THREE STEPS TO ACCELERATING YOUR MIGRATION FROM WINDOWS SERVER 2003
GET READY TO POWER TOMORROW’S BUSINESS
Now is a great time to set your business up for success by migrating your Windows Server 2003 servers and workloads to a more dynamic infrastructure. While Windows Server 2003 has been a reliable platform for more than a decade, moving to innovative virtualization and cloud-based technologies will open up new opportunities for your business. A move to modern platforms will also eliminate the risks associated with running software on an outdated, unsupported operating system. This guide will help you plan your Windows Server 2003 migration to maximize the benefits of modern systems and mitigate risks associated with maintaining an old infrastructure.

MOVING WITH THE MARKET

PROTECTING YOUR BUSINESS

THREE STEPS TO ACCELERATING YOUR MIGRATION
- Assess your environment
- Target the best migration destinations
- Migrate and modernize

THE TIME TO ACT IS NOW

APPENDIX
New virtualization and cloud technologies can help your business move faster, reduce operating expenses, and extend the capacity and reach of business services. According to IDC, “Increased business revenue from the IT innovation enabled by cloud could reach $1.1 trillion a year by 2015.”

Windows Server 2012 R2, Azure, and SQL Server 2014 are key building blocks to creating an incredibly productive infrastructure for your business. They allow you to quickly launch new services or easily extend your on-premises datacenter operations to the cloud.

Replacing your aging Windows Server 2003 today can propel your business to new levels of productivity and operational efficiency. This is also true for SQL Server 2005, a common Windows Server 2003 workload, which will reach end of support in April 2016.

The benefits you can achieve by evolving your infrastructure – particularly with cloud and hybrid cloud technologies enabled through Azure – can help your IT organization:

• Create highly available, hyper-scale applications that run on any device
• Reduce capital expenses by eliminating hardware and facility costs
• Simplify data storage and backup
• Provide huge advancements in speed
PROTECTING YOUR BUSINESS

The competitive risk of running your business on old technology is compounded by the security risks that increase when old technology is unsupported. Moving your Windows Server 2003 applications to new infrastructures – whether it is an on-premises datacenter built on Windows Server 2012 R2 or the Azure cloud – will protect your organization against vulnerabilities and compliance risks, and provide mission critical availability.

SECURITY
At the end of support, several security risks will arise. The first and most important is that Microsoft will no longer release any security patches or updates to protect systems running on Windows Server 2003. After July 14, 2015, if a new security vulnerability is discovered in the code, it is unlikely a fix will be released by Microsoft and Microsoft will not address non-security defects or assist customers that encounter problems in operation.

COMPLIANCE
Running unsupported systems can also introduce risk of non-compliance. Government regulations like HIPAA or the Sarbanes-Oxley Act prohibit the use of unsupported systems and may impose heavy fines for data breaches, especially those that involve personal information. Industry standards like the Payment Card Industry (PCI) Data Security Standard also require all systems to be up to date and members will not do business with you if you are not compliant.

AVAILABILITY
If an unknown latent defect triggers system failure, it may not be fixable. There is no guarantee that your internal IT team will be able to recover lost data or restore the system should such an error occur, which could lead to extended downtime, without the ability to get back online in a reasonable timeframe.
THREE STEPS TO ACCELERATING YOUR MIGRATION

With Windows Server 2003 ending support in July 2015 and SQL Server 2005 ending support in April 2016, now is the perfect time to evolve your server infrastructure. You can take advantage of the many benefits available by moving your datacenter infrastructure to Azure or Windows Server 2012 R2, while limiting your exposure to any security or compliance concerns. The sooner you move, the faster you will see positive business impact.

Because migration may not be a high priority within your organization, you may need to convince business leaders of why migration efforts can't wait. Below are three steps to help you prioritize migration off Windows Server 2003, create a solid action plan, and get the help you need to modernize your business today.
To determine the best options for your move off of Windows Server 2003, the first step is getting a complete view of your current datacenter landscape. Assessing your infrastructure gives you a clear insight into what changes need to be made – and a better idea of the risk of staying put. You’ll need to get visibility into both your infrastructure and applications. While it’s critical to know how many instances of Windows Server 2003 you have, the real priority is knowing what application workloads are running on those servers. Moving your applications is where the largest migration challenge and opportunity lies.

**INFRASTRUCTURE ASSESSMENT**

There are many tools out there that can help you run an assessment. The Microsoft Assessment and Planning Toolkit, for example, is a free download that provides detailed reports with extensive hardware and software information, including actionable recommendations to help organizations with their IT planning process. It can also provide server utilization data for virtualization planning.

Microsoft field and partners are familiar with Microsoft Assessment and Planning Toolkit reporting, so they will be able to help you interpret the data to determine your next steps.

**APPLICATION ASSESSMENT**

Many Microsoft partners – such as Lakeside Software and Citrix Systems – have tools to help you get detailed data on the applications you have running on Windows Server 2003. These tools can catalog and categorize workloads to provide a better understanding of your options for moving your applications. For example, running an assessment with these tools can help you determine which applications would benefit from moving to the cloud and which should remain on-premises.

**GET HELP!**

Depending on the complexity of your environment, it may make sense for you to get a partner to help. Many partners can help you with assessing your environment. You can find them [here](#), contact your local resellers, or see the appendix for options.
After assessing your current landscape you should be able to do the following:

- Prioritize which applications and workloads are critical
- Identify applications that can migrate with minimal effort
- Make a plan for applications that will be more challenging to migrate
- Consider retiring outmoded applications

You may find some applications need to be re-written to maximize performance, so it is best to start this process as soon as possible.

In determining what platform these applications should move to, keep in mind the advancements available in both on-premises and cloud options. Any or all of the solutions below may be good destinations for your business applications. Be sure to consider all options in order to maximize the benefit of any new technology or consolidation effort. Most likely, a combination of all of the solutions will be the most efficient path to supporting tomorrow’s business.
MICROSOFT AZURE

Innovations in the cloud have opened up new options for you to streamline your datacenter and support critical business applications. Migrating workloads to Microsoft Azure can lower capital expenditures and increase IT capacity as needed, not to mention providing elastic scale and pay-as-you-go performance. Operational costs are predictable, steady, and likely cheaper in the cloud.

Microsoft Azure includes both Platform as a Service (PaaS) capabilities for web hosting, data storage and app services for coding and streaming, as well as Infrastructure as a Service (IaaS) capabilities for compute services directly in Azure. Microsoft Azure Infrastructure Services uses the same virtual machine format as the latest version of Windows Server. Both run Windows Server 2012 R2, allowing the flexibility to move workloads as needed. Microsoft only charges users for what they use—by the minute, not the hour—and all service level agreements (SLAs) are financially backed. Further, migrating to Azure removes the future burden of migration that you are currently dealing with for Windows Server 2003.

OFFICE 365

If you are running Exchange or SharePoint on Windows Server 2003, Office 365 can be an ideal destination. It provides integrated, rapid deployment or migration and easy management of Microsoft Exchange, SharePoint, and Lync. Moving to Office 365 will often be the quickest and most direct route to migration from older versions of these applications.

WINDOWS SERVER 2012 R2

For many users, migrating from Windows Server 2003 to Windows Server 2012 R2 is a great opportunity to take advantage of the many advances in Windows Server since 2003. Many features that are standard on Windows Server now were not available or have vastly improved. These include:

- Enterprise-class scale and performance
- Shared-nothing live migration with Remote Direct Memory Access (RDMA)
- Hyper-V network virtualization
- Low-cost, highly available file-based storage
- Backup and recovery
- Hybrid applications
- Windows PowerShell 4.0
- Simplified, feature-rich Virtual Desktop Infrastructure (VDI)
3. MIGRATE AND MODERNIZE

Now that you have prioritized your workloads and understand the best target destinations for your applications, you need to figure out the most efficient way to migrate. Focus on migrating applications that have the highest impact to your business before support expires.

The effort necessary to migrate these applications will differ depending on unique environmental factors. In the most basic cloud scenario, moving an application to Azure could be as simple as installing the application on a new instance of Windows Server 2008 or 2012 R2, testing it, and publishing it to Azure. You can get a detailed accounting of the costs of running your application in the cloud using the free Azure Cost Estimator.

For an on-premises migration to Windows Server 2012 R2, you need to consider your hardware options. The hardware will need to be able to support the workload, which means you may need to purchase new equipment (which may be more efficient, but more costly) or repurpose existing hardware. Remember that Windows Server 2003 only supports 32-bit applications, Windows Server 2008 supports 32-bit and 64-bit, and Windows Server 2012 R2 only supports 64-bit.

Microsoft partners can help with more complex migration scenarios. The same service partners that can help with assessment likely have migration capabilities too. Several ISVs sell tools that can reduce the time it takes to migrate applications as well. AppZero, for example, can containerize your applications to allow them to run in either on-premises or cloud environments. You can find out more about their solution in this Microsoft Virtual Academy session.

NEED HELP FINDING A PARTNER?

Use the Windows Server 2003 Migration Planning Assistant. This application walks you through four steps to help you analyze your Windows Server 2003 workloads, and generates a summary report showing recommendations and relevant Microsoft partner offerings.
Start your assessment today! Take the first step on the path to modernizing your datacenter and minimizing the risks of maintaining legacy servers. Use free Microsoft tools or reach out to partners for migration assistance – whatever you need to prepare to power tomorrow’s business.
# APPENDIX

Below is a list of tools to help get you started. Contact your Microsoft partner or Microsoft sales representative for more information.

## ASSESSMENT ASSISTANCE

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
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<tbody>
<tr>
<td>Microsoft Assessment Planning Toolkit</td>
<td>Assesses your current IT infrastructure for migration. Provides inventory, assessment, and reporting tool to simplify the migration planning process.</td>
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<tr>
<td>Cloud App Discovery</td>
<td>Discover 100% of cloud apps running in your environment.</td>
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<tr>
<td>Azure Virtual Machine Readiness Assessment</td>
<td>Automatically inspects your on-premises environment, physical or virtualized. Provides a check list and detailed report on steps to move your environment to the cloud.</td>
</tr>
<tr>
<td>BlueStripe FactFinder</td>
<td>Identifies all the applications and transactions that run across a server, including front-end connections and back-end dependencies, failed connections, and performance metrics.</td>
</tr>
<tr>
<td>Citrix AppDNA</td>
<td>Discovers, automates, models and manages applications for faster application migration, easier application virtualization and streamlined application management.</td>
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<tr>
<td>Dell ChangeBASE</td>
<td>Automates application testing, remediation, packaging, and virtualization to reduce risk during migrations. Provides complete application inventory and accelerates deployments to new platforms.</td>
</tr>
<tr>
<td>HP Universal Discovery</td>
<td>Provides application dependency mapping, inventory, and real-time discovery in one product.</td>
</tr>
<tr>
<td>Lakeside Software SysTrack</td>
<td>Discovers Windows Server feature and role configurations and inventory, software inventory and hardware configuration. Identifies application dependencies, usage, and demand.</td>
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PLANNING ASSISTANCE

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<tr>
<th>Azure Cost Estimator</th>
<th>Helps customers profile their existing on-premises infrastructure and estimate cost of running it on Azure.</th>
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<tbody>
<tr>
<td>Cloudamize Estimator</td>
<td>Projects the TCO for current on-premises or datacenter workloads in a cloud environment and provides correct settings for a new cloud deployment.</td>
</tr>
<tr>
<td>Windows Server 2003 Migration Planning Assistant</td>
<td>A four step process that helps customers analyze Windows Server 2003 workloads and generate a summary report showing recommendations and relevant Microsoft partner offerings.</td>
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MIGRATION ASSISTANCE

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<tr>
<th>AppZero</th>
<th>Identifies, extracts, and moves enterprise Windows server applications to any server – physical or virtual – anywhere (cloud or datacenter) without AppZero software on the source server, and with no change to the source application.</th>
</tr>
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<tbody>
<tr>
<td>Azure Websites Migration Assistant</td>
<td>Enables you to deploy and scale Web Apps in seconds by migrating applications to Azure Websites.</td>
</tr>
<tr>
<td>IIS Web Deploy</td>
<td>Simplifies deployment of web applications and web sites to IIS servers. Streamlines IIS6/IIS7/IIS8 migration planning by identifying incompatibilities and previewing proposed changes.</td>
</tr>
<tr>
<td>VisionSolutions DoubleTake MOVE</td>
<td>Migrates physical, virtual, and cloud server workloads with real-time replication. Moves your entire server environment including the system state and file system without suspending or interrupting production operations.</td>
</tr>
<tr>
<td>Windows Server Migration Tools</td>
<td>Helps customers deploy servers that are running Windows Server 2012 R2.</td>
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ADDITIONAL RESOURCES

Windows Server 2003 End of Support Website
Windows Server 2012 Website
Microsoft Azure Website

"Cloud Computing’s Role in Job Creation," February 2012