

Small Office Technology

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File server in a box

EssentialServer runs on Linux, provides RAID drives, CD-RW, and tape backup

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By Sean Carruthers

Don't let the company name—Merlin Software Technologies—fool you; the Merlin EssentialServer is a piece of hardware, and a very nice one at that. The EssentialServer is a network storage device designed to be easy to set up and use.

Merlin EssentialServer



From: Merlin Software Technologies

www.merlinsofttech.com

Estimated prices:

Model	Capacity	Licence	Redundancy	Price
ES80D	80 GB	75-client	RAID 0/1	\$4,841
ES160D	160 GB	75-client	RAID 0/1	\$5,899
ES320D	320 GB	unlimited	RAID 0/5	\$9,174
ES240R*	240 GB	100-client	RAID 0/1	\$8,469
ES960R*	960 GB	unlimited	RAID 0/1/5	\$21,540

*Rack models

The desktop version of the server is roughly cube-shaped—a silver box with a black frame. Its front panel has an LCD screen that displays the status of the server and acts as the interface for setup and configuration if you don't want to connect it to a monitor. The rear panel has a number of connectors that would be typical on a PC: VGA, keyboard and mouse, two USB ports, a 10/100 Ethernet jack, audio inputs/outputs, a serial port, and a printer port. There are also three spots on the back for expansion modules (like PCI slots on PCs).

The EssentialServer is available in several desktop versions. All come with a pair of hard drives inside the case, for a total capacity of 80, 160, or 320 GB. The top of the box

has a black panel that lifts to reveal a CD-RW drive and built-in Ecrix VXA tape drive. The included CD-RW drive has maximum write, rewrite, and read speeds of 12X8X32, and the tape drive can handle up to 66 GB of data.

The processor in our review unit was an 667 MHz Intel Celeron and it shipped with 128 MB RAM—both of these can be upgraded (and are likely to change when new models of the EssentialServer are released).

The EssentialServer only comes with a tiny booklet for setup. That should not be an obstacle, because the unit is extremely easy to set up—for anyone who knows anything about networking. The first time you boot it up, it asks you to create an Administrator password, which you type in twice and away you go.

It then asks for a few networking numbers (the IP of the box, the netmask, and your gateway). The menus appear on the LCD screen on the front of the box, but if you plug a monitor into the VGA port, the information will also appear there.

The server runs Debian GNU/Linux, but it's set up so you'll never need to use it if you don't want to get your hands dirty with Linux command line. Most of the configuration can be done using the keyboard and the LCD screen on the front of the box. If you are familiar with Linux command line, you can log directly onto the box, add programs and more, though Merlin doesn't really recommend customizing your box. If you can't resist the urge to tinker, don't worry: the package includes a restore CD that will reset the server to its original factory state (but be forewarned—it will also erase all the data you've saved to the hard drive).

At present, the EssentialServer provides storage and backup functionality only. Because it uses Linux as its OS, you can install your own email, FTP, or DHCP server software. Merlin Software is already looking into these other options though, and when they become available as part of Merlin's standard OS load for the system, present users should be able to upgrade their EssentialServer fairly easily and for a fairly modest fee (if not for free).

Out of the box, our EssentialServer model was set up with a mirrored-drive RAID configuration, for maximum data redundancy. If you're interested in striping the drives instead, you can use the restore CD to reconfigure the box, but you should do this right at the beginning or make sure you back up your files first, because it's a destructive process (i.e., any data on the hard drive will be lost). The ES80D and ES160D desktop models ship with RAID 0/1, and the higher-capacity ES320D comes with RAID 0/5.

The administrator can set up a number of shares for users connected to the box, whether Windows or Mac OS-based (in addition to TCP/IP and NetBEUI, the EssentialServer can also communicate using Samba and AppleTalk). The system administrator can set up an application called PerfectCOPY on individual users' workstations, and this application will automatically back up selected directories to the server. All backup is initiated on the client side instead of server side, for greater security. The EssentialServer comes with an unlimited licence for client access to the box, and a varying size of licences for copies of the PerfectCOPY client (75, 100, or unlimited).

Rack it up



If you have a server rack, you may want to opt for one of the rack-mounted versions instead. These are essentially the same as the desktop units, and include the CD-RW drive and integrated tape drive. The ES240R model ships with 240 GB hard disk space and RAID 0/1, as well as a 100-copy PerfectCOPY Client licence. If you really want a lot of storage space, you can opt for the 960 GB ES960R, which comes with RAID 0/1/5 and an unlimited PerfectCOPY Client licence.

All EssentialServer products come with a two-year warranty. □