Preparing for Windows Server 2003/R2 EOS

Dell Services & Solutions
Fast, flexible path from Windows Server migration to future-ready IT

Are you ready?

The end of service for Windows Server 2003/R2

12 million production WS2003/R2 machines are in use today[1]

Optimistic Estimates

200 days
server migration[2]

300+ days
application migration[2]

end of service on

JULY 14th 2015

1 Directions on Microsoft, Migrating from Windows Server 2003 and 2003 R2, February 24, 2014
2 Microsoft TechEd, Windows Server 2003 End-of-Support Application Migration, June 2014

What the end of service will mean to you

No updates

No compliance

Lack of PCI compliance could mean that Visa and MasterCard will no longer do business with your organization

ow to act

37 critical updates released in 2013 for Windows Server 2003/R2

ntinued rt for ations

Dell Solutions Tour 2014

What's your state of readiness?

57%
of Microsoft customers **are still running WS2003/R2**[1]

53%
are worried about **security compliance & vulnerability** management caused by WS2003/R2 EOS[2]

23%
are worried about **increases support costs and downtime** caused by WS2003/R2 EOS[2]

12%
Are worried about **regulatory compliance requirements** caused by WS2003/R2 EOS[2]

94%
94% of those running WS2003/R2 intend to migrate, but **only 24% are ready** to do so[1]
24%

40%
of those running WS2003/R2 are **not sure of the upgrade path**[1]

$200,000+ / year
an **average for custom support costs** post-WS2003/R2 EOS in order to stay within specific industry regulations[3]

1 CloudPost, Windows Server 2003 EOS, June 25, 2014
2 AppZero, 2013 State of Readiness for Windows Server 2003 EOS Survey, December 2013
3 Microsoft Technet blog, Windows Server 2003 End of Support is July 14, 2015 – Will you be ready to seize the opportunity, January 29, 2014

DELL

What are your end of service options?

2. Isolate systems

Addresses issues of new security vulnerabilities but may reduce usability of system

4. Retire assets

Only for applications that have reached end of their useful life & can be retired without business impact

6. Automated OS migration

Modernization services & tools can accelerate migration, minimize risk & cost factors

1. Take no action

Only viable if replacing applications & servers with a new, from the ground-up architecture

3. Custom support contract

Provides (costly) bridge support, but not a permanent solution

5. Manual OS migration

Migration of a large pool of servers to newer OS can be long & resource-intensive

7. Migration to cloud or IaaS

Transformative scenarios can advance IT flexibility & evolution

DELL

Modernize your server OS

Why migrate to Windows Server 2012 R2?

"IDC believes that **organizations still using Windows Server 2003 should seriously consider making a move directly to Windows Server 2012**. If for no other reason, this move will extend the support at the other end of the life cycle by a minimum of four years. But given the strong list of new features and compatibility with private/hybrid cloud adoption, **Windows Server 2012 is a better deployment platform for the future**."

IDC
"Worldwide Windows Server Operating Environments
2013-2017 Forecast: Windows Server Drives into Virtualization"
August 2013, #242789

Windows Server	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2003 SP2			14 July								
2003 R2 SP2			14 July								
2008 SP2			13 Jan					14 Jan			
2008 R2 SP2			13 Jan					14 Jan			
2012						9 Jan					10 Jan
2012 R2	15 Nov					9 Jan					10 Jan

Mainstream support Extended support

Top benefits of Windows Server 2012 R2

Comprehensive cloud platform

- Complete, **built-in virtualization** platform
- **Enterprise-class scale and performance**, so you can virtualize every application
- Ability to achieve **business continuity** with inbox disaster recovery solutions
- Best-in-class **hybrid cloud** experience with a common set of technologies

Cost savings and increased efficiencies

- **Reduced storage costs** with Storage Spaces and other storage enhancements
- **Increased server/administrator ratio** through Windows PowerShell and multimachine management
- **Increased uptime** with Cluster-Aware Updating and transparent failover

Support for a modern work style

- **Virtual Desktop Infrastructure** (VDI): simplified management and reduced cost of implementations
- **Optimized branch office wide area network** (WAN) bandwidth use
- Ability **for remote users to more securely access internal resources** without a virtual private network (VPN)
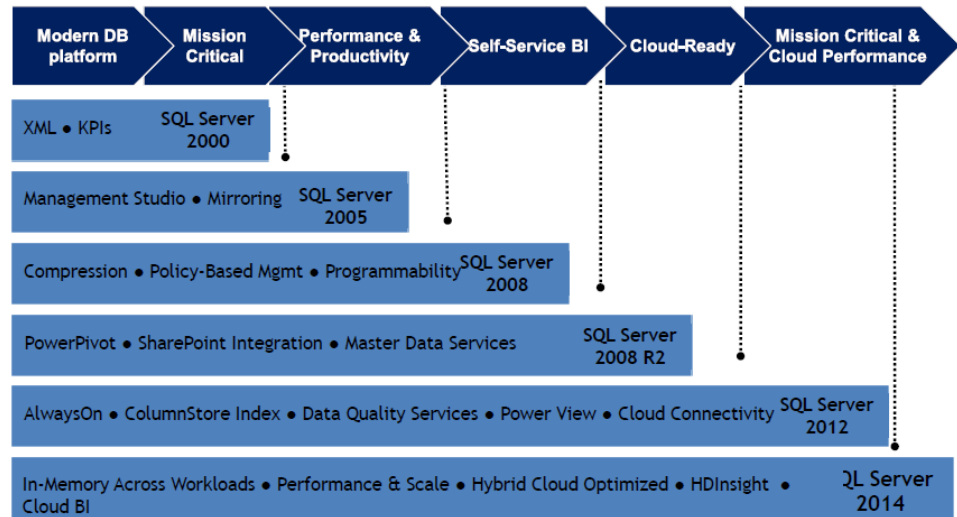
Should you consider upgrading SQL Server 2005?
End of service for Microsoft SQL 2005 is April 12, 2016

Key SQL Server 2014 enhancements

- 7X faster performance enables real time updates

- In-memory built-in memory on average 10X faster

- Up to 640 logical processors, 6 vCPUs/VM, 1 TB memory/VM, 64 nodes/cluster

- Network virtualization

- Storage virtualization

- 100% availability during all online operations

- Easy on-ramp to hybrid cloud

The evolution of the Microsoft data platform

| Modern DB platform | Mission Critical | Performance & Productivity | Self-Service BI | Cloud-Ready | Mission Critical & Cloud Performance |

XML • KPIs — SQL Server 2000

Management Studio • Mirroring — SQL Server 2005

Compression • Policy-Based Mgmt • Programmability — SQL Server 2008

PowerPivot • SharePoint Integration • Master Data Services — SQL Server 2008 R2

AlwaysOn • ColumnStore Index • Data Quality Services • Power View • Cloud Connectivity — SQL Server 2012

In-Memory Across Workloads • Performance & Scale • Hybrid Cloud Optimized • HDInsight • Cloud BI — SQL Server 2014

Should you consider a server refresh?
Windows Server 2012 R2 runs only on x64 processors

"**Organizations that refresh their software platforms more frequently than their hardware create a situation where the software platform is not optimized for the hardware platform** on which it is running. This can result in incompatibilities that require frequent patching, or perhaps an organization running multiple software versions in the same environment – another approach that will create a lot of maintenance and management problems."[1]

- Extending server replacement from 3 to 5 years increases the **failure rate by 85%**[1]

- Hardware that is 5 years old has **21% more downtime** than equipment 3 years old[1]

- On average, extending server hardware replacements from 3 to 5 years will **double the cost of IT staff labor**[1]

- Servers greater than 4 years old contribute only 4% of total performance capabilities in the datacenter while **consuming 65% of overall energy**[2]

1 IDC, Server Refresh Cycles: The Costs of Extending Life Cycles, August, 2012
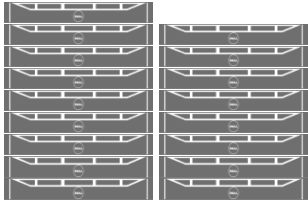2 Intel, Updating IT Infrastructure, 2013
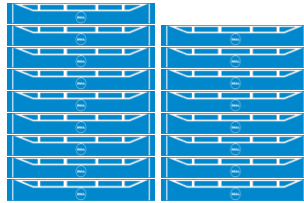
Benefits of a server refresh
Performance & efficiency

2014 (WS2012 + Intel E5-2600 V2, "Ivy Bridge")

2003 (WS2003 + Intel 5300)

17 Quad-core Intel Xeon processor 5300 series-based servers

1:1 **Performance refresh**

Up to **17x** the performance

17 Twelve-core Intel Xeon processor E5-2600 V2 product family-based servers

17:1 **Efficiency refresh**

1 Twelve-core Intel Xeon processor E5-2600 V2 product family-based servers

Up to **96%** reduced annual energy costs

As fast as **3** month ROI

DELL

What else should you consider when migrating?

Is server virtualization a good option?

Many organizations running WS2003 use only physical machines. Using Hyper-V, which is part of WS2012 R2, to run virtual machines instead of physical machines offers more efficiency, reliability & scalability.

How can you ensure application compatibility?

Ensure third-party applications are certified to work on WS2012 R2. Test all critical in-house applications to make sure they work properly in new environment.

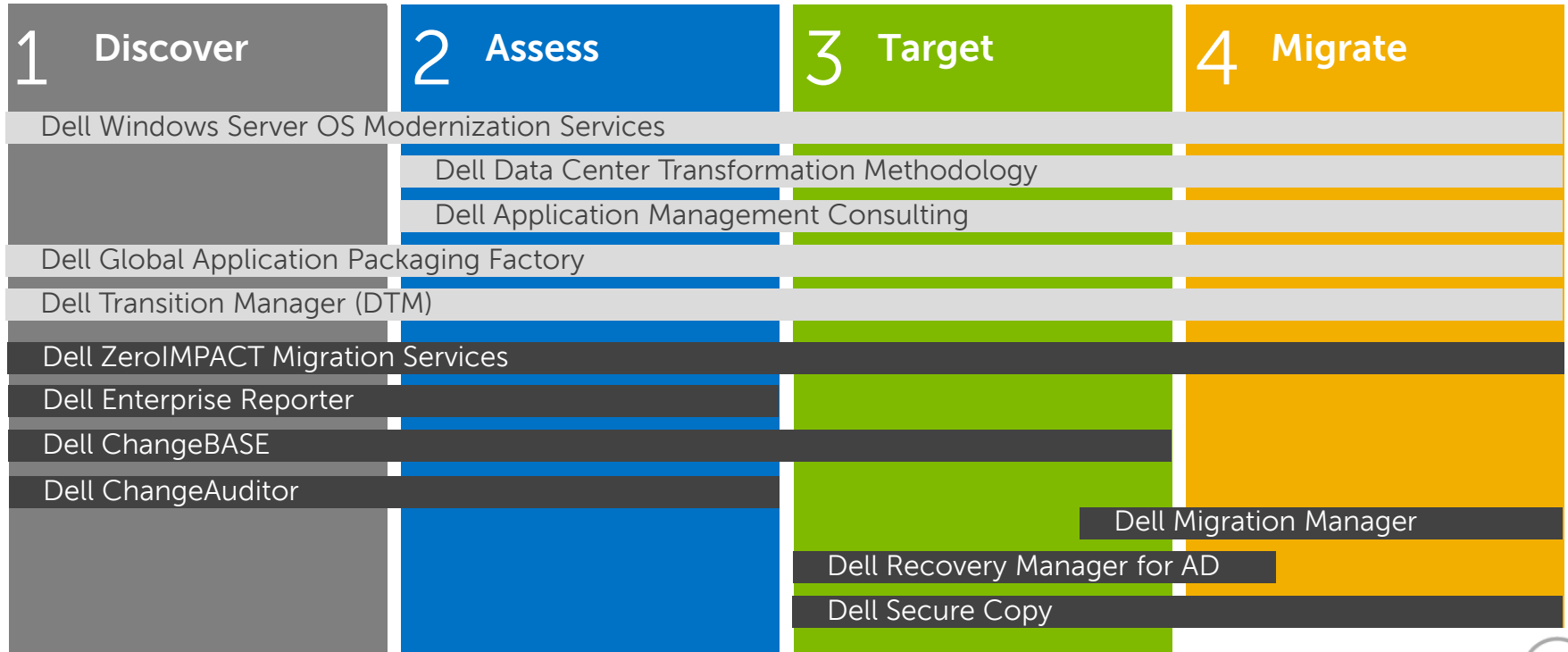## How can you improve security & compliance?

To ensure a secure & compliant WS2012 R2 environment, assess & clean up your current environment. In particular, make sure your Active Directory reflects each employee's current job function & inactive identities are deleted.

Do you need Active Directory restructuring?

Moving to WS2012 R2 is an opportunity to restructure your Active Directory to better meet your current and future needs. Consider how many domains you now need, how many forests.

The process you need to follow has not changed in a long time….the methodologies, frameworks & tools have

1 Discover	2 Assess	3 Target	4 Migrate
Dell Windows Server OS Modernization Services			
	Dell Data Center Transformation Methodology		
	Dell Application Management Consulting		
Dell Global Application Packaging Factory			
Dell Transition Manager (DTM)			
Dell ZeroIMPACT Migration Services			
Dell Enterprise Reporter			
Dell ChangeBASE			
Dell ChangeAuditor			
			Dell Migration Manager
		Dell Recovery Manager for AD	
		Dell Secure Copy	

Do more than modernize...

...transform

Should you consider the cloud or Iaas?

"For firms that are actively looking to transform their existing environment to a cloud-based model, the migration of Windows Server 2003-based applications represents an **opportunity to move a significant block of legacy functionality to the cloud**."

Gigaom Research
Balancing cost and Risk:
Migrating from Windows Server 2003 to the cloud
November 15, 2013

Over

80% of **new apps** will be distributed or deployed on clouds in **2012**.

70% of businesses are either using or investigating **cloud computing solutions**

Migration is an opportunity to transform your IT

Legacy apps & platforms

fortran COBOL
i for business AIX
hp UX SOLARIS
Microsoft

- Mainframe
- UNIX
- x86 server
- Storage
- Network
- Client

Outdated infrastructure

Flexible transition services
Assess, plan, design or implement

Business-class connected devices
Secure, connected, managed heterogeneous endpoints

Intelligent converged infrastructure
Software-defined architecture

Seamless cloud delivery
An extension of the data center (SaaS, PaaS, IaaS)
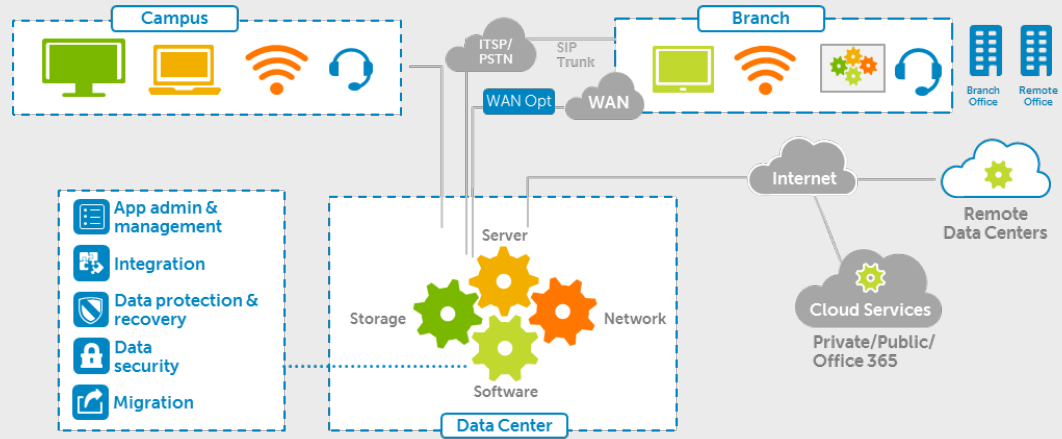
Greater insights from data
Data-driven decision making

Connected security
Secure from the device to the cloud

DELL

An opportunity to transform your business

Compute from your scale to hyperscale	Modernize network infrastructure	Establish new storage economics	Redefine office IT
Harness energy-efficient blade, rack, converged systems for any workload, at any scale	Improve infrastructure performance, lower costs with the power of 10GbE networking end-to-end	Experience new storage economics and innovations including Flash at the price of Disk	Bring order to chaos with an integrated, quiet solution for remote/branch offices

End-to-end solutions for the enterprise from data center to desktop to mobile device

Accelerate value with Dell's end-to-end capabilities
The right people, processes & technology

Expert **Services**

World-class solutions architects, automated tools, unique intellectual property, reference architectures & best of breed partners.

Innovative **Software**

Scalable & integrated technologies & best practices to efficiently & effectively address each phase of migration planning & execution.

Breakthrough **Hardware**

Industry-leading, future-ready IT solutions, as well as foundational building blocks, designed to maximize value & choice.

Flexible **Financing**

Wealth of leasing & financing solutions designed to help make upgrades affordable & help you find opportunities in your IT capital expenditure, operating expenditures & cash flow decisions.

Pragmatic **Training**

Award-winning suite of education services taught by top-trained faculty & staff, delivered through multiple methods, built around your migration needs & designed to speed maximum return on investment.

Choose the path that best fits your needs

Transform with Dell
Dell plans & implements migration for you, with world-class people, tools, IP

Dell Consultancy Services

Modernize with Dell
You leverage Dell unique scalable & integrated solutions & tools

Dell Software tools

Microsoft software

Do it yourself
You leverage Dell industry-leading foundational building blocks

Dell Hardware	Dell Support	Dell Deploy	Dell ED Services	Dell Asset Recovery	Dell Financial Services

No matter the path you choose, **Dell can help**
Accelerate migration & value, mitigate risks & costs

IT infrastructure that seamlessly spans on-premises and cloud, while reducing costs, simplifying management and improving data protection.

Cost savings

Align your infrastructure to the business, reduce capital expense & maximize investment through consolidation, virtualization & cloud infrastructure

Simplicity

Streamline your infrastructure & simplify IT management for more control & make it more agile with integration with Microsoft System Center

Peace of mind

Ensure availability & business continuity, rely on enterprise-grade security on-premises & in the cloud

DELL

Dell and Microsoft

Partner with the leader

30+ year partnership

"Original" Microsoft Certified Gold Partner

#1 distributor of Microsoft software*

#1 Microsoft OEM*

21 Gold & 3 Silver competencies*

Technology Adoption Programs (TAPs)

Dell has been a Microsoft Certified Gold Partner since 2003, the year the program began
* Microsoft Pinpoint as of July 29, 2014

Leading edge solutions built on collaboration

Joint Engineering

Joint engineering programs that produce unique intellectual property, including reference architectures and business ready configurations that are scalable from device to data center.

End-to-end Solutions

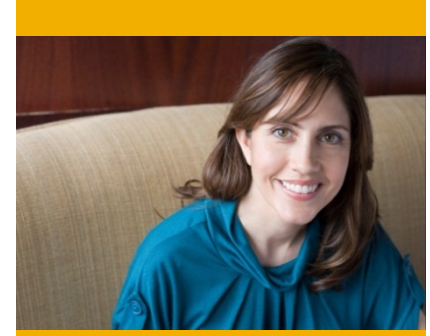End-to-end solutions across both the Microsoft product portfolio and Ell's solution and product portfolios.

Collaborative Sales Teams

Coordinate, incented and cross-trained sales teams with a deep understanding of the benefits of alliance solutions.

Worldwide Expert Delivery

Worldwide expert delivery teams that use a flexible approach and established delivery processes to meet specific customer needs.

Dell's Microsoft solutions portfolio

Unified Communications & Collaboration
- Unified Communications
- DVS Enterprise for Windows Server
- SharePoint Solutions
- Microsoft Exchange

Data Center Infrastructure
- Windows Server 2012 R2
- Microsoft System Center
- Data Center Virtualization
- Cloud Computing
- Windows Server Management
- Windows Storage Spaces
- Windows 2003 EOS Migration
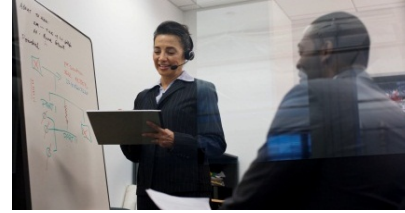
Data Management & Storage
- SQL Server 2012 & 2014
- Unified Storage for SharePoint
- Analytical Platform System

Client Computing
- Windows 8 Migration
- Microsoft Systems Configuration Center Manager
- Commercial Tablets
- Apps

Power Microsoft's innovation with ours
Industry-leading innovations now available in Dell's server and client computing solutions enable you to take immediate advantage of ground-breaking advancements in Microsoft software solutions.

We're ready when you are
Dell has the expertise to help you make informed decisions now and the solutions to streamline the management and evolution of your IT ecosystem.

Dell's Microsoft Partner competencies

21 Gold competencies

3 Silver competencies

Gold Application Development
Gold Application Lifecycle Management
Gold Business Intelligence
Gold Collaboration and Content
Gold Communications
Gold Customer Relationship Management
Gold Data Platform
Gold Devices and Deployment
Gold Distributor
Gold Hosting
Gold Identity and Access
Gold Intelligent Systems
Gold Learning
Gold Management and Virtualization
Gold Messaging
Gold Midmarket Solution Provider
Gold OEM
Gold Server Platform
Gold Small Business
Gold Software Asset Management
Gold Volume Licensing
Silver Application Integration
Silver Enterprise Resource Planning
Silver Project and Portfolio Management

Microsoft Pinpoint as of July 29, 2014

Dell's Microsoft Partner of the Year awards

So far, in....
2014

- Enterprise Partner Group Partner of the Year (East, West, Central)
- U.S. Windows Deployment Partner of the Year
- Worldwide Windows 8 App Developer of the Year
- Public Sector Partner of the Year
- U.S. Revenue Partner of the Year
- Worldwide Enterprise Partner Group Microsoft Sales Achievement Award (finalist)

2013

- Enterprise Partner Group Partner of the Year (East, West, Central)
- Worldwide OEM Multi-national Account Partner of the Year (finalist)
- U.S. Windows Partner of the Year
- U.S. Windows Deployment Partner of the Year
- Worldwide Windows 8 App Developer Partner of the Year (finalist)
- Worldwide Office/SharePoint App Developer of the Year
- Worldwide Enterprise Partner Group Microsoft Sales Achievement Award, SI
- Inner Circle for Microsoft Dynamics (recipient)
- President's Cloud for Microsoft Dynamics (recipient)
- YouthSpark Citizenship Partner of the Year

Next steps

Accelerate with Dell's end-to-end capabilities
The right people, processes & technology

Expert
Services

Innovative
Software

Breakthrough
Hardware

Flexible
Financing

Pragmatic
Training

Visit the Service Clinic in the expo today!

Top-down approach
Start with WS 2003 End of Service Workshop

Leverage Dell's full end-to-end solution approach: requirements, analysis, disposition, readiness, migration

Start with both approaches and match them up when full dependency analysis is complete

Bottoms up approach

Conduct technology POC's to prove the approach; build a plan for full migration

Thank you

Dell.com/2003migration