Microsoft

Windows Virtual Desktop Preview: Reviewer's Guide

How to get the most from your preview of the best virtual desktop experience, delivered on Azure

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Who should read this guide?

This guide is for Desktop Infrastructure Architects, Cloud Architects, Desktop Administrators, or System Administrators who are participating in the Windows Virtual Desktop public preview. It provides guidance and tips for getting the most out of your preview experience.

In this guide, you'll find several common virtual desktop use cases and information about how you can implement those scenarios.

Enjoy your preview of Windows Virtual Desktop!

Windows Virtual Desktop: an overview

Traditionally, if you wanted to deliver a virtual desktop infrastructure, you had two choices. You could provide individual virtual machines for each user or require your users to work with a server-based desktop—forgoing valuable end-user desktop features like Microsoft Edge or Cortana—so that multiple people can sign in at the same time.

Now you have another choice. Windows Virtual Desktop enables you to deliver a great virtualized Windows and Microsoft Office 365 ProPlus experience while reducing IT overhead with built-in security and management features. In just minutes, you can deploy and scale large numbers of Windows desktops, which your users can access from almost any device. Windows Virtual Desktop is the only cloud-based service that's optimized for Microsoft Office 365 ProPlus. It allows you to migrate your existing Windows Server desktops and apps to Azure. And it's the only virtualization solution that delivers a multi-user Windows 10 experience, so you can affordably deliver the Windows 10 features that delight your users—and do it at scale.

Prerequisites

Before starting your Windows Virtual Desktop preview, you'll need to prepare your infrastructure for user access, authentication, as well as app and desktop virtualization. For details, see the **Windows Virtual Desktop Preview: Quick Start Guide.**

What are your virtual desktop requirements?

Organizations like yours deploy virtualized desktops for different reasons. To make sure you're getting the most from Windows Virtual Desktop during the preview, think about what your reasons are. Either why you currently have a virtual desktop infrastructure solution. Or why you're considering implementing one.

As you try out the features and capabilities of Windows Virtual Desktop, consider the ones that align with your needs. The following sections describe common virtual desktop infrastructure usage scenarios and list some related capabilities you'll want to take a closer look at.

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Security and regulated environments

For organizations such as financial services companies, healthcare providers, and government agencies, virtual desktop infrastructure helps meet special security or regulatory compliance needs. With Windows Virtual Desktop, you can maintain an elevated level of control over how users access data and use applications. At the same time, you can provide broader access through a wide range of clients, since the applications run within the secured host environment and not on the client device.

In typical virtual desktop environments, you allow users to access hardware resources and peripherals from their local desktop. Users send documents to their local printer or copy data from a remote document into a web form in their local browser. Or they may copy files from their virtual desktop to a USB thumb drive.

In a secure environment, you may want to disable one or more of those capabilities. You can lock down the local environment through Group Policies that apply to all remote desktop sessions. Or configure Windows Virtual Desktop settings to exercise a high level of control over how remote clients access data in the virtual environment. During the preview, be sure to confirm your ability to secure the virtual desktop environment in the ways you need.

For example, you can:

Disable access to local USB peripherals

To disable access to local USB peripherals such as thumb drives, printers, and other devices, follow these steps.

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Elastic workforce

Windows Virtual Desktop benefits organizations that have an elastic workforce. Whether you bring on seasonal employees to meet high demand, hire contractors regularly for short periods, or suddenly grow your workforce through a merger or acquisition, virtual desktop infrastructure solutions like Windows Virtual Desktop can help you scale quickly and affordably. Even for substantial workloads, you can use older PCs, affordable thin clients, or mobile devices like tablets. Windows Virtual Desktop allows you to manage support costs for these workloads by giving you control over the desktop environments and ensuring that your users have the same Windows 10 experience they have on their local PC.

Plus, don't forget that Windows Virtual Desktop is the only virtual desktop infrastructure solution that provides multi-session Windows 10 capabilities. For your elastic workforce, that means you can give your users the Windows 10 experience without having to dedicate a single virtual machine to each employee.

During the preview, see how quickly you can create a large pool of multi-session desktops. Also, when provisioning desktops, try out the *breadth mode* and *depth mode* rules.

Windows Virtual Desktop provisioning rules

Breadth mode – Allocate desktops evenly across your pool of virtual desktop host virtual machines. With this rule, you ensure that each user has access to the maximum amount of available processing and memory resources.

Depth mode – Allocate the maximum number of desktops to each host virtual machine before allocating any on the next machine in the pool. This rule ensures you get the most from each virtual machine, while minimizing the overall number of them used.

Create a pool of multi-session Windows 10 desktops

You can create Windows Virtual Desktop tenants using Azure Marketplace or automate deployment using Azure Resource Manager templates. To create a pool of multi-session Windows 10 desktops from the Azure Marketplace, here are the steps to follow:

1. Find and select **Windows Virtual Desktop** in the marketplace and select **Create.**
2. In the **Basics** blade of **Create Windows Virtual Desktop**, provide the following information then select **OK:**
   - **Admin UPNs** – Enter the Azure Active Directory account(s) of the Windows Virtual Desktop administrator(s).
   - **Host pool name** – Enter a unique name within your Windows Virtual Desktop tenant for the pool of virtual machines hosting the desktops.
   - **Subscription** – Choose the Azure subscription that will be charged for the compute and storage consumed by your pool of desktops.
   - **Resource group** – Select or create the Azure resource group that you want to associate the pool of desktops with.
   - **Location** – Choose the region where the pool of desktops will be created.
3. In the size and quantity blade for the virtual machine operating system, enter the following options, then select OK. The wizard will determine a virtual machine size based on the information you provide. But you can also choose any virtual machine size you want.
   - **Image** – Select **Gallery** to choose from several predefined operating system disk images. Or use a custom image that you've uploaded to your Azure storage account.
   - **Operating system disk image** – Select **Windows 10 enterprise multi-session** (one of the predefined images) from the drop-down menu.
   - **Virtual machine disk type** – Select either **SSD** (Solid State Drive) or **HDD** (Hard Disk Drive).
   - **Workload type** – Select the default of **Medium**
   - **Total users** – Leave the default of **100.**
4. In the **Settings** blade, enter domain credentials with sufficient permissions to join your new virtual machines to the domain, then select **OK**.
5. Review the summary and then select **Create.**

Provision desktops

At the same time you create the Windows Virtual Desktop pool (following the above steps), the identically configured virtual machines are pre-provisioned. You can turn them ON and OFF using scripting commands. Choose the provisioning rule that best fits your workload.

Personal or pooled desktops?

The best solution for your elastic workforce might be pooled—or *multi-session*—desktops. Alternatively, maybe your workforce requires personal—sometimes called *persistent*—desktops. Whichever you choose depends on your workloads. Be sure to read the **Windows Virtual Desktop Architecture Guide** for more information.

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Specific employees

Windows Virtual Desktop helps you meet the needs of not only large groups of users—but specific employees, too. For instance, you may have workers who require access from their personally owned mobile devices to on-premises resources or administrator access to their desktop environments. For branch employees in a satellite office, you might need to provide an application that depends on a low latency connection to a source database. Or you may want a locally installed app for your call-center employees, who don't need a complete remote desktop environment.

As you review Windows Virtual Desktop, keep your specific employee needs in mind. Explore capabilities that can help you empower those segments of your workforce, like:

Create a pool of personal desktops

To create a pool of personal desktops and give users administrator access, follow these steps.

Access your Windows Virtual Desktop personal desktop using the web client

To access your Windows Virtual Desktop personal desktop using the web client, follow these steps.

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Specialized workloads

With Windows Virtual Desktop, you can support your users with specialized workloads without having to provide with high-end desktop hardware. For example, you can provide access to desktop environments that deliver graphics-intensive applications, like 3D visualization (CAD/CAM), or processor-intensive workloads, such as machine learning or data analytics. Your users can even work from a mobile device like a tablet or phone.

Windows Virtual Desktop also helps you handle legacy apps that won't run on the latest client operating system. You can also create development and testing environments, equip users with full desktops for these workloads, or simply provide a remote application that appears to be running on the user's local desktop.

During your preview, keep these specialized workloads in mind. Try out features and capabilities that can help you meet these needs. For example, you may want to:

Create a remote application pool for a Win32 app

To publish your own legacy application or an example Win32 application as a remote application pool, follow these steps.

Create a pool of personal desktops with GPU support

To create a pool of personal desktops with GPU support, follow the previous instructions for creating a pool of personal desktops. But instead of letting the wizard choose your virtual machine size, select an N-series virtual machine.

Keep a close eye on your costs

Don't forget that you're charged for the compute and storage associated with your virtual desktop host virtual machines. See Azure Cost Management for guidance on managing your cloud spend.

Windows 7 Extended Security Updates

Do you have a legacy app that can only run on Windows 7? Windows Virtual Desktop provides extended security updates for Windows 7 until 2023—for free!

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Office 365 ProPlus optimization

Microsoft Office 365 ProPlus is an important part of providing your users with a great desktop experience. With Windows Virtual Desktop optimized for Office 365 ProPlus, you can take this experience further. Updates to Windows 10 and Office 365 ProPlus mean that you can now use the Microsoft OneDrive client and Windows Desktop Search—even in pooled (non-persistent) environments. And, with the acquisition of FSLogix by Microsoft, you'll see faster load times for user profiles in multi-user session desktops.

So, as you examine Windows Virtual Desktop capabilities during the preview, make sure to create a multi-user pooled desktop pool that includes Office 365 ProPlus. By creating that pool, you can:

Enable Office 365 ProPlus license roaming

See Overview of shared computer activation for Office 365 ProPlus.

Connect Microsoft OneDrive client and access on-demand files

You can access OneDrive files on demand by connecting to OneDrive client even on Windows 10 Enterprise Multi-session. Since all files remain online until you open them, it's not necessary to sync complete OneDrive data to your remote machine. You can choose files to keep on a remote machine, so they're accessible even if you're offline.

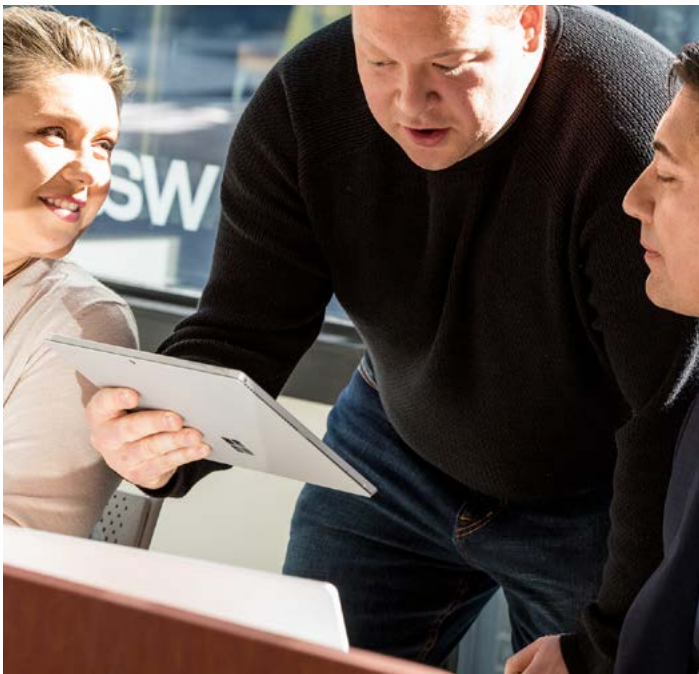
To access OneDrive from your remote desktop session:

1. Sign into your remote desktop session on Windows Virtual Desktop.
2. Open the OneDrive client either from the Start menu or from the Windows taskbar notification area.
3. Provide your credentials to authenticate your OneDrive account.

   Note: Your administrator must have configured OneDrive Files On-Demand.
4. Open Explorer and OneDrive folder to access Files On-Demand.
5. Access files stored in your OneDrive account or download files locally by right-clicking the file and selecting **Always keep on this device.**

Enable FSLogix profile containers for your Windows Virtual Desktop users

To enable your Windows Virtual Desktop users to take advantage of FSLogix Profile Containers, learn more about the requirements.



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Administering Windows Virtual Desktop

Windows Virtual Desktop makes managing your virtual desktops simple. You can deploy your virtual desktops in minutes using Azure Resource Manager templates, Windows PowerShell cmdlets, or REST APIs from Microsoft. Then manage them using the Azure portal, cmdlets, REST APIs, or with third-party solutions provided by Microsoft partners.

Built-in management roles let you quickly apply role-based access control concepts to Windows Virtual Desktop. With Azure Active Directory security features, you can reverse-connect, isolating your virtual desktop environment. Plus, you can integrate other Azure security monitoring solutions to help keep your Windows Virtual Desktop environment secure.

During your preview, be sure to try these management features:

Assign security roles to administrators on your team

Once your team members confirm which tasks they can perform, you can assign them the built-in roles listed below.

Use Windows PowerShell to deploy and manage your Windows Virtual Desktop tenant

As you complete other tasks we've suggested in this guide, don't forget to open Windows PowerShell and try out the cmdlets that can help you work UI-free.

To retrieve a list of the Windows Virtual Desktop cmdlets, install the latest Azure module for Windows PowerShell and enter the command **Get-Command RDS*.**

There are cmdlets available that will let you create and manage most Windows Virtual Desktop objects. In addition to the New-*, Get-*, Set-*, and Remove-* cmdlets (common for most objects like desktops and host pools), you'll also find cmdlets unique to your needs as a Windows Virtual Desktop administrator, including:

- Send-RdsUserSessionMessage – Sends a message to a user session.
- Invoke-RdsUserSessionLogoff – Signs out a user from a session.
- Get-RdsStartMenuApp – Returns a list of Start menu apps that are available for publishing.

For detailed help about a Windows Virtual Desktop cmdlet, run the command **Get-help <cmdlet name>.**

Role	Capabilities
RDS Owner	• Create, read, update, and delete Windows Virtual Desktop objects. • Assign security roles.
RDS Contributor	Create, read, update, and delete Windows Virtual Desktop objects.
RDS Reader	Read Windows Virtual Desktop object properties.
RDS Operator	Read diagnostic activity data related to Windows Virtual Desktop.

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What's next?

Thank you for participating in the Windows Virtual Desktop public preview. Now that you've explored how Windows Virtual Desktop can provide your users a great desktop experience, on the only platform to provide multi-user session Windows 10 desktops, what should you do next?

Visit the product page and get started.