

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 today¹

Optimistic Estimates

200 days
server migration²

300+ days
application
migration²

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

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

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

DW

to act

ntinued
rt for

ations

Microsoft TechEd, Windows Server 2003 End-of-Support Application Migration, June 2014



What's your state of readiness?

57%

of Microsoft customers
are still running
WS2003/R2¹

53%

are worried about
**security compliance &
vulnerability**
management caused by
WS2003/R2 EOS²

23%

are worried about
**increases support costs
and downtime** caused by
WS2003/R2 EOS²

12%

Are worried about
**regulatory compliance
requirements** caused by
WS2003/R2 EOS²

94%

94% of those running
WS2003/R2 intend to
migrate, but **only 24%**
are ready to do so¹

24%

40%

of those running
WS2003/R2 are **not sure**
of the upgrade path¹

\$200,000+ / year

an **average for custom support costs** post-
WS2003/R2 EOS in order to stay within specific
industry regulations³

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



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

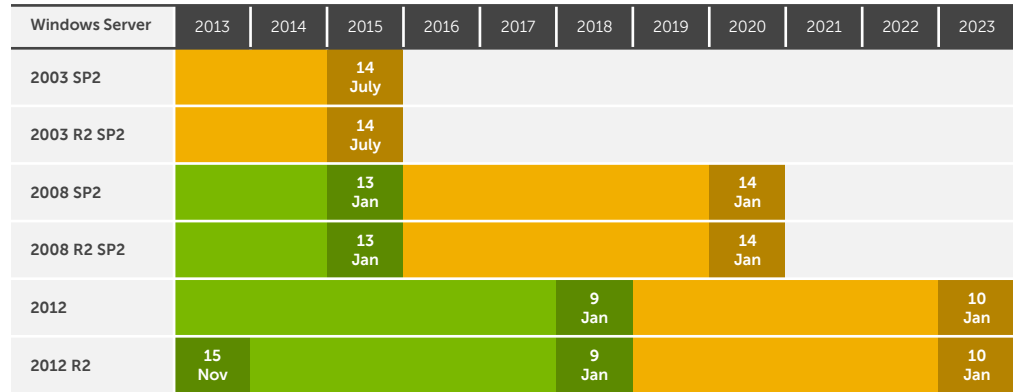
Transformative scenarios can advance IT flexibility & evolution

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



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)

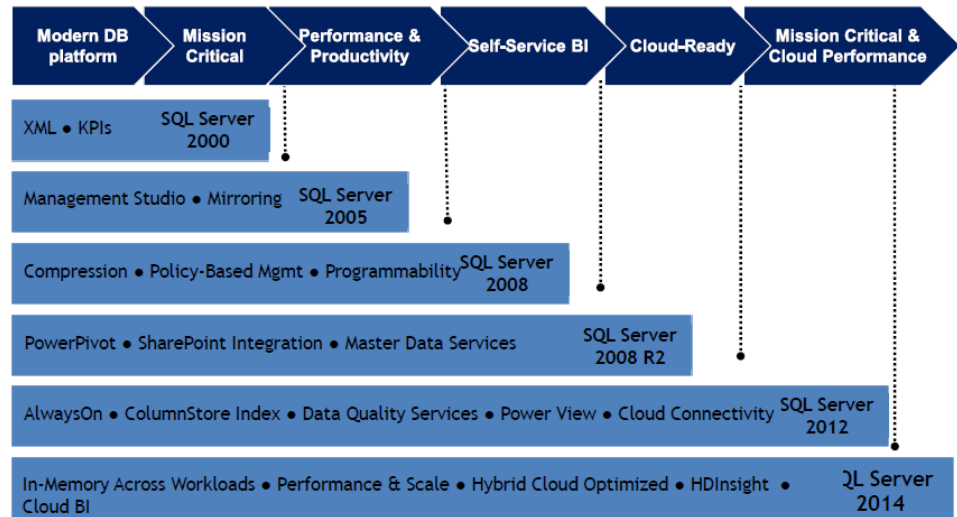
Should you consider upgrading SQL Server 2005?

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



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 old¹
- 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

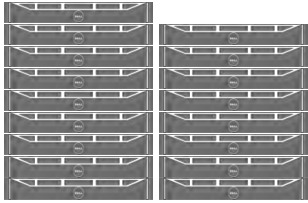
² Intel, Updating IT Infrastructure, 2013



Benefits of a server refresh

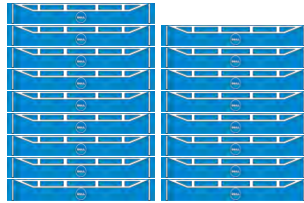
Performance & efficiency

2003 (WS2003 + Intel 5300)



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

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



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

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?

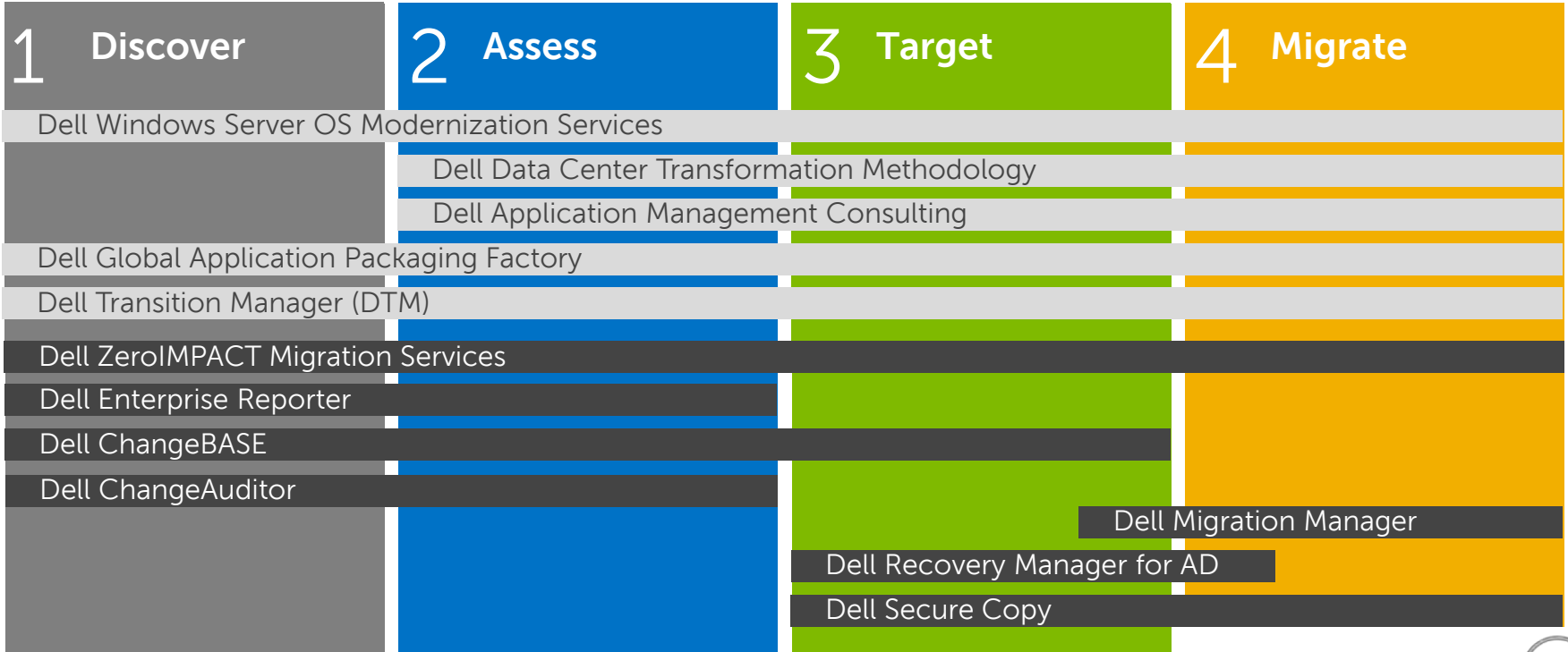
To ensure a secure & compliant WS2012 R2 environment, assess & clean up your current environment. In particular, make sure your Active Directory reflects each employee's current job function & inactive identities are deleted.



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



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.**

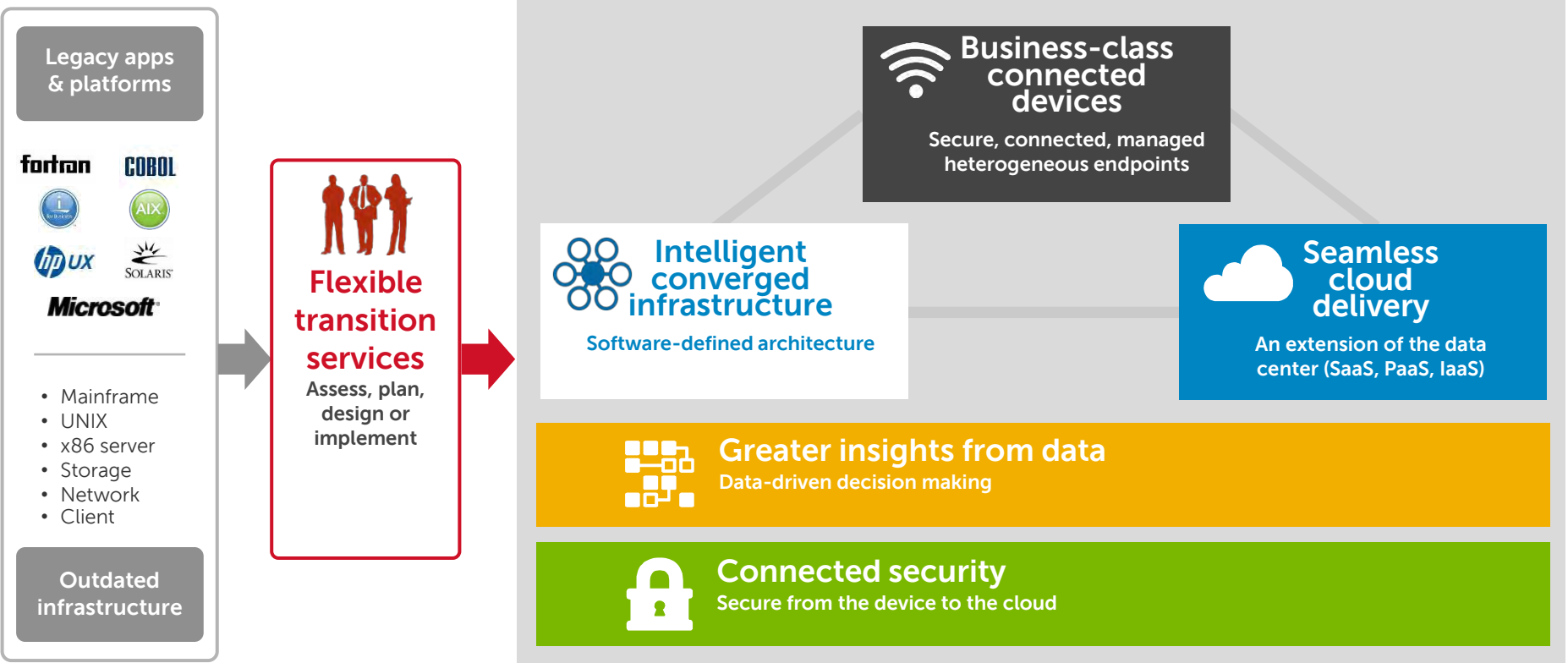


70%

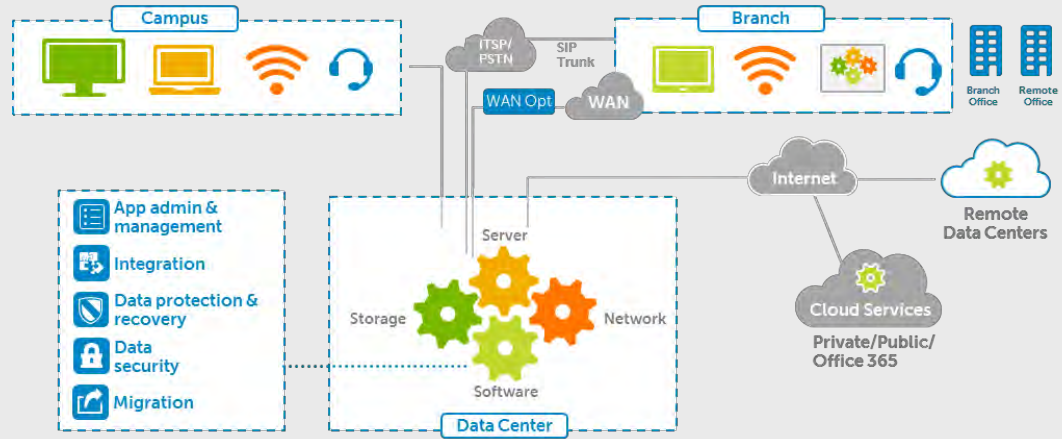
of businesses are either using or investigating **cloud computing solutions**



Migration is an opportunity to transform your IT



An opportunity to transform your business



Compute from your scale to hyperscale

Harness energy-efficient blade, rack, converged systems for any workload, at any scale

Modernize network infrastructure

Improve infrastructure performance, lower costs with the power of 10GbE networking end-to-end

Establish new storage economics

Experience new storage economics and innovations including Flash at the price of Disk

Redefine office IT

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



There is **no single migration path** that suits all organizations and workloads.

Dell provides unique services and tools to help you rank and classify your Windows migration pathway based on critical needs.

Dell's end-to-end capabilities addresses Windows migration **from the data center to the end point.**



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

Modernize with Dell

You leverage Dell unique scalable & integrated solutions & tools

Do it yourself

You leverage Dell industry-leading foundational building blocks

Dell Consultancy Services

Dell Software tools

Microsoft software

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 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.



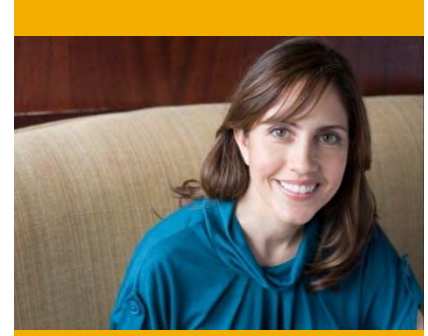
End-to-end Solutions

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



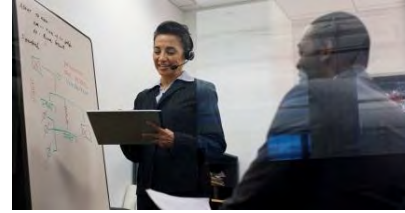
Unified Communications & Collaboration

- 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!

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

Bottoms up approach



Top-down approach

Start with WS 2003 End of Service Workshop

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

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



Thank you

Dell.com/2003migration

