FlashStation FS3410

Brand: Synology
Product Code: FS3410
Availability: 10
Weight: 15.00kg
Dimensions: 88.00mm x 482.00mm x 724.00mm
Call for Price:

Short Description

Synology 24-Bay FlashStation FS3410 (Diskless)

Description

Harness all-flash storage to speed up business workflows

Storage

Supports 24 x 2.5" SATA SSDs

Throughput

Over 356,500/129,400 iSCSI 4K random read/write IOPS

Memory

16 GB DDR4 ECC RDIMM, up to 128 GB

Expandability

Optional 25/40GbE through PCIe 3.0 expansion

Powerful flash storage server

Combine all-flash performance with Synology systems' ease of use and reliability. The FS3410 is designed to tackle scenarios that require high throughput and low latency.

Built for high reliability

The FS3410 is built to keep mission-critical data and services always accessible, enabling businesses to continue to perform even when disaster strikes.

Out-of-band (OOB) management

Simplify troubleshooting by managing powered-down devices remotely and accessing critical logs through a dedicated interface.

Dual power supply

Failover cluster

Power control

System logs

System reset

Powerful networking options

The FS3410 supports a wide range of networking interfaces, protocols, and configurations, whether you need fast sequential transfer, support for simultaneous connections, or high network redundancy.
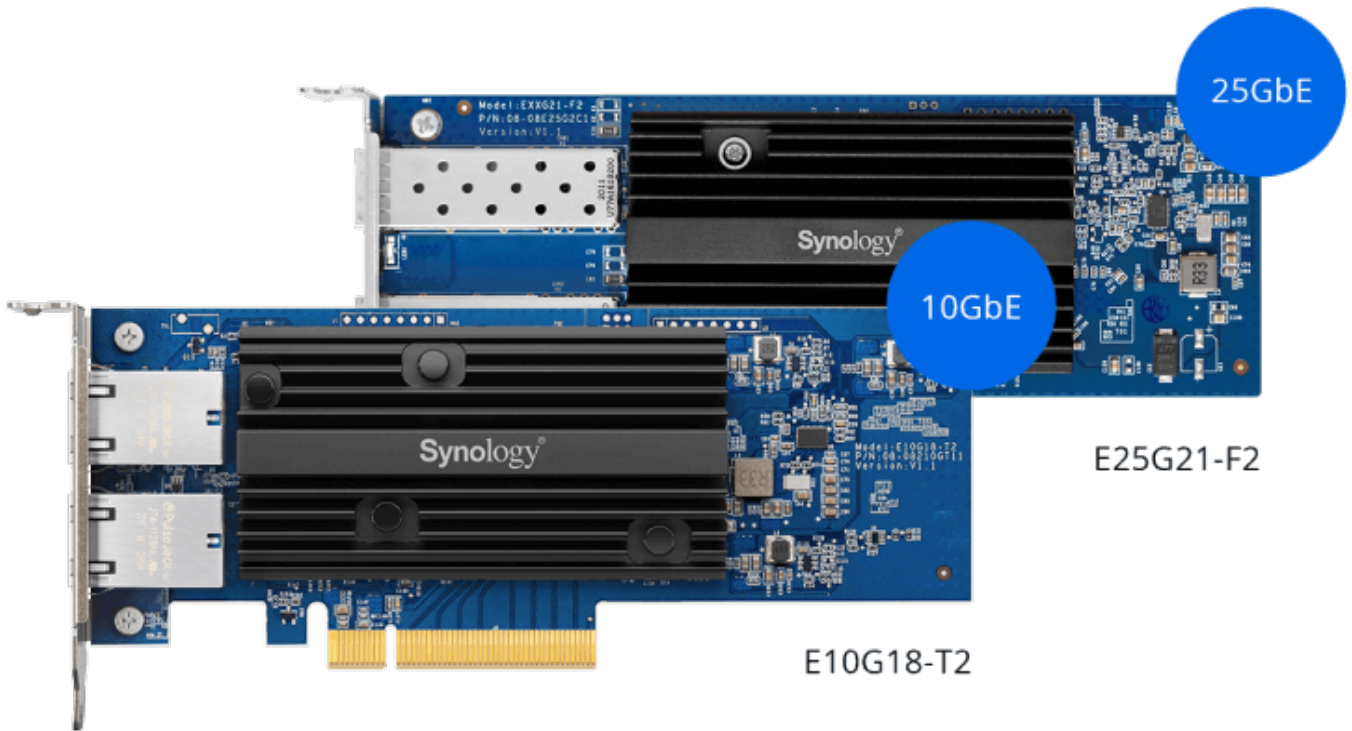
Built-in fast connectivity

Two 10GbE RJ-45 ports and four Gigabit Ethernet ports allow for rapid transfer speeds right out of the box.

Support for 10/25/40GbE

Add up to 2 x 10/25/40GbE network interface cards using the 2 x PCIe 3.0 slots to enable lightning fast networking in minutes.

Failover and network balancing

Bond multiple network interfaces with Link Aggregation to enable automatic network failover and load balancing.

25GbE

10GbE

E25G21-F2

E10G18-T2

Versatile data storage

The FS3410 fits perfectly in file server, block storage, or light application server roles that require high availability, reliability, and leading-edge storage technology.

VM storage & protection

High-performance file serving & syncing

Business application platform

VM storage & protection

Extremely fast IOPS performance combined with support for common virtualization platforms, iSCSI SAN service management, and extensive VM protection solutions make the FS3410 ideal for supporting and protecting VMs.

Complete SAN VM storage solution
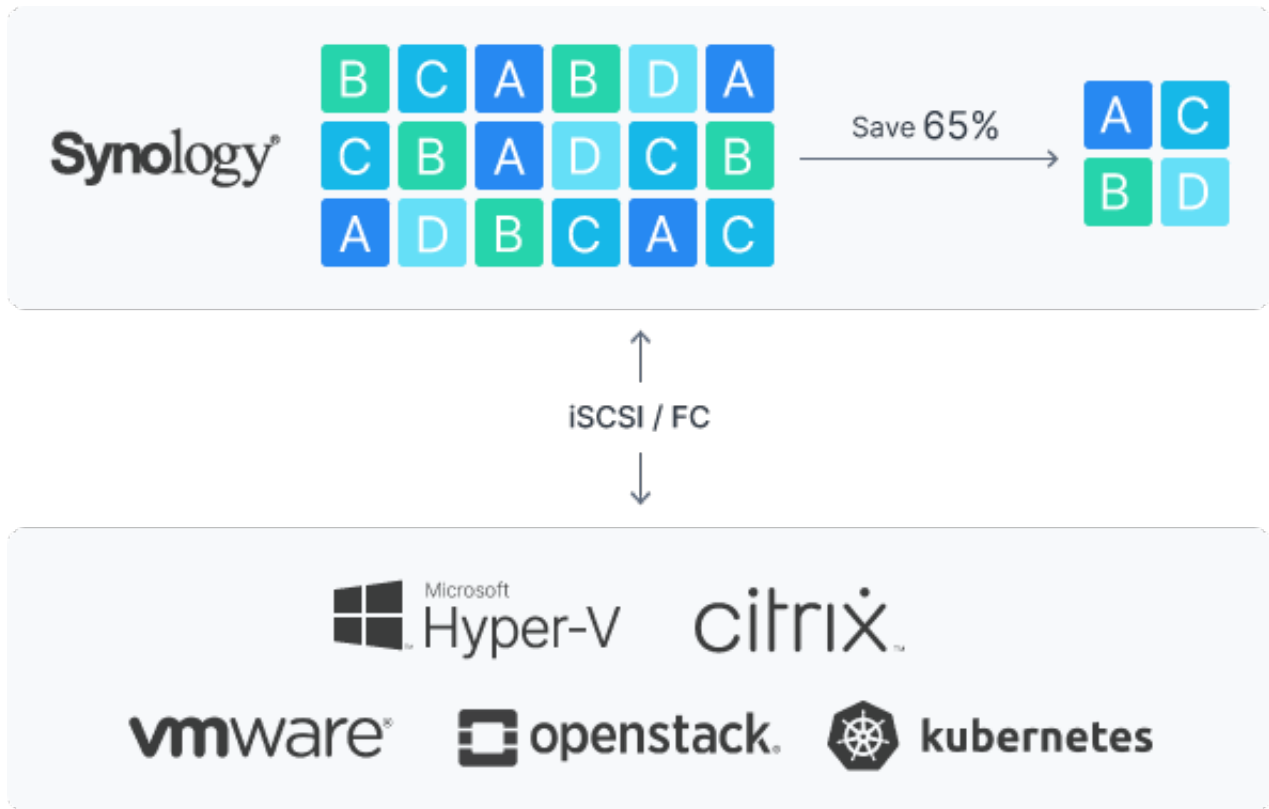
Efficient and reliable SAN VM storage

SAN management is a breeze thanks to SAN Manager, which provides LUN management, global monitoring, iSCSI configuration and disk space optimization from a single, intuitive interface.
Deploy and facilitate storage operations in various virtualization environments with full certification for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and a Kubernetes CSI driver for integrated volume management.
Synology High Availability provides automatic minute-level failover of stored VMs by pairing up two FS3410 units to create a high-availability cluster.

Maximize space efficiency

VM and container storage on all-flash arrays can take advantage of volume-wide data deduplication, which removes identical data to optimize storage use.
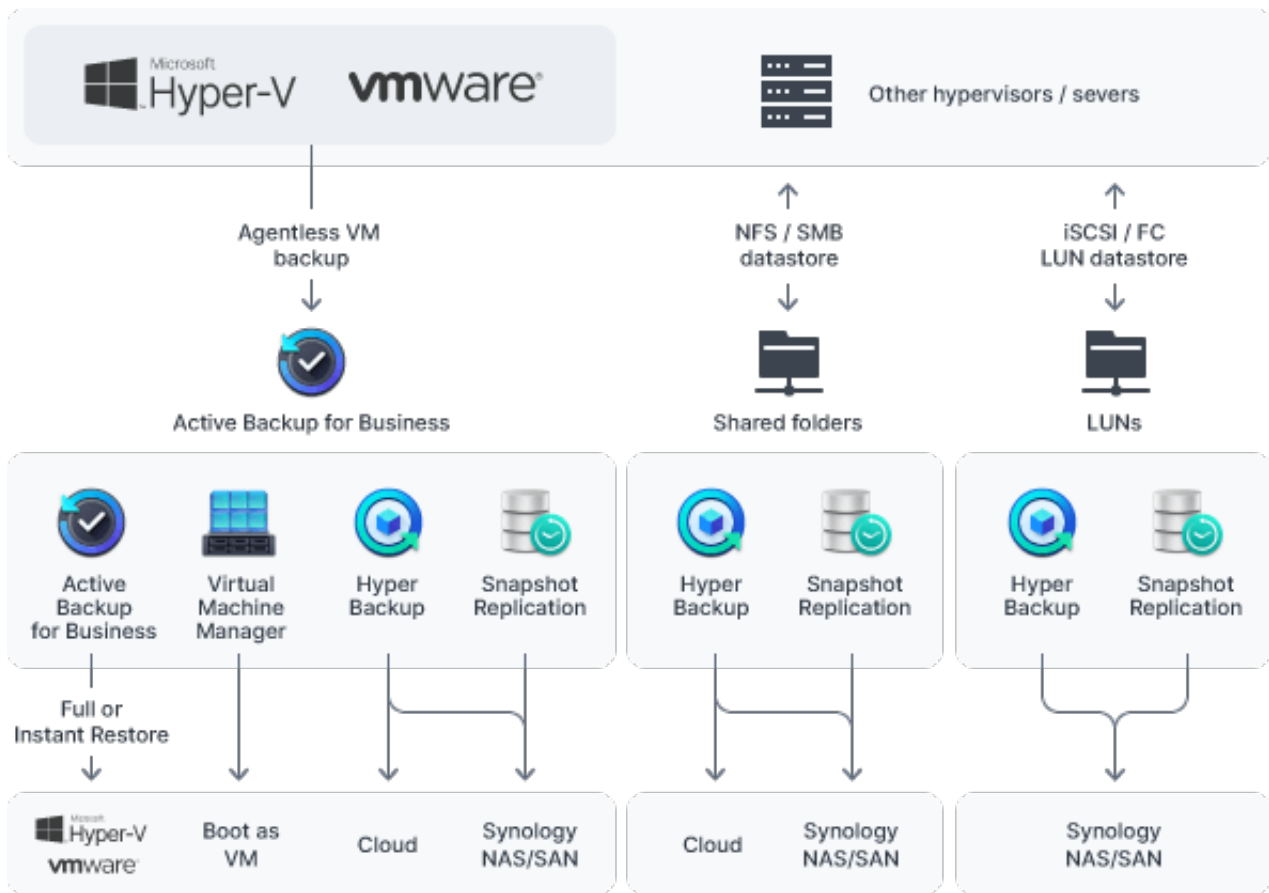
VM backup and protection

Reliable VM backups at no extra cost

Back up unlimited VMware vSphere and Microsoft Hyper-V virtual machines from physical servers using Active Backup for Business. When unexpected interruptions occur or in upgrade testing environments quickly migrate them to Virtual Machine Manager (VMM).[4]

Block-level LUN snapshots and backups

Leverage Snapshot Replication for point-in-time snapshots of LUNs and shared folders with an RPO as low as 5 minutes. Replications can be managed in vCenter Site Recovery Manager and can be directly recovered via VMware vCenter Server for a simplified recovery process.
Use Hyper Backup for full data LUN and shared folder backups to a local or remote Synology system.

Microsoft Hyper-V vmware				Other hypervisors / severs				

Agentless VM backup ↓

NFS / SMB datastore ↑ ↓

iSCSI / FC LUN datastore ↑ ↓

Active Backup for Business

Shared folders

LUNs

Active Backup for Business	Virtual Machine Manager	Hyper Backup	Snapshot Replication	Hyper Backup	Snapshot Replication	Hyper Backup	Snapshot Replication

Full or Instant Restore ↓

Microsoft Hyper-V vmware	Boot as VM	Cloud	Synology NAS/SAN	Cloud	Synology NAS/SAN	Synology NAS/SAN

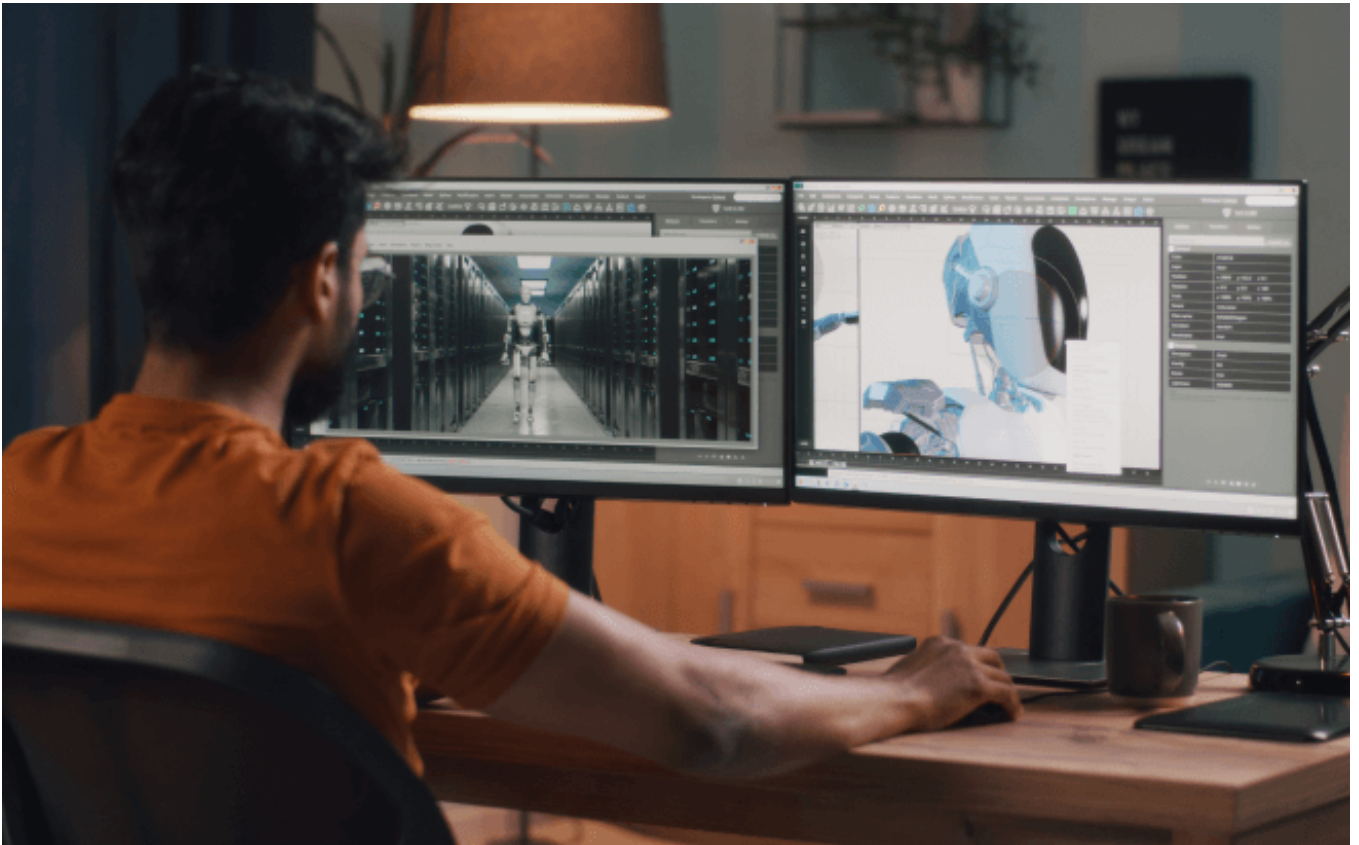# High-performance file serving & syncing

Leverage FS3410's blistering speeds to provide low-latency access to massive files. Enhance the collaborative process with powerful and user friendly cross-site syncing capabilities.

Lightning-fast access to large files

Built to handle demanding workflows

Fast network capability paired with all-flash performance means that the FS3410 is capable of taking on data and network-intensive workloads with multiple users accessing large files via SMB or NFS such as video post-production, BIM, and large-scale CAD projects.
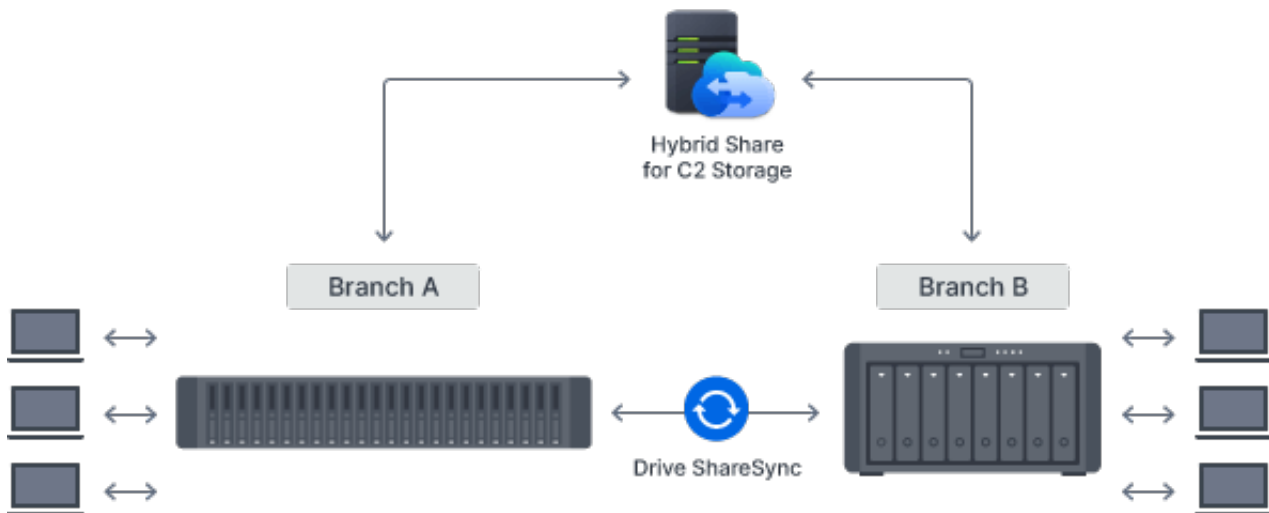
Speedy and efficient collaboration

Secure site-to-site file and folder syncing

Make sure branches have quick access to data teams use to collaborate by syncing folders one or two way using [Synology Drive ShareSync](#).

Efficient cross-site syncing through the cloud

Using [Synology Hybrid Share](#), store large sets of data on the cloud and leverage the powerful bandwidth of our data centers to stream requested files to local NAS deployed at branch offices, no matter their size.
Frequently used files are kept on the local NAS to provide access at LAN speeds, with the option to pin them manually to prevent removal from the cache.

Hybrid Share
for C2 Storage

Branch A

Branch B

Drive ShareSync

Business application platform

Host cost-efficient business solutions, either through containers, virtual machines, or Synology DiskStation Manager (DSM)'s own solutions, including a powerful free backup suite, a versatile mail server, and a surveillance VMS with transparent licensing.

Enabling effective collaboration

Synology Drive

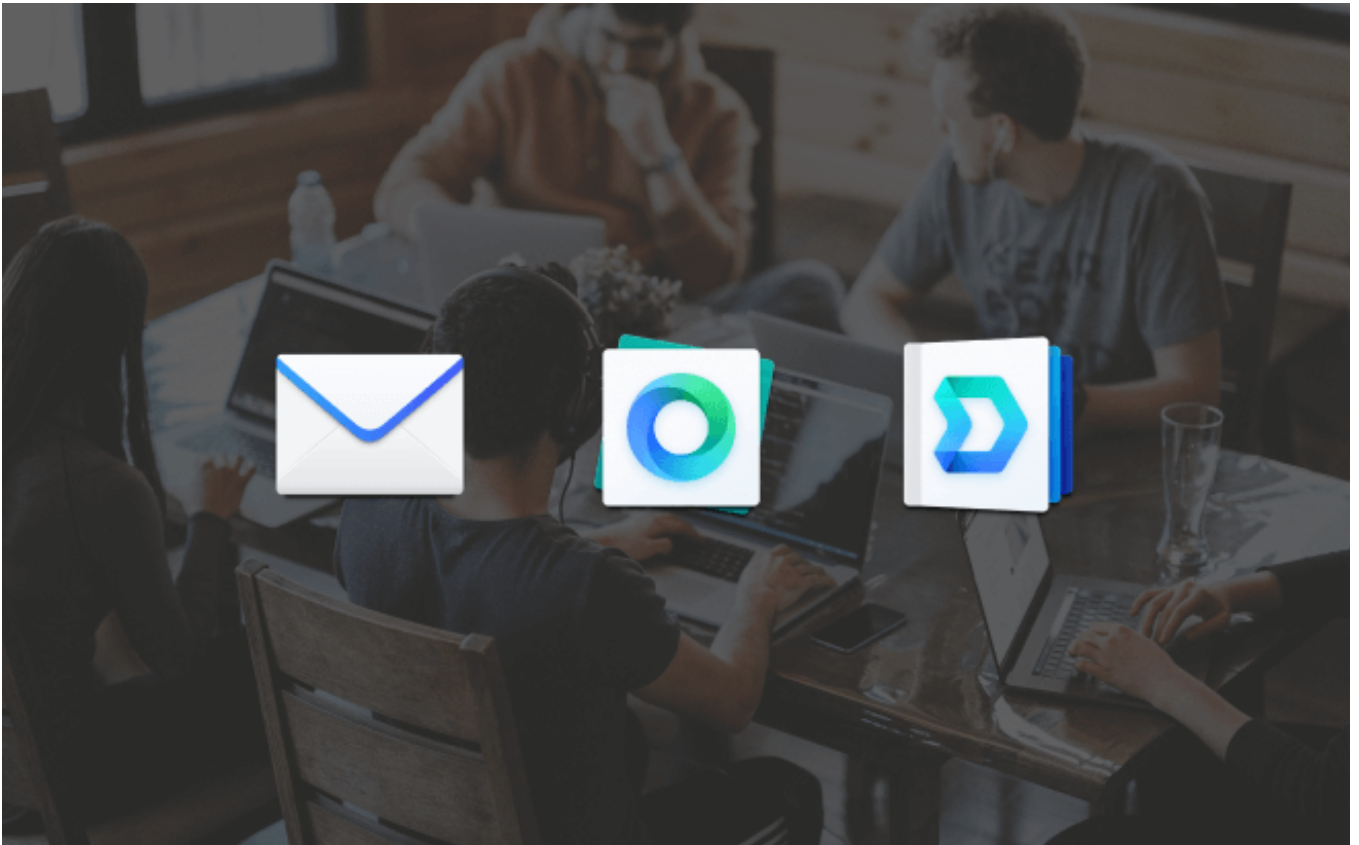Host your own private cloud on the safety of your NAS with 100% data ownership and no subscription fees.

Synology Office

Collaborate in real time on documents, spreadsheets, and slides for greater synergy and

productivity.

Synology MailPlus

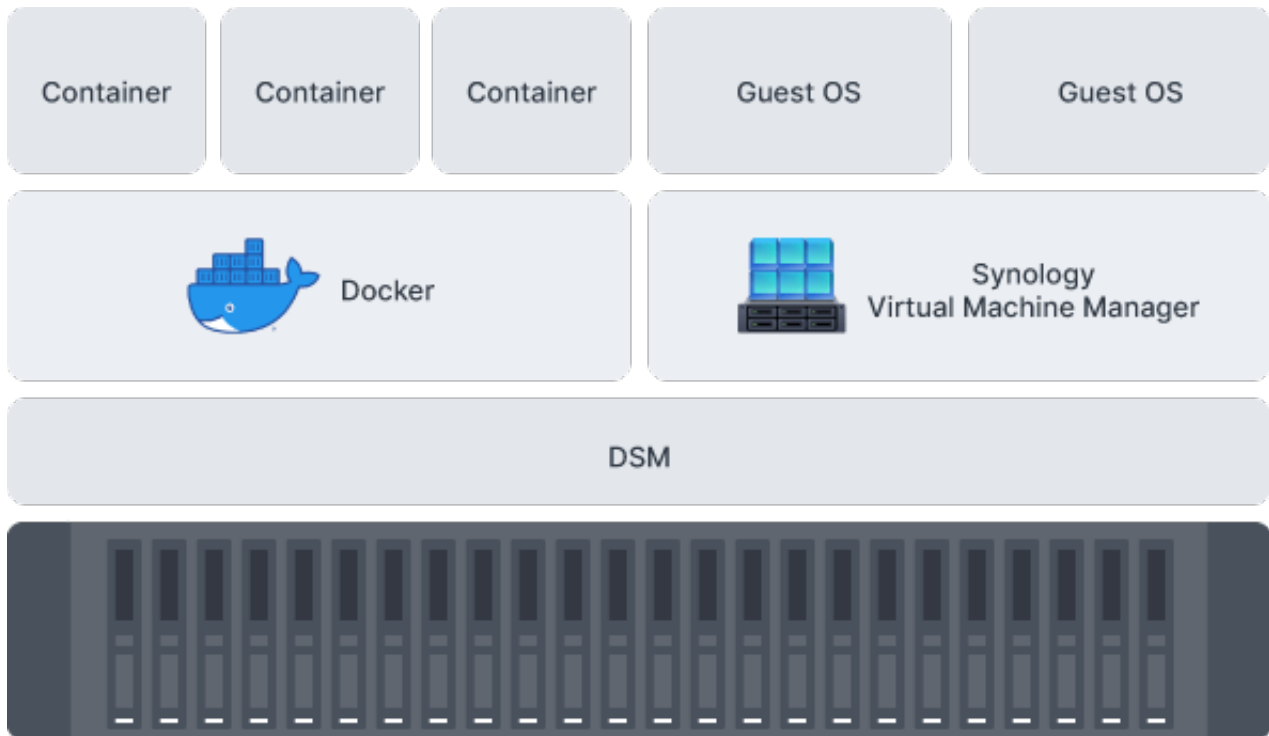Set up a private and secure mail server that can be merged with existing IT infrastructure and platforms.

Containerization and virtualization-ready

Docker

Docker on Synology DSM provides a virtualization environment that allows you to implement lightweight containers running thousands of applications.

Synology Virtual Machine Manager

Synology Virtual Machine Manager (VMM) is a hypervisor for Windows® and Linux® VMs or Virtual DSM, a virtualized version of DSM.

| Container | Container | Container | Guest OS | Guest OS |

| Docker | Synology Virtual Machine Manager |

| DSM |

Get more with DiskStation Manager

Take advantage of a host of native productivity, management, and security solutions available in the web-based Synology DSM operating system.

Data Protection

Keep your business safe from data loss and minimize service downtime.

User Management

Manage user accounts and devices throughout your business with powerful directory services.

Security

Shield your Synology NAS from the most sophisticated threats with industry-leading security solutions.

File Management

Manage, sync, and share files from multiple devices through a centralized platform.

System Administration

Manage the health of your deployments and centrally administer updates with ease.

Public Cloud Integration

Back up and synchronize data easily between public cloud accounts and your NAS.

Synology has you covered

The FS3410 is backed by Synology's 5-year limited warranty, including technical support and hardware replacement services to maximize your return on investment and ensure continued high-quality performance.

Software

DSM Specifications

Storage Management	Maximum Single Volume Size	1 PB (64 GB memory required, for RAID 6 groups only) 200 TB (32 GB memory required) 108 TB
	Maximum Internal Volume Number	256
	SSD Read/Write Cache (Determining cache size)	
	SSD TRIM	

RAID Group		
Supported RAID Type		• RAID F1 • Basic • JBOD • RAID 0 • RAID 1 • RAID 5 • RAID 6 • RAID 10
RAID Migration		• Basic to RAID 1 • Basic to RAID 5 • RAID 1 to RAID 5 • RAID 5 to RAID 6
Volume Expansion with Larger HDDs		• RAID F1 • RAID 1 • RAID 5 • RAID 6 • RAID 10
Volume Expansion by Adding a HDD		• RAID F1 • JBOD • RAID 5 • RAID 6
Global Hot Spare Supported RAID Type		• RAID F1 • RAID 1 • RAID 5 • RAID 6 • RAID 10
Notes		• Usable capacity for each volume will be lower than the maximum volume size and is dependent on the filesystem and the amount of system metadata stored. • When Peta Volume is enabled, validated services and packages are required. Please refer to this article for more information on limitations.

		• Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration. • Volumes over 108 TB require 32 GB of memory or more.
File System	Internal Drives	• Btrfs • ext4
	External Drives	• Btrfs • ext4 • ext3 • FAT • NTFS • HFS+ • exFAT
	Notes	exFAT Access can be installed for free from Package Center in DSM 7.0. In DSM 6.2 or earlier versions, exFAT Access needs to be purchased in Package Center.
File Services	File Protocol	• SMB • AFP • NFS • FTP • WebDAV • Rsync
	Maximum Concurrent SMB/AFP/FTP Connections	4,000
	Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion)	10,000
	Windows Access Control List (ACL) Integration	
	NFS Kerberos Authentication	
	Notes	• Regarding data

		concerning tests with RAM expansion, all memory slots are installed with the maximum capacity of supported RAM. • During testing, the maximum number of SSDs supported by this model is installed in a RAID 5 configuration. • The testing standard was based on the maximum number of concurrent connections supported by this model. During the testing, 25% of the connections were used to transfer files concurrently. The transfer process guaranteed that the connections were not interrupted; the minimum transfer speed was not guaranteed.
Account & Shared Folder	Maximum Local User Accounts	16,000
	Maximum Local Groups	512
	Maximum Shared Folder	512
	Maximum Shared Folder Sync Tasks	32
Hybrid Share	Maximum Hybrid Share Folders	30
Hyper Backup	Folder and Package Backup	
	Entire System Backup	
	Notes	Full-system backup requires DSM 7.2 or later.
High Availability	Synology High Availability	

[Log Center](#)	Syslog Events per Second	3,000
Virtualization	VMware ESXi 6.5 and VAAI	
	Windows Server 2022	
	Citrix Ready	
	OpenStack	
[General Specifications](#)	Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, Fibre Channel, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV
	Supported Browsers	- Chrome - Firefox - Edge - Safari
	Supported Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ???????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ???????, ???, ???, ????, ????
	Notes	For an updated list of supported browser versions, check the [DSM Technical Specifications](#).

Add-on Packages [view the complete package list](#)
[Central Management System](#)

[Synology Chat](#)	Suggested Users	500
	Notes	- Measured with simulated users, each with an average record of 20,000 messages, emojis, or stickers. The required server response time is below ten seconds. - Models with expandable memory are tested with their

		maximum supported memory.
SAN Manager	Maximum iSCSI Target Number	256
	Maximum LUN	512
	LUN Clone/Snapshot, Windows ODX	
Synology MailPlus / MailPlus Server	Free Email Accounts	5 (Additional accounts require purchase of licenses)
	Suggested Users	10,000
	Notes	- Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 pre-populated emails and receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). Learn more - The performance of the mail system will slightly decrease in high-availability mode due to data synchronization between the two servers. - Functions that were enabled in all of the tests above: anti-spam, anti-virus, DNSBL, greylist, content scan, full-text search (English only). - Models with expandable memory are tested with their maximum supported memory. To estimate

		the RAM requirement for your NAS, please [read this article]().
[Snapshot Replication]()	Maximum Snapshots per Shared Folder	1,024
	Maximum of System Snapshots	65,536
[Surveillance Station]()	Default Licenses	2 [(Additional cameras require purchase of licenses)]()
	Suggested Maximum IP Cameras and Total FPS (H.264)	1080p: 160 channels, 2800 FPS 3M: 160 channels, 1600 FPS 5M: 120 channels, 1200 FPS 4K: 80 channels, 800 FPS
	Suggested Maximum IP Cameras and Total FPS (H.265)	1080p: 200 channels, 6000 FPS 3M: 160 channels, 2800 FPS 5M: 160 channels, 1600 FPS 4K: 120 channels, 1200 FPS
	Notes	- Surveillance Station 9.1.3 or above is required to support the maximum IP cameras and FPS figures listed. - Performance figures are obtained from testing conducted with the device fully populated with drives, with their default memory configuration, and under a continuous recording setup.

		Actual system capabilities may vary based on configuration, drive performance, enabled features, and the presence of additional workloads. • Use [NVR Selector](#) to quickly find a suitable model based on your requirements. • The number of streams that can be viewed simultaneously is **twice** the suggested maximum number of cameras. For example, if the suggested maximum number of cameras for a model is 10 under H.264, 1080p, the model can support up to 20 streams of the same specification at the same time.
[Synology Drive](#)	Recommended Number of Concurrent Sync Clients	2,000 (the number of connections that can be maintained when the recommended number of hosted files was reached)
	Recommended Number of Hosted Files	50,000,000 (applies to files indexed or hosted by [Synology Drive](#). For file access through other standard protocols, refer to the File Services section above)
	Notes	• Exceeding the recommended numbers above will

not block application operations, but may result in longer response time.

- Utilizing SSD cache can significantly improve performance.
- Models with expandable memory are tested with their maximum supported memory.
- Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

[Synology Office](#)	Suggested Users Notes	12,500
		- Suggested users is derived from testing in an environment with 60% idle users (each logging in and viewing documents) and 40% active users (each executing random actions at intervals of 20 to 40 seconds) operating within documents, each document having 30 users. [Learn more](#)
- Models with expandable memory are tested with their maximum supported memory.
- Client performance may affect maximum simultaneous editing users. Client PCs used

		for testing: Intel Core i3-3220 / 8GB RAM
[Virtual Machine Manager](#)	Recommended Virtual Machine Instances	16 [(Learn more)](#)
	Recommended Virtual DSM Number [(Licenses required)](#)	16 (including 1 Free License)
	Notes	The specifications vary depending on system configuration and memory size.
[VPN Server](#)	Maximum Connections	60

Specification

NAS	
RJ-45 10GbE LAN Port	2
CPU Architecture	64-bit
CPU Core	8
CPU Frequency	2.1 (base) / 2.7 (turbo) GHz
CPU Model	Intel Xeon D-1541
CPU Quantity	1
Drive Bays	24
Form Factor (RU)	2U
Hardware Encryption Engine	Yes
Hot Swappable Drive	Yes
Maximum Memory Capacity	128 GB (32 GB x 4)
Memory	16 GB DDR4 ECC RDIMM
PCIe Expansion	2 x Gen3 x8 slots (x8 link)
Power Supply Unit / Adapter	550 watts
Redundant Power Supply	Yes
RJ-45 1GbE LAN Port	4
System Fan	80 mm x 80 mm x 4 pcs
Total Memory Slots	4
USB 3.2 Gen 1 Port	2

Product Gallery