

Session 1027

Getting the Most from Windows Server 2003 on HP Servers

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Objectives of Session 1027

- Enhance familiarity with Windows Server 2003
- Understand HP support strategies on legacy and new products
- Learn about known issues and workaround procedures
- Answer your questions and concerns

Agenda of Session 1027

- Brief overview of Windows Server 2003
- Support Roadmap
- Fresh Installation Support
- Supporting Upgrades from Windows 2000
- Supporting Upgrades from Windows NT 4.0
- 64-bit Version Support
- Summary and Discussion

Windows Server 2003 Editions

- Datacenters; Large RDBMS
- 32-bit, Support for up to 32-way SMP & 64 GB RAM
- 64-bit, Support for up to 64-way SMP & 512 GB RAM
- Medium to Large Enterprises
- 32-bit, Support for up to 8-way SMP & 32 GB RAM
- 64-bit, Support for up to 8-way SMP & 64 GB RAM
- Small or departmental environments, enabling basic file and print and collaboration
- Built for Web serving and hosting, providing a platform for rapidly developing and deploying Web services and applications.
- Support for up to 2-way SMP & 2 GB RAM
- Hyper-Threading



Microsoft
Windows Server 2003
Datacenter Edition



Microsoft
Windows Server 2003
Enterprise Edition



Microsoft
Windows Server 2003
Standard Edition



Microsoft
Windows Server 2003
Web Edition

Microsoft
Small Business Server 2003

*Available
2H 2003*

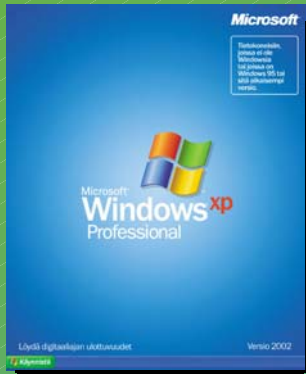
Windows NT

Windows 2000

Windows Server Family

Microsoft's Networking Plan for SMB

Level I



Peer-to-Peer

*Extend PC Value
for Your Business*

Level II



**SBS as First and
Essential Server**

*Realize the
Power of Server
Technology for
Your Emerging
Business*

Level III



**SBS + Windows
Server 2003**

*Grow Your
Windows Network
to Meet Expanding
Business Needs*

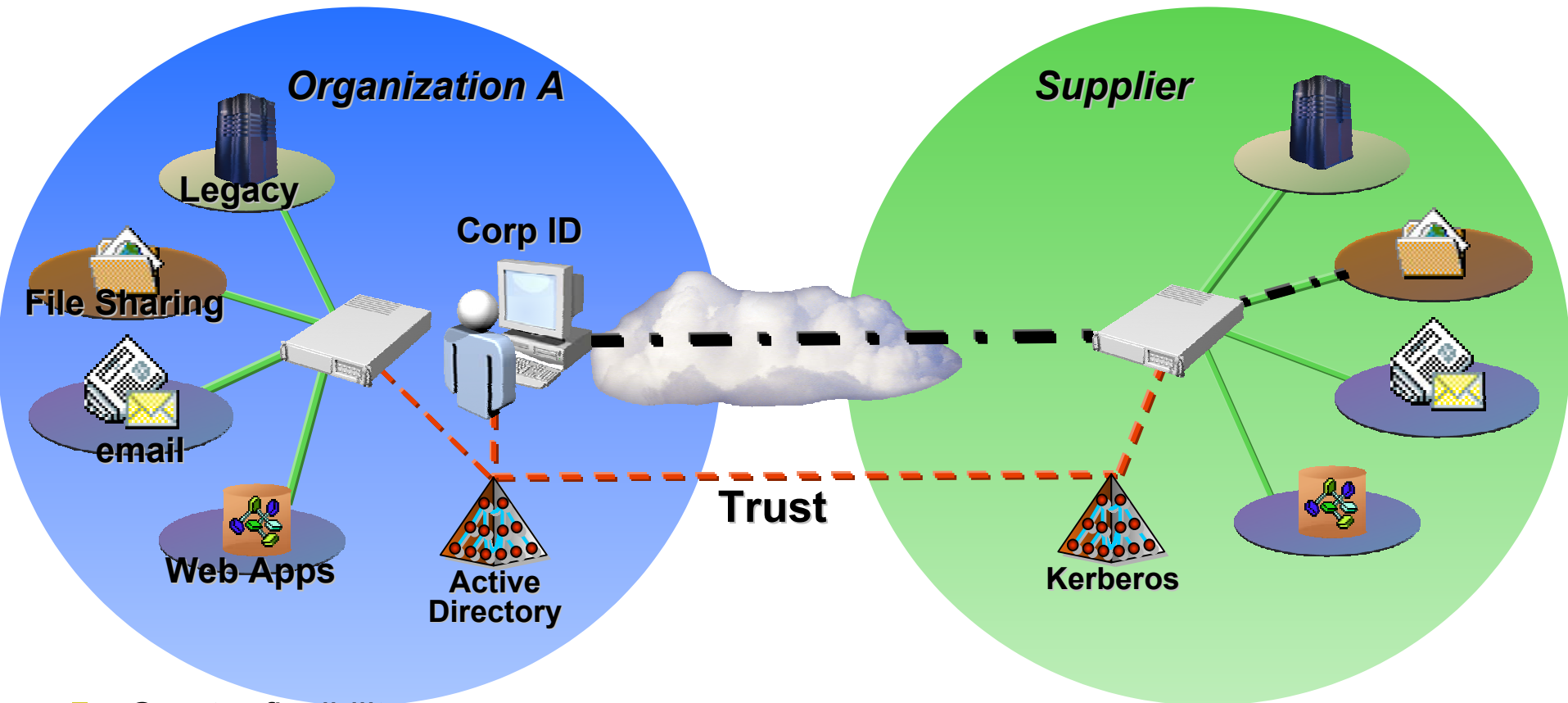
Level IV



**Multi-Server
Specialization**

*Integrate Servers
for Maximum
Performance
and Flexibility*

Active Directory Enhancements

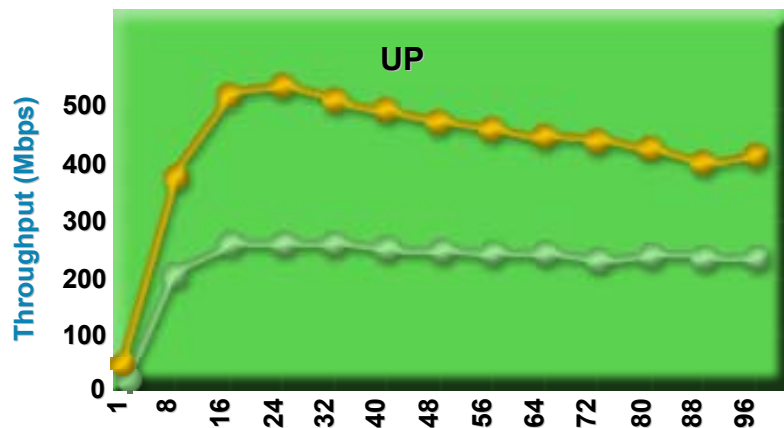


- Greater flexibility:
 - Domain rename, schema redefine, cross-forest trust
- Increased performance and scale
- Enhanced LDAP support

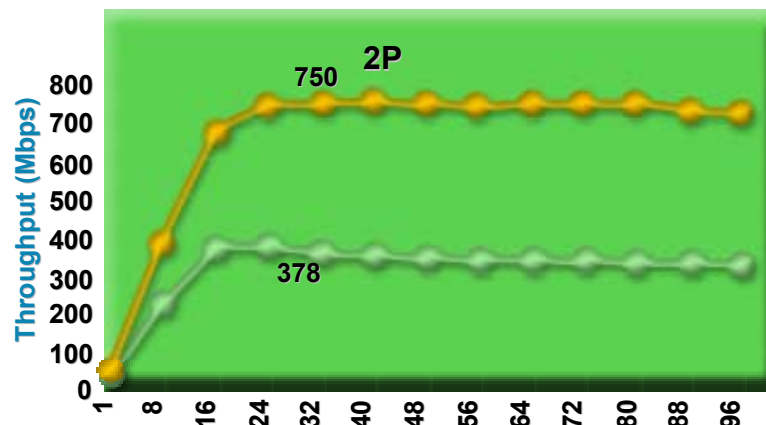
Faster File Server

98% faster than Windows 2000 Server

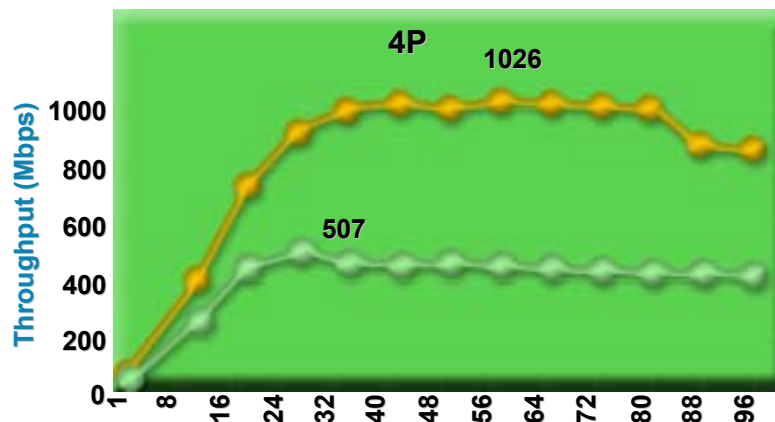
1-way 100% Faster



2-way 98% Faster



4-way 102% Faster

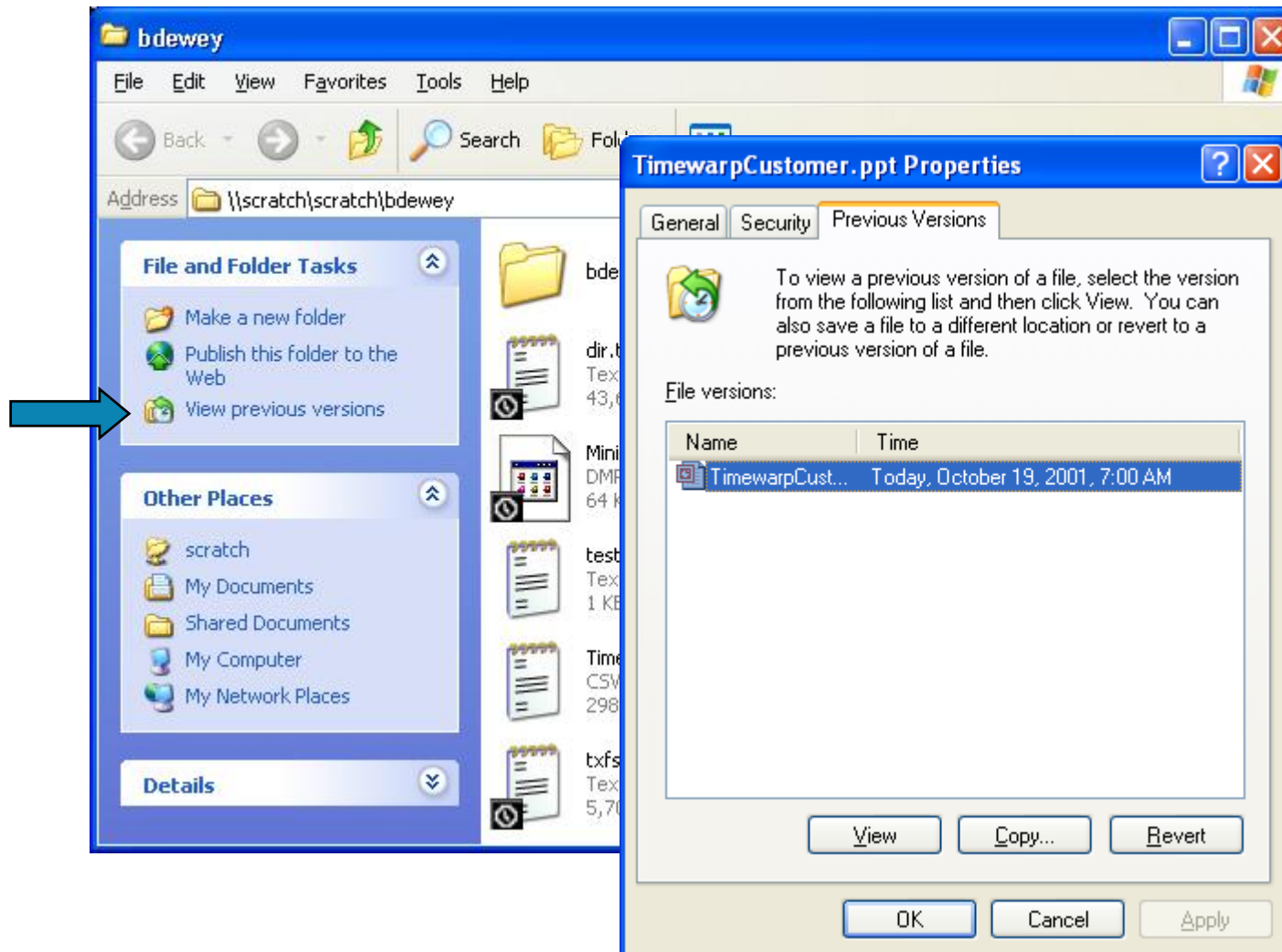


● Windows 2000 Server

● Windows Server 2003

Netbench Performance
(8P PIII 700 MHz, 2GB, HW
Raid)

Volume Shadow Copy & Restore



Microsoft's Security Framework



SD³ + Communications

Secure by Design

- Secure architecture
- Security aware features
- Reduce vulnerabilities in the code

Secure by Default

- Reduce attack surface area
- Unused features off by default
- Only require minimum privilege

Secure in Deployment

- Protect, detect, defend, recover, manage
- Process: How to's, architecture guides
- People: Training

Communications

- Clear security commitment
- Full member of the security community
- Microsoft Security Response Center



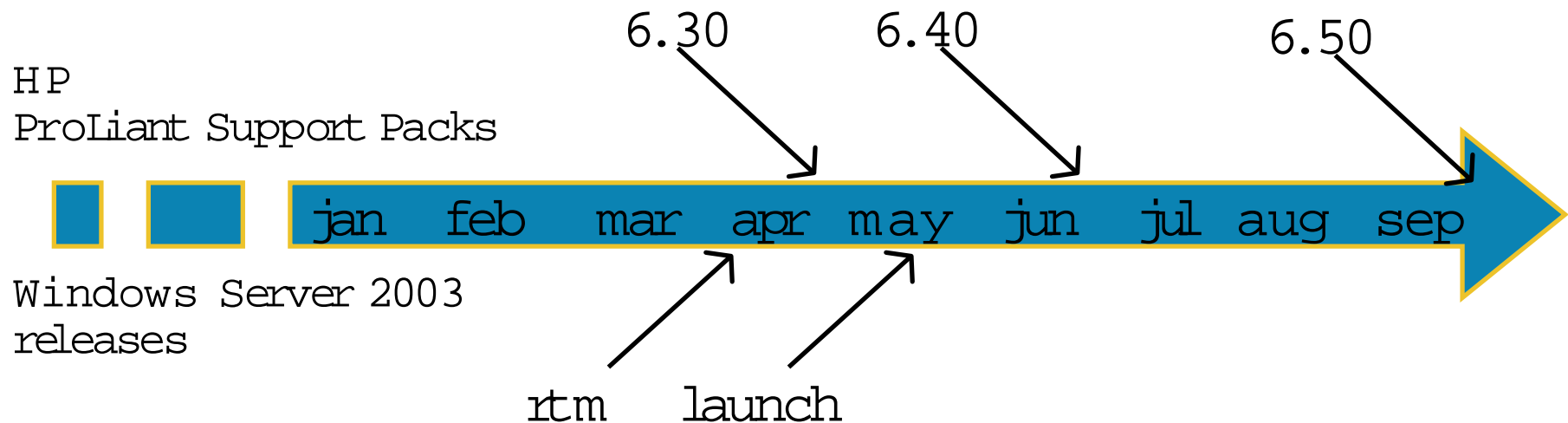
Support Roadmap

Support Roadmap

Evolution of a Server Operating System

- Windows NT 5.1 (early development stage)
- Windows “codename” Whistler (first beta releases)
 - Supported beta testers with Windows 2000 Support Paqs
- Windows XP (client products released)
 - Client and Server product code streams split
- Windows .NET Server (later beta releases)
 - Created special Windows .NET Support Paqs
- Windows .NET Server 2003 (release candidate)
 - Released comprehensive support software packages
- Windows Server 2003 (final release)
 - Added final driver signatures

Support Roadmap



New Rules for Driver Signatures

- Windows Server 2003 honors Windows 2000 (5.0) driver signatures ... *except for:*
 - anti-virus filters (5.1)
 - display adapters (5.1)
 - IEEE 1394 drivers (5.1)
 - imaging devices (5.2)
 - network devices (5.1)
 - USB controllers (5.1)
 - miscellaneous (5.2)

Support Roadmap

Support for Windows Editions

Server Family	Web Edition	Standard Edition	Enterprise Edition	Datacenter Edition
BL e-class	√	√		
BL p-class	√	√	√	
tc21xx		√		
tc3100		√	√	
tc4100		√	√	
ML3xx		√	√	
DL3xx	√	√	√	
ML5xx		√	√	
DL5xx		√	√	
ML7xx			√	
DL7xx			√	√

Support Roadmap

Expected Usage of Legacy Servers

Server Family	Web Edition	Standard Edition	Enterprise Edition	Datacenter Edition
PL 3000		√	√	
PL 5500		√	√	
PL 6000		√	√	
PL 6400r		√	√	
PL 6500		√	√	
PL 7000		√	√	
PL 8000			√	
PL 8500			√	
DL760			√	√

Support Roadmap

Processor Types on Legacy Servers

Server Family	Pentium Pro	Pentium II	Pentium II Xeon	Pentium III	Pentium III Xeon
pl 3000	n/a	no	n/a	yes *	n/a
pl 5500	no	n/a	no	n/a	yes *
pl 6000	no	n/a	no	n/a	yes *
pl 6400r	n/a	n/a	n/a	n/a	yes *
pl 6500	no	n/a	no	n/a	yes *
pl 7000	no	n/a	no	n/a	yes *
pl 8000	n/a	n/a	n/a	n/a	yes *
pl 8500	n/a	n/a	n/a	n/a	yes

Limitations on Supported Systems

- No Pentium II or older systems
- No EISA support
- No Netelligent/NetFlex NIC support



Fresh Installation

Steps to Perform Fresh Installation

- Read the white paper
- Obtain ProLiant Support Pack (6.30 or later) for Windows Server 2003
- Prepare a supported system
- Configure ROM to Windows 2000 settings
- Create/format array
- Install the OS kit
- Install the PSP for Windows Server 2003

Known Issues with Fresh Installations

- Devices not supported by OS media
 - Older device drivers removed from support
 - NetFlex/Netelligent NICs
 - Older storage controllers (Smart Array, SCSI)
 - Newer device drivers not included by cut-off
 - New storage controllers (e.g. SA3504)
 - New NICs (e.g. NC7770)
- NT Backup issue
 - Resolved by QFE available now
 - Does not impact third party backup programs



Upgrade from
Windows 2000

Steps to Upgrade from Windows 2000

- Read the white paper
- Obtain ProLiant Support Pack (6.30) for Windows 2000 and Windows Server 2003 (two PSPs)
- Prepare a supported system
 - Verify ROM revision is correct
- Apply PSP for Windows 2000
 - Insures all components are ready for clean upgrade
- Upgrade the OS to Windows Server 2003
- Apply PSP for Windows Server 2003
 - Updates some Windows Server 2003 specific drivers
 - Insures driver signatures are valid

Known Issues with Windows 2000 Upgrade

- Netelligent/NetFlex NIC driver
 - Failure to configure network during upgrade
- NIC Teams may need to be recreated after upgrade
 - Dissolve teams prior to upgrade for best results

Using NetFlex/Netelligent NICs

- Recommend upgrade to supported NIC(s)

but if that doesn't work....

- Ignore error and warning messages during OS install
- Do not configure network during OS install
- Obtain Windows 2000 driver from the Windows 2000 PSP
- Load the Windows 2000 driver manually, ignoring unsigned driver warning



Upgrade from
Windows NT 4.0

Upgrade from Windows NT 4.0

Steps to Upgrade from Windows NT 4.0

- Read the white paper
- Prepare a supported system
 - Verify ROM revision is correct
 - Verify unsupported components removed/disabled
- Run “Primer” utility to prepare system for upgrade
- De-install non-essential drivers and software
- Upgrade the OS
- Install the latest ProLiant Support Pack for Windows Server 2003

Known Issues with Upgrade from NT 4.0

- Class and filter drivers incompatible
- Control panel applets obsoleted
- Conversion to NTFS 5.0
 - may result in data loss
 - WILL result in configuration reset

Rolling upgrades of NT 4.0 clusters will not be supported



64-Bit Version Support

64-bit Version Support

64-bit Support Overview

- Windows Advanced Server Limited Edition
 - Available only from OEMs for 64-bit servers
 - DL590/64 (LE 1.1)
 - rx4610 (LE 1.1)
 - rx2600 (LE 1.2)
 - rx5760 (LE 1.2)

Transition to 64-bit Version of Windows Server 2003

- No charge to upgrade
- Provided by Microsoft to customers who register via enclosed response card

64-bit Version Support

Itanium and Itanium-2 Support

- DL 590/64 and rx4610
 - Windows Advanced Server Limited Edition v1.0 and v1.1
 - Supported by PSP 1.02A
 - 64-bit Version of Windows Server 2003, Enterprise Edition
 - PSP 1.04A available
- rx2600 and rx5670
 - Windows Advanced Server Limited Edition v1.2
 - 64-bit Version of Windows Server 2003, Enterprise Edition
- Superdome family
 - 64-bit Version of Windows Server 2003, Datacenter Edition

64-bit Version Support

Known Issues with 64-bit Version

- NT Backup issue
 - Resolved by QFE available now from HP

- Comprehensive support for all versions of Windows Server 2003 is available now
 - Prepare yourself with information
 - Make deployment decisions based on support
 - Prepare your servers with support software
 - Be prepared to handle known issues

Discussion



Interex, Encompass and HP bring you a powerful new HP World.

