



Asigra TrueNAS® X-Series

POWERED WITH ASIGRA CLOUD BACKUP AND RECOVERY SOFTWARE

Award-winning Asigra Cloud 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 MS Office 365, G Suite, and Salesforce, and PaaS sources like AWS and Azure. Asigra is also the first backup to prevent ransomware from infecting backups that cause attack-loops.

ENTERPRISE STORAGE FOR EVERY BUDGET

The most affordable Asigra TrueNAS unified storage arrays are designed with enterprise features, high-availability, and reliability at an entry-level cost. Available in two models, the Asigra TrueNAS X10 and X20 utilize both flash and spinning disk to provide unified file, block, and object storage, and are available in single or dual-controller configurations. The Asigra TrueNAS X-Series offers excellent reliability and affordability for small and medium IT environments.

The Asigra TrueNAS X-Series arrays combine the flexibility of unified storage, the performance of solid state flash drives, the capacity of hard disks, the simplified management of a powerful web-based user interface, and white-glove enterprise support. TrueNAS inherits the rich functionality and Open Source economics of FreeNAS® and adds Enterprise-class capabilities.

Every Asigra TrueNAS enterprise storage array supports unified block, file, and S3-compliant object storage protocols. Its modular hardware architecture conserves power, space, and cooling while supporting multiple applications with its hybrid flash and disk storage pools. Optional High Availability ensures storage services are not disrupted, while Intelligent Storage Optimization maximizes storage efficiency with typical data reduction ratios of greater than 2.5x.

The Asigra TrueNAS X-Series fits a wide range of applications from file and media storage to business continuity, video surveillance, and many others. The Asigra TrueNAS X-Series provides data integrity, reliability, and ease-of-management for business that never sleeps.



FLASH-ASSISTED PERFORMANCE

Solid-state performance at spinning-disk capacity and cost. Asigra TrueNAS leverages ZFS to merge multi-layer DRAM and flash cache with high-density spinning disks: system RAM and SSDs are used to cache reads and writes while HDDs store the data.

The performance of RAM and SSDs are orders of magnitude faster than HDDs, while their power requirements are much lower. Asigra TrueNAS lets you increase performance and scale capacity while conserving power and saving money.

SELF-HEALING DATA PROTECTION

Data integrity is the name of the game, and Asigra TrueNAS leaves nothing about your data to chance. In-flight data corruption is automatically detected and repaired before it ever reaches disk, and bit rot and data decay are identified and scrubbed clean. This ensures data is always pristine. Simply put, what you store on an Asigra TrueNAS storage solution today will remain intact for as long as it's in service.

INTELLIGENT STORAGE OPTIMIZATION

Asigra TrueNAS maximizes storage efficiency by offering compression, deduplication, and thin provisioning at no extra cost. The Asigra TrueNAS Adaptive Compression (TAC) algorithm efficiently boosts storage performance while maximizing storage capacity. TAC intelligently adjusts its compression ratio without wasting system resources. Before data is stored, TrueNAS dynamically detects and compresses what it can and skips over any data too inefficient to be worthwhile.

UNLIMITED SNAPSHOTS & REPLICATION

Most storage appliances require additional licenses for advanced features – but not Asigra TrueNAS. Unlimited file version retention, restoration, and replication are at your fingertips. Data is automatically protected locally against unintentional alteration, such as ransomware or malware, with minimal storage consumption. Data can be replicated locally, remotely, or to the cloud for backups or disaster recovery. TrueNAS snapshots can also be coordinated with VMware snapshots.

With the power of TrueNAS, any data protection or disaster recovery policy is simple to implement and maintain.

SOFTWARE SPECIFICATIONS

ASIGRA CLOUD BACKUP

- DS-System v14 installed in TrueNAS 11.1-U6 version and compatible across entire family of TrueNAS products
- High availability support in dual controller in TrueNAS HA system

FILE-BASED PROTOCOLS

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

BLOCK-BASED PROTOCOLS

- iSCSI

OBJECT-BASED PROTOCOLS

- S3-compatible

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, KVM, and other common hypervisors

- VSS, ODX, and CSV

FILE SYSTEM

- Self-healing file system
- Intelligent Storage Optimization including in-line compression and deduplication
- Snapshots and clones
- Thin and thick provisioning
- Online capacity expansion
- Virtual block devices
- ZFS Stripe, ZFS Mirror, RAIDZ (single parity), RAIDZ2 (dual parity), RAIDZ3 (triple parity)
- Compatible with AVID® ISIS® and Nexis®1

BACKUP

- Asigra DS-Replication
- Bidirectional snapshot-based OpenZFS local/remote replication

REMOTE ADMINISTRATION

- Graphical administrative interface over HTTP/HTTPS
- Alert notifications via email, AWS-SNS, Hipchat, InfluxDB, Slack, Mattermost, OpsGenie, PagerDuty, and VictorOps
- Ability to send logs to a remote syslog server
- Automated backup of system configuration and state
- Graphical reporting

- Signed updates with the ability to return to the prior version of the operating system
- SNMP MIBs
- IPMI remote console and power management
- REST API

SUPPORTED PUBLIC CLOUD PROVIDERS

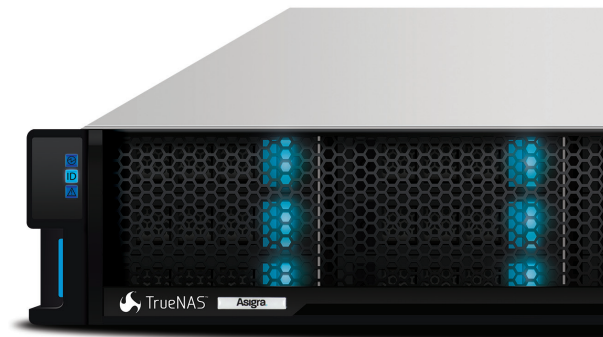
- Amazon Simple Storage Service (S3)
- BackBlaze B2 Cloud
- Google Cloud
- Microsoft Azure

Compact and full-featured enterprise unified storage with simple management, high-availability, and flash-based acceleration.

Flash-powered Enterprise Storage.

The Asigra TrueNAS X-Series offers storage flexibility, performance, reliability, management simplicity, and compatibility with the entire TrueNAS product family.

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



HARDWARE SPECIFICATIONS

AVAILABLE STORAGE MEDIA

- 7.2k RPM: 2TB to 14 TB
- SSD: (X20 only) 800 GB to 7.68 TB, L2ARC/ZIL
- All drives are SAS3 (12Gb/s)

POWER MANAGEMENT

- Dual redundant hot-swappable high-efficiency (90%+) power supplies
- 100-240 volt input power supported (auto-switching)
- Remote power-on/off
- UPS signal response and alerts

DISK MANAGEMENT

- Hot spares
- Hot-swappable drives
- Bad block scan + HDD S.M.A.R.T.
- Enclosure monitoring and alert LEDs
- Hard Drive Activity/Alert LEDs
- Hardware-Accelerated Disk Encryption (AES-NI)

PHYSICAL PARAMETERS

- 2U: 12x 3.5/2.5" hard drive bays (front-loading, hot swap)
- Dimensions (length x width x height): 21 x 19 x 3.5" | 531 x 447 x 89mm
- Rackmount rails: 23.5" to 29.5" standard, up to 36" with included extenders
- Enclosure monitoring and alerts
- Operating temperature: 0°C to 40°C
- Non-operating temperature: -30°C to 60°C
- Empty weight: 26 lbs | 12 kg
- Fully-loaded weight: 44 lbs | 20 kg
- Humidity: 8% to 80% non-condensing
- RoHS 6/6 compliant

ASIGRA TrueNAS X10

- Supports single or redundant storage controllers
- Second storage controller can be added for HA
- Up to 504TB capacity (with 2x ES12 expansion shelves)
- 32GB RAM
- Up to 480GB flash read cache
- Read and write caches optional
- Up to 6x 1GbE or 2x 10GbE interfaces per controller
- Expansion Shelves Supported: up to 2x ES12
- Maximum power draw**
 - Dual storage controller (HA): 198 Watts
 - Single storage controller: 138 Watts

ASIGRA TrueNAS X20

- Support single or redundant storage controllers
- Second storage controller can be added later for HA
- Up to 1PB of capacity (w/ 1x ES60 Expansion Shelf)
- 64GB of RAM
- Up to 960GB flash read cache
- Read and write caches optional
- Up to 6x 1GbE, 4x 10GbE, or 2x 16Gbps Fibre Channel interfaces per controller
- Expansion shelves Supported: up to 2x ES12, up to 1x ES60
- Maximum power draw**
 - Dual storage controller (HA): 200 Watts
 - Single storage controller: 140 Watts

“Combining Asigra's leading edge data protection with iXsystems powerful TrueNAS appliances delivers an unmatched powerful 1–2 knockout punch.” ~Dataedge

¹ iXsystems is not affiliated in any way with AVID® Technology, Inc. ** Power calculations are without hard drives populated. Hard drive calculations can be made using the following maximum guidelines (per drive): 3.5" SAS 7200RPM – 12W; 2.5" SAS SSD – 11W. TrueNAS and FreeNAS are trademarks/registered trademarks of iXsystems, Inc. Asigra, the Asigra logo, Asigra Cloud Backup, and Recovery is Everything, are all trademarks of Asigra Inc. All rights reserved.