asigra TrueNAS

Asigra TrueNAS M-Series

POWERED WITH ASIGRA TIGRIS BACKUP AND RECOVERY SOFTWARE



Tigris Backup

Award-winning Tigris Backup™ is a single, comprehensive, multitenant data protection platform for all sources and types of corporate data including physical and virtual servers, enterprise databases and applications, endpoint devices, SaaS-based office systems like Microsoft 365, Google Workspace, and Salesforce. Tigris Backup is also the first to prevent ransomware from infecting backups that cause attack loops.

Capacity Powerhouse

The TrueNAS M-Series stands as the cornerstone of enterprise storage solutions, offering unparalleled performance and reliability for mission-critical operations. Designed with high-availability in mind, it seamlessly integrates open-source economics with enterprise-grade hardware, providing organizations with the flexibility and scalability they demand.

Available in three versatile models—M40, M50, and M60—the M-Series delivers unified file, block, and S3-compliant object storage. These systems support configurations ranging from hybrid to all-flash setups, featuring impressive specifications such as up to 1.5 TB of system memory, TrueCache NVDIMM and NVMe caching, and scalability reaching up to 30 PB of capacity. With networking capabilities that include multiple high-speed connections (up to 4x 100 GbE), the M-Series is adept at handling intensive IT workloads, from virtualization and media production to high-speed file sharing and backup operations.

Built to conserve power, space, and cooling, the M-Series employs a modular hardware architecture that supports diverse applications through its hybrid flash and disk storage pools. High Availability (HA) configurations ensure continuous storage services, while Intelligent Storage Optimization achieves data reduction ratios exceeding 2.5x, maximizing storage efficiency. Coupled with simplified management via a robust web-based interface and comprehensive enterprise support, the TrueNAS M-Series offers a seamless blend of performance, scalability, and data integrity, catering to the needs of organizations that operate around the clock.

Features

Performance & Scale Without Compromise

The TrueNAS M-Series combines DRAM, TrueCache® NVDIMM, and NVMe/SSD with high-density disks for low-latency flash performance at disk capacity and cost. It supports up to four 100 Gb/s network ports per controller for maximum data throughput.

- TrueCache® NVDIMM Technology
 Found in the M40, M50, and M60,
 TrueCache® NVDIMM delivers fast, reliable, low-latency writen caching. It stores data before writing to the ZFS pool, ensuring protection and mirroring for high availability.
- Self-Healing Data Protection
 Utilizing the OpenZFS file system, the
 M-Series automatically detects and repairs in-flight data corruption before it reaches the disk. It identifies and scrubs bit rot and data decay, ensuring data integrity and reliability.
- Intelligent Storage Optimization
 The M-Series optimizes storage with compression, snapshots, clones, and thin provisioning—all at no extra cost.

 TrueNAS Adaptive Compression (TAC) dynamically adjusts compression to enhance performance and maximize capacity efficiently.

Benefits

Integrity

The self-healing capabilities of the OpenZFS file system ensure that data remains pristine, automatically correcting any corruption and preventing data loss.

- Cost-Effective Scalability
 With intelligent storage optimization
 features like TAC, organizations can
 efficiently utilize storage resources,
 reducing the need for additional
 hardware investments as data grows.
- Enhanced Data Protection
 Unlimited snapshots and replication protect against accidental changes, ransomware, and malware. Data can be replicated locally, remotely, or to the cloud for backup and disaster recovery, ensuring business continuity.

Software Specifications

ASIGRA CLOUD BACKUP

- DS-System v14.2 installed in TrueNAS version 24.10.2 and compatible across the entire family of TrueNAS products
- High availability support with a dual controller in the TrueNAS HA system
- Global Deduplication
- Instant restoration of files and directories
- · Attack-Loop prevention

FILE-BASED PROTOCOL

- SMB
- NFSv3, v4
- AFP
- FTP
- WebDAV

BLOCK-BASED PROTOCOLS

iSCSI

OBJECT PROTOCOLS

S3-compliant

DIRECTORY SERVICES

- Active Directory (AD)
- Kerberos
- Lightweight Directory Access Protocol (LDAP)
- Network Information Service (NIS)

NETWORKING

- Port Trunking/NIC Teaming and IEEE 802.3ad link aggregation
- IEEE 802.1q VLAN support

VIRTUALIZATION

- Supports VMware and VAAI, ESXi snapshot integration, VM Warn/Stun
- Supports KVM, Citrix XenServer, Microsoft Hyper-V, bhyve, and other common hypervisors

M-Series Platform

AVAILABLE STORAGE MEDIA

- Enterprise Nearline Hard Drives 7200 RPM SAS3:
 - Capacities from 4 TB to 22 TB
 - SED, FIPS 140-2 options
- Enterprise SSDs
 - SAS3: from 1.92 TB to 15.3 TB
 - RI, SED, FIPS 140-2 options
- NVMe SSDs:
 - From 1.6 TB to 3.2 TB
 - SED, FIPS 140-3 options

POWER MANAGEMENT

- Dual redundant, hot-swappable, high-efficiency (80%+) power supplies
- Auto-switching 100-240V 50/60Hz input power on TrueNAS M40/M50
- High-line 200-240V 50/60Hz input power on TrueNAS M60
- · IPMI Remote power on/off

DISK MANAGEMENT

- Global hot spares
- Hot-swappable drives
- Corrupted block scan + HDD S.M.A.R.T.
- · Hard drive activity/alert LEDs
- Local and remote (KMIP) key management
- · Enclosure monitoring and alerts

PHYSICAL PARAMETERS

- 4U: 24x 3.5/2.5" hard drive bays (front-loading, hot swap)
- Dimensions (I x w x h):
 - 27"x19"x7" | 686x483x178 mm
- Rackmount rails 26"–36.5"
- Operating temperature: 0°C to 35°C
- Non-operating temperature: -10°C to 70°C
- Humidity: 5% to 95% non-condensing
- Empty weight: 75 lbs | 34 kg
- Fully-Loaded weight: 114 lbs | 52 kg
- RoHS 6/6 compliant, CE, FCC Class A, UL, BSMI

TrueNAS M-Series Models

	TrueNAS M40	TrueNAS M50	TrueNAS M60
Hybrid or All-Flash Storage		Optional	
Dual Controller (HA)		Optional	
Controller	192 GB	384 GB	768 GB
Read Cache (Max)	2.4 TB SAS or 3.2 TB NVME	6.4 TB NVME	12.8 TB NVME
Write Cache (Max)	16 GB TrueCache® NVDIMM	16 GB TrueCache® NVDIMM	2 x 16 GB TrueCache® NVDIMM
Networking	2 x 10/25/40/100Gbe GB (optical) 2 x 10GBase-T (standard)	2 x 10/25/40/100Gbe GB (optical) 2 x 10GBase-T (standard)	4 x 10/25/40/100Gbe GB (optical) 2 x 10GBase-T (standard)
Fiber Channel	4 x 16 GB	4 x 16 GB or 2 x 32 Gb	4 x 32 Gb
Max Storage	3 PB	10 PB	30 PB
Max Expansion Shelves	2	8	12
Maximum Power Draw:			
Single Controller	825 Watts	975 Watts	1225 Watts
Dual Controller (HA)	950 Watts	1150 Watts	1450 Watts
Heat Output	2815/3241 BTU/h	3327/3924 BTU/h	4180/4947BTU/h

TO ORDER AN APPLIANCE: Contact Asigra at sales@asigra.com



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