

Get Attached

How Network-Attached Storage Can Save Time, Money—and Sleep

Q: What do hard drive failures, operating system worms, and laptop thieves have in common?

A: The potential to rob your business of important data if its storage is directly attached to user devices and servers.

“If the server goes down, your data goes down with it,” says Steve Hilton, a vice president at [Yankee Group](#).

Now is a good time to take advantage of the safety, reliability, and simplicity of new network-attached storage (NAS) solutions designed for the small business. Priced from about \$500 to \$1000, they quickly pay for themselves, for example, by preventing the data loss from just one hard drive failure that would take 20 professional hours to rectify.

“The new desktop NAS solutions also are easier to maintain, because they accept commonly available replacement parts such as hard drives and memory,” says Hilton. “And they don’t use up premium space in wiring closets like rack-mount solutions do.”

Easy Does It

NAS centralizes the storage of data from multiple application servers, whether they are using Windows, Mac, Linux, or UNIX. Centralization makes it easier to find, audit, move, or archive large data sets. And it lets team members in any location easily share and collaborate on files.

How is NAS safer? Most NAS solutions accommodate two or more hard drives that you can assign to a redundant array of independent disks (RAID). If one hard drive in an array fails, the others can still serve up the information. If your NAS has four hard drives, “assign all four drives to the RAID for the most redundancy, or assign two for faster performance,” advises Samir Patel, a manager for Electronics Design Group, Inc., a Cisco® Select Certified Partner.

Find Your Ideal Feature Set

When evaluating NAS solutions, look for the capabilities that are most important to your business:

- **Automate backups:** Automation ensures that data is stored, saves staff time, and may save IT travel time. “Businesses can also set up NAS to provide real-time back ups of Windows, Mac, and Linux desktops and laptops,” says Patel. This avoids the double dose of pain if an employee whose laptop was stolen had neglected to back up. Some NAS solutions, such as the [Cisco Small Business Network Storage Systems NSS2000 and NSS3000](#), integrate with Cisco Small Business Continuous Data Protection software to back up your most important files the moment they are saved.
- **Control file access:** Some NAS solutions enable you to control access to particular files by user or group. If you use Active Directory, look for a solution that integrates with it. Some solutions also support VLANs so that you can keep each department’s data separate.

- **Support multiple concurrent file users:** Performance shouldn't slow down appreciably as more users access stored files. The two Cisco solutions, for example, support up to 15 concurrent connections.
- **Help ensure regulatory compliance:** On-disk encryption of stored data prevents people who steal a NAS unit from viewing the stored information. It also satisfies audits for regulations such as [HIPAA](#), [SOX](#), and [PCI DSS](#). If you plan to use on-disk encryption, check the performance metrics for this option.
- **Avoid downtime:** Solutions with hot-swappable storage bays let you replace hard drives while the remaining drives in the RAID continue serving up data. Other features that minimize downtime include dual Gigabit Ethernet ports, hard disk drive failure detection, failed drive locator, dual firmware images, and redundant power supplies.
- **Support workgroup collaboration:** Look for a NAS solution that automatically tags and records updated files even if the user forgets to change the filename.
- **Archive surveillance video:** Each Cisco NSS2000 or NSS3000 solution can record live video and audio from up to 16 [Cisco Small Business video surveillance cameras](#). You can remotely monitor your business through a VPN; some cameras will also notify you whenever they detect motion. Keep in mind that cameras that use Power over Ethernet (PoE) can be deployed anywhere, without the expense of running electrical wiring.

You'll probably want your network reseller partner to help you install the NAS solution. "Setup requires familiarity with network sharing protocols and authentication protocols," says Sean Pejic, network engineer with Memory Lane Computers Electronics, Ltd., a Cisco Select Certified Partner. "After that, it's easy enough to log in to add or disable network shares."

Sleep Tight

Wondering whether your business data will be there in the morning? That's great if you like the aerobic benefits of tossing and turning.

If you prefer sound sleep, it's time to look into network-attached storage.

Next Steps

Ask a [Cisco Partner](#) to find the budget-friendly network-attached storage that's right for your business.

Learn more about the [Cisco Small Business Network Storage System \(NSS\) solutions](#).

Learn more about [Cisco Small Business Continuous Data Protection for files](#) and [Cisco Small Business video surveillance cameras](#)

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