AWS
re:Invent

DEM31-S

Deploying IBM storage infrastructure software on the AWS Cloud

Deepa Krishnan

Director, Offering Management
Storage Cloud SW and SaaS
IBM Storage

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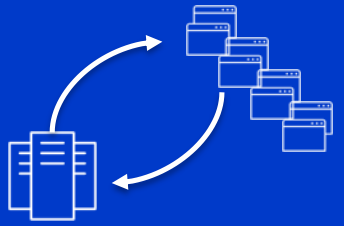
Digital transformation is changing the way companies think about storage

10X

growth in data from 2016 to 2025



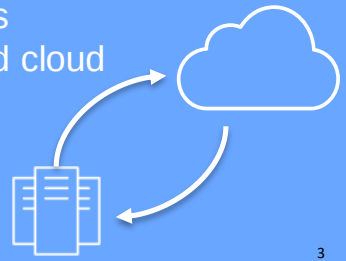
Data is unlimited, reproducible, and reusable – its value increases when it's combined and analyzed

73%

of large enterprises plan to use the public cloud for backup, archive, and DR

85%

of companies have a hybrid cloud environment



IDC Reports 2017 and 2018

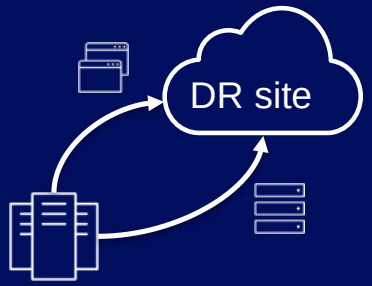
IDC; IBM IBV C-Suite Study; RightScale

IDG 2018 State of Digital Business Transformation

Storage choices matter because cloud use cases matter

Business continuity

Leveraging public cloud resources



DevOps/ analytics

Temporary data copies from on premises to the cloud

Workload migration

Transparent data migration to the cloud

Hybrid cloud

Infrastructure both on premises and in the public cloud

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Hybrid cloud storage portfolio

Storage for AI & big data

Storage for hybrid cloud

Storage for Z

Software-defined/ cloud storage

IBM Spectrum Discover

IBM Storage Insights

IBM Spectrum Scale

IBM Cloud Object Storage

IBM Spectrum Virtualize

Storage systems

Elastic storage system

ESS 3000

Cloud object storage

Storwize

Storwize V5000/ V7000

FlashSystem

FlashSystem 9100

SAN Volume Controller

IBM Spectrum Accelerate

FlashSystem A9000/R

DS8000

DS8900F

Tape

TS7700

Networking

Modern data protection & cyber resiliency

IBM Spectrum Protect

Hybrid cloud

Snapshots

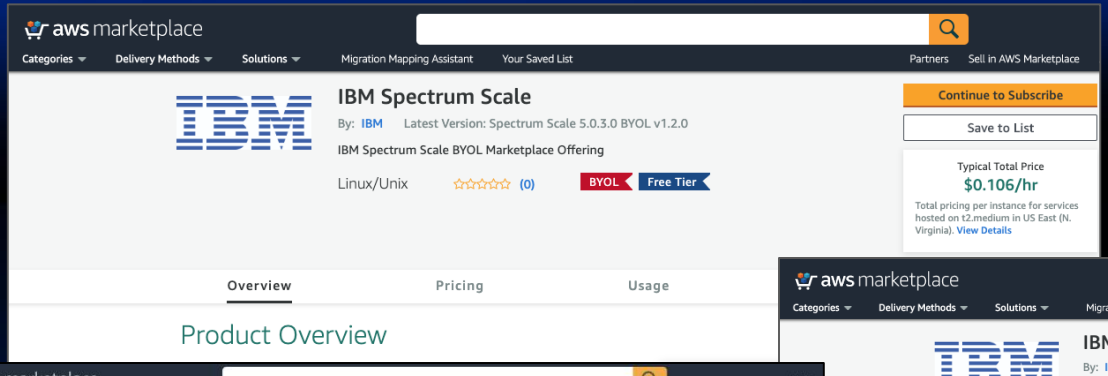
Tape

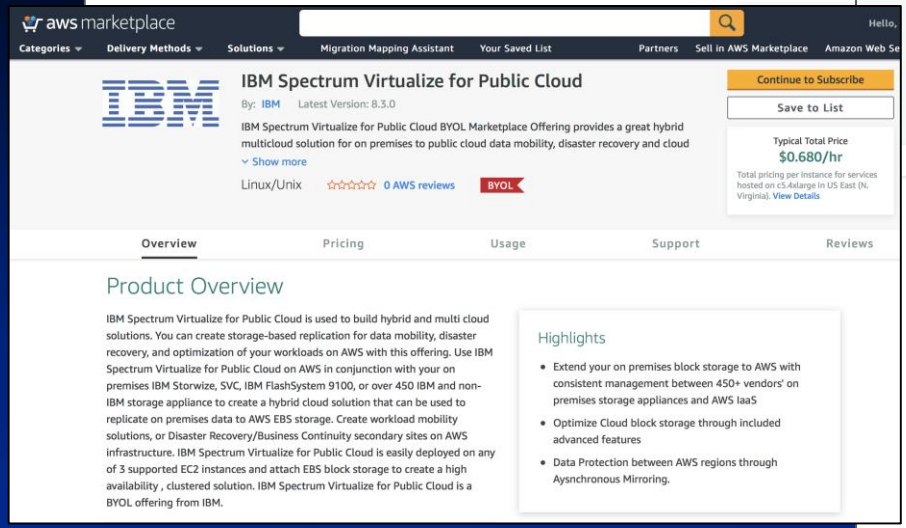
VMs

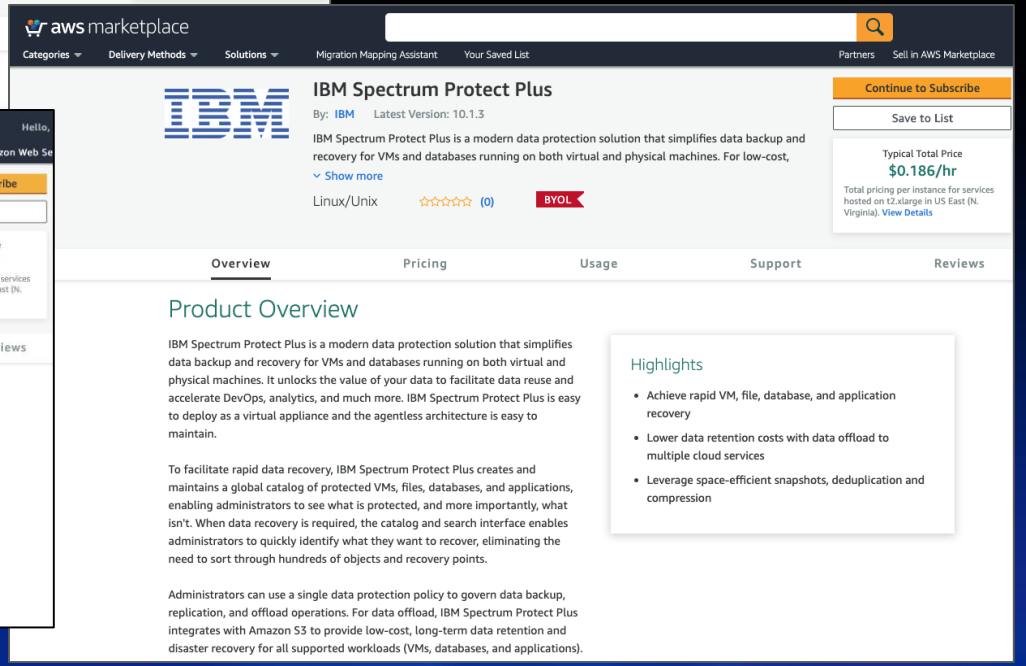
Containers

IBM

IBM Storage on AWS Marketplace







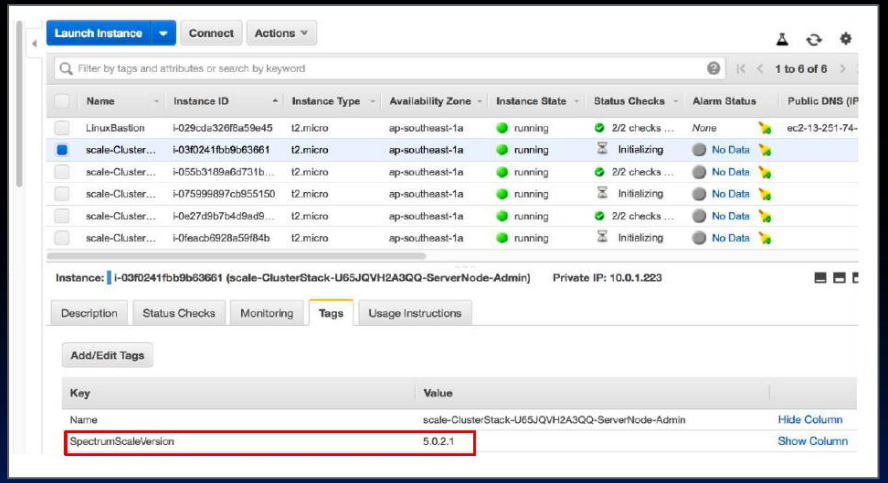
IBM **Spectrum Scale**

IBM Spectrum Scale on AWS

IBM Spectrum Scale on AWS value proposition

IBM Spectrum Scale

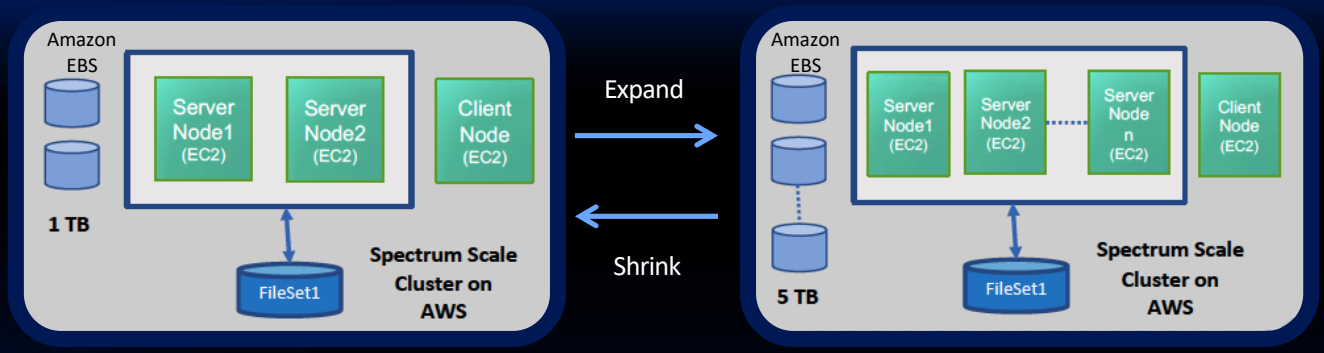
- Highly available (HA), scalable file system on AWS with POSIX semantics
  - Deployment is available through AWS Marketplace
  - On-demand provisioning, rapid deployment
  - No Spectrum Scale admin skills required
- Targeted for HPC use on AWS
- Agile deployments (capex) for temporary workloads such as DevOps or POCs



IBM Spectrum Scale on AWS use cases

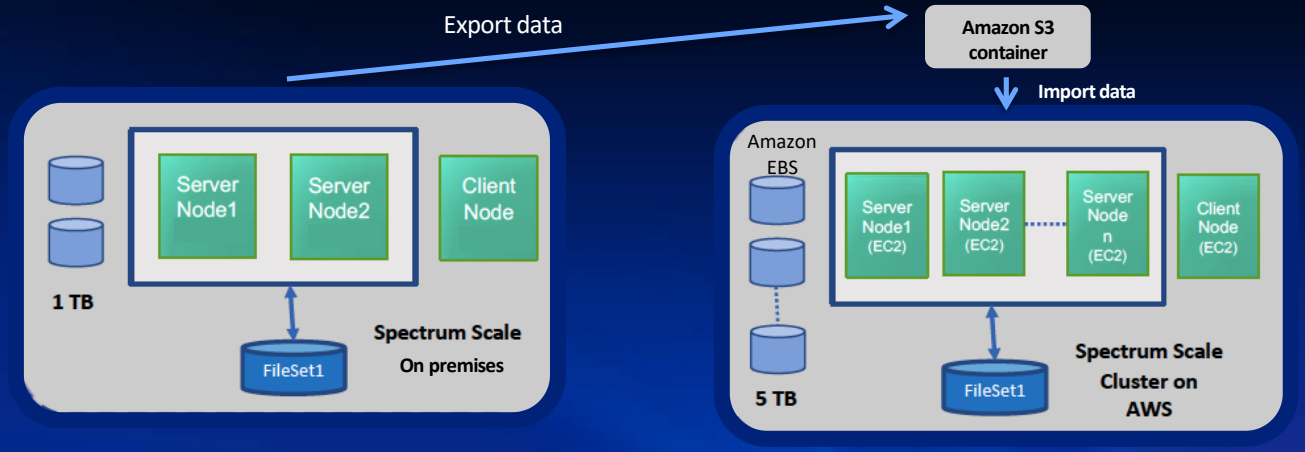
IBM Spectrum Scale

Scaling on AWS



Bursting on AWS

(Hybrid use case)



IBM Spectrum Scale on AWS

Deployment in an hour!

1

IBM **Spectrum Scale**

Purchase IBM Spectrum Scale

Offered through IBM Passport Advantage as a monthly term license or perpetual license.
Select data management edition part numbers.

2

aws marketplace

Deploy IBM Spectrum Scale on AWS Marketplace

Find IBM Spectrum Scale on **AWS Marketplace**.
Select Amazon EC2 instance type and cluster size, and the cluster is deployed and provisioned automatically.

IBM **Spectrum Protect**

IBM Spectrum Protect for AWS

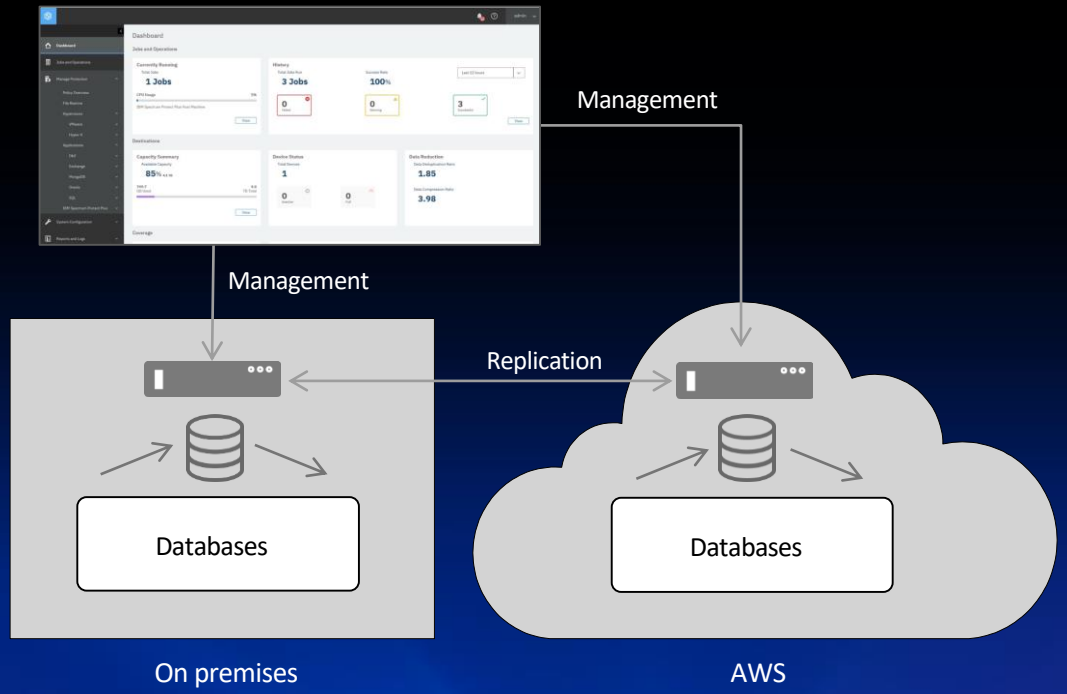
Back up and recover database workloads on premises and on AWS

IBM Spectrum Protect

IBM Spectrum Protect Plus

Help protect databases hosted on premises and on AWS

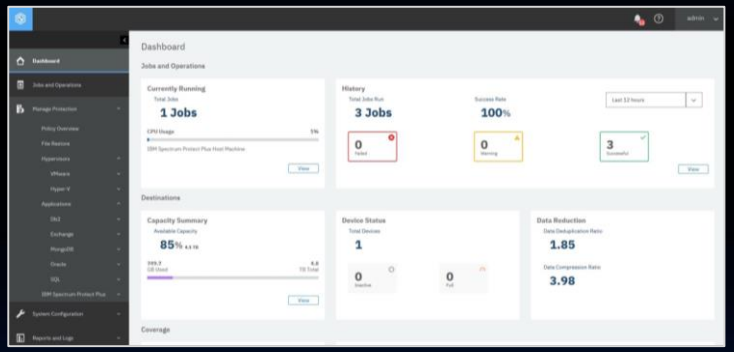
- IBM Db2
- Oracle
- Microsoft SQL Server
- MongoDB



VMware Cloud on AWS support

IBM Spectrum Protect

- Simplifies management by unifying data protection for VMware in hybrid cloud environments
- Supports all workloads, including VMs, databases, and applications



VMware on premises

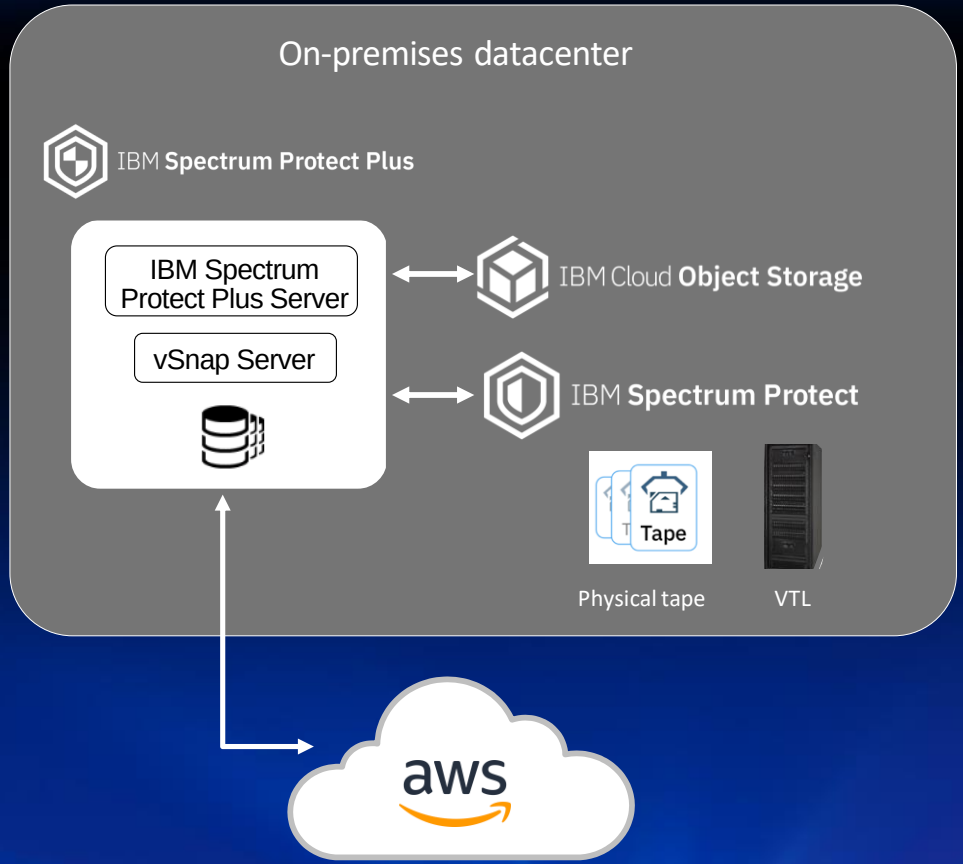
VMware Cloud on AWS

IBM

Data retention for hybrid cloud environments

IBM Spectrum Protect

- On premises
  - IBM Cloud Object Storage (including WORM storage features)
  - IBM Spectrum Protect, IBM Tape
- Cloud services
  - Support for Amazon S3
  - Support for Amazon S3 Glacier



IBM Spectrum Protect Plus on AWS

Deploy in 20 minutes!

1

IBM **Spectrum Protect Plus**

Purchase IBM Spectrum Protect Plus

Offered though IBM Passport Advantage either individually or as part of the IBM Spectrum Protect Suite

2

aws marketplace

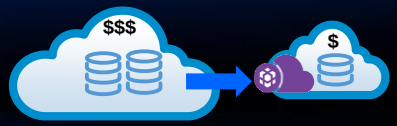
Deploy IBM Spectrum Protect Plus v Snap Repository from AWS Marketplace

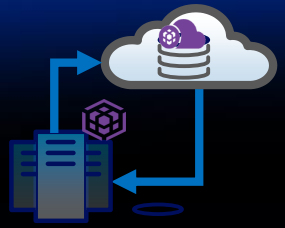
Find IBM Spectrum Protect Plus on AWS Marketplace, deploy the vSnap repository either in an existing VPC or new VPC, and add the vSnap to the IBM Spectrum Protect Plus management server

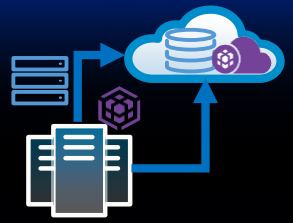
IBM **Spectrum Virtualize**

IBM Spectrum Virtualize on AWS

Use cases for IBM Spectrum Virtualize for Public Cloud







Optimize public cloud block storage

Spectrum Virtualize for public cloud

1. Lower cost
2. Improve performance
3. Increase scalability … of public cloud storage IaaS

Extend on premises to hybrid cloud

- Add **cloud capabilities** to ANY existing storage on premises
- Extend VersaStack to the cloud
- Consistent management

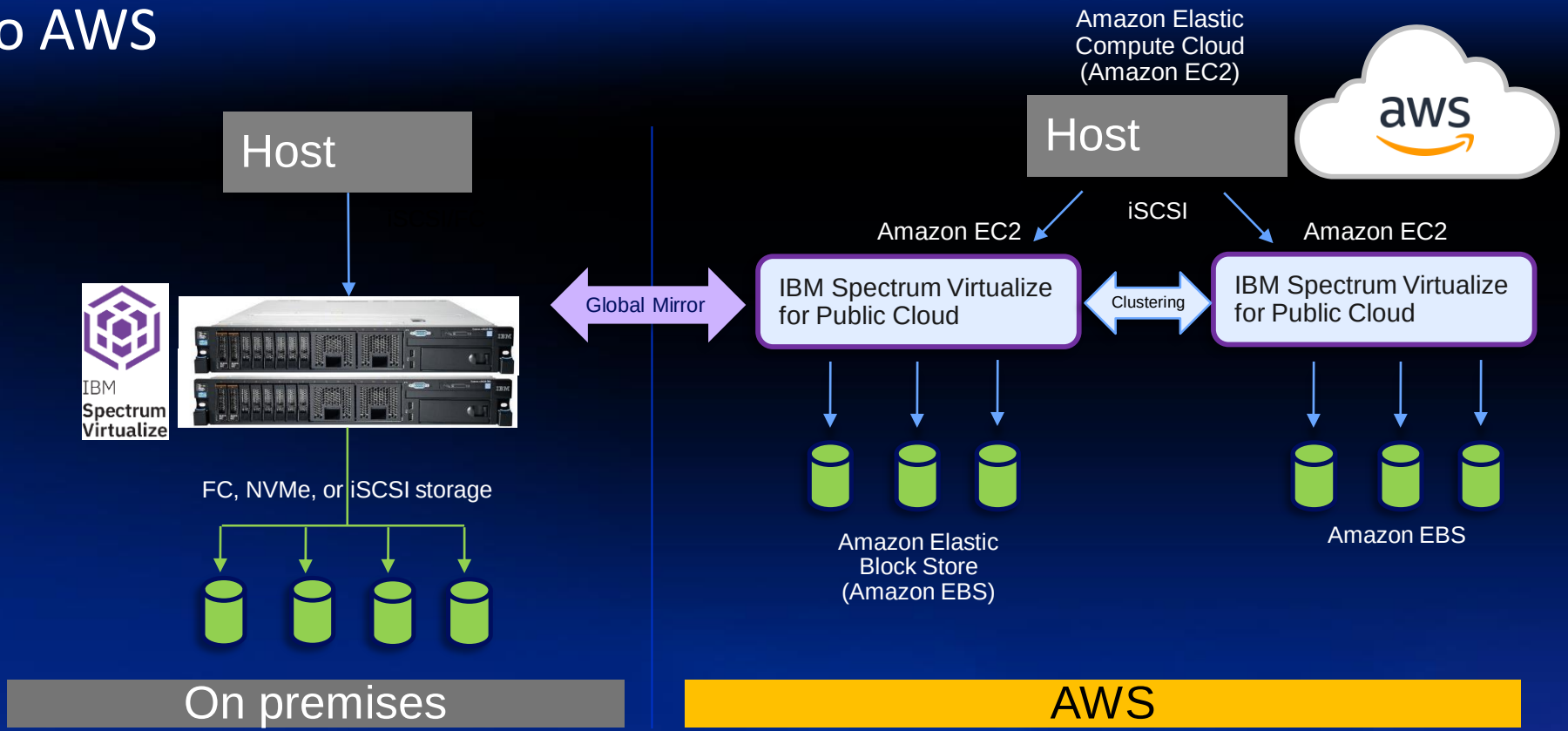
Business continuity on the public cloud

- Create a DR site on the public cloud
- Synchronize local data
- Protect on-premises data

Protection of data in the public cloud

- Protect data already on the cloud
- Across cloud provider regions
- Create air-gapped cyber resiliency solutions

Hybrid cloud data mobility from on premises to AWS

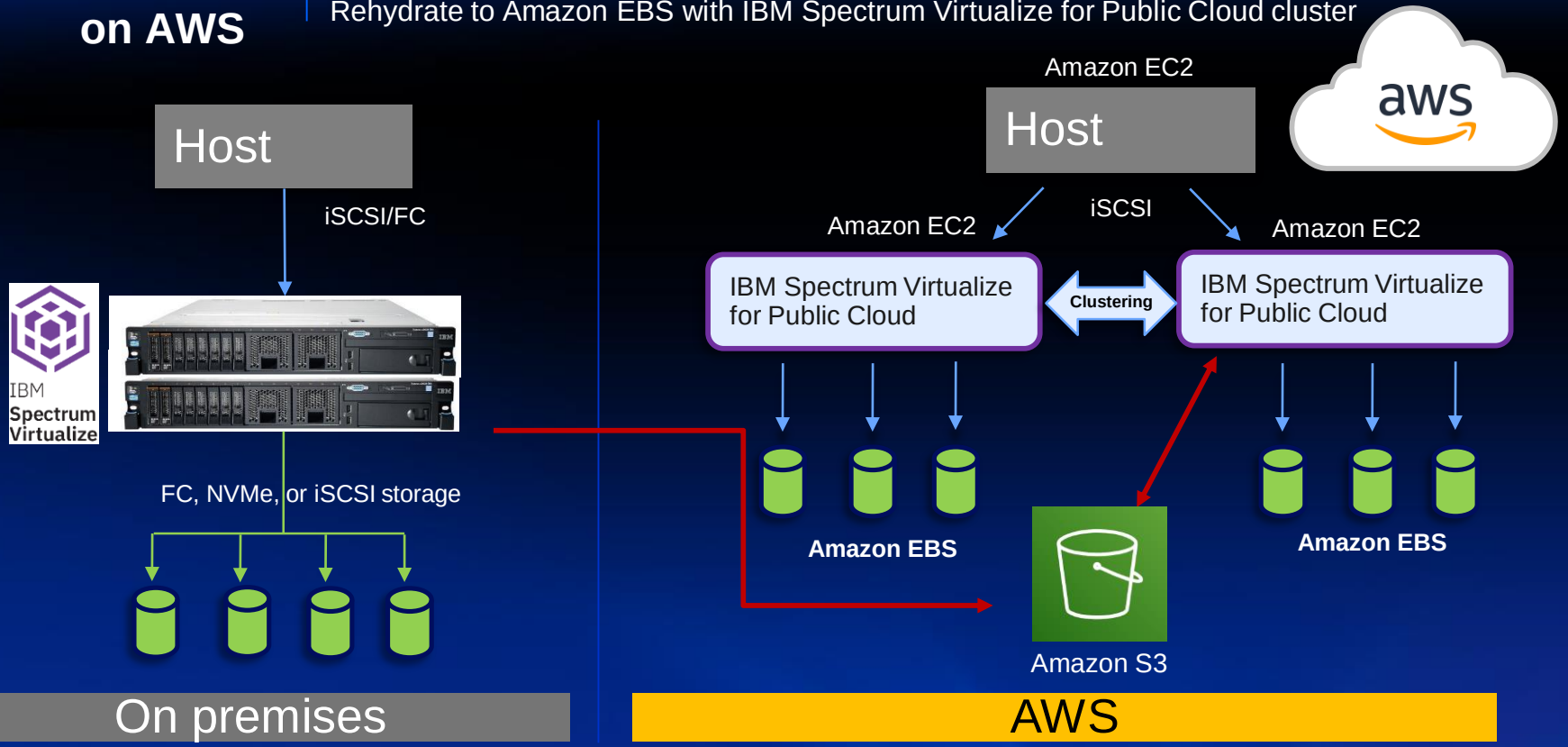


IBM Spectrum Virtualize for Public Cloud on AWS with Amazon S3

IBM Spectrum Virtualize

Architecture on AWS

On AWS, create an air gap data protection solution by leveraging Amazon S3 storage
Rehydrate to Amazon EBS with IBM Spectrum Virtualize for Public Cloud cluster



IBM Spectrum Virtualize for Public Cloud on AWS

Super easy deployment in 15 minutes!

1

IBM Spectrum Virtualize for Public Cloud

Purchase IBM Spectrum Virtualize for Public Cloud

Offered through IBM Passport Advantage as a monthly term license or perpetual license; select AWS part numbers

2

aws marketplace

Deploy IBM Spectrum Virtualize for Public Cloud from AWS Marketplace

Find IBM Spectrum Virtualize for Public Cloud on **AWS Marketplace**; select the Amazon EC2 instance type, and the cluster is deployed automatically, along with an IP quorum server and a minimum set of Amazon EBS storage

Case Study: The ATS Group

Managed Service Provider that built a new SaaS offering based on IBM Spectrum Virtualize for Public Cloud

❖ Business problem

Eliminate the days, weeks, or months it often takes to understand, test, and implement a hybrid cloud storage solution.

❖ Solution

With this unique solution from ATS, customers can consume IBM Spectrum Virtualize for Public Cloud on SaaS model on AWS, making storage easier to use and more flexible in a fraction of the time.

"Maintaining consistent data between on-premises storage and the public cloud can be difficult. We are pleased to be able to help our clients eliminate the complexity of migrating and replicating heterogeneous storage systems between on-premises environments and the public cloud."

—Tim Conley, Principal at ATS Group

Real Use Cases

Large Federal Commerce Customer

Needs ability to migrate subsets of data to the AWS Cloud

- Storage division has the need, at the request of LOB, to have the ability to port data to the cloud quickly
- Customer now HAS the ability to migrate any application or LUN, based on application requirements

SaaS Customer - Galileo

Migrating application to the cloud as SaaS offering

- Galileo needs the ability to port/migrate data to the cloud easily
- Currently resides on premises on V7000 (Spectrum Virtualize-based)
- Spectrum Virtualize for Public Cloud allows us to replicate our flash copies to the cloud daily/weekly for our extensive testing requirements

IBM Storage Software on AWS

IBM **Spectrum Scale**

HPC storage for AWS

IBM **Spectrum Protect Plus**

Protect your data leveraging AWS

IBM **Spectrum Virtualize**

Extend your data center storage to AWS with unified management

Let's continue the conversation!

Join us in booth 616

Please complete the session survey in the mobile app.

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