



IBM server™ iSeries™

# iSeries Windows™ Integration Overview

**Integrated xSeries Solutions**

IBM & IBM Business Partner Use Only Until Announced

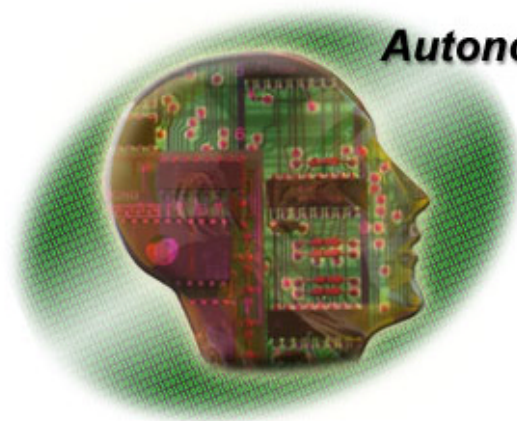
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## iSeries and Windows Servers

- A large majority of iSeries and AS/400 customers have Windows® servers installed
- ISVs and IBM are delivering complementary applications with Windows Servers
- Customers want to consolidate servers



# The next generation iSeries... ... simplicity in an on demand world



**Autonomic**



**Integration**



**Virtualization**



**Open Standards**



... including "de facto" standards like Wintel servers

# iSeries Windows 2000 Server® Integration

## ■ Solutions

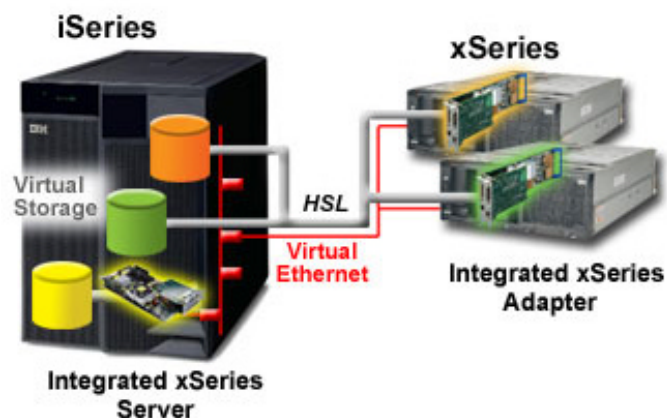
- ▶ Extend OS/400 applications with Windows™
- ▶ Consolidate Windows Servers

## ■ Approach

- ▶ Leverage xSeries hardware
- ▶ Use Standard Windows Server software
- ▶ Add value to Windows servers

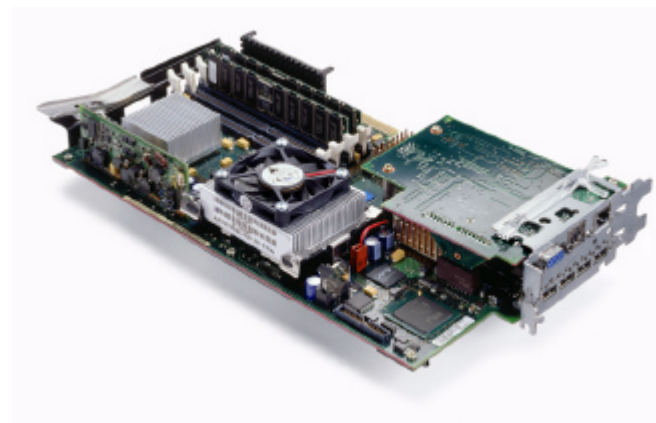
## ■ Choice of Offerings

- ▶ Server "under the covers" - Integrated xSeries Server
- ▶ Direct Attach xSeries Server - Integrated xSeries Adapter



## Integrated xSeries Server

- **Intel® 1.6 GHz Xeon™ Processor**
  - ▶ With Hyperthreading technology
  - ▶ Up to 4 GB Memory
- **Integrated 10/100 Mbps Ethernet Adapter**
- **Leverages iSeries resources**
  - ▶ Virtual disk storage - up to 2 TB
  - ▶ Virtual 1 Gbps Ethernet connections
  - ▶ Shared Tape, DVD and CD-ROM
- **iSeries Models 270, 8xx**
  - ▶ OS/400 V5R2 Required
  - ▶ 1 GHz IXS available for V5R1
- **Windows 2000 Server® Support**
  - ▶ Windows 2000 Server
  - ▶ Windows 2000 Advanced Server®
  - ▶ Microsoft .Net®\*



*Integrated operations and server management*

\* Planned for 1Q 2003, dependent on Microsoft delivery

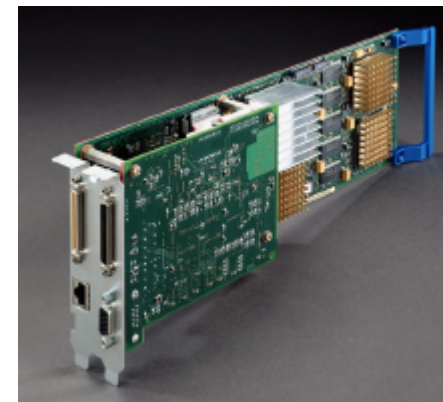
# Integrated xSeries Adapter

- **Attaches the latest 2, 4, 8-way xSeries Servers\***
  - ▶ 1 GBps High-Speed Link
  - ▶ x235 (2w), x255 (4w), x360 (4w), x440 (8w)
  - ▶ Models 270, 8xx
  - ▶ OS/400 V5R1 or V5R2
- **Retains features and value of Integrated xSeries Server**
  - ▶ Virtual disk storage
  - ▶ Virtual 1 Gbps Ethernet connections
  - ▶ Shared Tape, DVD & CD-ROM
- **iSeries Models 270, 8xx**
- **Windows 2000 Server Support**
  - ▶ Windows 2000 Server
  - ▶ Windows 2000 Advanced Server
  - ▶ Microsoft .Net\*\*

\* Selected Open Bay models of x235, x255, x360, and x440

\*\* Planned for 1Q 2003, dependent on Microsoft delivery

Enterprise **X**-Architecture™

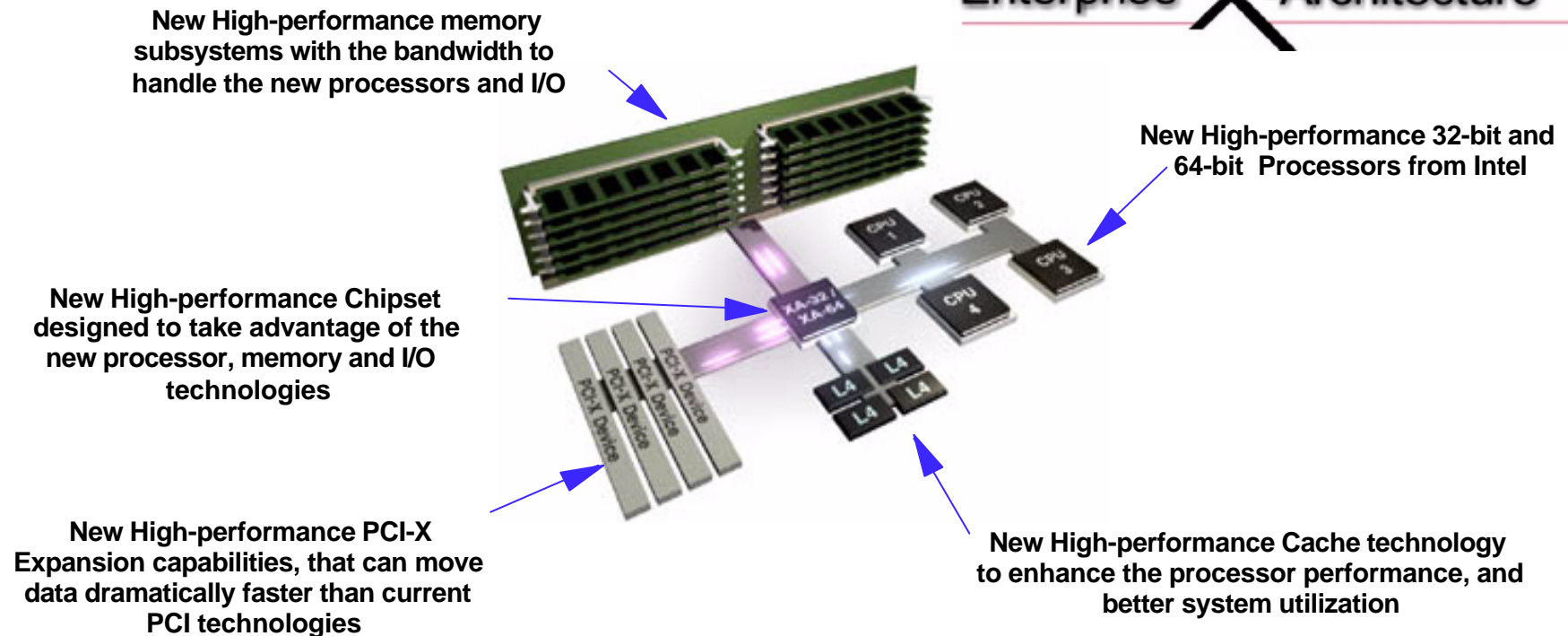


*Integrated operations and server management*

# Matched, High-performance Technologies

**Matching new high-performance 32 and 64-bit processor technology, with new high-performance memory and I/O subsystems.**

Enterprise **X**-Architecture™



**Result: Increased overall performance, system utilization, scalability and availability**



***Integration***



# iSeries Integrated xSeries Solutions : What is New

- **Support for new iSeries models**
  - ▶ i800, i810, i825, i870, i890
- **Integrated xSeries Server/Adapter maximums increased on 8xx**
  - ▶ Enables iSeries to support for larger and more complex Windows 2000 Server environments
- **i825, i870, i890 Enterprise Package includes Integrated xSeries Server**
  - ▶ 1.6 GHz Integrated xSeries Server
  - ▶ Education Voucher valid for ILS iSeries Windows Implementation Class
  - ▶ Service Voucher valid for iSeries Windows Integration Services



## Integrated xSeries Server (IXS)

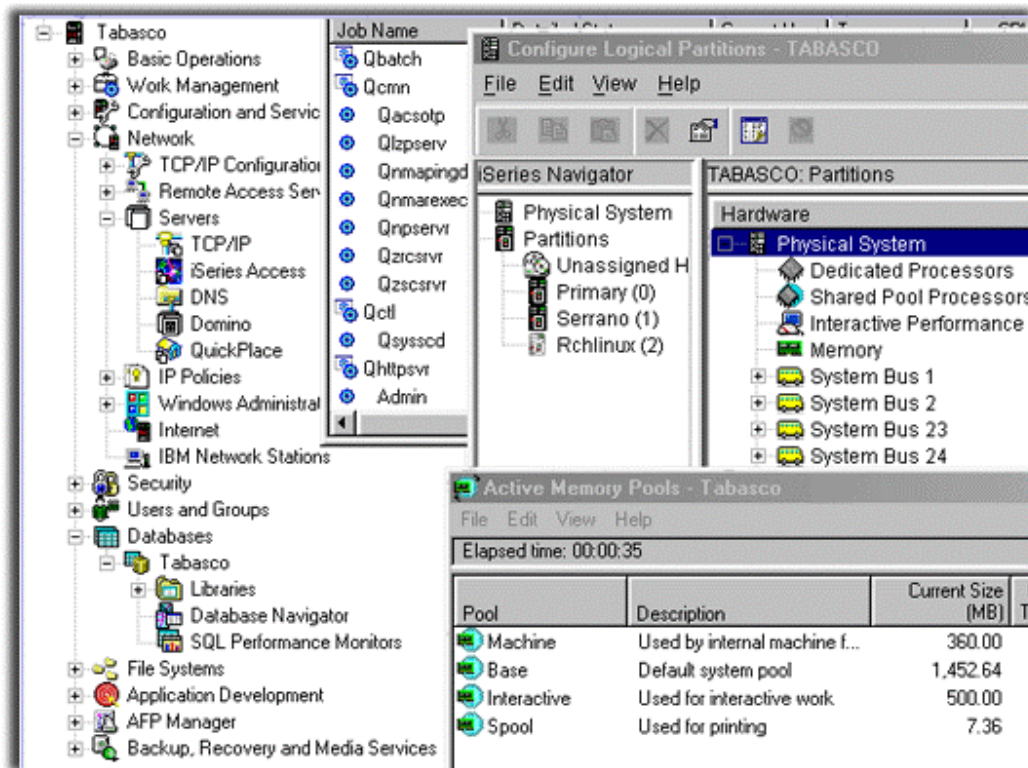
Model	Max IXS	Model	Max IXS
		800	4
270	3	810	13
820	12	825	36
830	28	870	48
840	32	890	48



## Integrated xSeries Adapter (IXA)

Model	Max IXA	Model	Max IXA
		800	3
270	2	810	7
820	8	825	18
830	16	870	60
840	32	890	60

# OS/400 V5R2 & iSeries Navigator



- Improve operator productivity with extensive automation for workload management
- Centralized administration of multiple operating environments across LPARs and Integrated xSeries servers
- Integrated management for enterprise middleware solutions

# User Administration

## Problem

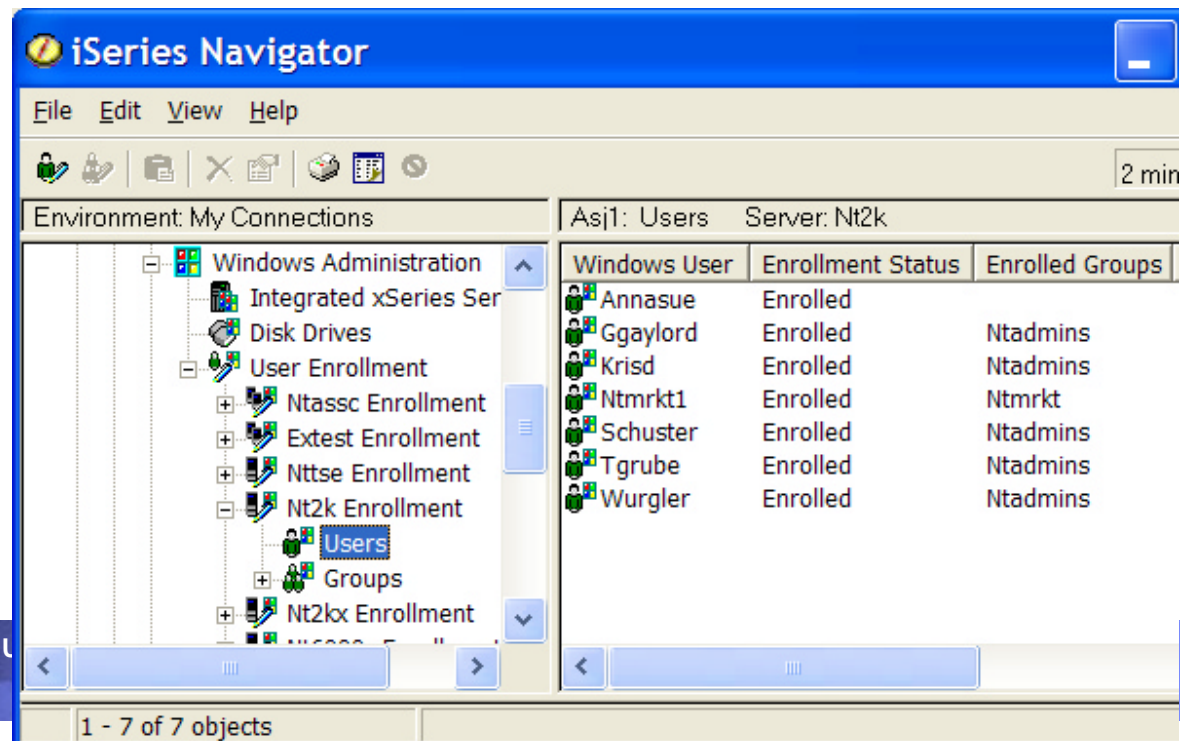
- ▶ Multiple system user management

## iSeries Solution

- ▶ Adding OS/400 Users and Groups to Windows 2000 Server Domains and Synchronizing Passwords

## Benefit

- ▶ Can reduce costs with integrated user management





## *Virtualization*

# Virtual Networking

## Problem

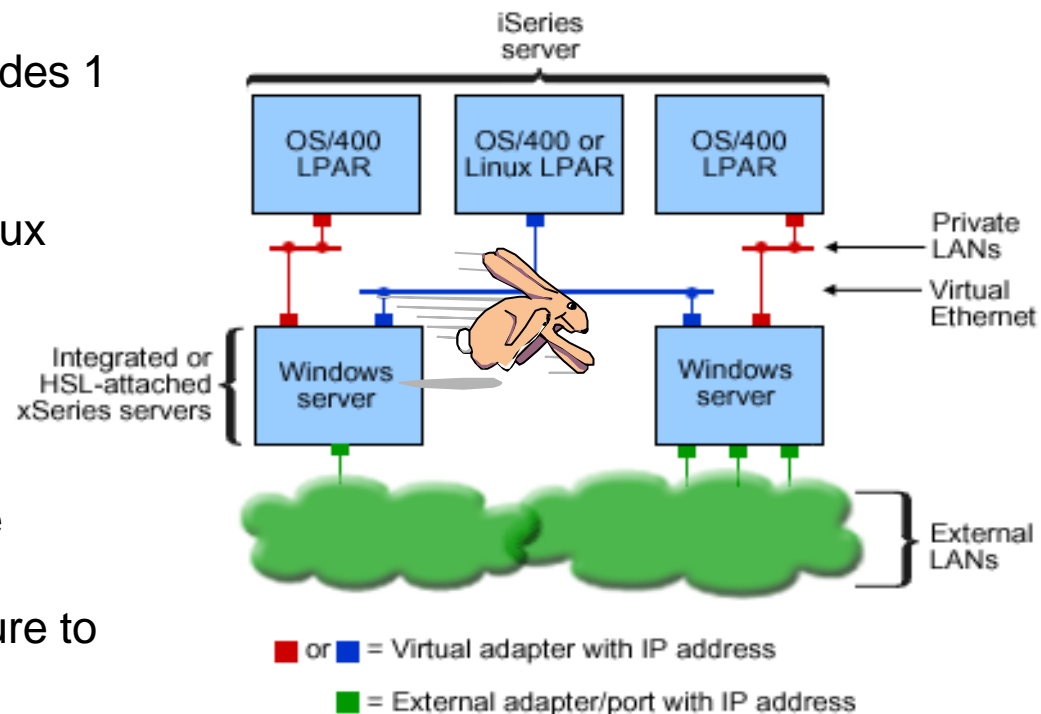
- ▶ Upgrading network infrastructure to support high-speed application communication is expensive in terms of time, resources and equipment

## iSeries Solution

- ▶ Virtual Ethernet at OS/400 V5R2 provides 1 Gb Connections with no LAN Adapters/Switches
- ▶ Windows to Windows to OS/400 to Linux
- ▶ Up to 5 Connections per IXS / IXA

## Benefit

- ▶ Extremely secure and reliable server communication over high-performance connections
- ▶ Can reduce network traffic and exposure to "sniffing"



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# Virtual Storage

## Problem

- ▶ Storage management across the server farm

## iSeries Solution

- ▶ Flexible Virtual Disks from 1 MB to 64 GB.
- ▶ Up to 2 TB per Windows server
- ▶ Hot add of iSeries Storage Space to Windows 2000 Server

## Benefit

- ▶ Can reduce costs with flexible, centralized storage management

