

Update

Network Station exemplifies the NC's potential

When we tested thin-client solutions last summer, we wanted to see how well network computers could replace terminals in branch offices. We were disappointed in the offerings because administration tasks were more difficult than they needed to be. (See "NCs take one step forward," Aug. 17, page 48.)

Although the Citrix/Wyse solution showed the most potential, its Windows 3.1 end-user interface and requirement for a separate data server held back its score. But with IBM's NC solution, which was unavailable for our testing last summer, there is no Achilles' heel, and its eSuite is a step forward for the technology.

IBM picked the best technology from its partners to include in its Network Station. Network Computing Devices (NCD) provided the firmware, Network Computer Inc. (NCI) provided the browser software, and IBM provided the Network Station hardware. The company tied it all together with an impressive back-end software solution. Using a boot server running the Network Station Manager software, the central console is flexible enough to administer on a systemwide level, as well as on specific group and individual user levels.

What makes IBM's boot server better than the other solutions' is that it makes an administrator's life easier. For starters, the Network Station Manager software on the boot server synchronizes and authenticates the user and group information from the boot server OS. Most browser-based

interfaces are awkward, but IBM's is simple and well organized, allowing you to easily manage remote branch servers from a central-office location.

The Network Station itself is an unobtrusive device with 64MB of RAM. The station is an Independent Computing Architecture client that can access a Windows Terminal Server and Windows applications. For the end-user, the Network Station OS interface has a taskbar on the bottom with buttons to launch applications. And for applications, for users who have been using a green-screen terminal, Lotus eSuite is logically

Report Card

IBM NC solution

- IBM Network Station Manager
- IBM Network Station Series 1000
- Lotus eSuite 1.0

BOTTOM LINE

6.9

Implementation and deployment 15%
Excellent 1.5

Of the solutions we tested, IBM offers the best setup because the company does all the work. eSuite and Java development kit upgrades are messy, and you would spend more time and money if you had to do the work yourself.

Administration and maintenance 25%
Very good 2.0

Network Station Manager featured a well-designed Web interface that inherited user and group profiles in the Windows NT domain. The Microsoft/NCD and Citrix/Wyse solutions are also integrated with NT, but Network Station pulled ahead because tasks were simpler.

End-user experience 15%
Very good 1.2

The client hardware has a clean interface with buttons that are clearly marked for the user. The user button can be customized to go to the correct host for 3270 sessions. The eSuite applications are easy to understand and use.

Performance 10%
Satisfactory 0.4

The Network Station was the slowest of the solutions we tested because eSuite takes a long time to load at the beginning of each session. Once eSuite is loaded, it works quickly enough. However, most users will spend their time in 3270 sessions, and performance was the second fastest for those tasks.

Support 15%
Satisfactory 0.6

IBM's confusing documentation needs a better index, especially because it is only available in PDF form or on the Web. The technicians are professional and responsive, but they didn't have the answers we needed when we called.

Projected Basic Ownership Cost 20%
Good 1.2

At \$149,576 or \$2,493 per station, the IBM NC solution is the least expensive. The Network Station was priced significantly higher than the others, but this cost was offset by the free eSuite software that is included.

Contact information

IBM Corp.
Somers, N.Y.
(800) 426-2255, ext. 1619
www.pc.ibm.com/us/networkstation/index.html

THE SCORE

6.9

IBM NC solution

- IBM Network Station Manager
- IBM Network Station Series 1000
- Lotus eSuite 1.0

6.7

Citrix/Wyse solution

- Citrix WinFrame 1.7
- Wyse Winterm 2310SE

6.6

Microsoft/NCD solution

- Microsoft Windows Terminal Server
- Citrix MetaFrame 1.0
- NCD Explora 451

5.4

IBM solution

- IBM WorkSpace On-Demand 1.0
- IBM PC-300GL
- IBM OS/2 Warp Server Advanced 4.0 SMP

4.5

NCI solution

- NCI NC Administration Server 1.3.3 for Sun Solaris
- NCI NC Desktop 2.1
- Funai FNC-100

TEST CENTER COMPARISON

organized by task, so users won't have to hunt to find things. eSuite is better organized than the NCI solution's full-featured StarOffice suite. However, eSuite 1.0 is slow because it is written entirely in Java. Version 1.5 was not available for our testing.

Our one complaint is that there were no remote-control features in the IBM NC solution. This capability in the Citrix/Wyse solution made it easy for us to troubleshoot and demonstrate a new feature with a remote user.

The other solutions either lacked cohesive designs or made simple tasks too difficult to complete. However, the IBM NC solution has such synergy in its design and administration tools that we were heartened to see such a successful implementation of the NC model. For future releases, we encourage IBM to improve eSuite's Java performance and not to skimp on documentation or training for support technicians.

Results at a Glance

Thin clients promise to decrease IT administration and reduce desktops' total cost of ownership. When we tested thin-client solutions in August, they hinted at what network computing could offer, but the IBM NC solution, which was unavailable for testing at the time, is the first to demonstrate the potential.

The IBM NC solution edges ahead of the other thin-client offerings we tested. Its streamlined Network Station Manager software works seamlessly with Windows NT domains and the Network Station hardware is smaller than a terminal and a PC. The Java-based eSuite of productivity tools, included with the solution, is simpler to use than most office suites. Although the client software was slow at start-up, the interface was intuitive for new users.

The Windows-based Citrix/Wyse solution was easy to centrally manage because it required

fewer servers than the other solutions. Citrix WinFrame 1.7's load-balancing feature needed only two servers, which saved administrative time and lowered hardware costs.

The Microsoft/NCD solution offered a better user interface than the Citrix/Wyse solution, but Microsoft Windows Terminal Server required more servers, creating more administrative work overall.

The IBM solution was held back by WorkSpace On-Demand's detailed profiles, which made the process of installing new applications grueling. In addition, the OS/2 interface on the desktop was not intuitive to new users.

The NCI solution featured a great interface, but was too difficult to set up and administer relative to the other solutions. It was a first-generation solution that lacked mature management tools.

The IBM NC solution snaps right into your enterprise

The IBM NC solution setup is similar to the Microsoft/NCD solution. Our scenario included an existing infrastructure of an e-mail server, a 3270 host, and a 56Kbps connection between the host and the branch offices.

