



CITRIX®

1998

Thin-Client/Server Computing

CITRIX®

Our Business Mission

**The leading provider of
thin-client/server software
for high-performance, secure,
managed access to business-
critical applications**

Every Device

Every Network

Every Application

Citrix at a Glance

NASDAQ — CTRS

Founded 1989

450+ Employees

Product

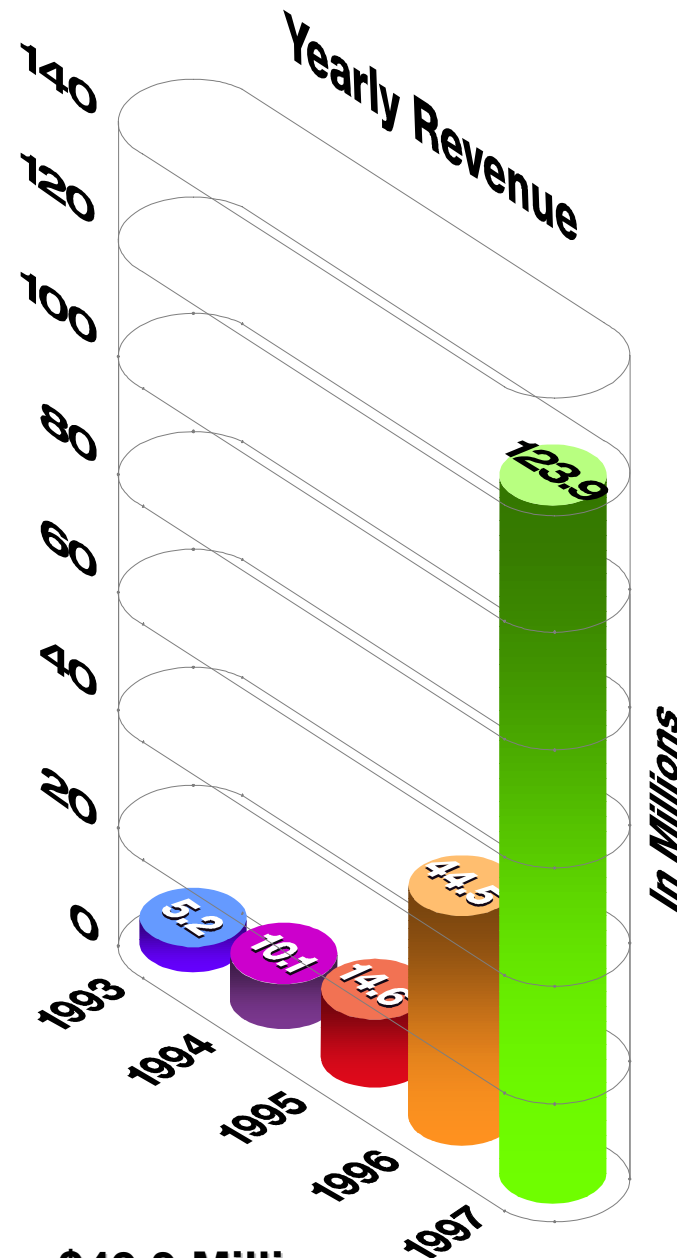
- WinFrame

Technologies

- ICA
- MultiWin

Sales and Marketing

- OEM Licensees
- Industry Partnering
- Indirect Sales Channels



* Q1 98 Revenues = \$49.3 Million

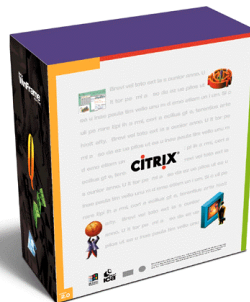
Products and Technologies

Technologies



Product

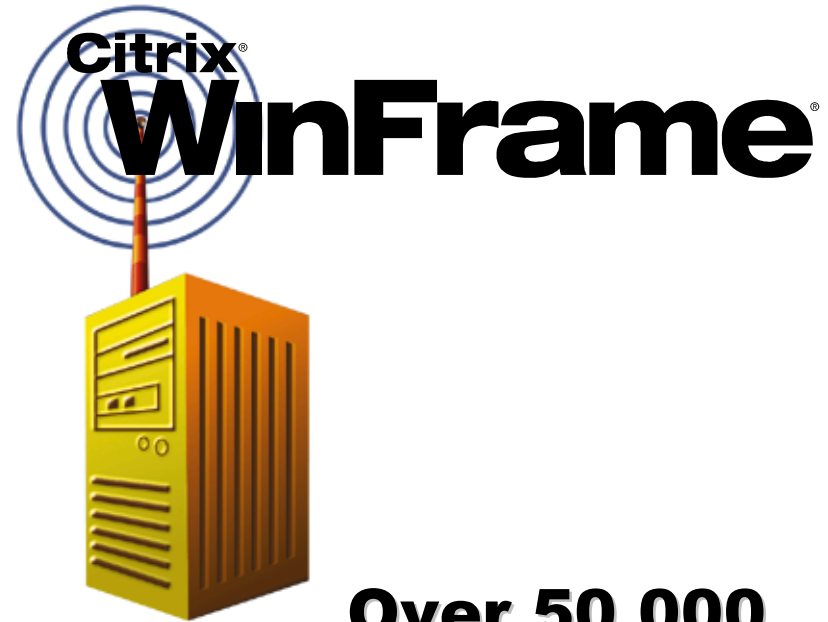
Citrix® WinFrame®



Key Milestones



1,000,000
Concurrent
User Connections



Over 50,000
WinFrame Servers
in Production

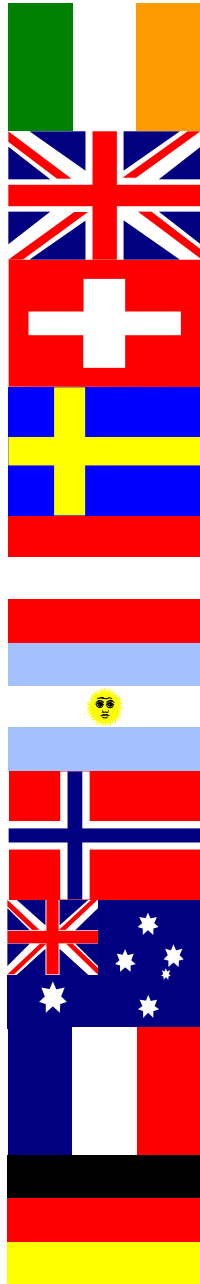


Average of 20
Concurrent
Connections
per Server

Awards



Expanding Worldwide Reach



World Headquarters

Ft. Lauderdale

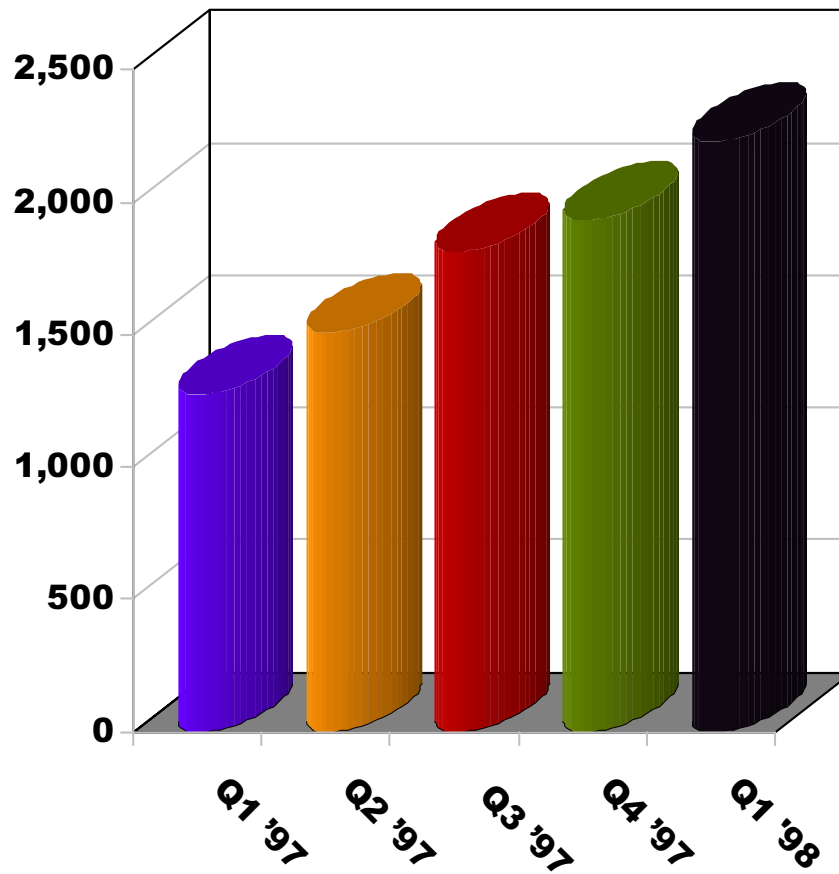
North American Offices

Atlanta Boston
Chicago Dallas
Redmond
Salt Lake City
Houston
Los Angeles
New York
San Francisco
Toronto
Washington, D.C.

International Offices

Paris
London
Europe
& Africa
Headquarters - Munich
Asia Pacific
Headquarters - Sydney

North American Solution Providers



World-Class Strategic Partners

Microsoft



COMPAQ

COMPUTER ASSOCIATES
Software superior by design.

ADP

GREAT PLAINS SOFTWARE

3Com

PEOPLE Soft

Hyperion software

CITRIX

ADP
Anderson Consulting

Boundless
Ceridian

Chase Research

CheckPoint

Concord Business Systems

Consensus

Crescent Systems

DANDB/GEAC

Daly and Walcott

Dell Computer
Digi

Eicon Technology

Equip
ES

Fast Management Group

FLX

Giro Enterprises

Global Village Communication

Great Plains Software

GreenTree

HDS

HST

Hewlett-Packard
Hyperion
IBM

JD Edwards

Keyfile

KPMG

Marcam

MedicaLogic

Metrix

Microsoft
Motorola

MySoft

Navis
NCD

NetAccess

NetFrame

NetSoft

Navalis

ONYX Software

Optika Imaging

Optus

Oracle

PeopleSoft

Perifitech
Platinum

Progress Training

ProphetLine

Proxim

Psion Software

Quantum Compliance

Raintree

Rascom

Ross Systems

SCT

Security Dynamics

Shi

Soft

Solor Software

SQL Financials

Stallion Technologies

Sybase

Symix

Systems Union

Tektronix

Telechips

TeleMagic

Telxon

Timberline

Tsoft

TSP Companies

Ultimate Software

Ungerboeck

WennSoft

WYSE

World-Class Licensees and Strategic Partners

Acorn Group

Amdahl

Aranex

Athena
Networking
Products, BV

Boca
Research, Inc.

Boundless
Technologies

Bryant
Computers

Caldera, Inc.

Cruise
Technologies,
Inc.

Cubix

Data General

Digital
Concepts, Inc.

HCL
Peripherals

Hewlett-
Packard

IBM

IGEL GmbH

Javelin
Systems, Inc.

Key Tronic
Corp.

Maxspeed
Corp.

Microsoft

Motorola



MTX, Inc.

NCD, Inc.

Neoware
Systems, Inc.

Netier
Technologies, Inc.

Philips
Electronics

Plexcom

Psion

Qnx Software
Systems

Sharp Electronics
Corp.

Sun

Microsystems

Symbol
Technologies

TECO

Information
Systems, Inc

Tektronix, Inc.

Telxon

TriTeal Corp.

UMAX Data Sys.

VXL Instruments
Ltd.

Websonic

Wyse

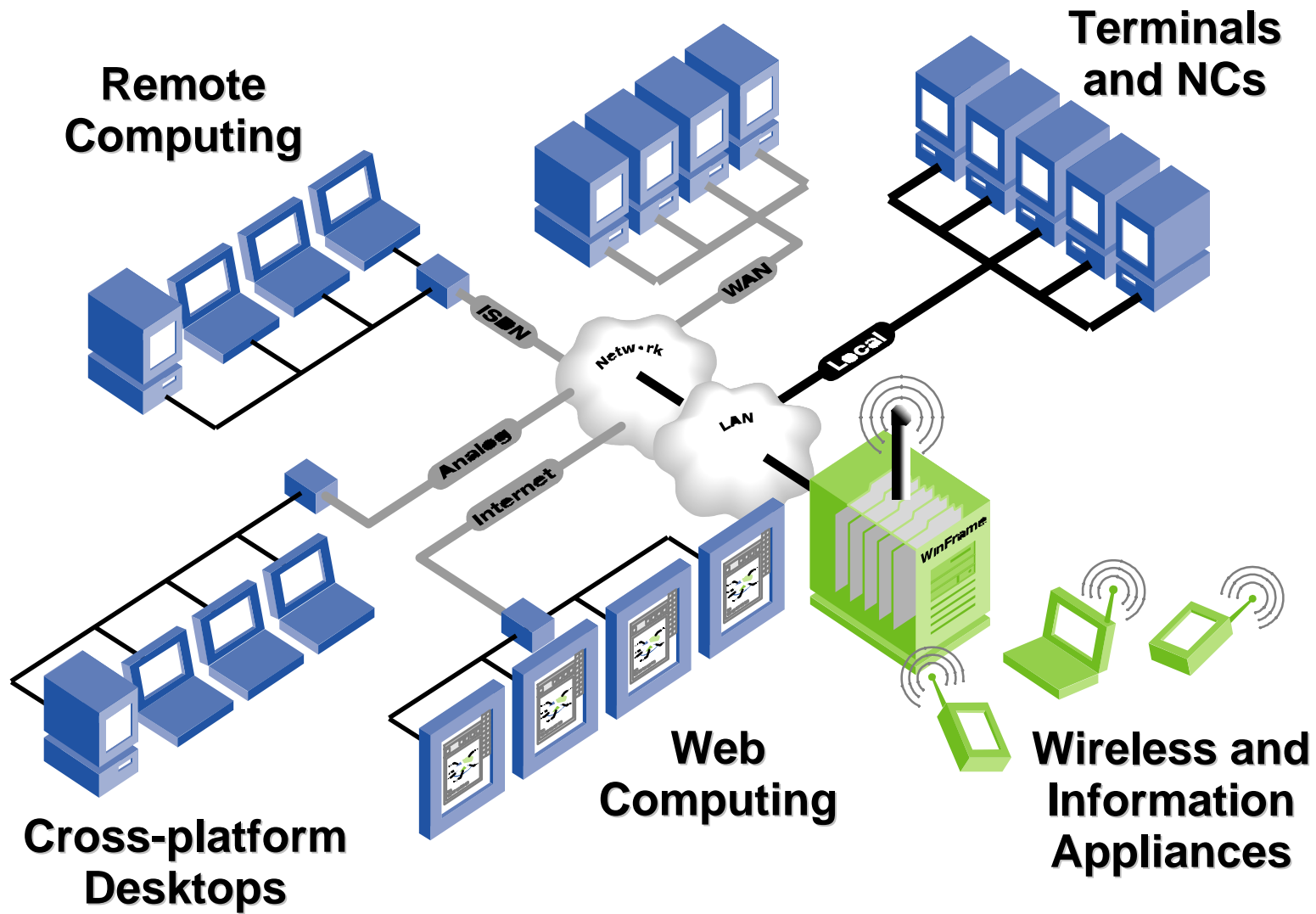
Technology, Inc.

World-Class Global Customers

- Anne E. Biedel M.D. & Associates
- AT&T Wireless
- Bank of Walnut Creek
- Belfast City Hospital
- Bell Mobility
- City of Tulsa Park & Recreation
- Claimsnet.com
- Erdania Begnins-Say
- Honeywell Europe SA
- Mecon
- Mott's
- NovaMed EyeCare
- Orange County Public Defenders
- OshKosh B'Gosh
- ProStaff
- Shell Oil Canada
- Standard Forms, Inc.
- US Navy NTCS
- Wyland Galleries Hawaii

Thin Client/Server Computing

Thin Client/Server Computing



What to consider when looking at TCO:

- **Capital:** Hardware, Network, and Software Capital Costs
- **Management:** System and Network Management Costs
- **Support:** Technical Support Costs
- **End User:** IT and Related Costs Shouldered by End Users
- **Other:** Software Development Costs, WAN Costs and Fees, and Downtime

Capital

- **Provides 32-bit Windows-based Applications to Any Client Device**
- **Leverages Existing Computing and Network Infrastructure**
- **Supports Cost-Effective Windows-based Terminal Hardware**

Management

- **Offers Single-Point Control Over Applications and Data Files**
- **Enables Deployment, Configuration, Management, and Support for Applications from One Location**

Support

- **Enables IT to Support, Diagnose, and Train Users from a Central Location**
- **Allows Support Staff to Remotely Join or Control a User's Computing Session**

End User

- **Enables Remote Sites and End Users to be Supported by Headquarters-Based Staff and Systems**
- **Improves Control and Security without Sacrificing End-User Applications**

Other

- **Extends Today's 16- and 32-bit Windows-based Applications**
- **Avoids Application Rewrites**
- **Minimizes Network Traffic and WAN Upgrades**
- **Minimizes Impact of Individual Server Downtime**

Thin Client/Server Computing

It's
BIG!

WinFrame Positioning Statement

The only thin-client/server software that provides access to virtually any Windows application, across any type of network connection to any type of client

Its robust features give you centralized management, exceptional performance and improved security for all your business-critical applications and data

WinFrame

- **The only thin-client/server software**

Three core technologies

- **Windows NT**
- **Citrix ICA**
- **Citrix MultiWin**

Client software component (ICA)

Network protocol component (ICA)

**Server software component
(ICA and MultiWin)**



Client, Network and Server

**Separates application's
logic from user interface**



**Transports to client
over standard protocols**



**Makes any client — fat or thin —
a thin client**



**Highly efficient —
1/10th normal bandwidth**



**Keystrokes, mouse clicks,
screen updates**



Server

**Multi-user component
of Windows NT Server**



**Allows multiple,
concurrent users — 20+ per
Pentium Pro processor**

**Citrix®
WinFrame®**

**WinFrame meets
application deployment
challenges while helping
to lower the total cost of
application ownership.**

WinFrame Key Features

Management

- **Single-Point Control**

Access

- **Universal Application Access**

Performance

- **Bandwidth-Independent Performance**

Security

- **Eyes-Only Security**

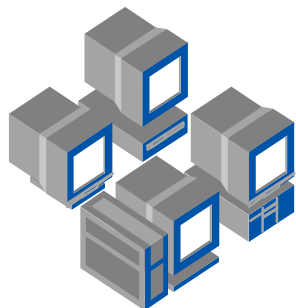
Single-Point Control

Keeps I/S in Command

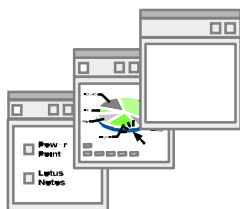
- Deploy, manage and support in minutes, not months — from one location
- Make installations, updates, additions once, on the WinFrame Server
- Robust set of built-in administrative utilities
- Integrate database, file and Web servers
- Support up to 20 users per processor
- Scalable on demand to 1,000s

Universal Application Access

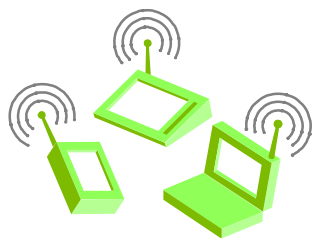
Virtually Any Application from Any Client



Pentium PCs, Windows terminals, DOS PCs, Macs, UNIX workstations, OS/2 desktops, network computers



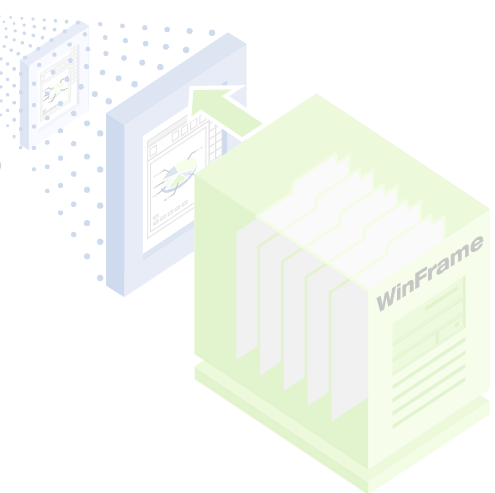
Business-critical applications — even on the Internet/Intranet. No rewrites. Run anywhere



True local/remote application transparency

Bandwidth-Independent Performance For Everyone, Everywhere

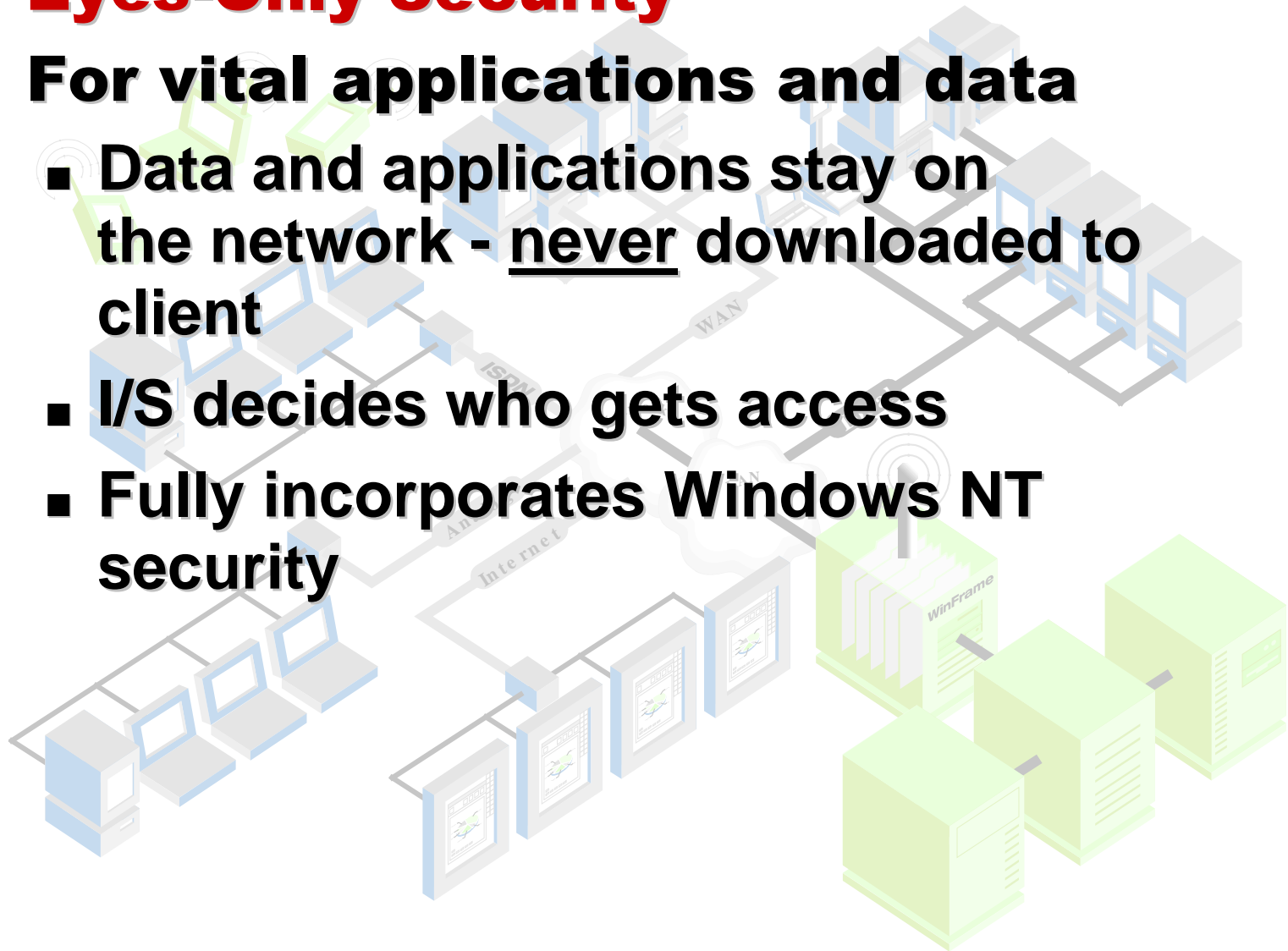
- ICA keeps network-intensive application activity on the corporate backbone
 - Blazing speed on LANs
 - Efficient use of WANs - saves money
- LAN-like performance over WAN and dial-up
 - Analog or ISDN modems
 - WANs
 - Wireless LANs
 - Internet



Eyes-Only Security

For vital applications and data

- Data and applications stay on the network - never downloaded to client
- I/S decides who gets access
- Fully incorporates Windows NT security



Pricing

WinFrame Enterprise 1.7 (15 Users)	\$5995.
+5 Users	\$995.
+10 Users	\$1995.
+20 Users	\$3990.
+50 Users	\$9975.
Migration from WinFrame 1.7 to MetaFrame (per server)	\$1495.
WinFrame for Workgroups 1.7 (5 Users)	\$2495.
Server Option Pack	\$1495.
Load Balance Option Pack (per server)	\$1495.
Secure ICA Option Pack (per server)	\$2495.

CITRIX[®]

Case Studies

Company Profile

- Canada's leading provider of wireless communications
- 1.8M customers
 - Cellular
 - Air-to-ground
 - Paging
 - Wireless data
 - Mobile radio
 - Mobile satellite

Business Requirement

- Cellular phone activation
- Customer service

Applications

- Custom — Powerbuilder, VB, C++
- Telephony and fax routing

Challenge — Management

- **Rapidly deploy frequent market-driven changes to customer service applications**

Users

- **Over 1,500 customer service phone agents with 16- and 32-bit PCs**
- **Connections — LAN**
- **LAN**

Alternatives

- **Traditional client/server**

WinFrame Environment

- **Servers — Dell OptiPlex and HP Vectra**
 - 200 MHz dual Pentium Pro
 - 256MB RAM, 2GB drives
- **Elsewhere in the enterprise**
 - NetWare and NT file servers
 - IBM 9672/R3 mainframe
- **Clients**
 - LAN connected
 - Windows terminals
 - 16- and 32-bit PCs

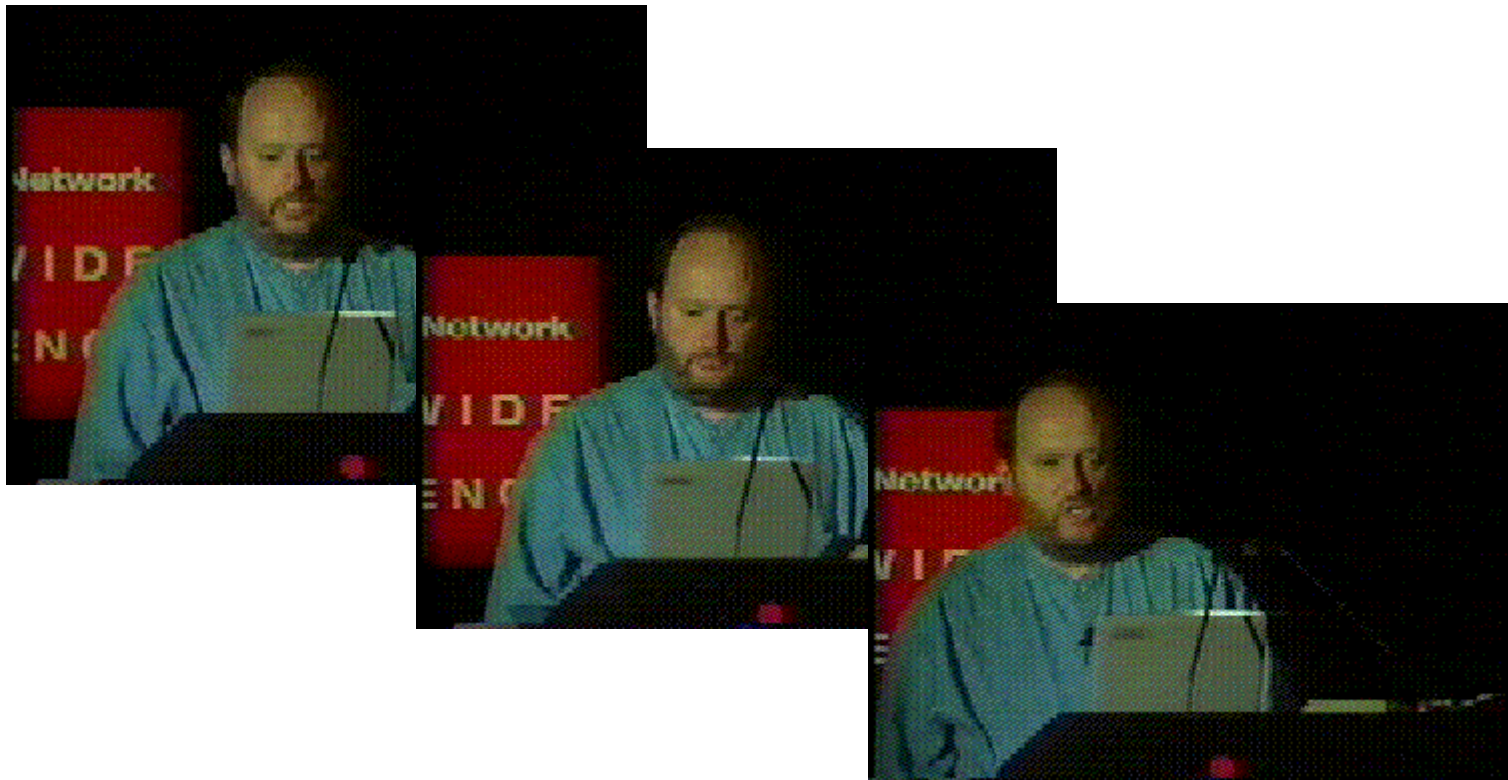
WinFrame Benefits

- **Single-point control instantly updates applications for over 1,500 users**
- **Leveraged use of existing 16-bit PCs**
- **New users getting Windows terminals**
- **Increased LAN performance**

CASE STUDY #1 — Bell Mobility

“We are able to deploy new mission-critical applications to employees in less than one minute.”

George Morris, Senior LAN Specialist



Company Profile

- Leading manufacturer and distributor of business forms
- Over 20,000 active customers

Business Requirement

- Online product catalog
- Order entry and tracking

Applications

- Custom — legacy RPG applications

Challenge — Access

- Diverse base of customer client types
- Wide range of customer I/S expertise

Users

- Customers and remote employees using 16- and 32-bit PCs, Macs and workstations

Connections

- Low-bandwidth dial-up and Internet

Alternatives

- Install Reflection terminal-emulation software with custom overlays at customers' sites

WinFrame Environment

- **Servers — Dell OptiPlex and Compaq Proliant 1500**
 - 90 and 100 MHz dual Pentium
 - 64MB RAM, 4GB Fast-SCSI drives
- **Elsewhere in the enterprise**
 - NT file servers
 - IBM AS400s via 5250 gateways
- **Clients**
 - You name it!

WinFrame Benefits

- **Universal access of order-entry application for customers**
 - **Diverse client hardware**
 - **Minimum connectivity bandwidth**
- **\$20M per year in online revenue**
- **Eliminated \$16,000 “per-site” setup costs**
- **Substantially reduced connection costs**

Company Profile

- Oversees 20 recreation facilities and 120+ parks

Business Requirement

- Activities registration
- Facilities scheduling

Applications

- RecWare, a recreation automation package
- Microsoft Office, FoxPro, WordPerfect

Challenge—Access

- Needed to distribute RecWare to all its facilities

Users

- Residents of Tulsa and Park and Recreation Department employees

Connections

- LAN

Alternatives

- Remote control software

WinFrame Environment

- **Servers—Compaq ProLiant 4500 Dual Processor**
 - 192 MB RAM
 - Upgrading to 448 MB RAM and a third processor
- **Elsewhere in the Enterprise**
 - Windows NT file server
 - U.S. Robotics 33.6 Sportster modems
TCP/IP WAN
- **Clients**
 - Legacy computers

WinFrame Benefits

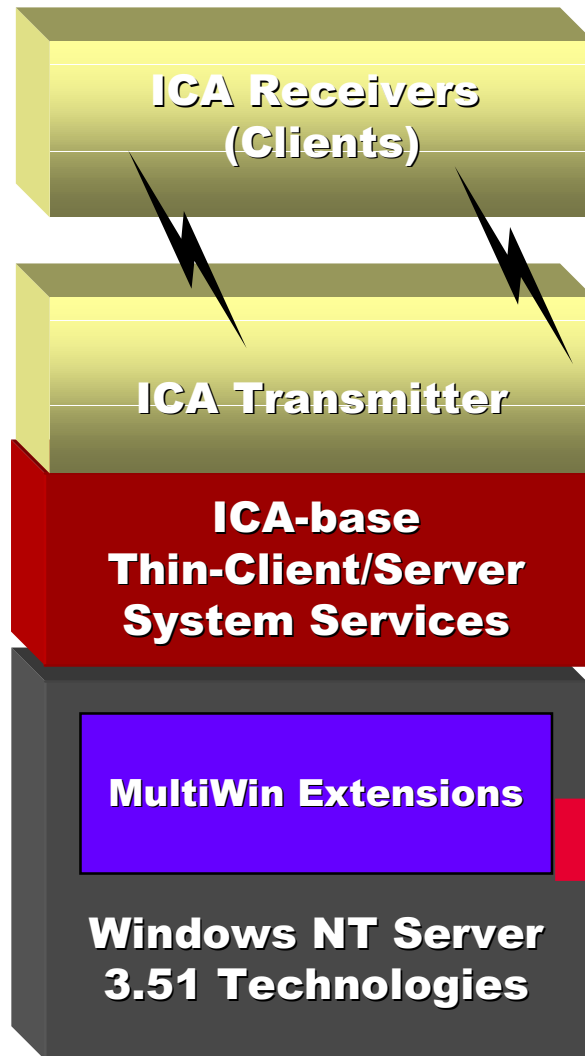
- **Easy distribution of RecWare to each site**
- **Enables users to share information via a central database**
- **Allows additional employees and users to compute from home inexpensively**
- **Works with legacy computing hardware**



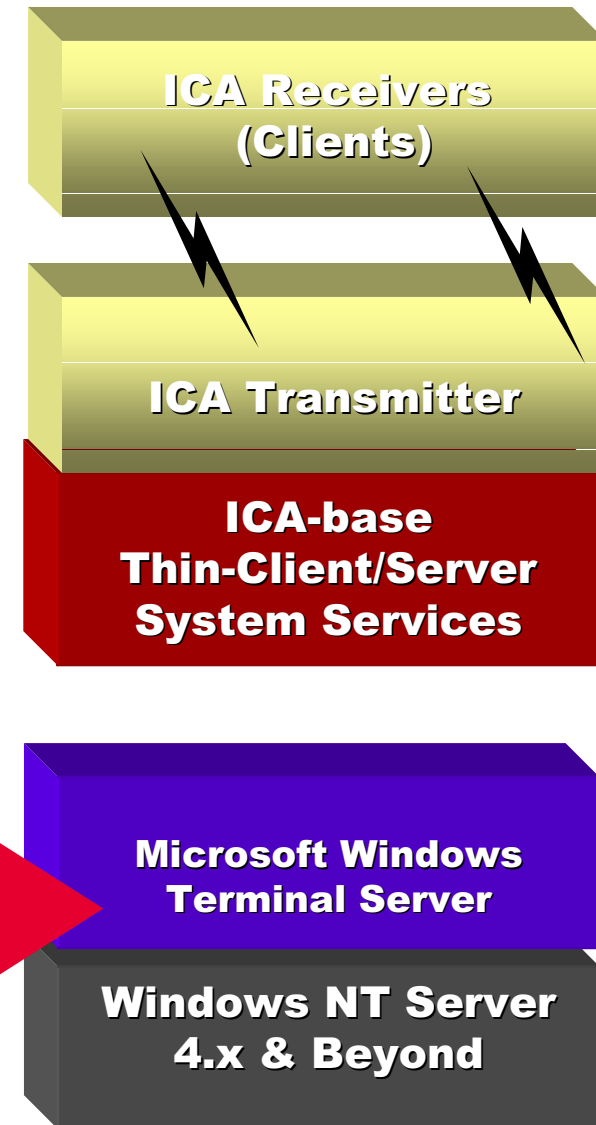
**Multi-user Extensions
Incorporated into
Microsoft Windows
Terminal Server**

MetaFrame Embraces and Extends WTS

Citrix® WinFrame®

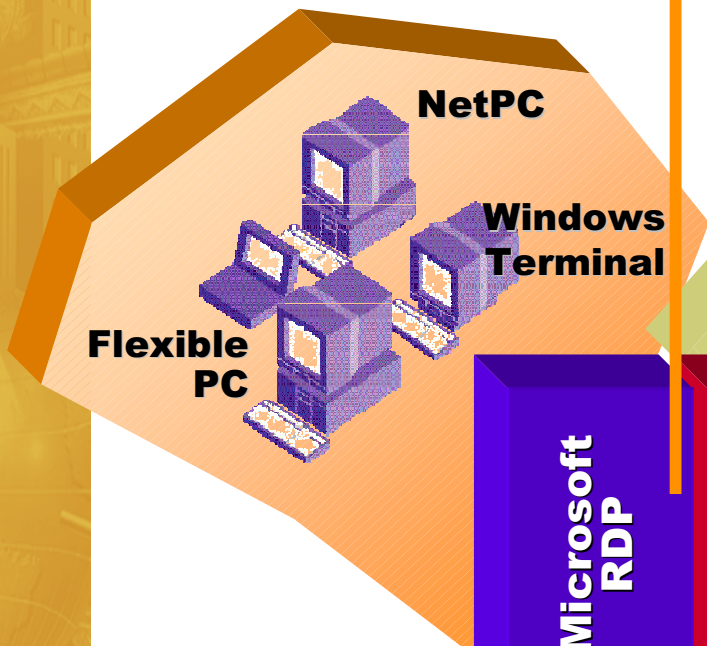


Citrix® MetaFrame™

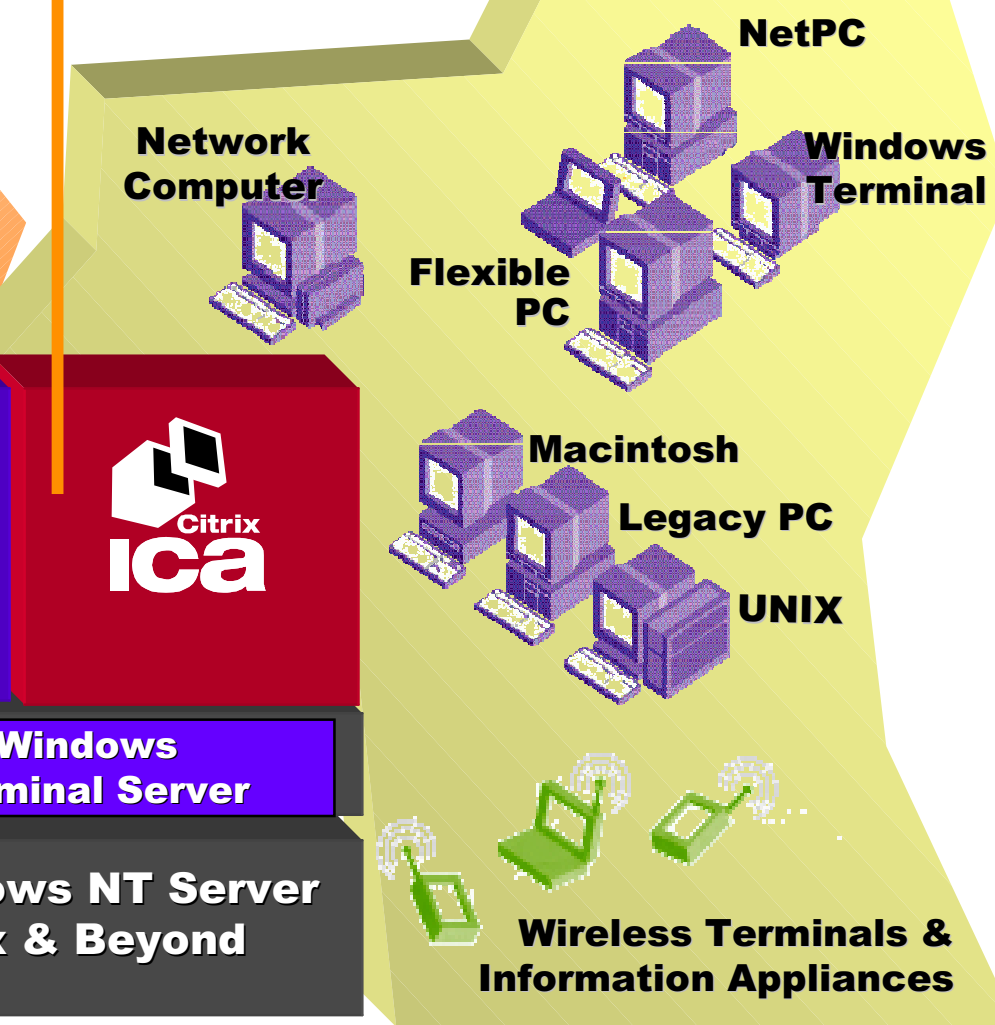


Citrix/Microsoft Thin-Client/Server Support

Windows-based Devices



Windows-based & Other Devices



Bandwidth-challenged Environments

- Dial-up & WAN-based Connectivity
- Wireless LAN & CDPD Connectivity

Heterogeneous Environments

- Medium - Large Corporate Organizations
- Business-to-Business Electronic Commerce
- Web-based Computing on the Internet

Large-Scale WBTS Deployments

- Mature & Maturing WinFrame Accounts



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Thin-Client/Server Computing

www.citrix.com

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