

Smart drives can give you a desktop to go

by Jonathan Sidener

Until recently, USB flash storage units - often called thumb or key-fob drives - were like the lead character in the movie "Rain Man": lots of memory, but not really smart.

Like Dustin Hoffman's character, who stored baseball statistics and much of the phone book in his head, thumb drives were repositories for files and not much more.

A new generation of drives changes that. Called smart drives, these little USB devices sport a variety of skills. Some read fingerprints and will reveal their files only to their rightful owner. Others automatically encrypt everything stored inside so data can't be stolen if the drive is lost. Some have little displays to show how much available storage remains. And at least one includes a system to automatically back up the drive's data online.

SMART DRIVES - The most common smart drives serve as portable desktops that can store your desktop applications, making any computer familiar work space, complete with contact information, instant-messaging buddy lists and browser favorites. CNS Photo Illustration by Jacie Landeros. The most common smart drives serve as portable desktops. Store your home or work desktop applications on the drive and any computer becomes a familiar work space, complete with contact information, instant-messaging buddy lists and browser favorites.

"Originally, USB drives were just for backing up and transfer of data," said Steffen Hellmold, president of the USB Flash Drive Alliance. "Manufacturers have begun to add proprietary applications to add value."

While a traditional flash drive will allow proud parents to carry around photos of their children, they might struggle to display the photos on the grandparents' computer. A smart drive would allow them to create a slide show using familiar software and then show the slides on the computers of friends and relatives using the same software.

"Smart drives allow you to take your applications on the go," Hellmold said.

Initially, most or all smart drives are designed for Windows PCs, although there are some reports of work-arounds to enable the devices to work on Mac OS X.

There are two main technologies for smart drives. One, marketed under the name U3, requires a specialized

drive with modified hardware. The U3 format is backed by memory maker SanDisk and its subsidiary M-Systems.

The U3 backers offer a number of programs, free and for sale, for the format on the Web site www.U3.com.

The other format uses the Ceedo software platform (www.ceedo.com), which can run on any USB drive.

Esther Kruijver, a U3 vice president, said manufacturers are able to produce smart drives at roughly the same cost as traditional USB drives. As a result, the smart drives cost consumers little or no more than the regular drives, she said.

Kruijver said many people buy U3 drives and don't realize they're smart drives until they plug them into the computer and the U3 software launches.

She said the devices are catching on the fastest with people who frequently work on computers at various locations.

"It's popular with students and soccer moms," Kruijver said. "Students in particular are likely to work on more than one computer every day. With a smart drive, they take their entire work space along in a very portable way."

Smart drives typically require a password to protect their data. In addition, they leave no traces on public computers such as a library or Internet cafe.

The Ceedo drive stores all temporary files from a computing session in its memory, so they can't be left behind. The U3 system erases all temporary files when the drive is ejected.

It's important to include authentication technology such as a password, Kruijver said.

"If you lose one - and they are such small devices - password protection means no one else can get your files," she said.

Some companies have gone beyond passwords for smart-drive security. Sony's Micro Vault Fingerprint Access USB Flash Drive uses a biometric fingerprint reader to verify a user's identity. Once the identity is verified, the drive automatically enters the user's log-in and passwords on Web sites.

While most smart drives are add-ons to increase sales, Mighty Key from Atomynet (www.mightykey.com) uses the smart features as the basis for a subscription service. The smart drive encrypts everything sent from the computer to the Internet, whether through a wired or wireless connection.

Mighty Key also allows subscribers to back up all files on online servers. To retrieve information from the remote database, users must connect the drive and then sign in with a password. The drive will also encrypt files on a computer, which can then be viewed only when the drive is connected.

Files stored on the drive are encrypted to provide security if the drive is lost.

Mighty Key subscriptions start at \$5.95 a month.

For some workers, smart drives might eliminate the need to lug along a laptop computer. But many business travelers want a laptop so they can work during a flight.

"It's not designed to replace the computer," Kruijver said. "But for the business traveler who runs out of battery power, a smart drive used in the hotel-lobby computer could be valuable."

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