



SCALITY

SOLUTION BRIEF

CYBER-RESILIENT STORAGE APPLIANCE FROM SUPERMICRO AND SCALITY ARTESCA



Supermicro AS -2015CS-TNR

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Executive Summary

Supermicro, a global leader in application-optimized total IT solutions, and Scality, a global leader in reliable, secure, and sustainable data storage software, have expanded the Artesca portfolio to include an object storage appliance that provides the power of Supermicro hardware and Scality software options for immutable backup storage.

Supermicro solutions for Scality ARTESCA offer flexibility for modern applications while delivering state-of-the-art performance on Supermicro servers and storage. ARTESCA solutions offer simple, secure object storage, providing lightweight deployments starting at 50TB with easy expandability to many petabytes.

Scality ARTESCA is a lightweight, easy-to-deploy software-defined object storage solution with comprehensive support for the Amazon S3 API, build-in-geo-replication, and federated management for multi-use cloud environments. ARTESCA can start as small as a single node and scale to six nodes to meet future capacity requirements.

SUPERMICRO

As a global leader in high performance, high efficiency server technology and innovation, we develop and provide end-to-end green computing solutions to the data center, cloud computing, enterprise IT, big data, HPC, and embedded markets. Our Building Block Solutions® approach allows us to provide a broad range of SKUs, and enables us to build and deliver application-optimized solutions based upon your requirements.



Secure Object Storage Software for immutable backups

Faster to deploy and manage, allowing for backup versatility

Scality ARTESCA is lightweight in design, which offers the first and last line of defense against any data threat to recoverability. A cyber-resilient storage solution coupled with the Supermicro servers and storage powering the next generation of unified data access from a single physical server or virtual machine, scaling up to 5 petabytes of usable storage capacity.

ARTESCA can be deployed in three deployment options, allowing freedom to deploy the best solution for your workload as a secure software appliance, virtual appliance, or hardware appliance. Simple to deploy and use, ARTESCA offers the most secure S3 object storage software for immutable backups.

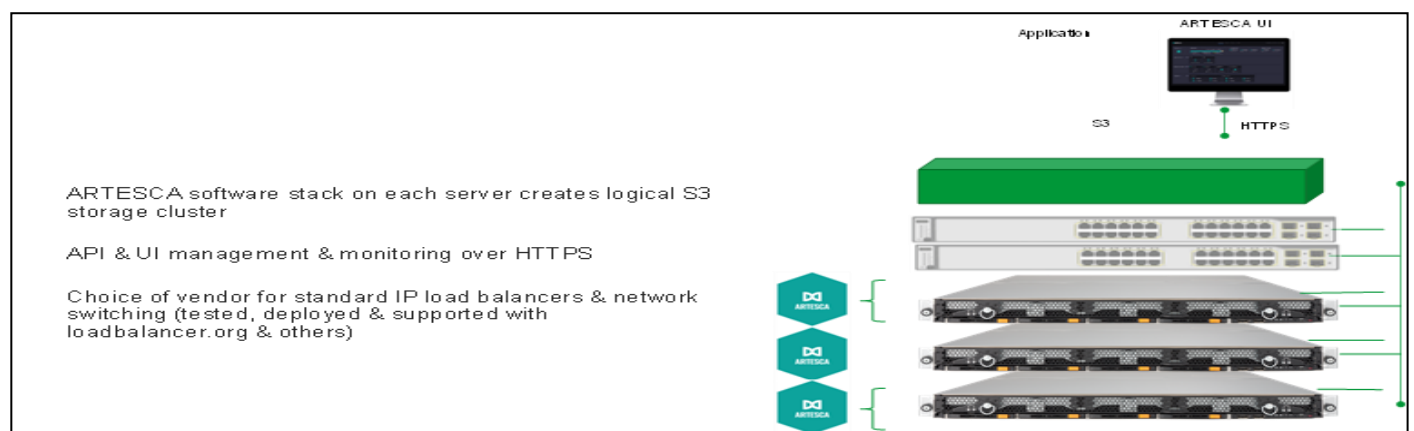
Unbreakable cyber resiliency

- 1 Application-level resiliency**
 - Amazon S3 object locking immutability with configurable data retention policies and compliance mode
 - Veeam v 12 "Direct to object" backups and SOSAPI support, plus automated enforcement of validated IAM access control policies
- 2 Network and data resiliency**
 - Secure HTTPS/TLS S3 termination, plus AES 256-bit data encryption-at-rest
 - Multi-factor authentication (MFA) for secure UI logins, plus automated firewall rules on deployment
- 3 Storage resiliency**
 - Distributed erasure coding renders data indecipherable to low-level and data exfiltration attacks; metadata in secure repository on intrinsically immutable object storage layer
 - 1 to 6 servers for growth to 5 PB with dual-level data protection
- 4 Geographic replication resiliency**
 - Async replication to separate security and management domain for "air-gapped" offsite storage
 - Eliminates the "all data in one place" problem



- 5 Core architecture-level resiliency**
 - Integrated, security-hardened Linux operating system precludes root access, reduces exposure to CVEs to limit a wide range of attack threats

ARTESCA Reference Deployment



Supermicro ARTESCA reference configurations with AMD single-socket servers.

Solution 1: Supermicro AS -2015CS-TNR-OTO-95

CPU: Single 4th Gen AMD EPYC™ 9254 Series Processor
Memory: 16GB DIMMS, Total 192GB DDR5-4800MHz
NVMe: 2x 800GB NVMe PCIe 4.0
Drives: 12x Hot-Swap 3.5" 8TB Capacity Per Node
Network: Advanced I/O Module (AIOM), 2-port 10Gbps 2x RJ45 and 2x SFP+ connectors



Solution 2: Supermicro AS -2015CS-TNR-OTO-10

CPU: Single 4th Gen AMD EPYC™ 9254 Series Processor
Memory: 16GB DIMMS, Total 192GB DDR5-4800MHz
NVMe: 2x 1.6TB NVMe PCIe 4.0
Drives: 12x Hot-Swap 3.5" 18TB Capacity Per Node
Network: Advanced I/O Module (AIOM), 2-port 10Gbps 2x RJ45 and 2x SFP+ connectors

Solution 3: Supermicro AS -2015CS-TNR-OTO-11

CPU: Single 4th Gen AMD EPYC™ 9254 Series Processor
Memory: 16GB DIMMS, Total 192GB DDR5-4800MHz
NVMe: 2x 3.2TB NVMe PCIe 4.0
Drives: 12x Hot-Swap 3.5" 18TB Capacity Per Nodes
Network: Advanced I/O Module (AIOM), 2-port 10Gbps 2x RJ45 and 2x SFP+ connectors



START AS SMALL AS A SINGLE SERVER

- Kubernetes on VM or physical server
- Note: enterprise support on bare-metal reference architectures only



EXPAND TO ANY CAPACITY AT ANY TIME

- Grow one server at a time
- Add new capacity and go



OPTIONAL: REBALANCE DATA

- Moves existing data to new servers in background for even utilization
- Good for workloads that need the IO performance of the entire system



Simplifying cyber-resilient, immutable backup storage

Supermicro and Scality have partnered to offer a new hardware appliance with a software focus to address solving customer problems while focusing on providing enhanced solutions. The goal is to deliver the best breed to enhance the data center experience. The focus is to provide solutions for the rapid data growth of mid-to-large enterprise corporations while addressing the spread of corporate data across many devices, SI, and androids. The ever-present need to protect and assure data integrity against various threats while driving affordability and sustainability.

IT professionals understand that most cyber-resilient infrastructures are built on multiple layers that are untoward, protecting critical business operations, applied options, and data. Immutable storage has become essential to a robust and resilient cybersecurity strategy as IT leaders recognize its value in overall ransomware protection and recovery.

Supermicro, Scality ARTESCA, and Veeam

The road to Supermicro and Scality's new hardware appliance offering begins with ARTESCA, an S3 object storage rich and ultra-simple affordable solution. A solution targeted for mid-to-large enterprise customers requiring an immutable solution for ransomware-proof backup data that's fast and easy to manage and deploy. ARTESCA v2.0 has significant enhancements (**See Link**), offering multi-level cyber-resilience capabilities.

It is built, optimized, and tested by a systems integrator and sold through certified distribution and VAR channels. The software features:

- Improved multi-factor authentication
- Limited user privilege rights and increased root access protections with the introduction of a new ARTESCA-OS user profile
- Hardened Linux with Rocky Linux 8, compliant with CIS (Center for Internet Security) policy Level 2
- Tightened protections for installation with a pre-configured ARTESCA OS to reduce the number of required updates

As a hardware appliance, ARTESCA targets Veeam users, providing current and future Veeam customers with an unbreakable backup and recovery solution that can withstand any threat. Adding a hardware option to virtual and software appliances offers customers the most secure immutable storage offering while keeping customer preferences at the forefront. The Supermicro ARTESCA hardware appliance further provides joint customers with secure and immutable storage in one easy-to-deploy solution, enabling their ability to recover faster from a cybersecurity incident if and when an event happens.

Summary

Supermicro is a leading provider of high-performance and cost-optimized industry-standard server solutions, ideal for the Enterprise, Data Center, and Cloud Computing environments. A recognized leader in distributed file and object storage, Scality offers software solutions for today's hybrid and multi-cloud data management environment.

Supermicro and Scality are partnering to deliver a flexible, object storage solution optimized for cloud-native container application deployment: Scality ARTESCA, running on Supermicro A+ Storage Servers.

For more information, please visit: www.supermicro.com