

# NetPCs <sup>in</sup> Action <sub>at</sub> Bose Corporation

*Breakthrough  
Manageability  
Without  
Compromise*

intel®



# The Manageability Challenge

**"People expect the best from Bose."**

When Madison Square Garden wanted to deliver top sound quality to every seat in the house, they turned to Bose Corporation. So did the sound engineers at the Sistine Chapel, when they needed to reduce a reverberation problem that prevented their older audio system from producing crisp clear speech and high quality music.

A privately held company founded by MIT Professor Amar Bose, Bose Corporation represents the best in speaker and sound reproduction technology. Its audio systems are found everywhere from luxury automobiles and home cinemas to the Olympic Games and the Japan National Theater.

"People expect the best from Bose," says the company's IT manager, Frank Calabrese. "We aim for excellence in everything we do, and that includes the IT department."

The corporate IT organization oversees computing services for the growing company and its 4,000 employees, including manufacturing facilities in the U.S., Mexico, Canada and Ireland.

The signs of growth – and high standards – are widespread at Bose. Bose has expanded its markets into India, China and Russia, and recently moved into a brand new, six-story office building in Framingham, Mass. The company has been adding 400-500 computers every year to accommodate its expansion and to ensure that each user has the right tools for the job.

For Calabrese's group, it's not enough to focus on holding down total cost of ownership (TCO). They also want to foster the company's ability to do business. To that end, they actively research and implement best practices. When the opportunity arose to test the Network PC (Net PC), they were quick to take advantage of it.

## Managing The Net PC

**"These are very controllable PCs."**

Bose deployed Net PCs along with Intel's LANDesk® Configuration Manager (LCM) to manage them. The LCM is an integrated hardware/ software system that enables remote operating system and application installation, as well as on-going ministration and maintenance of remote platforms. Using the LCM, IT administrators can create a master

set of configurations, and use them to upgrade and install desktop systems quickly and efficiently.

Bose is currently implementing a seven-point plan to streamline its hardware acquisition and deployment processes. They see the managed PCs having great potential to fit into this program and help reduce deployment costs. Prior to the Net PC trial, setting up a new system required having a technician visit an end-user's site with the right mix of floppies and CD-ROMs to install software, configure the machine for Internet access and email, and so forth. Not only was the user's productivity interrupted, but the technician was tied up for an hour and a half or longer for each system.

With the Net PC, IT techs can determine the software load ahead of time and have an installation script ready to go before the machine is even in house. "Once we receive the machine, we can use an LCM script to load the software before the end-user ever sees the machine," says Calabrese. "Once we've done that, we put the machine on a cart, wheel it to his desk, and he's off and running within a few minutes." The technician is on to a new task in a matter of minutes.

All in all, this deployment and redeployment flexibility "makes the Net PC very attractive," in Calabrese's words.

The Net PC can further reduce life cycle costs by simplifying the work of inventory and asset management, according to Calabrese. "Since the Net PC has a sealed case, I know it will have the same hardware when it's retired as it did when it was deployed," he comments. "If I need to retire or redeploy a Net PC, I don't have to undergo the expense of reinventorying the system just to find out how much RAM or how big a hard drive are in it."

The Net PC's compatibility with Bose's Windows\* based LAN infrastructure is another plus. "Operationally, this machine works the same as what my end-users are used to, which means it doesn't raise my training costs," Calabrese says."



## The User's Point of View

"This machine will definitely make my life easier."

Bose put its Net PCs into action in the IT department, where PC Help Desk technician Ben Kolp was one of the users. Like the other PC technicians at Framingham, Kolp supports PC users at Bose headquarters in Massachusetts and at all remote sites except Europe.

Kolp is downright enthusiastic about managing the Net PC, particularly features such as remote monitoring,

remote management and quick problem resolution. "This machine will definitely make my life easier," he says. "For starters, if a memory chip goes bad or a fan is about to die, the system alerts you, so you can do preventive maintenance and prevent downtime for the user. If someone needs a new version of software or a new set of virus definitions, I can just download it remotely. If a user has a problem, I can see what's on their screen and figure it out and fix it faster. And if the machine breaks down, you don't tinker around with complex diagnostics - you just swap the machine out. It's a powerful tool to have in the company."

### Summing Up "The payback really starts to mount up."

Bose sees the Net PC in terms of what it is rather than what it isn't. "To us, it's a managed PC - an Intel Architecture-based computer with no floppy drive and built in control and manageability features," says Calabrese. "We don't even refer to it as a Net PC. We just call it a computer." Whatever you call it, it's clear to Calabrese that the Net PC's locked-box design, combined with the remote management software configuration and remote monitoring enabled by LANDesk Configuration Manager, can have a significant impact on life cycle costs. "None of these advanced management capabilities individually are rocket science," says Calabrese. "But layer them one atop the other, and the payback really starts to mount up."

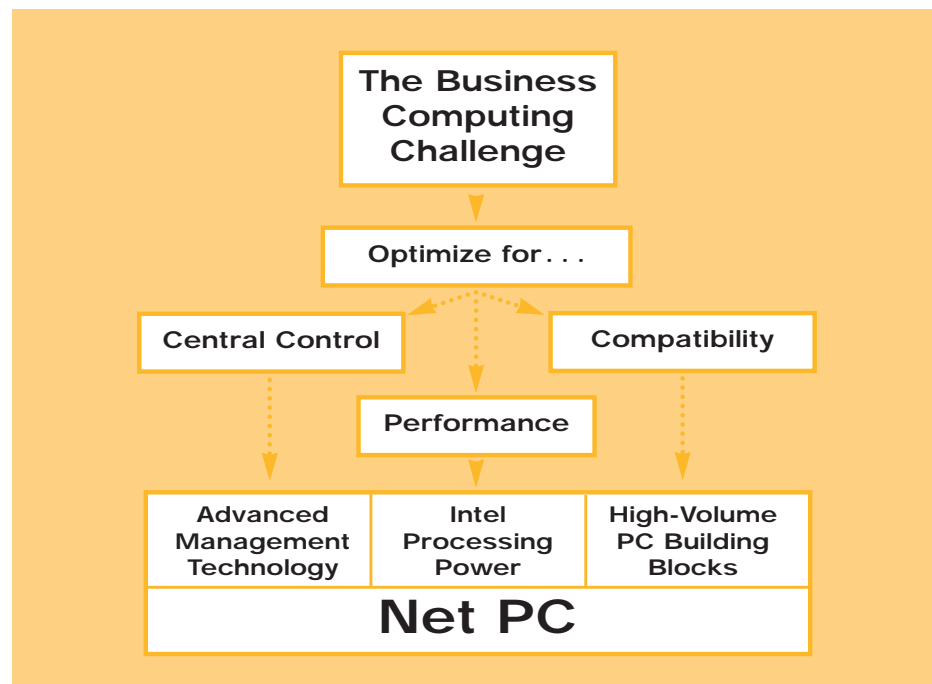
# The Net PC at a Glance

The Network PC, or Net PC, is a new type of business PC intended to reduce ownership costs through its advanced management capabilities while delivering the power and versatility of traditional business PCs. Advanced system administration features, including remote configuration and repair and the ability to wake up systems for off-hours maintenance, give IT organizations greater centralized management capabilities while retaining existing LAN infrastructures. Hard disk drives give users the choice of running their Windows\*-based business software and storing data locally or on servers.

Net PCs cover the full range of price/performance, including high-power systems based on Intel's Pentium® II processor.

The Net PC is most appropriate for companies centralizing PC management and for those data- and task-focused users who need no hardware expandability. For example, it is ideal for information delivery, kiosks, customer support, manufacturing, finance and training applications.

Net PCs are based on a reference specification developed by Intel, Microsoft\*, Compaq\*, Dell\* and Hewlett-Packard\*. Products based on the specification are emerging at a wide range of performance levels and price points.



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