Integrated backup solution with NetApp® AltaVault™ technology, Veritas Backup Exec, and Microsoft Azure through CDW
 - Easy-to-order bundle
 - Available in the United States



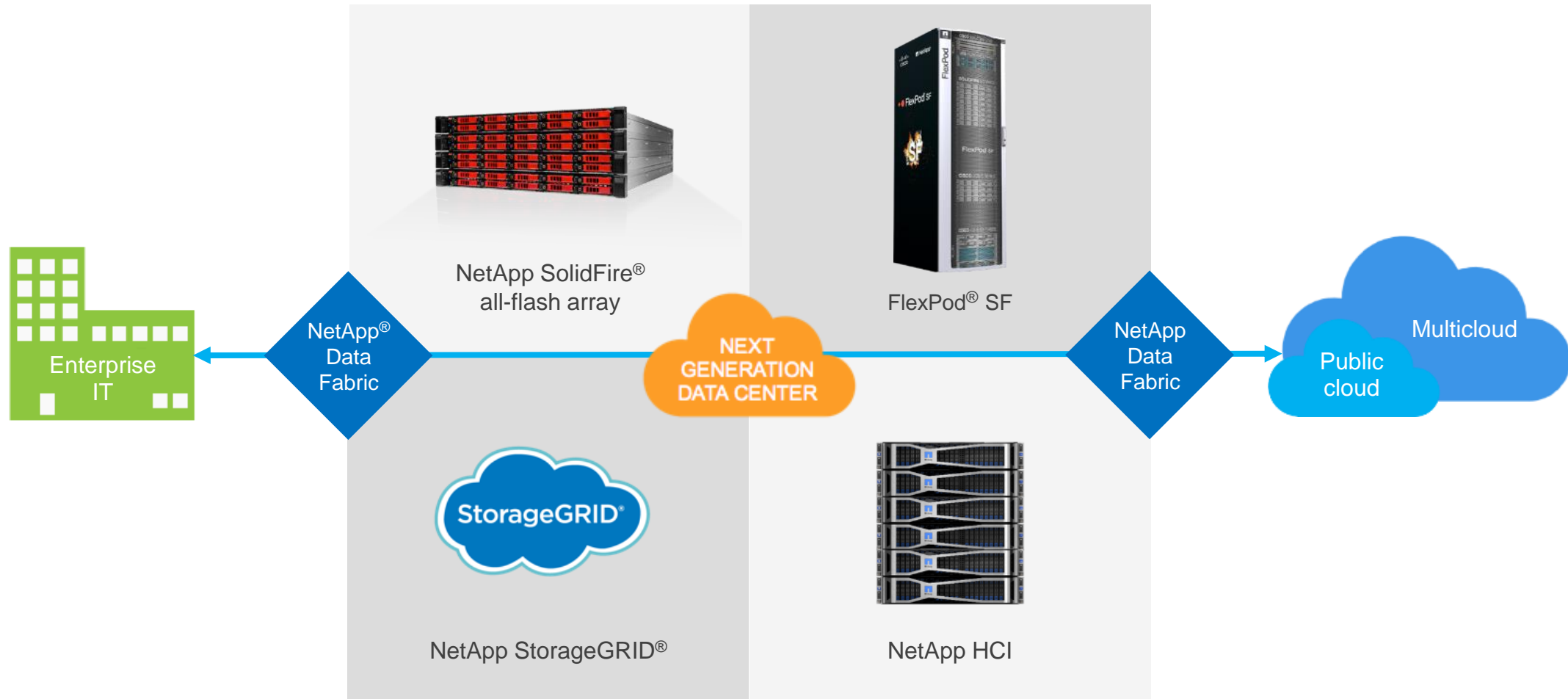


BUILD a next-generation data center

Reach new customers

NetApp next-generation data center portfolio

Built to be software-defined, agile, scalable, automated, and Data Fabric connected



SolidFire Element OS 10

Software agility for the next-generation data center

Scalable, predictable, automated, protected

NETAPP® SOLIDFIRE® ELEMENT® OS



SolidFire SF-Series

All-flash storage solution,
bring your own compute



FlexPod® SF

Converged infrastructure:
all-flash storage + network + compute,
end-to-end Cisco hardware



NetApp HCI

Hyper converged infrastructure:
all-flash storage + compute

QoS policies—simplify management of guaranteed performance

The industry's best quality of service gets even better

Create QoS policy

Create a New QoS Policy

Policy Name

Silver

Quality of Service

IO Size	Min IOPS	Max IOPS	Burst IOPS
4 KB	100	250	500
8 KB	63 IOPS	156 IOPS	313 IOPS
16 KB	37 IOPS	93 IOPS	185 IOPS
262 KB	3 IOPS	6 IOPS	13 IOPS

Max Bandwidth

1.75 MB/sec

3.50 MB/sec

Create QoS Policy

Cancel

Assign QoS policy

Edit Volume Attributes

Volume Size

10

GB

Access

Read / Write

Account

DelTest

Create Account?

Quality of Service

Policy

Silver

Custom Settings

Save Changes

Cancel

Change QoS policy

QoS Policy Details

ID: 1

Policy Name

Gold

Quality of Service

IO Size	Min IOPS	Max IOPS	Burst IOPS
4 KB	50	500	1000
8 KB	31 IOPS	313 IOPS	625 IOPS
16 KB	19 IOPS	185 IOPS	370 IOPS
262 KB	1 IOPS	13 IOPS	26 IOPS

Max Bandwidth

3.50 MB/sec

6.99 MB/sec

Changes to QoS Policy Settings will be applied to all associated volumes.

NetApp HCI—enterprise scale

General availability in late October



Guaranteed performance
To run multiple applications



Flexibility and scale
To address demanding web needs



Automated infrastructure
To accelerate self-service and private
cloud infrastructure deployment



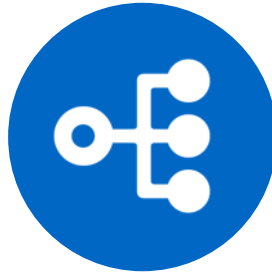
Bridge to the
NEXT-GENERATION
DATA CENTER

NetApp StorageGRID Webscale: your unstructured data at scale



Open

Future-proof
investments



Optimized

Deliver differentiated
service levels



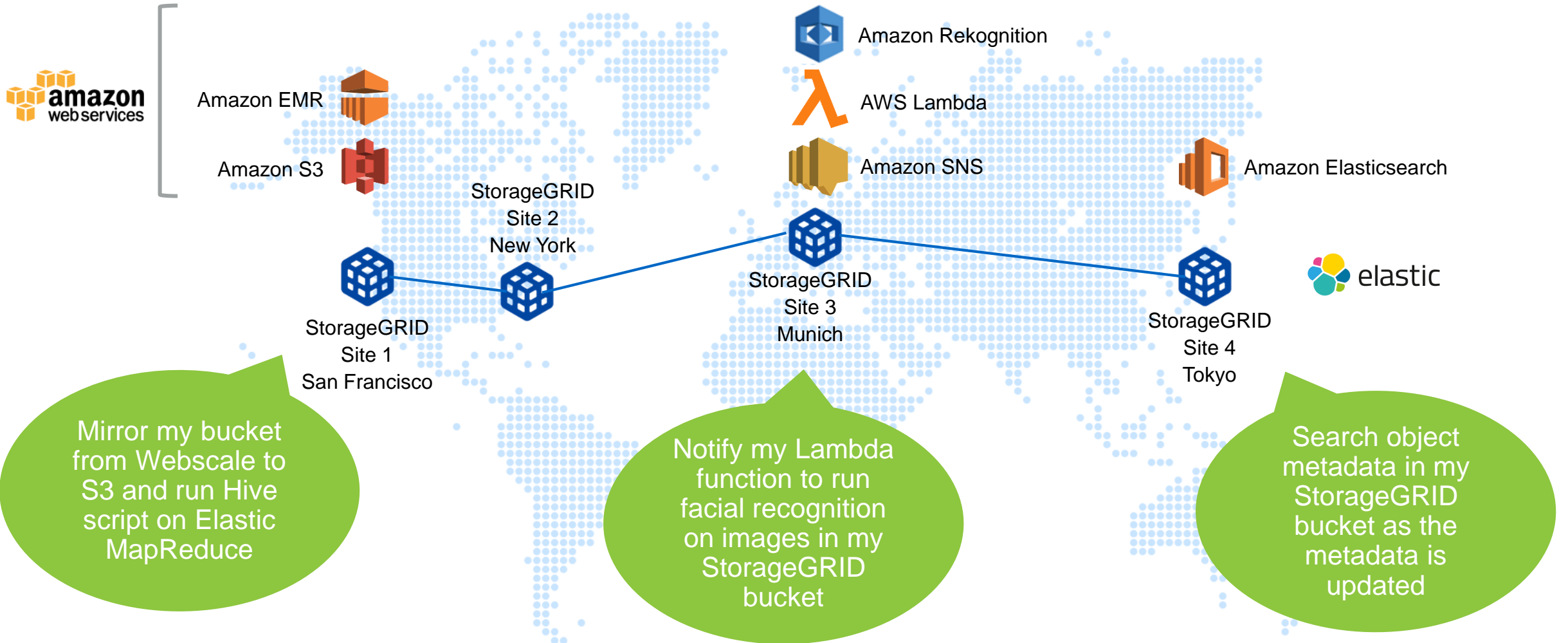
Extensible

Bridge hybrid cloud
workflows



NEW: Extensible—build a truly hybrid cloud

Deliver workloads that span from on premises to the cloud and back





MODERNIZE storage
through data management

ONTAP 9.3: Modernize your data management

Public announcement at NetApp Insight Las Vegas; expect shipping in November



Higher
performance



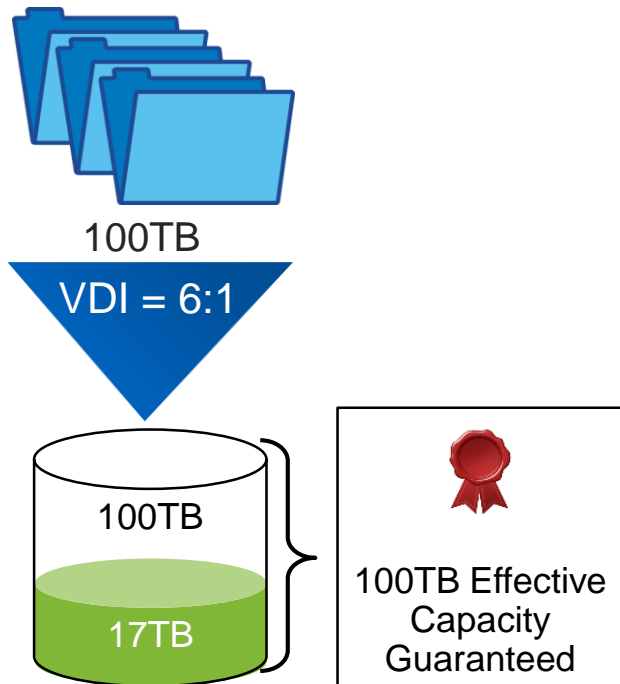
Increased
efficiency



Enhanced security
and compliance

Delivered with just an ONTAP[®] software upgrade on supported platforms

Reduce infrastructure costs



Up to 30% higher storage efficiency

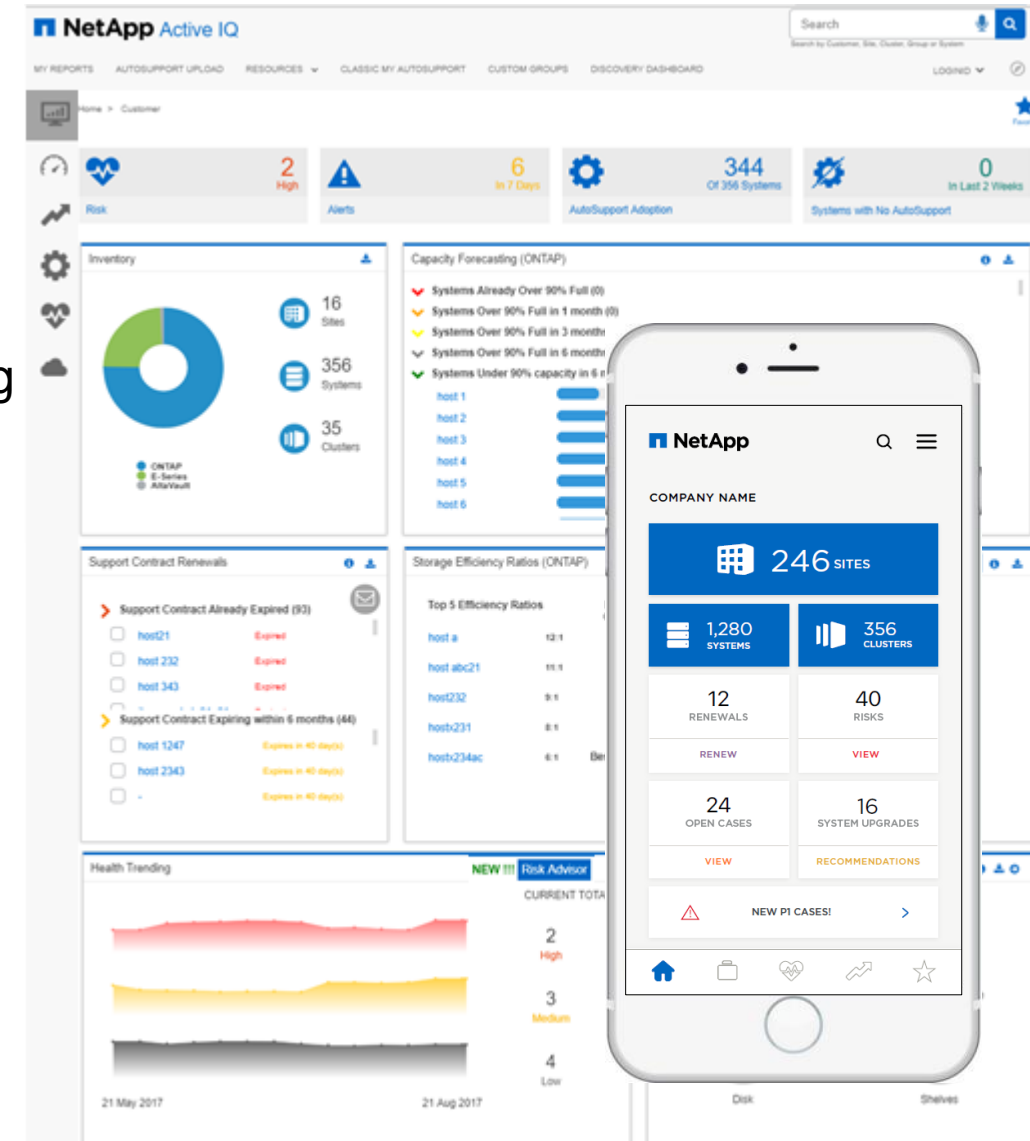
- Optimized inline and background deduplication
- Additional efficiency savings reflected in All-Flash Guarantee
- Continued efficiency improvements in each ONTAP 9 release

Simplify infrastructure for continuous data availability

- NetApp MetroCluster™ IP reduces capital expenditures and operational expenditures by 10% to 15%
- Enables standardization on IP
- Supported on AFF A700 and FAS9000 (controlled release)

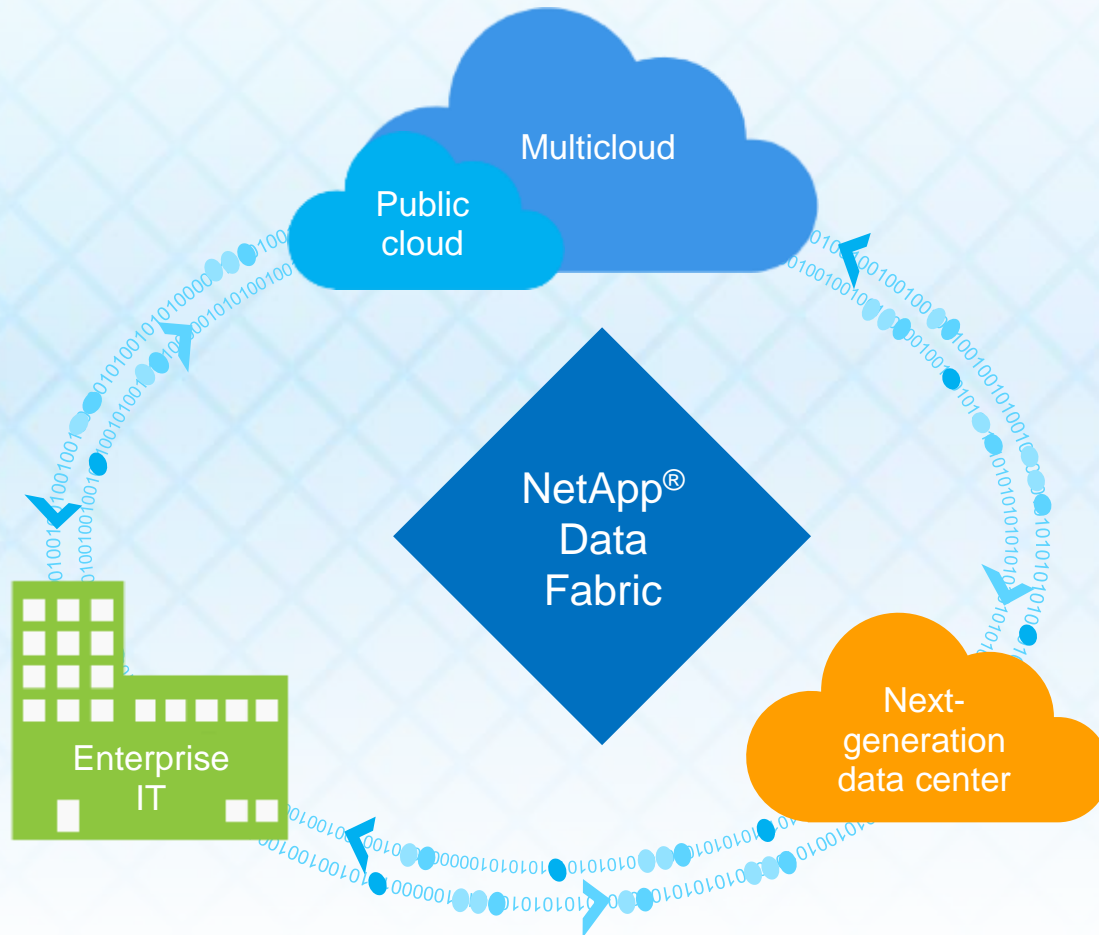
Digital customer experience

- Elio virtual support assistant with IBM Watson® cognitive computing
 - Find the best answers 4 times faster with cognitive computing
 - Get 24/7 access to Elio chat online, on mobile, or within products
- NetApp® Active IQ®—the evolution of the NetApp AutoSupport® tool
 - Intelligent insight from cloud-based analytics
 - Visibility across NetApp solutions, on premises and in the cloud
 - New Risk Advisor, Storage Efficiency Advisor, and more
 - Leveraging of community wisdom from across user base



NetApp Data Fabric

Helping customers unleash data to accelerate digital transformation and address their business imperatives



HARNESS
the power of the
hybrid cloud



BUILD
a next-generation
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MODERNIZE
storage through
data management

NetApp 位居台灣外部企業儲存市場第一名

IDC 全球每季企業級儲存系統追蹤報告



#1

Leader

蟬聯 七 連霸

2017 年第 1 季和第 2 季
2016 年第 1 至 4 季
2015 年第 4 季

* 根據 IDC 資訊，市佔率的差距小於 1%。NetApp 和 HPE 在 CY16Q2、CY16Q3 和 CY17Q1 並列第 1 名。NetApp 和 Dell 在 CY17Q2 並列第 1 名。



How will you
change the world
with data?