Asustor AS1004T
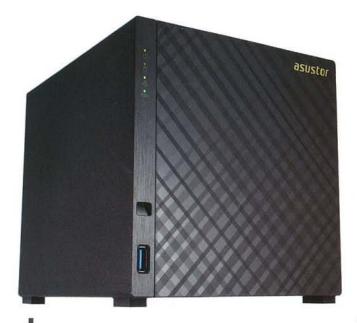**IS NEWER ALWAYS BETTER?**

THE LATEST NAS from the Asustor's labs, the AS1004T leverages the latest hardware to gain an edge over older models. Just on the market, it's not as cheap as some of the competition, but does offer an excellent range of features and software.

The NAS is diskless, but supports up to 32TB with RAID 0, 1, 5, 6 10 and JBOD. It's got dual Gigabit LAN connections, with aggregation and failover support, plus two USB 3.0 ports — one on the front.

Higher-end CPUs in a NAS are a mixed bag. While needed for some tasks, such as transcoding or faster access with encryption, for day-to-day use, a lesser option can suffice. The AS1004T uses the very new Marvell ARMADA 385 — a dual core 1GHz processor — along with 512MB of RAM. It's a budget option, but is still powerful enough for great transfer speeds — even when under other load. The CPU only uses 3.5W, and while efficiency is nice, the drives used have a bigger impact on your power bill.

The ASUSTOR NAS is tool-less and the drive installation and setup is simple. It uses a large 120mm cooling fan, so remains quiet under load. The NAS itself can do the usual media serving, backups, remote and cloud access, as well as run third-party apps. ASUSTOR have a big range of smartphone apps for remote management, cloud access, media streaming and more. While all are solid, it feels somewhat clunky to switch between apps to change from streaming video to audio.

Synology DS416
DOES YOUR OFFICE NEED AN UPGRADE?

THE LATEST HIGHER performance NAS from the minds of Synology Boffins, the DS416 is aimed at business and the more demanding home users. It uses an Annapurna Labs Alpine AL-212 CPU, which is a dual core processor running at 1.4GHz. The NAS also has 1GB of DDR3, though 2GB is pretty common in this price bracket.

The NAS can handle up to 32GB of 2.5- and 3.5-inch drives in hot swappable bays, configured in RAID 0, 1, 5, 6 ,10 and JBOD, as well as some Synology hybrid options. Network connectivity is courtesy of dual Gigabit LAN ports, which support link aggregation for higher speeds and failover support for redundancy. It also has three USB 3.0 ports (one on the front) that can be used to add extra storage or a wireless dongle.

Installing drives and getting up and running is dead simple, and the Synology DiskStation Manager is top notch. Transfer speeds are better than most, and the NAS has a hardware encryption engine that improves performance when using secured volumes. The DS416 can do the usual streaming, online sharing and backups, as well as run extra apps on the NAS itself, such as a personal cloud or IP camera recording.

Smartphones and tablets are supported through an array of excellent apps, if somewhat an excess in number.
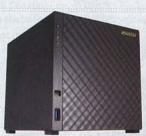
While the Synology NAS doesn't have extra media functionality such as HDMI output or transcoding, the superior OS and apps are worth the extra cost for business focused use.

ASUSTOR AS1004T
$415
www.asustor.com
CRITICAL SPECS
Bays: 4 x 3.5-inch, CPU: Armada 385 1GHz, RAM: 512MB DDR3, HDD: Up to 32TB, LAN: 2 x Gigabit, USB: 2 x USB 3.0

SYNOLOGY DS416
$585
www.synology.com
CRITICAL SPECS
Bays: 4 x 2.5/3.5-inch, CPU: Alpine AL-212, RAM: 1GB DDR3, HDD: Up to 32TB, LAN: 2 x Gigabit, USB: 3 x USB 3.0