

iXsystems FreeNAS Mini XL+ and Mini E Expand the Reach of Open Source Storage to Small Offices

On July 25, 2019, iXsystems® [announced](#) two new storage systems. The **FreeNAS® Mini XL+** provides a new top-end model in the FreeNAS Mini product line, and the **FreeNAS Mini E** provides a new entry-level model. These servers are mini-sized yet provide professional-grade network-attached storage.

FreeNAS Minis are Professional-grade and Whisper Quiet



Source: iXsystems

The FreeNAS Mini XL+ and Mini E incorporate technologies normally associated with enterprise servers, such as ECC memory, out-of-band management, and NAS-grade hard drives. Both are engineered for and powered by the widely adopted ZFS-based FreeNAS Open Source storage OS. Thus, the Mini XL+ and Mini E provide file, block, and S3 object storage to meet

nearly any SOHO/SMB storage requirement.

Early in my IT career, I purchased a tower server that was marketed to small businesses as a convenient under-desk solution. The noise and heat generated by this server quickly helped me understand why so many small business servers were running in closets. The FreeNAS Mini is not this kind of server.

All FreeNAS Mini models are designed to share space with people. They are compact and “whisper quiet” for use in offices and homes. They are also power-efficient, drawing a maximum of 56 to 106 Watts for the Mini E and Mini XL+, respectively.

Next-Generation Technology Powers Up the FreeNAS Mini XL+ and Mini E

The Mini XL+ and E bring multiple technology upgrades to the FreeNAS Mini platform. These include:

- Intel Atom C3000 Series CPUs
- DDR4 ECC DRAM
- +1 2.5” Hot-swappable Bay (Mini XL+)
- PCI Express 3.0 (Mini XL+)
- IPMI iKVM (HTML5-based)
- USB 3.0
- Standard Dual 10 Gb Ethernet Ports (Mini XL+)
- Quad 1 Gb Ethernet Ports (Mini E)

FreeNAS Mini is a Multifunction Solution

FreeNAS Mini products are well-equipped to compete against other small form factor NAS appliances; and perhaps even tower servers because of their ability to run network applications directly on the storage appliance.

Indeed, the combination of more powerful hardware, application

plug-ins, and the ability to run hypervisor or containerized applications directly on the storage appliance makes the FreeNAS Mini a multi-function SOHO/ROBO solution.

[FreeNAS plugins](#) are based on pre-configured FreeBSD containers called jails that are simple to install. iXsystems refers to these plugins as “Network Application Services”. The plugins are available across all TrueNAS® and FreeNAS products, including the new FreeNAS Mini E and XL+.

The available plugins include quality commercial and open source applications covering a range of use cases, including:

- Backup (Asigra)
- Collaboration (NextCloud)
- DevOps (GitLab)
- Entertainment (Plex)
- Hybrid cloud media management (Iconik)
- Security (ClamAV)
- Surveillance video (ZoneMinder)

FreeNAS Mini Addresses Many Use Cases

The FreeNAS Mini XL+ and Mini E expand the range of use cases for the FreeNAS product line.

Remote, branch or home office. The FreeNAS Mini creates value for any business that needs professional-grade storage. It will be especially appealing to organizations that need to provide reliable storage across multiple locations. The Mini’s combination of a dedicated management port, IPMI, and [TrueCommand](#) management software enables comprehensive remote monitoring and management of multiple Minis.

FreeNAS Mini support for S3 object storage includes bidirectional file sync with popular cloud storage services and private S3 storage. This enables low-latency local file access with off-site data protection for home and branch offices.

Organizations can also deploy and manage FreeNAS systems at the edge and use TrueNAS systems where enterprise-class support and HA are required. Indeed, iXsystems has many clients that deploy both TrueNAS and FreeNAS. In doing so, they gain the benefit of a single storage operating environment across all their locations, all of which can be managed centrally via TrueCommand.

Managed Service Provider. TrueCommand and IPMI also enable managed service providers (MSPs) to cost-effectively manage a whole fleet of FreeNAS or TrueNAS systems across their entire client base. TrueCommand enables role-based access controls, allowing MSPs to assign systems into teams broken down by separate clients and admins..

Bulk data transfer. FreeNAS provides robust replication options, but sometimes the fastest way to move large amounts of data is to physically ship it from site to site. Customers can use the Mini XL+ to rapidly ingest, store, and transfer over 70 TB of data.

Convenient Purchase of Preconfigured or Custom Configurations

iXsystems has increased the appeal of the FreeNAS Mini by offering multiple self-service purchasing options. It offers a straightforward [online ordering tool](#) that allows the purchaser to configure and purchase any of the FreeNAS Mini products directly from iXsystems. iXsystems also makes preconfigured systems available for rapid ordering and delivery via Amazon Prime. Either method enables purchase with a minimal amount of fuss and a maximum amount of confidence.

Thoughtfully Committed to Expanding the Reach of Open Source Storage

Individuals and businesses that purchase the new FreeNAS Mini

XL+ or Mini E are doing more than simply acquiring high-quality storage systems for themselves. They are also supporting the ongoing development of Open Source projects such as FreeBSD and OpenZFS.

iXsystems has decades of expertise in system design and development of Open Source software including FreeNAS, FreeBSD, OpenZFS, and TrueOS®. Its recent advances in GUI-based management for simplified operations are making sophisticated Open Source technology more comfortable to non-technical users.

iXsystems has thoughtfully engineered the FreeNAS Mini E and XL+ for FreeNAS, the world's most widely deployed Open Source storage software. In doing so, they have created high-quality storage systems that offer much more than just NAS storage. Quietly. Affordably.

For a thorough hands-on technical review of the FreeNAS Mini XL+, see this [article](#) on ServetheHome.

Additional product information, including detailed specifications and documentation, is available on the iXsystems [FreeNAS Mini product page](#).