



VEEAM



Hewlett Packard
Enterprise

Veeam Backup for Microsoft 365

Scality ARTESCA and HPE



March 2023



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UNDERSTANDING ARTESCA

Lightweight cloud-native object storage

Core-to-edge application ready

Single server to scale out, easy to install, ideal for the edge

Single pane of glass UI to control multi-cloud data, workflow management, and metadata search

Local and network erasure coding for superior data protection with low overhead

Multi-tenancy & user management, security, and operations

Adaptive and sustainable across future platforms and innovations





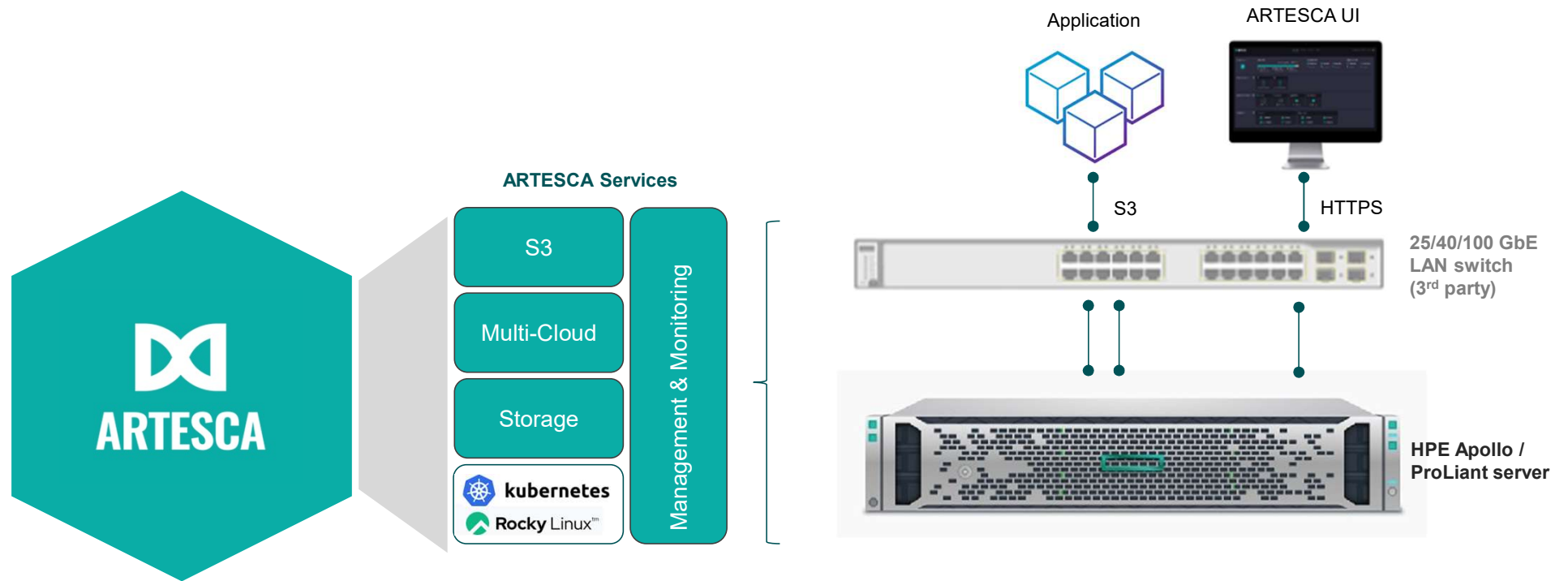
ARTESCA

S3 Object Storage

Some technical basics

ARTESCA SINGLE-NODE DEPLOYMENT

Containerized software services & orchestrated in Kubernetes



ARTESCA THREE-NODE DEPLOYMENT

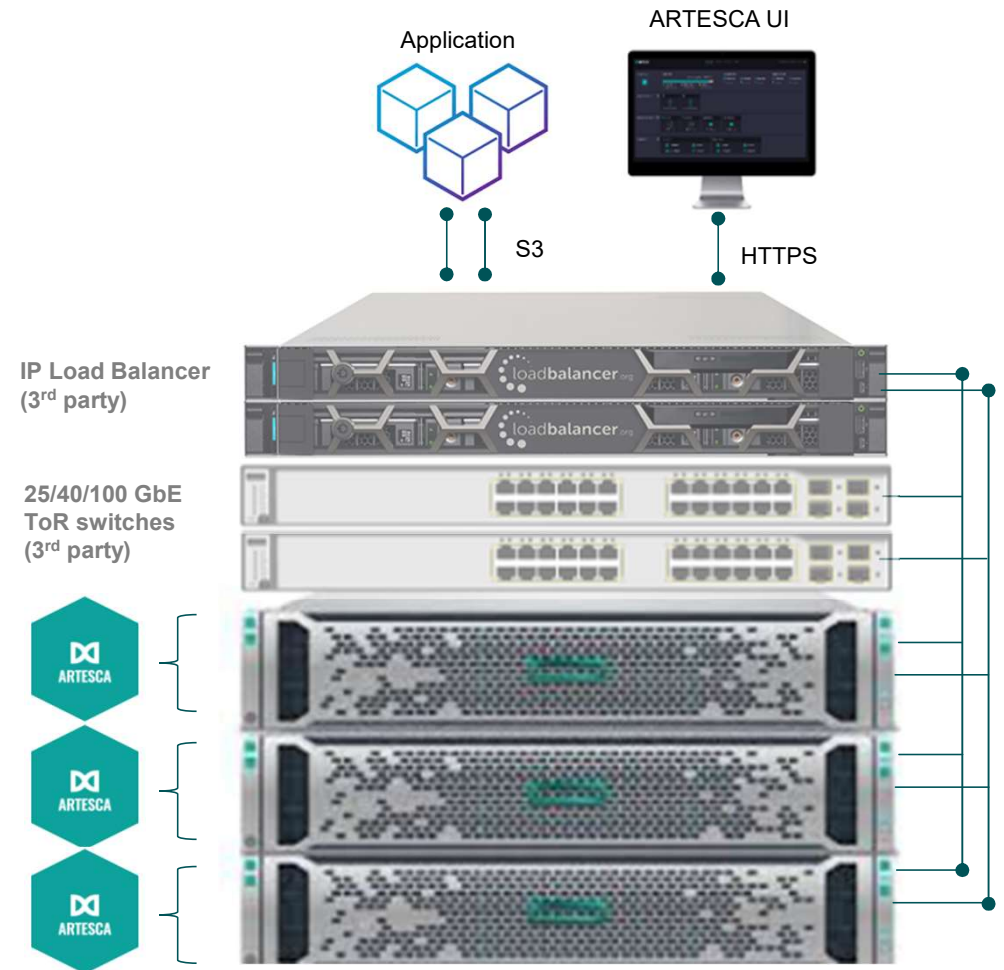
Scales-out in capacity performance for growing workload demands

ARTESCA software stack on each server creates logical S3 storage cluster

API & UI management & monitoring over HTTPS

Choice of vendor for standard IP load balancers & network switching or use built-in HA with virtual IPs and DNS Round Robin

Extensive range of HPE all-flash & hybrid servers (Apollo 4510/4200/4200+ & ProLiant DL380/325)



ARTESCA STORAGE SERVICES

Dual-level Data Protection For Durability

Why dual-level data protection?

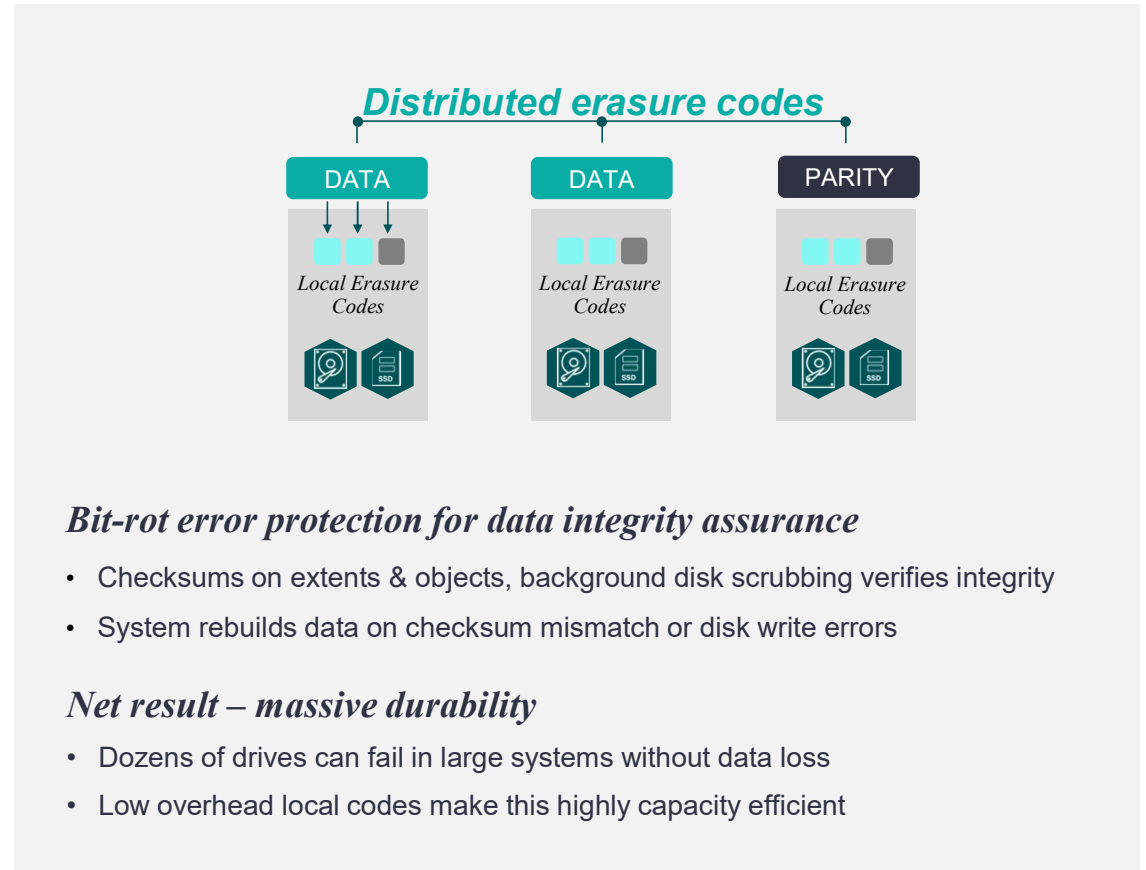
- As drive sizes increase, network rebuilds become cumbersome
- Distributed protection requires the network IO for rebuilds - this can slow down data rebuilds
- Single servers require local data protection

Local protection on each server

- In multi-server systems, avoids the need for network access, speeds up data rebuilds
- Especially effective on high-density disk drives

Distributed protection across servers

- Protects against full server failures – fast rebuilds in parallel across servers
- Utilizes all drives, no spare disk drives as in RAID



Note: dual-level scheme uses replication for objects below 60KB, erasure-coding above 60KB (local & distributed)



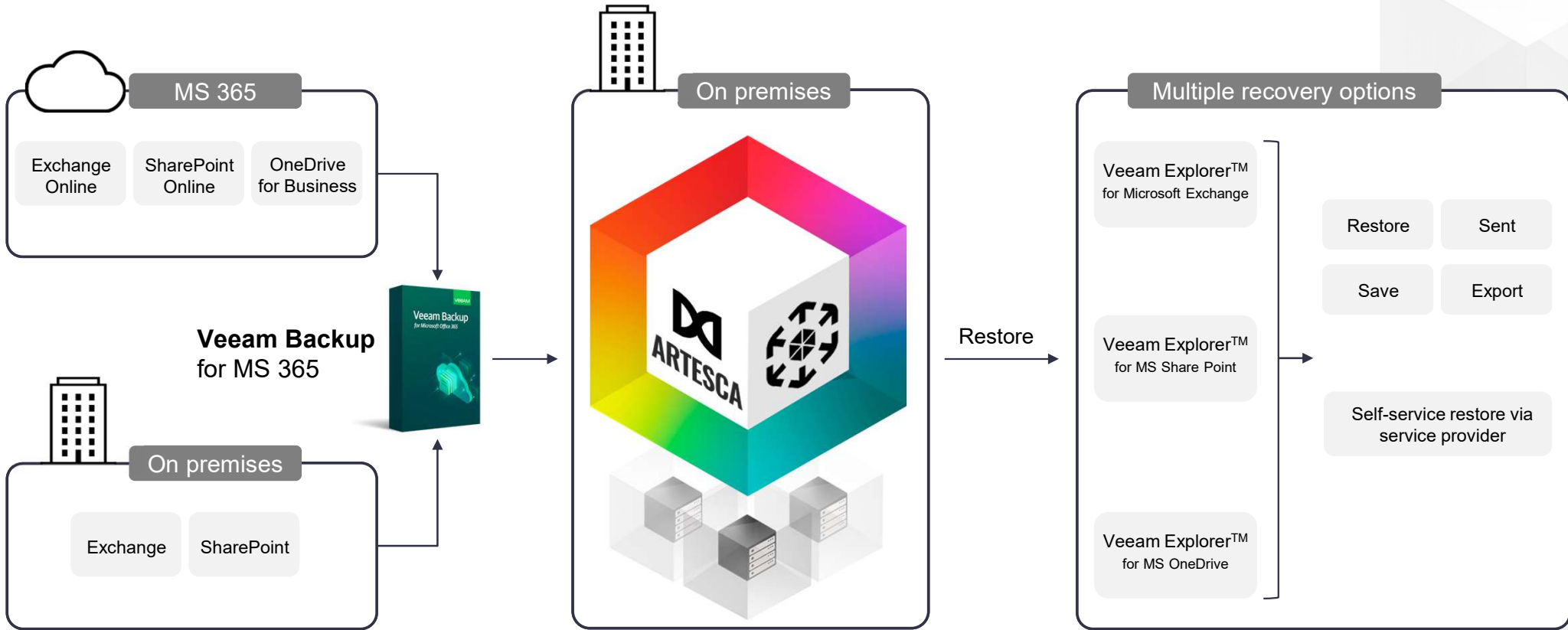
ARTESCA

S3 Object Storage

Deployment on VMware vSphere / ESXi or
HPE-HW for Veeam Backup for M365

Veeam Backup + ARTESCA for MS 365

Simple and scalable



Scality ARTESCA

Scalable S3 Storage – 2 Options

Option 1: Virtual

- deployed on VMware vSphere/ESXi
- 1 or 3 Virtual Machines configuration

Option 2: Physical

- deployed on standard x86 servers / storage servers
- Single server or multi-server configuration



Why S3 Object Storage instead of a simple, block-based VM?

Key benefits

- **More storage efficiency** on S3 object storage than on simple block-based storage
 - Veeam-backup is more efficient on ARTESCA S3 object storage
 - **up to 50% less storage capacity** on ARTESCA than on block-based storage
- **More performance** on S3 Object Storage than on simple block-based storage
 - processing of meta-data is being passed over to S3 storage
 - **frees up workload** on the CPU of the Veeam backup server (“VBO Backup Proxy”)
 - ARTESCA S3 Object Storage ensures **continuous stable performance**
- ARTESCA S3 Object Storage can **easily grow and scale** with increasing data volumes





**Thank
You**

