



NetVista N2200e Overview

Thin Client Express



T3 Presentation

May 30, 2000

IBM NetVista thin clients
Access for today, flexibility for tomorrow



Range of N2200 Offerings

Extend HW investment, SW transition options



IBM NetVista N2200

- ◆ X86 legacy-free system
- ◆ Supports multiple software environments

N2200 Zero Footprint brackets

- ◆ For those who value space
- ◆ Brackets attach N2200 to IBM T55 flat panel screen



N2200L

Thin Client for Linux

- ◆ For those who want open source, SW downloads
- ◆ IBM toolkit, instructions on Web
- ◆ IBM moderates Web discussion group
- ◆ Transition to / from TCM

N2200 TCM V2R1

- ◆ For those who want full function clients with full server management SW
- ◆ Local Netscape 4.5
- ◆ Local emulators
- ◆ Local JVM
- ◆ Transition to Linux

N2200e

Thin Client Express

- ◆ For those who want IBM thin client SW with rapid set-up, deployment
- ◆ Packaged solution
- ◆ Local Netscape 4.5 (3Q)
- ◆ Local emulators
- ◆ Transition to TCM, Linux

N2200w

WBT Standard 1.5

- ◆ For those who want Microsoft thin client software
- ◆ Packaged solution
- ◆ Local WBT IE 4 (3Q)
- ◆ Local emulators
- ◆ Transition to TCM, Linux



Available Now . . . Built for the Future

NetVista

IBM NetVista N2200e Thin Client Express

▶ Proven thin client hardware - N2200 (N2800 3Q)

- ◆ 32 MB compact flash - room for browser
- ◆ TCM Server software not required
- ◆ Keyboard and mouse
- ◆ 3 year warranty
- ◆ Ethernet connectivity

▶ Express client software

- ◆ ICA 3.0++ for Windows access
- ◆ Terminal emulators
 - ✓ 3270, 5250, VTxxx
- ◆ Netscape 4.5 browser (3Q)

▶ Systems management

▶ Transition options

- ◆ Entry to Thin Client Manager
- ◆ Thin Client for Linux

*An exclusive
vs. competition*





N2200e Thin Client Express



► What is Thin Client Express?

- ◆ **N2200 with pre-programmed 32MB Compact Flash**
 - ✓ Thin Client Manager Desktop, ICA 1.8, emulators, Netscape 4.5 (3Q)
 - ✓ Client Configuration Tool
- ◆ **V2R1 PTF6 code level**

► Why Express?

- ◆ **Easy to set up**
 - ✓ Thin Client Manager (TCM) server technology not required
 - ✓ Flash based boot
 - ✓ Peer boot - boots many thin clients that do not have flash cards
 - ✓ Minutes from opening box until up and running applications
- ◆ **Simple to manage**
 - ✓ No TCM required, very simple local configuration tool provided on client
 - ✓ No-charge Utilities available for flash and remote operation management
 - ✓ Update Thin Client Express in customer locations
- ◆ **Room to grow**
 - ✓ Rapid entry into NetVista thin clients
 - ✓ Seamless, no charge transition to full server-based environment
 - ✓ Applications included are functionally equivalent to those found in TCM V2R1 PTF6
 - ✓ Browser and dialer support in 3Q 2000 (via PTF and new from factory)



Thin Client Utilities

Simple to manage



- ▶ **Two "as-is," no-charge utilities available**
 - ◆ **Thin Client Express Service Utility (5648-D83)**
 - ✓ Contains latest complete client flash image
 - ✓ Client has code to pull and reflash from these files
 - ◆ **Thin Client Manager Operations Utility (5648-D84)**
 - ✓ Set of tools for remote operations for N2200e, N2200, and N2800
 - ✓ N2200, N2200e, N2800: client lockdown, wake on LAN, remote reboot
 - ✓ N2200e: clone configuration, force flash update, force authentication to server
- ▶ **Available as Web download or on single orderable CD**
 - ◆ **www.ibm.com/nc, select software for V2R1**
 - ◆ **NetVista Thin Client Utilities CD -- GEMS order number 11K7686**
- ▶ **PC Server or desktop with**
 - ◆ **Windows NT 4.0 or Windows NT 4.0 TSE**
 - ◆ **Windows 2000 (Beta)**
- ▶ **Do not need to be available on network during normal operation**
 - ◆ **No need for utilities to be permanently resident on network server**
 - ◆ **Can be loaded on laptop and attached to network during updates**
- ▶ **English only**



Simple to Manage

Update Thin Client Express in customer locations



► Client Side Pull (Thin Client Express Service Utility)

- ◆ Latest image available on web or CD
- ◆ Download update service to file on NT
- ◆ Install on NT workstation or server
- ◆ On client, select configuration tool's software update, request flash update

- OR -

► Management Service Push (Thin Client Manager Operations Utility)

- ◆ Install Java based management tool from web or CD on NT workstation or server
- ◆ NT workstation or server initiates client pull

- OR -

► Update via peer

- ◆ Assuming Boot Monitor intact
- ◆ Configure peer to reset flash from master





Thin Client Express Use Scenario 1

Standalone mode



- ▶ For small deployments or where each client requires unique customization
- ▶ No server
- ▶ Client configures desktop
 - ◆ Uses configuration tool shipped in client



Express client

Thin Client Express Use Scenario 2



Server-administered configurations

- ▶ For large deployments or where Express clients require group-specific desktops
- ▶ Thin Client Operations Utility on server
- ▶ SNMP Management capability
- ▶ One "master" client configures multiple desktops to be used by other Express clients

"Master" Express client

- ✓ Create desktop
- ✓ Have Operations Utility pull configuration to the Server
- ✓ Repeat until all desktops have been created
- ✓ Any number of Express Clients



Express client

Pull configuration from Master Express client

Push configuration to Express client

Operations Utility



IBM NetVista thin clients

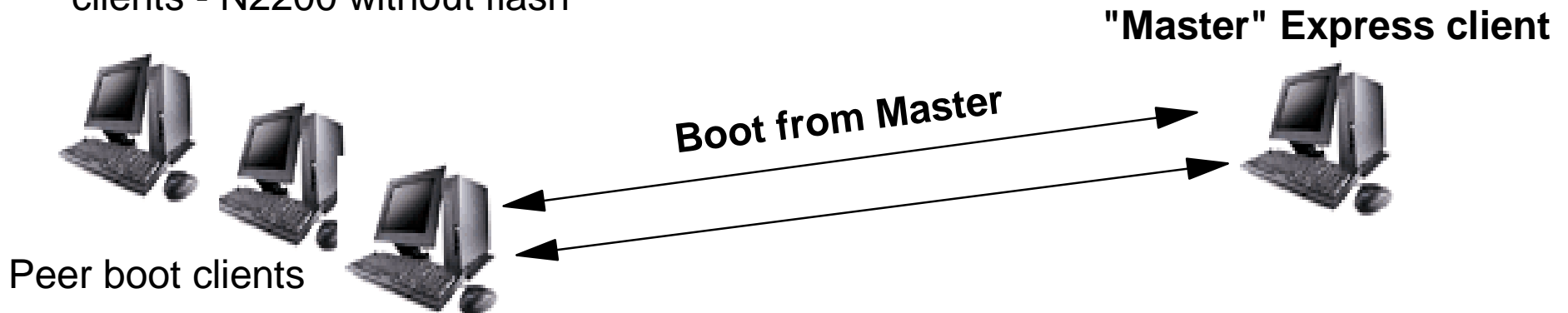
Thin Client Express Use Scenario 3



Peer boot clients without server

- ▶ For deployments where peer boot clients with no flash card will use the Express client software, configuration
 - ◆ Spread cost of Express client across multiple peers without flash cards
- ▶ No server
- ▶ "Master" Express client configures a desktop to be used by other peer boot clients
- ▶ Peers share all characteristics of Master client
 - ◆ Preferences, printer config, language, mouse configuration

1 to many peer boot thin clients - N2200 without flash





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Easy to Set Up and Configure

NetVista

► **Image deleted to reduce file size**

1. Configure TCP/IP, Display, and Keyboard
2. Specify one application or configure a set of applications on a full desktop with launch bar
3. Begin using workstation



Configuration Tool

Preloaded on Thin Client Express

NetVista

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1. Offers rapid initial configuration
2. Customize Desktop appearance
 - ◆ Single application kiosk configuration
 - ◆ Complete desktop, launch bar, and auto start options
3. Software update - Request client flash update from remote update server



Functional Comparison

Draft



Function	TCM V2R1	Express	WBT-Generic	IBM WBT
Client functions				
ICA Remote Application Manager	x	x	Less Function	Less Function
5250, 3270, VTxx Emulation	x	x	Less Function	Less Function
Netscape 4.5	x	3Q00 No Java		
Client Configuration Tool	x (PTF 6)	x	x	x
Management				
Easy field update	x	x		
Efficient cloning technology	N/A	x		
WAN Friendly Update	x	x		
Other OS Support				
Kiosk Mode	x	x		
Full Desktop Kiosk Mode		x		
Windowed Environment	x	x		
Convert to other OS	N/A	Linux	No	No
Convert to V2R1 boot	N/A	Yes	No	Yes