Agility meets Control meets Security

3 reasons you'll want Windows Server 2016 now

Microsoft

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Introduction

In today's business climate, decision makers must make some tough choices about their IT. You must support your company's ability to innovate, but respect your IT department's responsibility to keep resources secure and controlled. Choosing the right combination of technology resources and services is a balancing act. It takes time and careful consideration of your organization's needs versus desires.

The process begins with asking a series of questions:

- What are your key security concerns?
- What are the steps your company has in place when a security breach occurs?
- What does your company hope to achieve?
- What role does technology play in your company's competitive position?
- What infrastructure will you need to make those goals a reality?
- What is the timeframe? Are there specific needs or goals driving that deadline?

Individually, these questions will help you identify each department's wants and needs. Taken together, they will give you a 360-degree view of your company's overall priorities. In this e-book, we'll show you how Windows Server 2016 can help you satisfy the technology needs and requests of your entire business. Read on to see how Windows Server 2016 can help you balance your business in three core areas:

- Built-in Security
- Software-Defined Data Center
- Remote Desktop Services

REASON 1

Better security now starts at the OS

More security.
Better security.

When you think about your company's security, what comes to mind? Is it your server operating systems? In today's world of sophisticated hackers, ever-evolving threats, and breaches, you need more layers of security for prevention and detection. Here's why:

Breaches are on the rise. Attackers are targeting identity as the top entry point into an organization's network. Major corporations and government agencies have been publicly criticized for failing to prevent attacks. Past hacks on business large and small have exposed sensitive customer and employee information, including social security numbers and payment information.

Hackers are in control. The bad actors have more time on their hands to attack you than you do to defend against them. A hacker can gain access because of vendor vulnerabilities or because you didn't do enough to protect your company. Let's face it: Often hackers have more time to innovate than you do.

Modern IT is changing quickly. Hybrid environments and technology innovation can make it difficult to keep up. Virtual machines (VMs) can be difficult to protect, and server imprints are often too big for many needs.

How does Windows Server Help?

Windows Server 2016 has new layers of security built in to help protect your company against a security breach. These include:

- Prevent and limit the damage related to stolen credentials and insider threats
- Detect intrusions and threats earlier
- Deploy in the cloud with confidence knowing your OS is secured actively

Keep reading to learn more about these built-in protections.

Prevent and limit the damage of stolen credentials and insider threats

The administrator account is the most powerful account on your network. This role often has 24/7 access to every area of the network—even though admins rarely need that constant level of access. Allowing this level of access can endanger your network. If a hacker gained access to ANY machine an administrator logged into, they could extract the administrator credentials. In the worst case, a hacker could use this to syphon off data *for years*. Windows Server 2016 enables you to give your admin the proper level of access only at the times needed, without leaving your network open to unnecessary risks.

> *Windows Server 2016 enables admin access without leaving your network open to vulnerabilities.*

How does Windows Server Help?

- Reduce risk by limiting administrator exposure with just-in-time and just-enough administration access options.
- Protect stored credentials with our virtualization-based security Remote Credential Guard and Device Guard.

Watch a demo of:
Just-in-time and just-enough administration

The moment a VM is stolen, it's worthless

Virtual machines (VMs) offer many benefits, including greater flexibility and cost savings. They also have unique security vulnerabilities. A VM is essentially a file—which means stealing it is as easy as copying it. An attacker could steal your VM without leaving any signs they were there. So how do you protect your data? Begin by securing your data onsite. Don't allow anyone to remove your VM from the premises via a USB drive or other physical media. Second, ensure your data will be worthless if it is stolen.

Watch an introduction to:
Shielded VMs

How does Windows Server help protect your VMs against attacks?

- **Shielded Virtual Machines.** This new feature encrypts disk and state of virtual machines so only VM or tenant admins can access it. This protects your VMs from compromised or malicious administrators in the fabric (e.g., storage admins, backup admins, etc.).

  Read the blog to learn more about VM vulnerabilities

- **Host Guardian Service (HGS).** This functionality authenticates host permissions. When a Shielded Virtual Machine is turned on, the HGS will check to see if the hosts are allowed to run the Shielded VM. The check is conducted through attestation and hardware-based boot measurements and via a new feature, Code Integrity, to determine whether a host meets the criteria as a healthy host—and may run the Shielded VM.

Deploy in the cloud with confidence knowing your OS is secured

Windows Server 2016 can be deployed on premises and in the cloud. Keeping your deployment secured is critical, no matter where it's deployed.

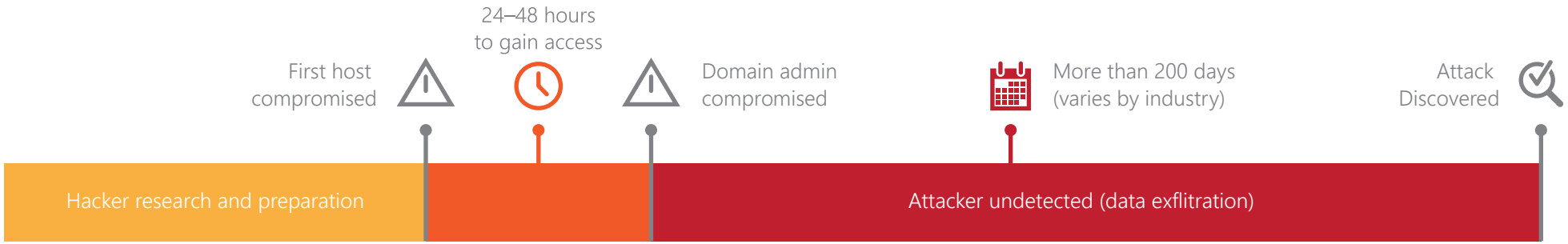
Windows Server 2016 is an active participant in your security scheme, protecting itself and its workloads. You can enhance this native protection in the following ways:

Prevent accidental malware infection by restricting software usage. Only allow approved software to be used on the operating system, regardless of location.

Maintain code integrity. Only allow permitted code to run on the operating system.

Increase control and protection. This applies to deployments on premises and in the cloud.

Detect intrusions and threats earlier



It takes most hackers just 24 to 48 hours to gain access to the credentials they need to compromise your network. You can prevent such quick access by intruders through additional layers of security.

Learn more about
Windows Server 2016 security features:

Windows Server 2016 Security solution brief

How does Windows Server Help?

Windows Server 2016 is an active participant in your security defenses, with new layers of built-in features to help organizations prevent, resist, and detect malicious activity. From better protection of VMs against attacks and compromised administrators to enhanced auditing for improved threat detection, Windows Server 2016 security can help.

REASON 2

Improve efficiency and reduce costs across your data center

Improve data center efficiency and get ready for the cloud

Businesses are shifting to cloud choices that meet their business needs every day, laying the groundwork for a successful transition to the next generation of technology. Software-defined everything — compute, storage and networking — helps organizations use industry-standard hardware to build highly efficient, centrally managed data centers. Smaller staffs and other cost-control measures can make it difficult to invest in driving innovation. **Other issues facing IT departments today include:**

How does Windows Server Help?

Azure runs on Windows Server. Microsoft has used its experience running its hyperscale Azure data centers to build new features in Windows Server 2016.

Hard to deploy and operate.
Businesses of all sizes require flexible access and no downtime. Finding time to deploy and operate beyond the basic requirements can be difficult.

Lack of integration between solutions.
An increased need for mixed environments (Linux, etc.) necessitates quick onboarding.

Server footprint is too big.
Not all features are required for many of today's workloads and apps. A bloated server footprint is neither portable nor agile.

Windows Server 2016 simplifies day-to-day work, freeing you to innovate.

Spend more resources innovating—and learn the secret to getting more budget next year

By reducing the costs of commodity services and investing in innovative technology, you can push your IT forward. Storage is a great opportunity for costs savings. Storage Spaces Direct replaces traditional SAN storage at a fraction of the cost. It offers tighter integration and is simple to manage. Windows Server 2016 runs consistently on premises and in the cloud, reducing costs.

Watch now:
Software-defined Storage with Windows Server 2016

Spend less time managing network infrastructure and get ready for hybrid

Windows Server 2016 simplifies day-to-day management, freeing you to plan your company's hybrid migration. Notable features include:

- Software-defined networking optimizes traditional networking. Processes that have traditionally taken 2 to 3 days to complete now take a few minutes. Integration with the cloud also has been improved using the Azure data plane in your data center.
- Software can now be defined with touching a switch.
- Manage by policy instead of by configuration. Eliminate errors, create the policy, and let the network controller do the rest.

Learn more about:
Software-defined networking

Watch a demo of:
Rolling cluster upgrades

Stop spending your weekends upgrading

- Rolling cluster upgrades minimize downtime and reduce migration risks, while applications stay up. No more 2 a.m. migrations!

Get your workloads cloud-ready

- Work with the resources in your application as a group, mixing resources across IaaS and PaaS services.
- Achieve enterprise-grade performance and security in the data center and in the cloud, delivering consistency across clouds with familiar tools and resources.
- Use hybrid operations to meet the changing needs of your business with greater flexibility.

Plus

The Microsoft Azure Hybrid Use Benefit lets those using Windows Server with Software Assurance bring their on-premises licenses to Azure. Rather than paying the full price for new Windows Server virtual machines in Azure, you only pay for the base compute rate.

REASON 3

Provide Remote Desktop Services with more IT flexibility

Make applications easily accessible for your staff

With an increasingly mobile and remote workforce, businesses need to provide their employees with 24/7 access to the applications they need to do their jobs – and not just "mobile" versions of the apps, but full access to accounting, CRM, HR, graphic-intensive and other server-based applications that replicate the desktop experience.

However, with greater access comes greater risk as more employees use their own devices for work and use laptops that can be easily lost or stolen. Companies need to be able to control who and how their applications and data are accessed. And they need to ensure that their remote workers can connect to the server without any disruptions.

Windows Server 2016 comes with enhanced Remote Desktop Services (RDS) that make it easier, more affordable, and more secure to set up remote access to server-based applications whether running on-premises or in the cloud.

How does Windows Server Help?

Windows Server 2016 enables you to allow employees to securely access the applications they need to do their work, whether hosted in the cloud or on-premises.

Windows Server 2016 provides flexible options for deploying Remote Desktop Services.

Two ways to deploy Remote Desktop Services

With Windows Server 2016, the goal is to provide you with flexibility on how you deliver Remote Desktop Services, either on-premises, in the cloud, or with a hybrid model.

On-Premises: Working from a single console for more efficient management, you have the flexibility to customize the implementation between personal or pooled virtual desktops, session-based desktops, and RemoteApp in the datacenter, as well as RemoteApp hosted in Azure.

In the Cloud: Enable remote access to applications hosted on Microsoft Azure from any type of device using the Azure Remote App. Without the extra cost of purchasing and managing additional servers, you can securely host applications on Azure's reliable, protected cloud platform, and scale up or down as needed to meet your changing business demands.

More efficient.
Better performance.

Cloud Optimization: With a simplified Virtual Machine architecture, deployments typically require just half the number of VMs when compared to Windows Server 2012 R2. Additionally, cloud deployments are now more secure through supported Azure Active Directory App Proxy and Domain Services integration.

Graphics Optimization: If your business uses graphics intensive applications like Adobe Photoshop or Autodesk® Maya®, Remote Desktop Services provide server VM support up to 4K resolution as well as support for Open GL 4.4 and Open CL 1.1.

Enhanced Scalability: Connection broker can now prevent a log-on storm by handling 10,000 log-on connections concurrently, and heavy usage applications can be easily supported through Remote Desktop Services.

Watch now

Set up a high availability Azure SQL Database with Windows Server 2016

"Provide employees secure access to any on-site or cloud-based applications with the enhanced Remote Desktop Services of Windows Server 2016."

Conclusion: Build your future with Windows Server 2016

By providing your business with end-to-end security, flexible IT management option, and Remote Desktop Services, Windows Server 2016 gives your business a solid technological foundation for controlling costs, maintaining security, and innovating and responding quickly to an ever-changing business environment.

Windows Server 2016 is built to work the way your business works.

For more information, check out:
https://aka.ms/BuiltforBusiness

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