QSAN STORAGE

Newsletter

A basic set of apps, but this desktop NAS offers high capacity good performance, and valuable data protection.

SMBs that want a desktop NAS with a focus on data protection will find QSAN's XCubeNAS 5008T has plenty to offer. It may be one of QSAN's entry-level models, but it runs exactly the same QSM software as its bigger brothers, which is based on a ZOL (ZFS on Linux) architecture.

The upshot is the appliance offers a range of enterprise-class features including unlimited snapshots, data deduplication, block-level replication and intelligent real-time data tiering. Whereas some competitors have only recently introduced support for WORM (write once read many) , QSM has always offered this, and lets you apply one of three NAS share policies to protect data from tampering.

This 9-bay appliance is solidly built and the ninth bay is secreted behind a small side cover. Inside is a removable carrier for an SSD that can be used for hybrid read and write caching or as a read cache for the deduplication service.

Two SODIMM slots are also located behind the cover with the base 8GB of DDR4 memory upgradable to 32GB. On the other side of the chassis is a PCIe expansion slot that only supports QSAN's 10GbE and Thunderbolt 3 adapters. For testing, QSAN provided its optional dual-port 10GbE SFP+ card, which costs £250.

Installation is swift. We loaded four 16TB Seagate Iron Wolf Pro NAS drives and used the quick start wizard to load the latest QSM 3.3 software and create a RAID5 storage pool. RAID-Z3 support means you can create a triple-drive redundant pool for more protection.

"The dual-core 2.9GHz Celeron G3930 CPU may be quite old but it's capable of delivering surprisingly good performance."

A NAS share mapped over 10GbE to a Dell EMC T640 Xeon Scalable Windows server returned high Iometer read and write speeds of 9.3Gbits/sec and 9.2Gbits/ sec, while copies of a 25GB file averaged 7Gbits/sec and 3.6Gbits/sec.

It handled our IP SAN tests well, with a 500GB iSCSI target registering high 9.2Gbits/sec read rates and 8.2Gbits/sec writes. Ramping up the pressure with a dual 10GbE MPIO link to the target saw speeds increase to 13.2Gbits/sec and 10Gbits/sec, but in both cases, CPU use peaked at 98%.

QSAN QSM software provides plenty of data backup features

The tidy QSM web console makes light work of storage management, but apps are in short supply. Only ten are provided, but they cover all major requirements, including backup hardware monitoring, cloud syncing, file and media management, VPNs, antivirus, MariaDB SQL databases, web services, and virtualization .

The Hypervisor Manager app can host just about any OS although the dual-core CPU and 8GB of memory realistically limit this to one VM. It's easy to use, though; we created a virtual switch using the second of the appliance's four-gigabit ports and had a Windows Server 2022 VM ready in 15 minutes. NAS and iSCSI LUN snapshot schedules are handled by the Backup app and run as often as every five minutes. It can manage Rsync backup to any compliant appliance and the XMirror service syncs data between two XCubeNAS appliances.

The Backup app also secures data to Alibaba Cloud OSS, Amazon S3 and HiCloud cloud storage, and the Cloud Sync app supports Dropbox, OneDrive, and Google Drive. Workstations can be backed up to the appliance as QSAN includes its free Acronis-powered XReplicator software.

The XN5008T is a reasonably priced 9-bay desktop appliance, though the basic CPU does have some limitations and it can't match Qnap and Synology for app choices. That said, **it delivers good 10GbE performance and offers an impressive range of business quality data-protection features.**

FINAL SCORE: ★★★★☆   Product Specification Detail