



Windows Virtual Desktop 101

THE FACTS

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REMOTE WORKING STRATEGIES FOR YOUR TEAM

In today's environment, it's crucial for businesses to implement remote working strategies for their teams, while enhancing security, reducing infrastructure costs, and simplifying IT management.

With Windows Virtual Desktop, users can work from anywhere, using the latest desktop and application virtualization cloud technology, empowering companies to provide a secure, productive experience in an ever-changing world.

To help you prepare for a successful Windows Virtual Desktop deployment, this e-book shares an overview of desktop virtualization, the distinct benefits of Windows Virtual Desktop, why it's important, the security surrounding it, and tips for deployment.

Virtual Desktop Infrastructure

The use of virtualization to provide and manage virtual desktops

Virtual desktop infrastructure (VDI) refers to the use of virtualization and virtual machines to provide and manage virtual desktops. Users can access virtual machines remotely from supported devices and remote locations, where all the processing is completed on the host server.

Typically, users connect to their desktop instances through a connection broker. This broker is essentially a software layer that acts as the intermediary between the user and server, enabling the orchestration of sessions to virtual desktops or published applications. VDI is usually deployed in an organization's datacenter and managed by their IT department. VDI can be hosted on-premises or in the cloud.

What is Windows Virtual Desktop?

Windows Virtual Desktop (WVD) is a Microsoft Azure-based service that allows companies to deliver a full Windows experience to their workers, whether on-premise or remote, through the cloud. As the name implies, with WVD the Windows desktop, along with Windows-based applications, are accessed virtually.

In fact, the entire Windows environment, including applications, data, the user's desktop interface, and even the Windows operating system itself, are all housed in the cloud rather than on the user's local hard drive.

THE ADVANTAGE?

Access now becomes device and location independent. WVD desktops and applications can be accessed through Windows and iOS devices, allowing remote workers to run Windows applications from their laptop, tablet, and even smartphones.



Why is Windows Virtual Desktop Important?

Windows Virtual Desktop provides access to a virtual Windows computer running whatever apps a typical IT-sanctioned Windows computer should be running for your business.

By taking advantage of Azure's cloud infrastructure, businesses can set up multi-session Windows 10 deployments optimized to run in multi-user virtual scenarios.

From the worker's perspective, their Windows Virtual Desktop is the same as their traditional PC settings in the office.

From the business' perspective, the cost of purchasing, setting up, deploying, and securing physical hardware can be saved by entrusting Microsoft and Azure to handle those specifics in the cloud.

THIN CLIENTS WITH NO LOCAL STORAGE

User workstations can be treated as thin clients with no local storage of their own.

This means your company's sensitive and mission-critical data never have to be downloaded to the devices of your remote workers.

Instead, data remains centralized and secure in cloud storage.

Security

EXTRA LAYER OF PROTECTION

Teams is a relatively new product built on Office 365 groups, Microsoft Graph, and the same enterprise-level security, compliance, and manageability as the rest of Office 365.

Teams leverages identities stored in Azure Active Directory (Azure AD). Teams keeps working even when you're offline or experiencing spotty network conditions.

MONITORING

Centralization allows administrators to better monitor which employees should be given access to applications or data based on the requirements of their roles in the organization.

CENTRALLY MANAGED

WVD allows security to be centrally managed. IT administrators can perform software upgrades and configurations once, rather than having to do so for each individual workstation.

The same user access management standards, such as strict password controls and multi-factor authentication, can be enforced on all workstations wherever they may be located.



BEST USER EXPERIENCE

Windows Virtual Desktop provides full Windows 10 and Windows Server desktop, and application virtualization, including seamless integration with Microsoft Teams and Microsoft 365 Apps for enterprise, helping users to be productive and stay connected with the desktop experience that they're used to

QUICK SIGN-IN

User sign-in to Windows Virtual Desktop is extremely fast because user profiles are containerized.

At sign-in, the user profile container is dynamically attached to the computing environment. The user profile is immediately available and appears on the system exactly like a typical native user profile.

SECURE POSTURE

Windows Virtual Desktop uses industry-leading security and compliance offerings to protect user data, including solutions such as Azure Security Center and Microsoft Endpoint Manager. This helps to protect your infrastructure, and Azure Active Directory, which allows you to enable conditional access policies and role-based access control.

In addition, data & applications are separated from the local hardware and are run on the remote server, reducing the risk of confidential data being left on a personal device. This isolates user sessions in both single and multi-session environments, providing much better security.

MONITORING

With Azure Monitor, administrators can identify issues and get alerted through a single interface; and Azure Service Health, which provides personalized guidance to help mitigate downtime and prepare for planned maintenance.

SIMPLIFIED DEPLOYMENT

Windows Virtual Desktop manages the entire VDI for you, so you can focus on the user, the apps, and the operating system images you need to use, instead of hardware inventory and maintenance.

With WVD, you can quickly and securely get your users up and running, with limitless scale and full automation that you control based on your business needs.

REDUCED COSTS

Windows Virtual Desktop reduces large capital expenditure and infrastructure costs, with cloud-based capabilities that allow you to only pay for what you use.

With the unique Windows 10 multi-session capability, multiple concurrent users can have access. Plus, you have the flexibility to choose the VM you want to use and tune it how you would like, to meet your business and budget needs

Benefits

Deploying Windows Virtual Desktop

PLAN, PREPARE, DEPLOY & OPTIMIZE

Windows Virtual Desktop Deployment | Checklist

Phase	Steps
PLAN	<ul style="list-style-type: none">• Network Considerations• Number of VMs (limits and sizes too)• Image types• Domain joining• Application groups• Device clients
PREPARE	<ul style="list-style-type: none">• Set-up Azure• Integrate with Active Directory Domain Services• Create Azure resources• Assign administrator roles• Assign licenses to Windows Virtual Desktop users
DEPLOY	<ul style="list-style-type: none">• Create a Windows Virtual Desktop workspace and host pool• Make the desktop and remote apps available to users by using application groups• Customize the workspace, apps, desktop and protocol• Connect to the workspace by using the Windows Virtual Desktop client
OPTIMIZE	<ul style="list-style-type: none">• Set-up roaming and user profiles by using Azure File Storage• Configure Azure file sync to sync on-premises files or user profile data to Azure Storage• Scale session hosts by using the scaling tool built on Azure Automation and Azure Logic Apps

Tips

MAXIMIZING YOUR DEPLOYMENT

ENSURE YOU'VE GOT THE RIGHT NUMBER & SIZE OF VMs YOU NEED TO SUPPORT YOUR BUSINESS REQUIREMENTS

DECIDE HOW YOU WANT TO CONNECT TO A WORKSPACE WITH A WEB OR DESKTOP CLIENT

ENSURE YOU'VE SET UP FIREWALL AND OTHER NETWORK REQUIREMENTS

ASSIGN THE REQUIRED APPLICATION GROUPS

BEFORE YOU CAN DEPLOY ANY VMs, YOU NEED TO SET UP A NETWORK

SELECT YOUR REQUIRED IMAGE TYPE

Getting Started

We hope you enjoyed this eBook and feel more knowledgeable about starting your journey with Windows Virtual Desktop!

There are a lot more resources and support to help you on your journey:

1. [Read](#) more about Windows Virtual Desktop.
2. [Take](#) a tutorial on getting started with Windows Virtual Desktop.
3. [Watch](#) this on-demand Windows Virtual Desktop demo.
4. Contact AMTRA Solutions to discuss solutions for enabling secure remote work info@amtrasolutions.com or 855.326.0533.

