

## SPECIAL REPORT

### Windows 95

#### MIGRATION

# Upgrading to Win95 sounds great, but what is it going to cost?

By Alan Radding

**W**HEN IT COMES TO PROJECTING how much IS departments need to set aside in their budgets, the only thing that analysts and consultants agree on is this: Migrating users to Windows 95 won't be cheap. The bidding begins at \$1,465 per user for an average software-only upgrade. As the saying goes, "Your mileage may vary." These estimates make a number of assumptions, only a few of which may apply to your organization.

Upgrading entails a slew of costs, such as the necessary hardware upgrades to make Windows 95 run properly, the staff time required to go from workstation to workstation to perform the installation and hardware upgrades, upgrading applications to take full advantage of Windows 95, and training the support staff and help desk.

Based on a recent study by Gartner Group Inc., the cost of migrating a single user to Windows 95 comes to \$1,465, including three application upgrades and no hardware upgrade (see chart at right). Assuming some economies of scale, the Gartner Group calculates the cost of migrating 1,200 users at \$1,515,980.

"This is not a simple upgrade," says Carter Lusher, vice president and research director at the Gartner Group. "Unlike moving from Windows 3.0 to 3.1, Windows 95 touches everything to do with the system."

"The cost doesn't surprise me. We're expecting it to be substantial," says Glen Jurmann, team leader in the office technology group at Baxter Healthcare, in Deerfield, Ill. Planning time alone will be substantial, he says. "When we get to the point where we can take advantage of Win95, [however,] it will reduce our costs."

The obvious costs fall into several areas: hardware and software upgrades; training; and the installation of Windows 95 itself. The less-obvious costs, however, will catch many organizations by surprise. They are most likely to underestimate the costs or overlook them altogether in areas such as increased initial help desk expenses, planning, sales and marketing, and management of the upgrade process, according to Glenn Miller, vice president of information strategy and research at reseller Entex Information Services Inc., in Ryebrook, N.Y.

**THE REAL WORLD.** If you read Microsoft Corp.'s published hardware requirements for Windows 95, the upgrade looks modest. As specified in the documentation, the minimum Windows 95 system includes a 20-MHz

386DX processor, 4MB of RAM (8MB recommended), VGA (Super VGA recommended), 20MB of free disk space for a full installation (10MB for a compact installation), and room divided between RAM and hard disk for a swap file of at least 14MB.

Analysts and consultants unanimously scoff at these requirements. If Windows 95 is to perform well running 32-bit applications, they say a much more powerful system is needed: a 486 processor (90-MHz or faster Pentium recommended), 12MB of RAM (16MB recommended), 300MB of disk storage (500MB recommended), and Super VGA.

Hardware upgrades will cost about \$1,000 per system, plus the cost of installation, Miller estimates.

These richer system requirements significantly increase the cost of a Win95 upgrade.

#### QUICK POLL

### How big is your Windows 95 budget?

**H**ow much are you setting aside in your budget for your migration to Windows 95? If you are planning the move, please take a minute to tell us how much you plan to spend (total and per user) and your minimum hardware configuration.

Send your response to bob\_kayne@infoworld.com.

"It will cost more to upgrade an existing 386 than to just buy a new 486 machine," Miller says. But the 486-based system, which reigns as the current corporate standard for new desktop systems, won't really be sufficient when users start loading on 32-bit applications that tap the power of Windows 95, he says.

"In practical terms, Windows 95 will redefine the corporate desktop beginning in 1996," Miller says. By then, companies will be loading up on Windows 95 suites that require almost twice the hardware resources of today's suites, according to Miller. The new minimum corporate desktop will be a 90-MHz Pentium, he says.

"We have a whole class of PCs that will simply have to be replaced," notes Ki Wilson, senior microcomputer analyst at Stone Container Corp., in Deerfield, Ill. Like a lot of organizations, Stone Container still has users running DOS-only systems.

**TIME EQUALS MONEY.** From a software standpoint, Windows 95 will require 1 hour per desktop for installation, according to the Gartner Group. Miller believes 1 hour per installation is wishful thinking. After studying 80 corporate beta sites, he estimates that a vanilla installation will take 2 hours. If the user has crammed in extra add-on boards, devices, and special software, the Windows 95 installation will jump to 6 hours or more. Using Gartner's \$50-per-hour installation cost, a complex Windows 95 installation would cost \$300 in labor alone.

In addition, organizations will need to upgrade to 32-bit applications if they are to receive the full benefits of Windows 95. Gartner estimates upgrades

will cost about \$100 each and sets the cost of installation at \$50 per hour. Organizations will also need to upgrade 16-bit applications that are incompatible with Windows 95. (See "Mainstream apps face Win95 conflicts," Aug. 7, page 25.)

**HELP DESK HIT.** The costs don't stop, however, with the hardware and software upgrades. The organization's help desk workload will double, at least initially.

"The average call length for Windows 95 will be two times that of Windows," estimates Bob Johnson, director of software services research at Dataquest Inc., in Westboro, Mass.

Microsoft counters that help desk support costs will drop over time, because Win95 is easier to use and more stable than Windows 3.1.

Although some analysts agree, Johnson isn't convinced.

"We think there will be more users doing more things. For instance, Microsoft Network will open a whole new area of support demands," Johnson says.

Microsoft also is counting on electronic software distribution and support for plug-and-play hardware to reduce the load on the support staff, but most users and analysts don't expect to see the load lessen until after the migration to Windows 95 and plug-and-play-compliant systems.

"What if plug and play doesn't work?" John-

son asks. The full payoff from plug and play comes down the road, after organizations have replaced an entire generation of systems, peripherals, and components with plug-and-play-compatible devices.

"Plug and play will make life easier for the next upgrade, not this one," Miller says.

Similarly, electronic software distribution is expected to pay off the next time around but won't help with Windows 95.

"If the industry gets this right, this may be the last labor-intensive rollout that we have to do," Miller says.

Training represents another significant expense, especially if organizations want to take advantage of Windows 95, Johnson says. The Gartner Group estimates 7 hours for training at \$50 per hour (\$350). Of that, Lusher suggests that end-users will need 1 to 2 hours, and help desk and

general IS people will need 4 to 6 hours. There will also be expenses associated with detailed education in OS training, as well as support, networking, and application development.

**PLANNING COSTS, TOO.** Miller recommends that, in addition to planning for installation costs, IS organizations invest time in planning and preparing the Windows 95 migration, changing policies and procedures, streamlining processes, and, most importantly, selling and marketing their involvement in the Windows 95 rollout.

"Users are ready to buy Windows 95 and run with it. IS will have to sell users on letting it manage the migration," Miller says.

Planning the rollout of Windows 95 requires a complete PC hardware and software asset inventory and hashing out who gets it first. The PC asset inventory itself involves significant labor as staff visit each machine and record the hardware and software configurations. The organization may also want to set up a Windows 95 testing laboratory, Miller adds. All this costs money.

Down the road, Windows 95 is expected to save organizations money, according to analysts. Plug and Play and electronic software distribution, as well as increased ease of use and stability, should add up to reduced support costs. Over five years, the Gartner Group projects the cost of ownership for Windows 95 to be about 13 percent less than the cost for Windows 3.1, amounting to savings of more than \$1,000 per user each year. For most organizations, Windows 95 will pay for itself within two years, according to Gartner.

Alan Radding is a Newton, Mass.-based freelance writer specializing in technology.

#### Gartner rings up \$1,465 Gartner Group Inc.'s estimate of the per-user cost of the software-only upgrade

Windows 95 upgrade	\$50
Cost of purchasing	\$35
Windows 95 installation	\$50
Training of IS and end-users	\$400
Support department review	\$50
Help desk calls	\$35
Three application upgrades	\$300
Cost of purchasing upgrades	\$35
Upgrade installations	\$75
End-user training for upgrades	\$350
Upgrade support costs	\$50
Help desk upgrade calls	\$35
<b>Total</b>	<b>\$1,465</b>

#### Adding it all up

Reseller Entex Information Services Inc. projected the costs for a migration of a department of 800 to 1,000 desktops

Hardware upgrades	Per system: \$1,000 to \$2,000
Software upgrades	
Per user (over a three-year period)	\$100 to \$500
Per user to replace incompatible software	\$75 to \$100
Testing lab	\$25,000 to \$50,000*
Management planning	\$10,000 to \$25,000
Asset inventory	Per desktop: \$50 to \$150
Training	
End-users	Two hours per user: \$100
PC support technicians	16 to 20 hours: \$1,000 to \$3,000
LAN support technicians	Four to six weeks: \$15,000 to \$25,000
Developers	\$40,000
Rollout labor	
Installation	Average desktop: two hours Complex desktop: four hours
Changes to department infrastructure	\$15,000 to \$50,000
Sales and marketing to end-users	\$20,000 to \$40,000

\*Depending on the environment.