NetPCs in Action at Snow College

Breakthrough

Manageability

Without

Compromise

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The
Manageability
Challenge

"It's important that our computers be as manageable as possible."

Founded in 1888 and located in the rural heartland of central Utah, Snow College is one of the oldest two-year state colleges in the west. More than 2,700 students are currently enrolled, drawn by the school's low cost, broad course offerings and great football program. Its strong English as a Second Language program attracts students from more than a dozen nations, including Japan, American Samoa and the Philippines.

Like many tax-supported colleges, Snow faces constant pressure to cope with limited resources and ever-shrinking budgets. In the information technology area, this includes supporting more than 400 computers with just a handful of staff, most of them part-time student assistants.

Those computers are an important tool to promote learning, so keeping them up and running is vital. It's no small challenge. The College's computers are spread over five labs, numerous faculty offices and a variety of buildings at the main campus and at a satellite facility a mile away. Many students are novice users, and those who are more experienced are often inclined to experiment with both hardware and software. Demands on the equipment are cyclical, slowing down during vacations and peaking during big assignments and final exams. IT's student staff has a turnover rate of roughly 80% each year.

All of which puts a premium on manageability. "We support a lot of people with relatively few resources, so it's important that our computers be as manageable as possible," says Shawn Lindow, Director of Network and Communication Services.

Working to standardize the computer configurations in the student labs also helps. "We try to reduce the "guess and groan" factor," says Help Desk Manager Ron Bradley. "Our goal is for students to be able to log on to any computer on the campus network and get their work done as easily as possible."

Managing
The
Net PC

"The Net PC takes management beyond a hands-on approach."

Snow College deployed Network PCs (Net PCs) as part of Intel's Net PC Trials Program. To provide network-based management, they used Intel's LANDesk® Configuration Manager, an integrated hardware/software system that takes advantage of the Net PC's built-in manageability. Together, the two facilitate remote configuration of software as well as remote administration, maintenance and problem resolution.

IT personnel at Snow were impressed with the Net PC's inherent manageability and the capabilities provided by using the Net PC with leading remote management software. Although

Snow's IT department is already using some sophisticated management techniques, they saw a number of critical areas where the Net PC would add significant value.

Installing software and configuring machines were was one such area. To promote uniformity, each lab has an "image" or snapshot of the software that should be installed on each machine. The image is stored on the network and mirrored onto each desktop once a week. Thanks to the Net PC's Wake on LAN* capabilities, software upgrades can be scheduled for off hours and performed even on Net PCs that are powered down. According to Bradley, this cuts the time needed for the mirroring process or for installing new software versions by more than half. It also allows mirroring to be done without interrupting students and staff and without placing an additional burden on the network during peak usage periods. The help desk staff is freed to work on other chores since they don't have to monitor the download process.

The ability to take control of a PC from a remote location, to diagnose and correct problems, is another big winner for Snow. "The Net PC takes management beyond the hands-on approach," says Jacob Johansen, a Snow College sophomore in computer science and part-time network specialist on the help desk.

This hands-off manageability is particularly helpful in an environment where a student or professor with a PC or a software problem might be on the other side of the campus, up to a mile away. "When you're as spread out as we are, it's not reasonable to run to someone's desk every time there's a problem," says Lindow. "Those little trips add up very fast and consume a big part of the day."

"If the technician can stay at the phone and take care of problems, it makes an enormous difference in how many PCs one person can manage," he continues. "The Net PC lets us care for many PCs from a single point. That's critical for us."

The Net PC's sealed case also scores points at Snow. Often, a lab might be designated for open use for one hour, then used for classroom instruction the next hour. If a student tampers with a machine during the open period, the next hour's teaching atmosphere and student learning may be can disturbed. "We have users who like to play," Lindow says. "The more bulletproof the box is, the better off we are."

The User's Point of View

"The speed is wonderful."

The Net PC is designed for high performance business computing, so it supports the range of Intel microprocessors up to the Pentium® II processor and is fully compatible with other Intel architecture PCs. This performance and compatibility have made it a hit with students and faculty users alike, according to Johansen.

"Users really like the Net PC," Johansen says. "People have this misconception of the Net PC as a dumb terminal, but nothing could be further from the truth. The speed is wonderful. The machine has been very popular."

It's not just the help desk staff who appreciate the Net PC's remote manageability. Remote problem-solving is also a big time-saver for students and faculty. "If a user has lost the toolbar on their application program and doesn't understand your suggestions over the phone, you don't have to walk over to their building to take care of it," says Johansen. "You can fix it remotely and have them back at work within minutes. Without the remote management, the user might have been out of commission for several hours or longer depending on how busy we were."

Summing Up "With the Net PC, the technology becomes a tool instead of a distraction."

Given the school's goal of using technology to promote learning, the Net PC's built-in manageability and sealed chassis offer direct value for Snow College. "Too often, users get tangled up in the technology," observes Lindow. "With the Net PC, the technology becomes a tool instead of a distraction. Students and faculty will spend less time on problems and be more able to use the technology for the work they need to do."

"We need to manage the environment effectively, and we need to give students the freedom to learn," says Bradley. "The Net PC helps us achieve both those goals."
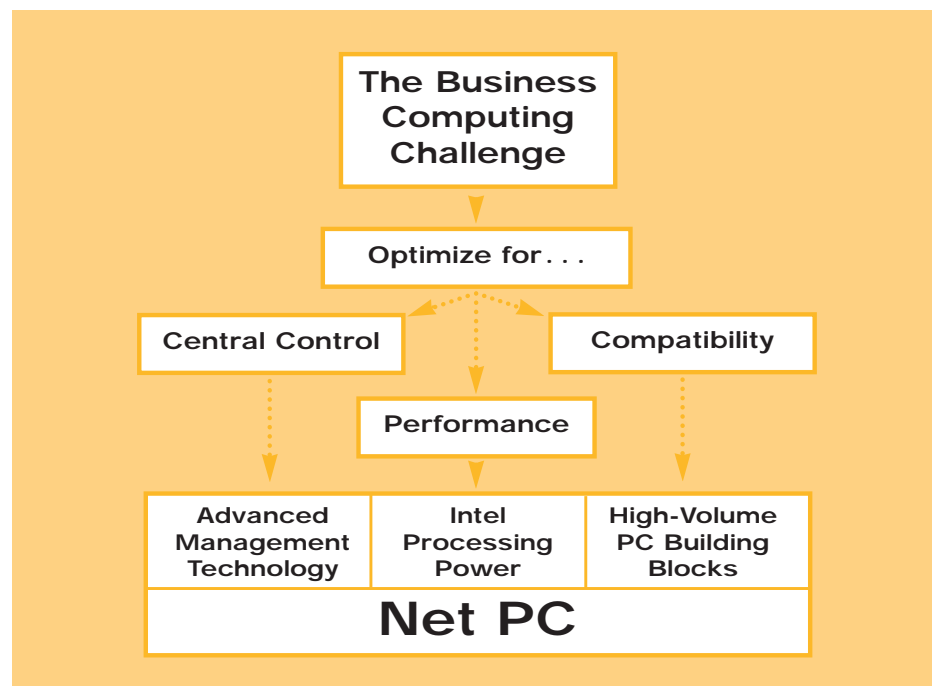
The NetPC at a Glance

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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