

A guide to migrating from Citrix to Azure Virtual Desktop with Nerdio



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Introduction

As organizations strive to modernize their IT infrastructure and reduce costs, many are considering migrating from Citrix to Azure Virtual Desktop (AVD) with Nerdio. This guide covers the essential aspects of this migration, including motivations, licensing differences, architectural comparisons, image management, migration methods, connectivity options, and additional considerations.



Why are organizations moving from Citrix to Azure Virtual Desktop + Nerdio?

Several factors drive organizations to transition from Citrix to AVD with Nerdio:

1. **Cost efficiency:** AVD offers more flexibility, lower licensing costs, and simplified pricing models compared to Citrix, reducing the total cost of ownership.
2. **Integration with the Microsoft ecosystem:** AVD is a Microsoft product that seamlessly integrates with other Microsoft services, such as Entra ID, Microsoft 365, and security tools, providing a more cohesive experience.
3. **Simplified management:** Nerdio enhances AVD by offering powerful management tools that simplify deployment, scaling, and optimization of virtual desktops, making it easier to manage than Citrix.
4. **Scalability and flexibility:** AVD provides native cloud scalability, allowing organizations to quickly adjust resources based on demand, which is more challenging in traditional Citrix on-premises environments.
5. **Performance and user experience:** AVD, leveraging Microsoft's global Azure infrastructure, offers robust performance and reliability, often surpassing traditional on-premises Citrix deployments.

Licensing differences between Citrix and Azure Virtual Desktop + Nerdio

1. Citrix licensing

Citrix offers complex licensing models for specific use cases.

- a. Universal Hybrid Multi-Cloud
- b. Citrix Platform
- c. Citrix for Private Cloud

Citrix is currently priced on a named user licensing model and offers customers 3-year minimum commit renewals. More information about Citrix licensing can be found [here](#).

A key factor to note is that if you are running Server OS workloads and use RDSH, that will need to be purchased and licensed separately. Azure Virtual Desktop uses the Windows 11 Multi-session Operating System, which does not require an additional RDS CAL license. The cost savings can be considerable, as a 5-user license can cost around \$749, or a perpetual per-server license can cost around \$300 per server.

2. Azure Virtual Desktop licensing

Azure Virtual Desktop licensing is more straightforward and typically included in Microsoft 365 and Windows 10/11 Enterprise subscriptions. Costs stem from Azure infrastructure usage, including virtual machines, storage, and networking. More information can be found [here](#).

3. Nerdio licensing

Nerdio's licensing model provides additional management layers for Azure Virtual Desktop. It is more straightforward and cost-effective due to its automation and optimization features.

For further licensing information, please visit this link for Nerdio Manager for Enterprise and this link for Nerdio Manager for MSP.

Nerdio licensing has no minimum commitment, so you will only be billed for what you consume.

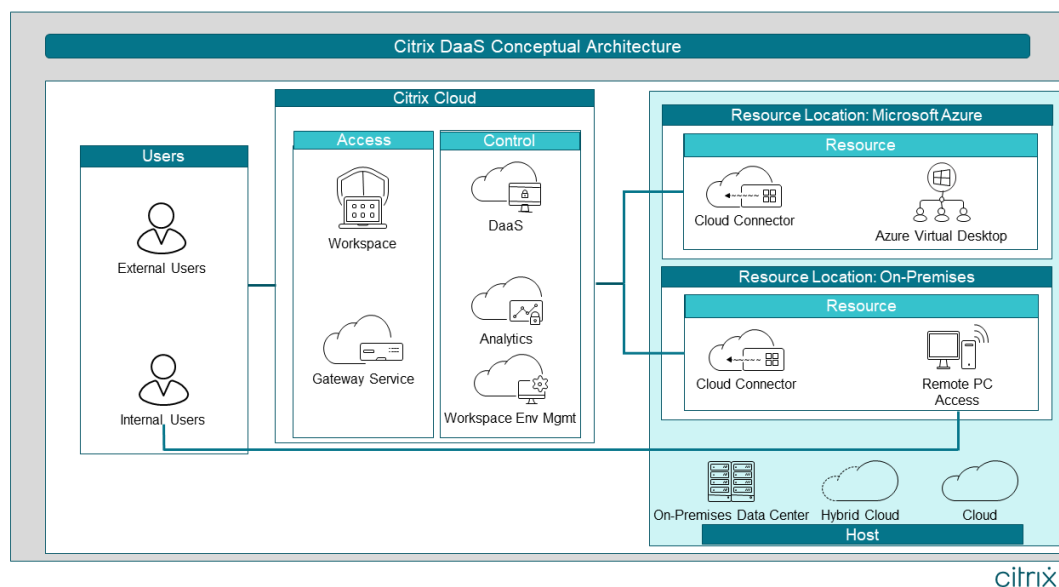
Architectural differences: Citrix vs. Azure Virtual Desktop + Nerdio

Citrix and Azure Virtual Desktop are similarly architected. Both brokering services rely on an agent on the session hosts to register against the back-end services. Once the session hosts register against the broker, they can be placed in either a machine catalog (Citrix) or a host pool (Azure Virtual Desktop), and they are then available for connections from users.

The diagram below shows the Azure Virtual Desktop architecture.

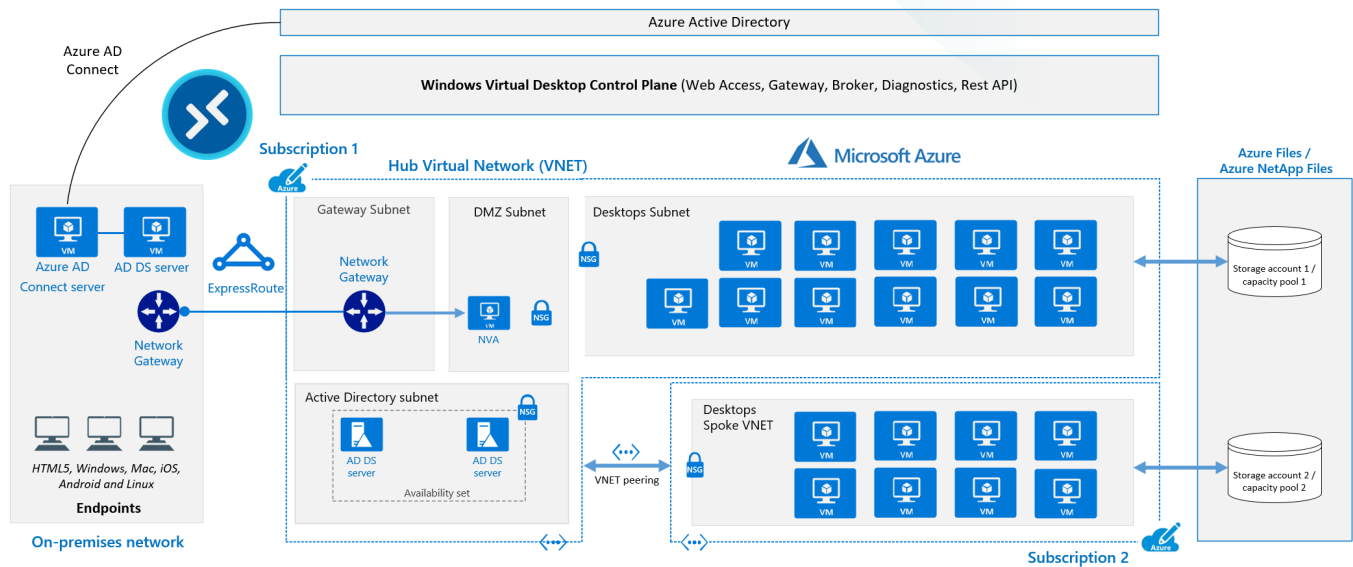
A key point to note is whether the Citrix environment could be hosted on-premises, in Amazon Web Services (AWS), Google Cloud Platform (GCP), or Microsoft Azure. Azure Virtual Desktop runs 100% in Azure, or you can run Azure Local (formerly Azure Stack HCI) to connect to on-premises workloads.

Microsoft controls and maintains the AVD brokering architecture, which can be managed in the Azure portal or via Nerdio. For further information, please visit this Microsoft help page.



This diagram shows the overall Citrix DaaS architecture.
[View diagram](#)

CITRIX



Machine catalog/delivery groups vs. host pools

One of the critical differences between Citrix and AVD is how the session hosts are allocated and how sessions are then assigned to users.

Citrix uses a machine catalog to define collections of virtual machines. Once those virtual machines have been placed into a machine catalog, they can be put into different delivery groups and assigned to the relevant users.

The screenshot shows the Citrix Studio interface for managing Machine Catalogs. The left sidebar contains navigation options: Machine Catalogs, Delivery Groups, Applications, Images, Policies, Licensing, Administrators, Hosting, StoreFront, App Packages, Zones, Settings, and Backup + Restore. The main area displays a table of Machine Catalogs.

Machine Catalog	Machine Type	Machine Count	Allocated Count	Folder
Machine Catalog 1	Multi-session OS (Virtual)	5	5	...
	User data: Discard	1	1	...
	Multi-session OS (Virtual)	1	1	...
	User data: On local disk	10	10	...

Below the table, a message states: "Select a machine catalog within a folder to view the details."

Azure Virtual Desktop uses host pools, which are groups of identical VMs that provide resources for a specific group of users. A host pool can be considered a combined machine catalog and delivery group.

With Azure Virtual Desktop, we have something called Application Groups. When we create a host pool, the application group is created, and then when we assign a user to a host pool, the user is automatically added to the app group.

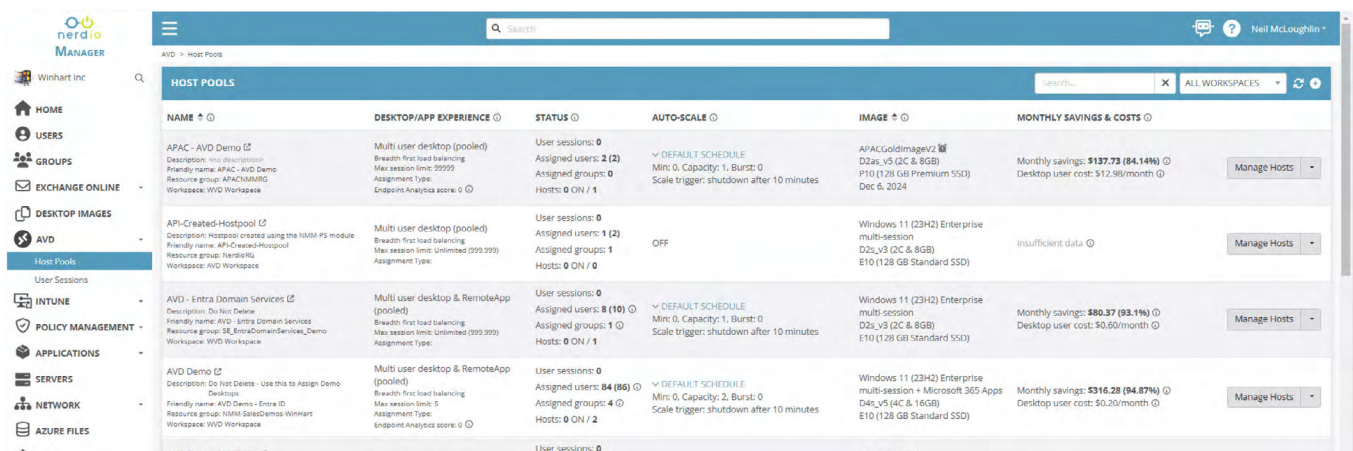


Image management and VM provisioning

One of the major features of Nerdio Manager is the ability to manage images and applications, enabling you to manage the full lifecycle from within the Nerdio Console.

Historically via Citrix, administrators would need to manage their images and applications using third-party tools, such as SCCM, Packer, or similar technologies.

Citrix

Citrix uses a technology called Machine Creation Services to provision session hosts. Citrix Machine Creation Services can provision hosts quickly, as thin provisioning is used to create session hosts. A copy of the image is added to the resource groups in Azure, and each session host has an identity disk and a cache disk to which the temporary cached data is written. When the VMs are shut down or rebooted, the cache disk is reset, and the VM returns to its original state. This is known as non-persistent mode.

Image management is performed outside of Citrix, and then the master image is shut down. Citrix Machine Creation Services takes a snapshot of the image, which is then replicated to all resource groups.

Many Citrix deployments also leverage Citrix Provisioning Services. With Citrix PVS, the operating system is "streamed" to the virtual machines, which means that little local storage is required.

AVD + Nerdio

Nerdio leverages the existing image management capabilities used by Azure Virtual Desktop, which is slightly different from how Citrix operates. The most significant difference is that all the image management is performed inside the Nerdio console. Nerdio can perform all activities involved in the image management life cycle. There are a few important things to note:

1. Azure Virtual Desktop requires that images be in a sys-prepped state. Nerdio manages this process for administrators.
2. Azure Virtual Desktop can distribute images using the Azure Compute Gallery. This method provides advanced capabilities, such as version control, and the ability to distribute images to multiple Azure regions worldwide within a few clicks.
3. Nerdio can also perform application management against the session hosts and images, which Citrix cannot do.
4. Using Nerdio, users can quickly implement advanced image management with a few clicks, completely automating updating images, applications, and session hosts.

Protocol differences

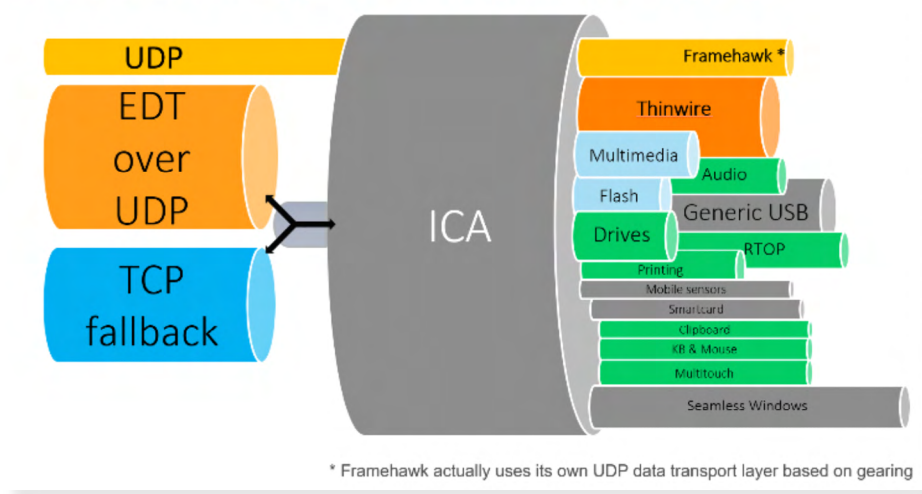
The remote protocol used when connecting to a VDI desktop is one of the most critical factors in the desktop's performance. Let's compare the differences between the ICA protocol and the RDP protocols used for Citrix and Azure Virtual Desktop.

Citrix

Citrix uses the ICA protocol to deliver a solid desktop experience, even over high latency and low bandwidth connections. Historically, this has been the main driver for customers using Citrix, which has improved over the years to provide an optimized user experience. It also performs well in GPU environments by using the H.265 codecs. More recently, Citrix started using the AV1 codec.

The ICA protocol can also use Framehawk, which uses the UDP protocol. UDP can use much higher bandwidth, enabling a better user experience.

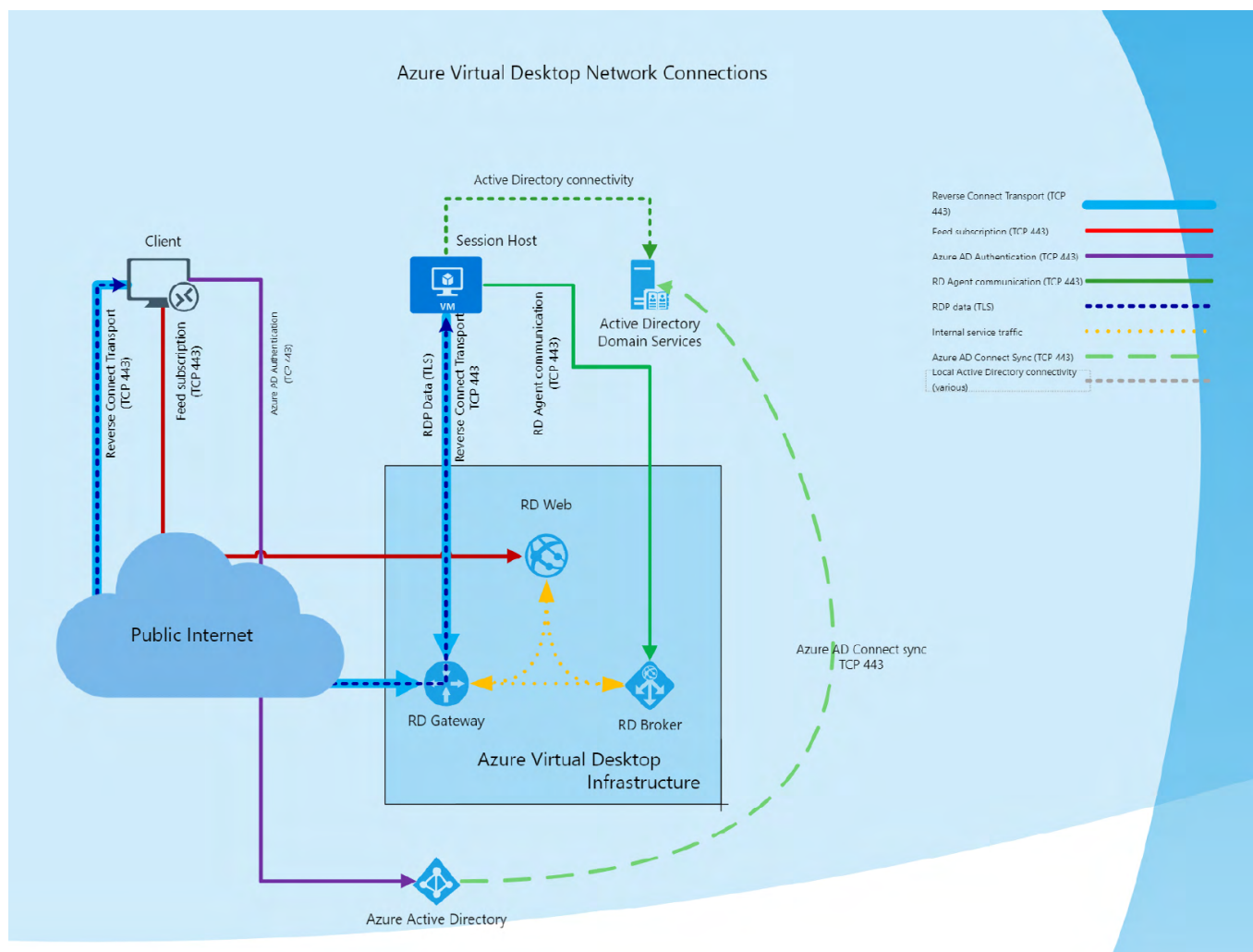
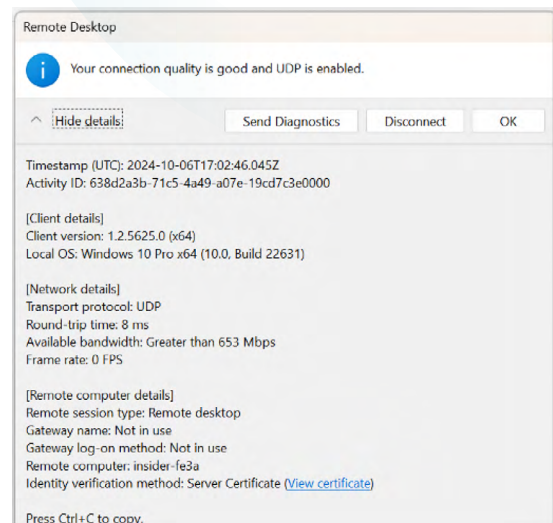
HDX with Enlightened Data Transport



Azure Virtual Desktop

Azure Virtual Desktop uses the RDP protocol. Microsoft created the protocol in 1998 as part of Windows NT 4.0 Terminal Server Edition, and over time, it has improved to become more efficient for remote desktop performance. In most use cases, the performance can now match the ICA protocol from an end-user perspective.

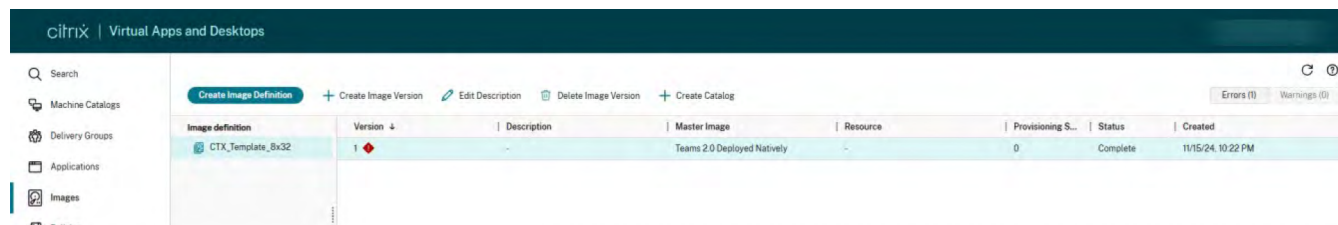
Historically, the RDP protocol has been limited to TCP-only usage, and all traffic went through the Azure Virtual Desktop backend infrastructure. However, Microsoft released RDP Shortpath in October 2022, which allows UDP connectivity and a direct connection from the client to the session host. This significantly improves end-user performance and provides a Citrix-like experience in a high-bandwidth environment.



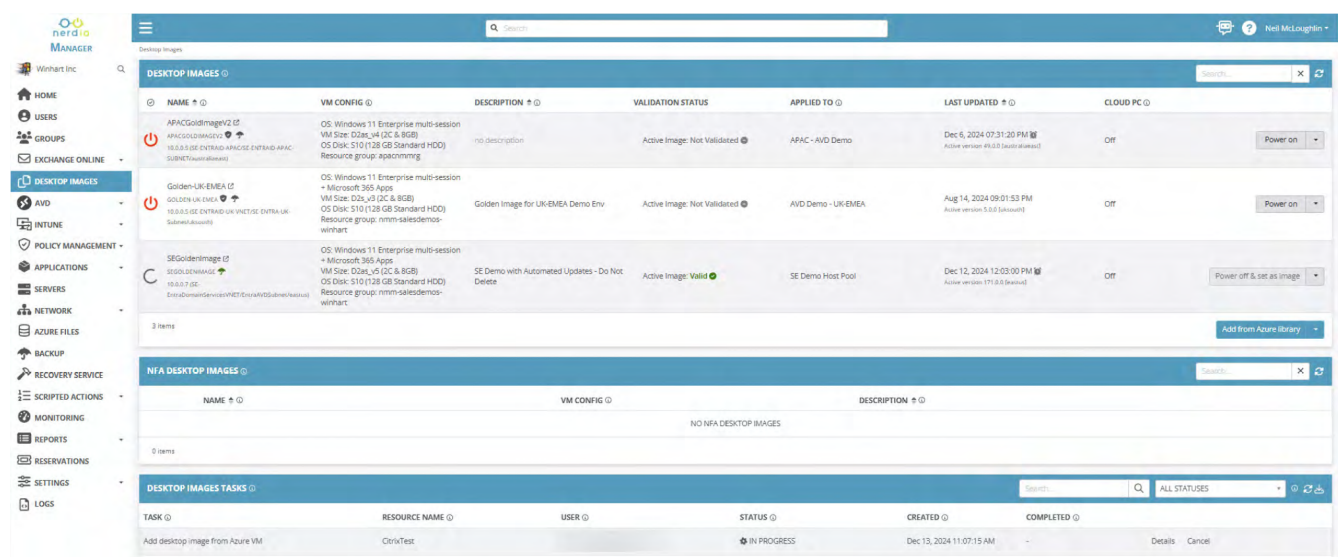
The example shows that 653 Mbps of bandwidth is available on an Azure Virtual Desktop in the UK South and has only 8ms of latency. [Source](#)

Image management capabilities

Citrix image management is handled through Citrix Studio, where administrators create, maintain, and update master images for VMs using Citrix Provisioning Services or Citrix Machine Creation Services.



AVD with Nerdio offers more robust image management capabilities. Nerdio allows for the creation, maintenance, and automated updates of master images directly in the Nerdio console. Nerdio simplifies this process with intuitive interfaces and automated workflows.



To manage Azure Virtual Desktop images using Nerdio:

- Utilize Nerdio Manager, which provides tools for image versioning, updating, and scaling across host pools.
- Schedule updates and automate rollouts to reduce downtime and maintain consistency across the virtual desktop environment.

**POWERED BY
NERDIO MIGRATE****Looking to accelerate your Citrix to AVD transition?**

Nerdio Migrate automates key migration steps—helping you modernize faster, reduce risk, and simplify your move to Azure.

Migrating Citrix images to Azure Virtual Desktop + Nerdio

When migrating images from Citrix to Azure Virtual Desktop, you first need to look at the operating system version and where that image is currently hosted. Generally, using Citrix, you will see the following types of operating systems:

- Windows Server 2012–2022 R2 RDSH
- Windows 10 Enterprise single-session
- Windows 11 Enterprise single-session

Ideally, you will want to build a new image and migrate to Windows 11 multi-session to ensure that you remain supported by Microsoft. However, you can also import an existing image into Nerdio. If your image is a Windows Server operating system image, you will still need to maintain RDS licenses and an RDSH licensing server, which is why it is recommended to migrate to Windows 11 multi-session images if possible.

In this section, we will cover both scenarios.

First, we will import an existing image into Nerdio and then create a brand-new image.

Discovery

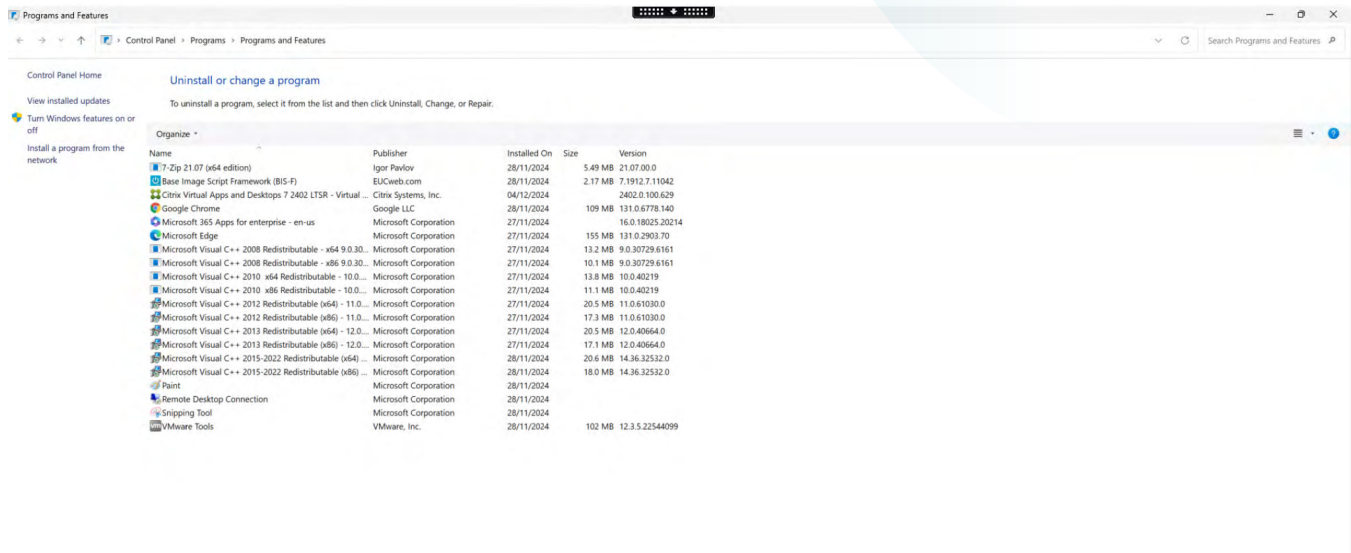
When migrating from one solution to another, e.g. Citrix to Azure Virtual Desktop, the first step should be an application discovery piece.

In most scenarios, migrating your applications from one solution to another will require the most effort. Factors may include operating system compatibility and the location of the backend infrastructure.

For example, databases hosted on-premises may need to migrate to Azure. If your desktop is in Azure and the database is on-premises, then users may experience slow responses from their applications.

The easiest way to discover what applications are installed on the image is to log onto your master image and see which applications need to be migrated to the new solution. Any applications that are not required can be removed from the image pre-migration.

If you use a tool like SCCM or Configuration Manager, you may also receive a list of applications currently used in your production environment.



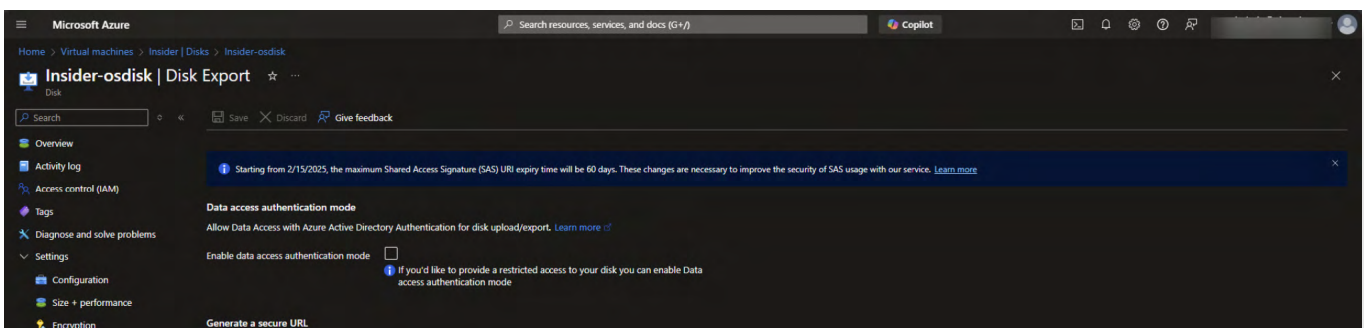
Creating a new image from your existing image

Once you have removed the applications you do not need from the master image, you will need to take a snapshot of it and create a SAS URL. You will use this SAS URL to import the image into Nerdio and create other images.

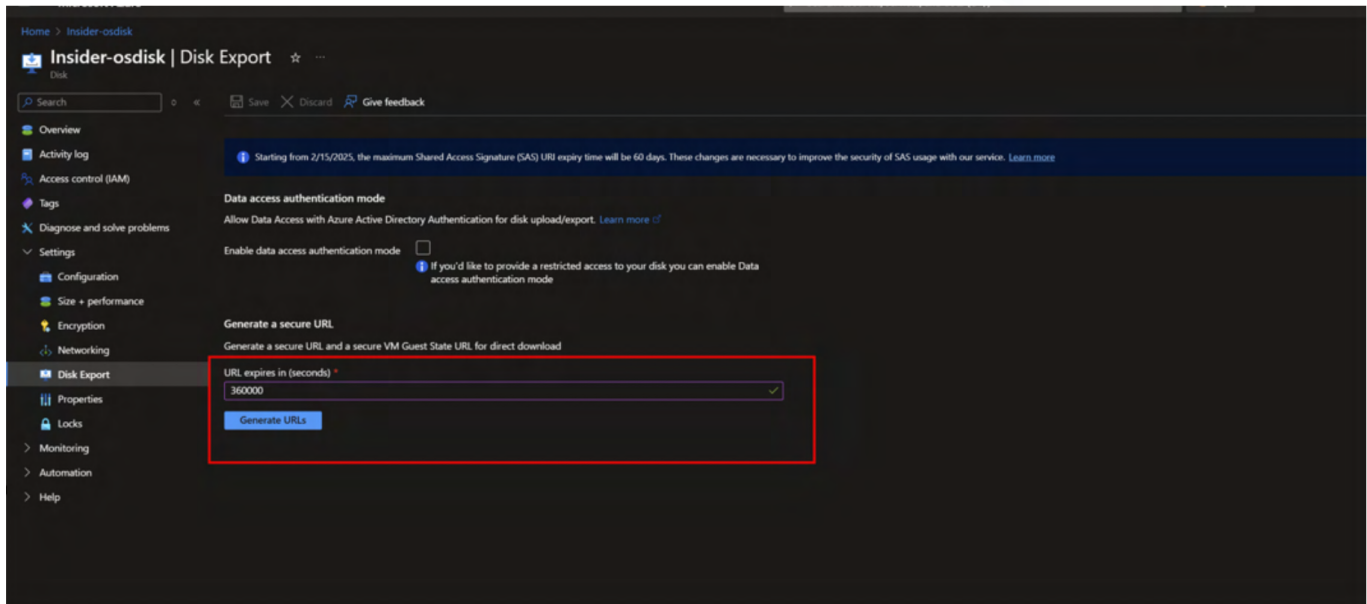
A SAS URL provides secure, delegated access to the storage account containing the snapshot of the image. It is secure because only the administrator knows the URL needed to retrieve the disk image.

To create the SAS URL, perform the following steps:

1. Head over to the Azure Portal and find your master image (assuming your image is in Azure—if not, you must migrate it from Hyper-V/VMware onto a VHD format and upload it to Azure).
2. Go to **Disks** and select the disk that contains your master image.

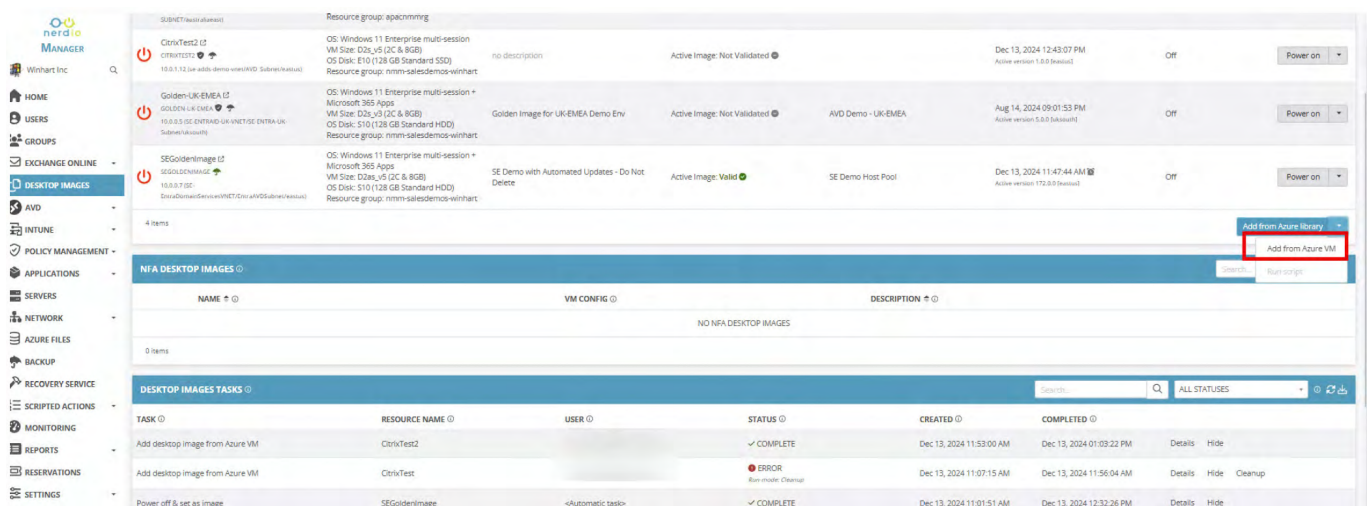


3. Select **Disk Export** and enter a URL that expires in **3600000 seconds**.



This will generate a [URL](#) that you can use to import the image into Nerdio.

4. Log onto your **Nerdio Manager** instance, head over to **Desktop Images**, and select “**Add from Azure Library**.”



5. Fill in the required details and press **OK** to proceed.

ADD IMAGE FROM AZURE VM ⓘ

Would you like to add a desktop from Azure VM?

NAME:

CitrixTest ⓘ

DESCRIPTION:

ⓘ

SAS URL:

https://md-hdd-jldmpr4ctbwl.z43.blob.storage.azure.net/ghhn5hwmm? ⓘ

NETWORK:

se-adds-demo-vnet (AVD_Subnet) ⓘ

OS:

Windows 11 (23H2) Enterprise multi-session - Gen2 (multi-session) ⓘ

VM SIZE:

D2ads_v5 (2C & 8GB @ \$0.10/hr retail) ⓘ

OS DISK:

E10 (128 GB Standard SSD @ \$0.01/hr retail) ⓘ

RESOURCE GROUP:

NMM-SalesDemos-WinHart ⓘ

☒ Create image VM as Gen2 ⓘ

☒ Use Trusted Launch ⓘ

☐ Join to AD ⓘ

NerdioSales.local ⓘ

☐ Enable for cloud PCs ⓘ

☐ Do not create image object ⓘ

☒ Enable time zone redirection ⓘ

☒ Set time zone: ⓘ

(UTC+00:00) Dublin, Edinburgh, Lisbon, London ⓘ

☒ Uninstall FSLogix app ⓘ

☒ Uninstall AVD agent ⓘ

☐ Install all AVD enabled certificates ⓘ

☐ Validate image ⓘ

☐ Use Boot Diagnostic Insights ⓘ

Provide custom credentials for a local administrator user ⓘ

Off ⓘ

Geographic distribution & Azure compute gallery ⓘ

Off ⓘ

Run the following scripted actions: ⓘ

Off ⓘ

Applications Management ⓘ

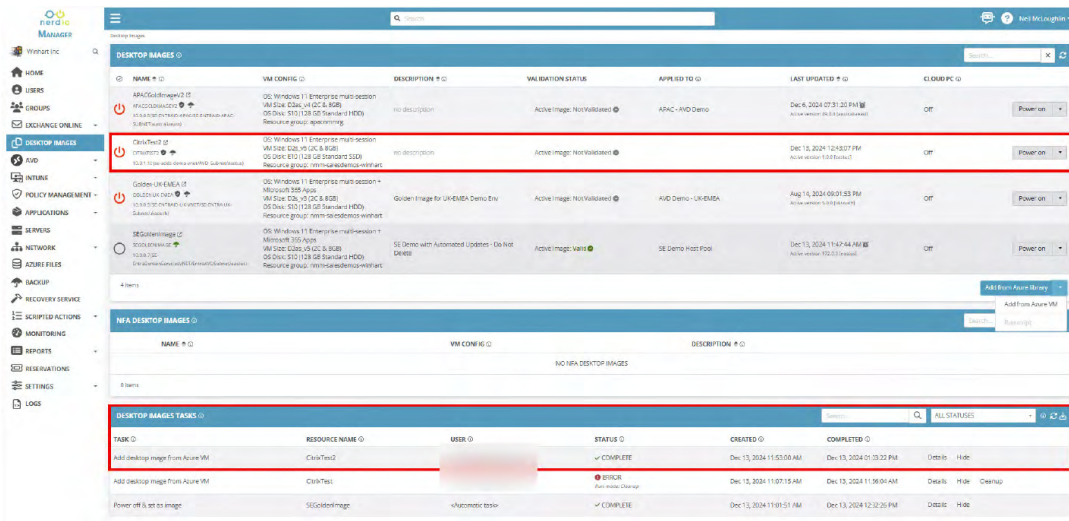
Off ⓘ

In Azure Portal, stop the VM, go to its OS Disk and select Disk Export to generate the SAS URL.

Cancel

OK

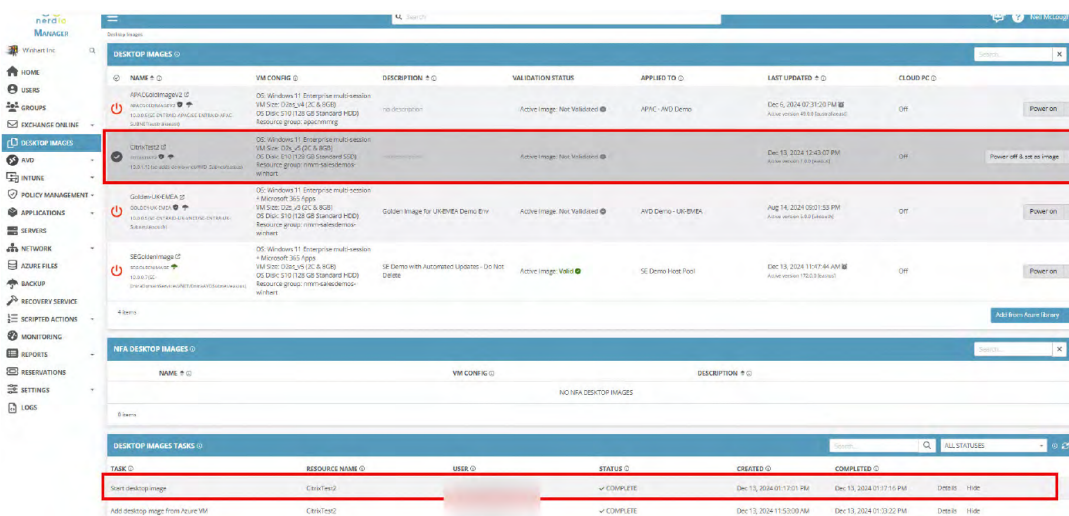
Your existing image will then be imported into Nerdio. To verify the process has been completed, you should see your image appear under **Desktop Images**, and the “Add Desktop Image from Azure VM” should show as “Complete.”



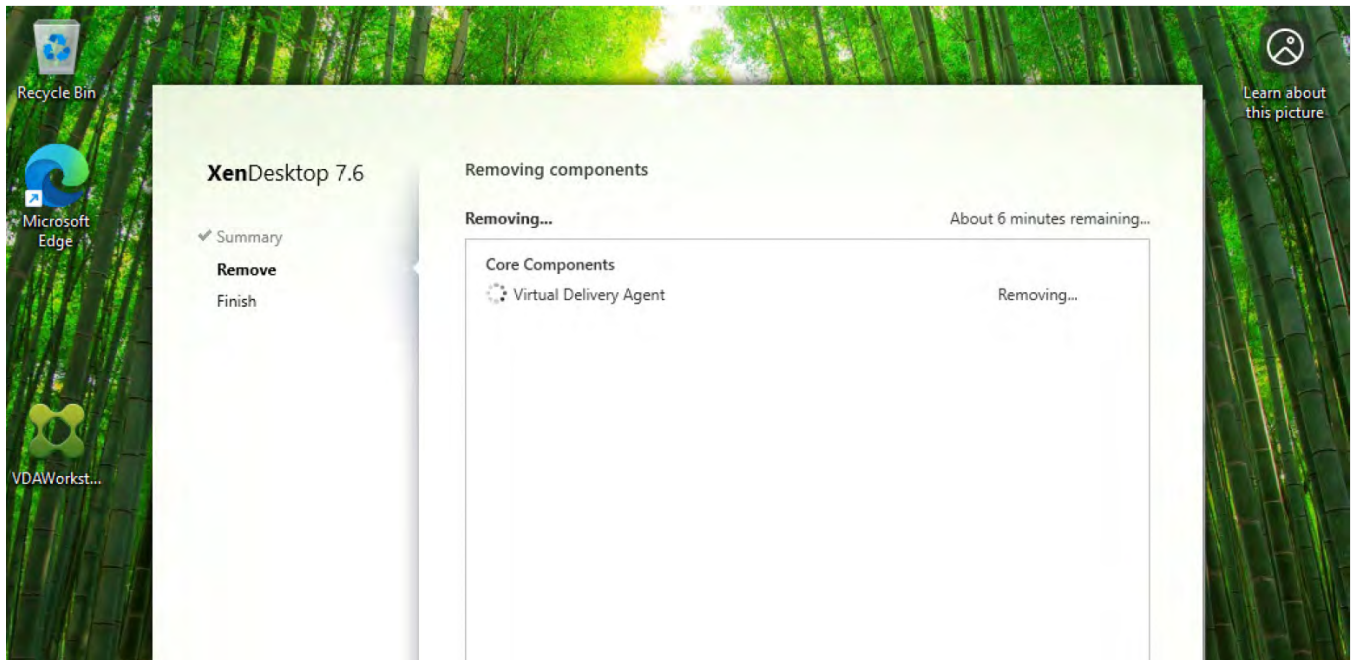
During the import process, the following things happen:

- The image will be upgraded to **Gen2** if that is selected so you can update to Windows 11.
- Any existing **FSLogix agents** will be uninstalled, as Nerdio will manage these going forward.
- Any existing **Azure Virtual Desktop agents** will be removed.
- The image will be **sys-prepped** and can be used immediately to deploy Azure Virtual Desktop session hosts.

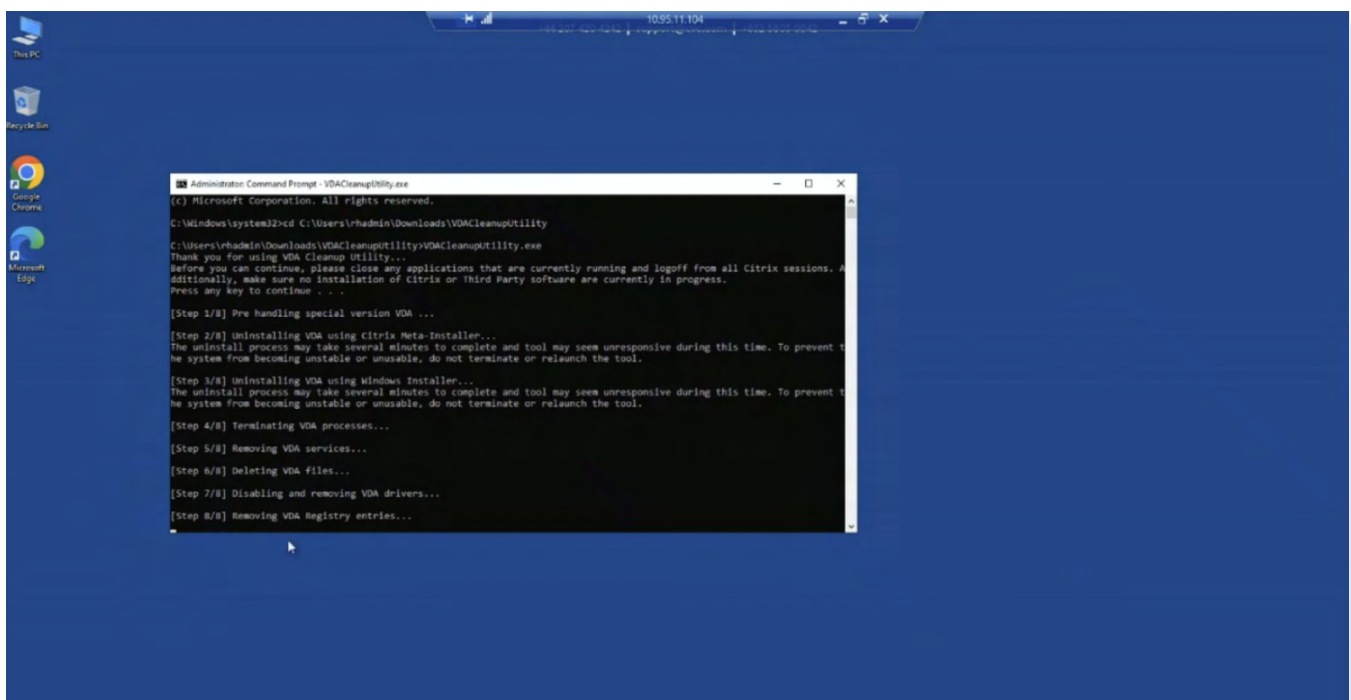
6. The next step is to **remove the Citrix agents** on the master image, as these can interfere with Teams redirection and multimedia redirection. To remove the Citrix agents, you will need to power on the virtual machine via the **Nerdio console**.



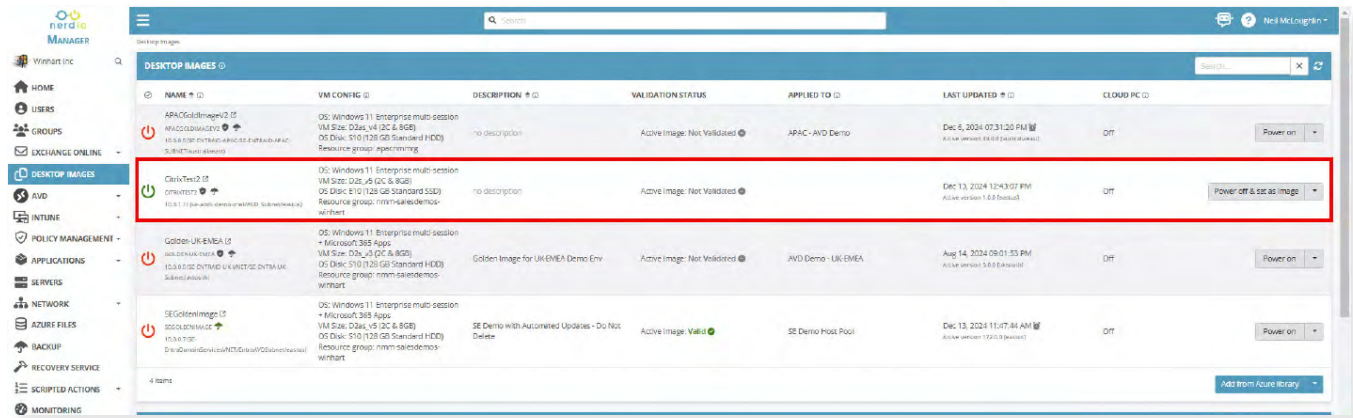
7. Once the master image is powered on, log onto the virtual machine and **uninstall the Citrix VDA agent**.



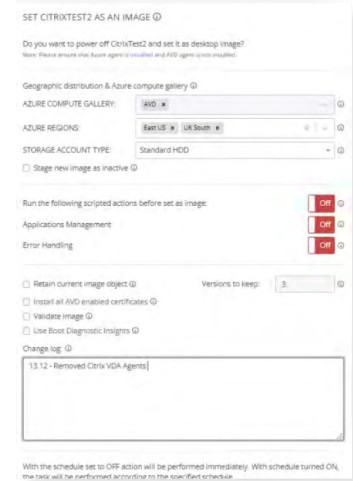
8. After uninstalling the Citrix VDA agent, **reboot the VM** and run the **Citrix VDA cleanup utility** to remove any remaining components.



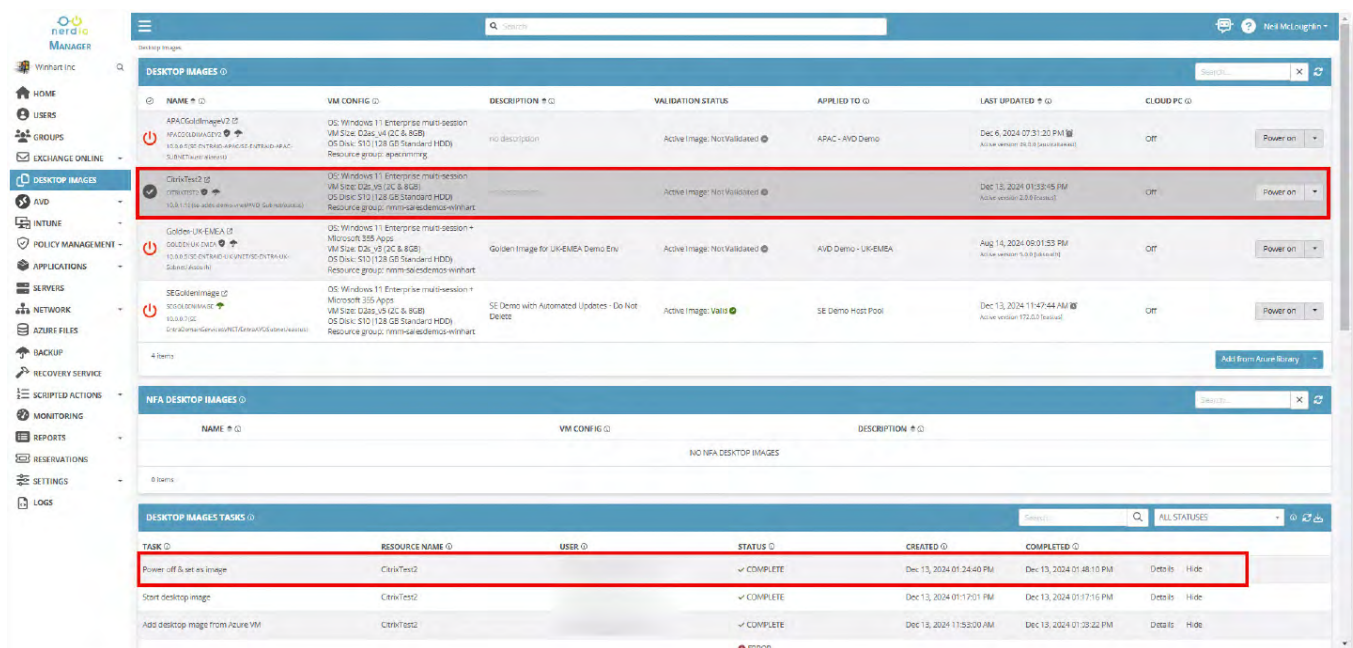
9. Once the VM has been rebooted, select **"Power Off and Set as Image"** in Nerdio.



10. If you want to publish the image to the **Azure Compute Gallery** to deploy across multiple regions, select that option.



11. The image processing is complete, and you can now deploy session hosts using the image.



Creating a new image within the Nerdio console

The other method of preparing your image is to create a clean new image. This is the preferred method, as it ensures you start fresh and leave behind any potential issues from your previous image.

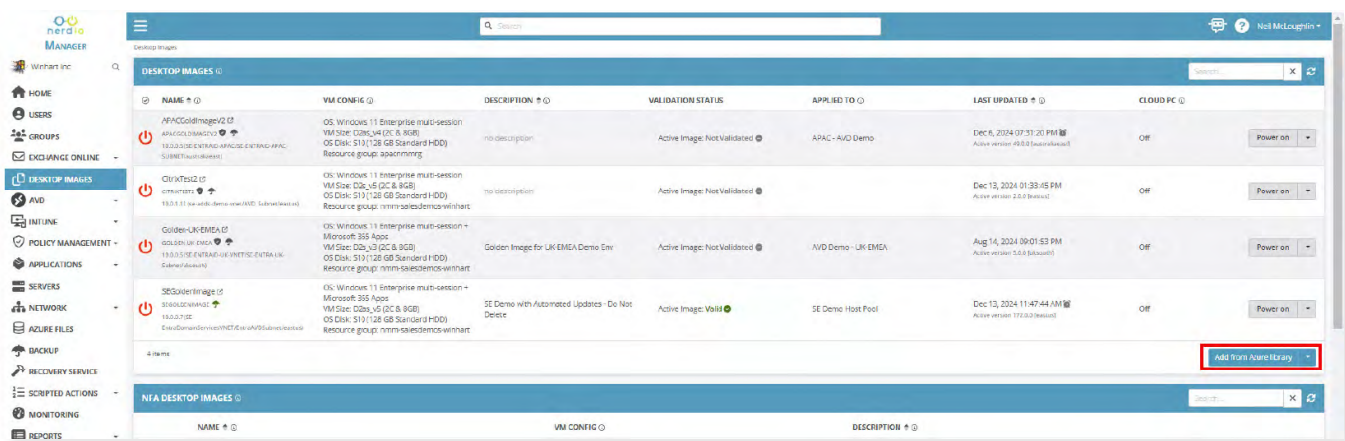
For more information about creating images in **Nerdio Manager**, please visit the following links:

MSP: [Nerdio Manager for MSP Help Center](#)

Enterprise: [Nerdio Manager for Enterprise Help Center](#)

To create a new image in Nerdio Manager:

1. Select **"Add from Azure Library"** in the Nerdio Manager console.



2. Fill in all the necessary details.

ADD DESKTOP IMAGE

Add desktop image from Azure image library

NAME: CitrixTest
DESCRIPTION:
NETWORK: se-adds-demo-vnet (AVO_Subnet)
AZURE IMAGE: Windows 11 (22H2) Enterprise multi-session - Gen2 (multi-session)
VM SIZE: D2as_v4 (2C & 8GB @ \$0.09/hr retail)
OS DISK: E10 (128 GB Standard SSD @ \$0.01/hr retail)
RESOURCE GROUP: NMM-SalesDemo-WinHert

☒ Use Trusted Launch
☐ Join to AD: NerdioSeries.local
☐ Enable for cloud PCs
☐ Do not create image object
☒ Enable time zone redirection
☒ Set time zone: (UTC+09:00) Dublin, Edinburgh, Lisbon, London
☐ Install all AVD enabled certificates
☒ Universal PS-Login app
☐ Validated image
☐ Use Boot Diagnostic Insights

Provide custom credentials for a local administrator user

USERNAME: LOCAL ADMINISTRATOR
PASSWORD: Enter password
Confirm password: Confirm password

Geographic distribution & Azure compute gallery

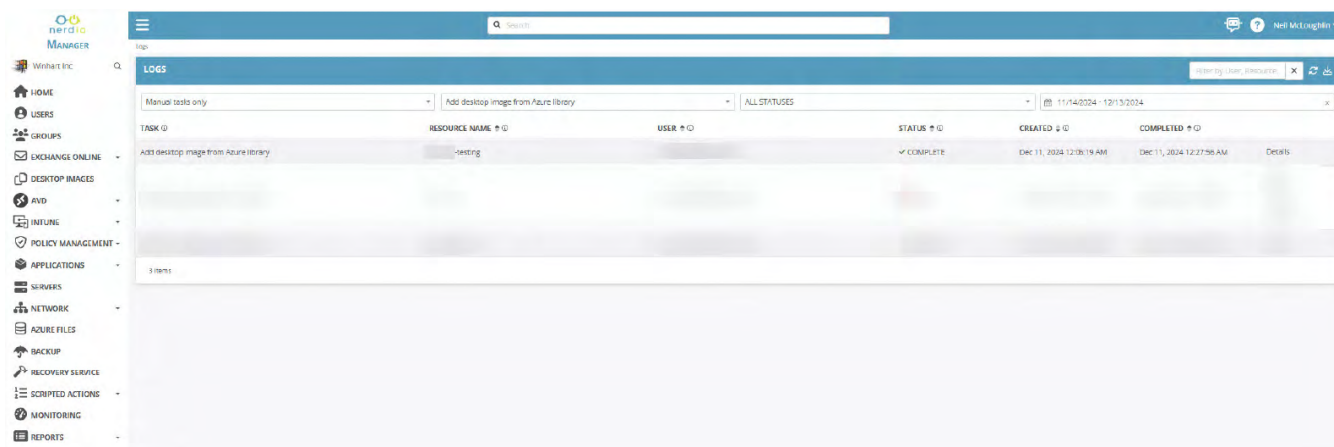
☐ Run the following scripted actions: Applications Management
☐ This task may take up to an hour to complete. You can monitor progress in the Desktop Images Tasks section.

Cancel OK

3. Press **OK** to begin the image creation process.

The process takes approximately 20 minutes and involves the following steps:

- **Nerdio creates an Azure VM** from an existing **Azure Marketplace** image to become the master image.
- **Nerdio takes a snapshot** of the master image and creates a temporary VM.
- **Nerdio runs the Sysprep process** on that VM and publishes the image to the **Azure Compute Gallery**.



Job Details - Add desktop image from Azure library

EMAIL:				
NAME	START / COMPLETE	STATUS	RESULT	
Check image OS	Dec 11, 2024 12:06:29 AM Dec 11, 2024 12:06:29 AM	✓ COMPLETE	Image OS: Windows 11 Enterprise multi-session	
Get Directory Profile	Dec 11, 2024 12:06:39 AM Dec 11, 2024 12:06:39 AM	✓ COMPLETE	Directory Profile id was not specified	
Provide storage account	Dec 11, 2024 12:06:39 AM Dec 11, 2024 12:06:40 AM	✓ COMPLETE	Standard: [REDACTED]	
Create network interface	Dec 11, 2024 12:06:40 AM Dec 11, 2024 12:06:41 AM	✓ COMPLETE	2edabdc080f/resourceGroups/NMM-SalesDemos-WinHart/providers/Microsoft.Network/networkInterfaces/ahickey-testing-nic	
Create vm	Dec 11, 2024 12:06:41 AM Dec 11, 2024 12:10:43 AM	✓ COMPLETE	Market place image id: MicrosoftWindowsDesktop/windows-11win11-21h2-and-latest Trusted launch: Off	
Enable timezone redirections	Dec 11, 2024 12:10:43 AM Dec 11, 2024 12:13:45 AM	✓ COMPLETE	Extension added successfully	
Remove 'Enable timezone redirections' extension from VM	Dec 11, 2024 12:13:45 AM Dec 11, 2024 12:15:17 AM	✓ COMPLETE	Extension was removed	
Uninstall FSLogix	Dec 11, 2024 12:15:17 AM Dec 11, 2024 12:18:50 AM	✓ COMPLETE	Configuration: Uninstall FSLogix agent: Yes Uninstall AVD agents: No Extension added successfully Extension was removed	
Stop template VM	Dec 11, 2024 12:18:50 AM Dec 11, 2024 12:19:31 AM	✓ COMPLETE	Success	
Copy template VM disk	Dec 11, 2024 12:19:31 AM Dec 11, 2024 12:19:33 AM	✓ COMPLETE	Template VM disk copied /subscriptions/[REDACTED]/resourceGroups/NMM-SalesDemos-WinHart/providers/Microsoft.Compute/disks/[REDACTED]-testing-temp-osdisk	
Provide storage account	Dec 11, 2024 12:19:33 AM Dec 11, 2024 12:19:34 AM	✓ COMPLETE	Standard: zpn829678040829f6cc3c44	
Create network interface	Dec 11, 2024 12:19:34 AM Dec 11, 2024 12:19:35 AM	✓ COMPLETE	/subscriptions/[REDACTED]/resourceGroups/NMM-SalesDemos-WinHart/providers/Microsoft.Network/networkInterfaces/[REDACTED]-testing-temp-nic	
Create vm	Dec 11, 2024 12:19:35 AM Dec 11, 2024 12:19:31 AM	✓ COMPLETE	VM created: /subscriptions/[REDACTED]/resourceGroups/NMM-SalesDemos-WinHart/providers/Microsoft.Compute/virtualMachines/[REDACTED]-testing-temp	
Remove users from temp VM	Dec 11, 2024 12:19:51 AM Dec 11, 2024 12:21:53 AM	✓ COMPLETE	Extension added successfully	
Remove 'Remove users' extension from temp VM	Dec 11, 2024 12:21:53 AM Dec 11, 2024 12:23:24 AM	✓ COMPLETE	Extension was removed	
Start sysprep process on temp VM	Dec 11, 2024 12:23:24 AM Dec 11, 2024 12:25:25 AM	✓ COMPLETE	Extension added successfully	

Application deployment methods

Deploying applications on **Azure Virtual Desktop + Nerdio** differs from traditional **Citrix** deployment methods.

Citrix

Since Citrix master images are handled outside of Citrix, the platform does not have built-in application management features beyond publishing applications. Traditionally, Citrix applications have been deployed by:

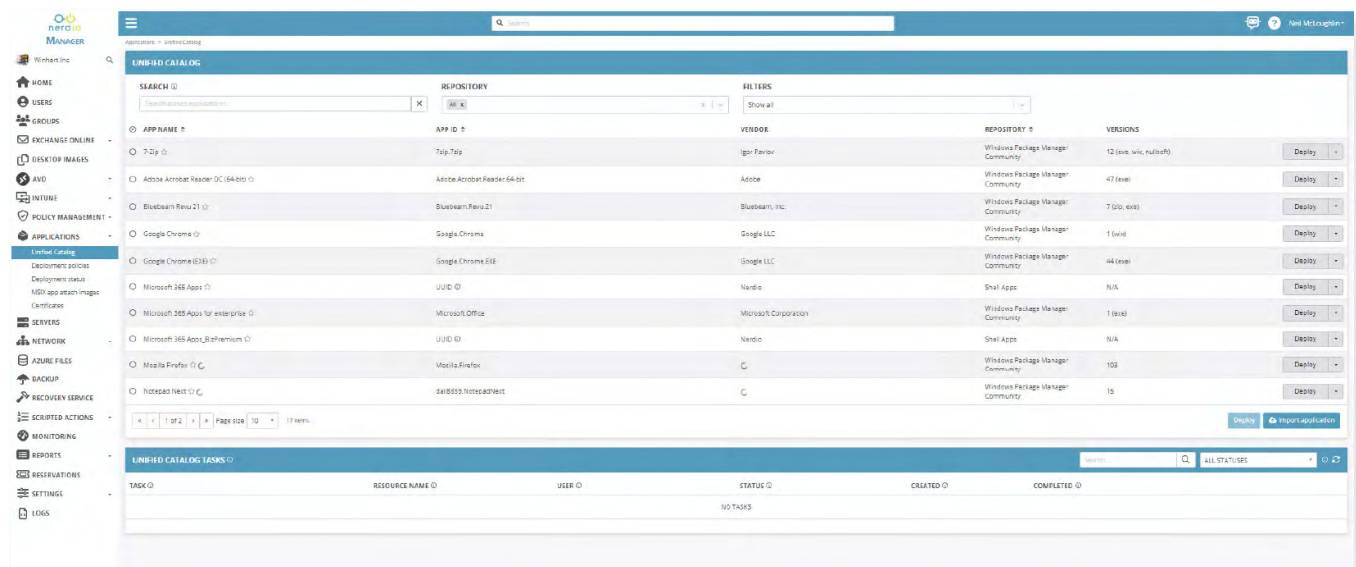
- **Manual installation** onto the master images
- **Virtualization** using Microsoft App-V
- **Advanced scripting** with tools like Packer or Azure DevOps

Azure Virtual Desktop and Nerdio

Nerdio offers built-in functionality to deploy, manage, and update applications across images and session hosts. Nerdio's automation capabilities simplify application deployment, enabling a fully automated process with just a few clicks.

Recommended Nerdio application deployment methods:

1. **Scripted actions:** PowerShell scripts executed on images or session hosts using PowerShell DSC. Useful for deploying applications and configuring settings.
2. **Nerdio unified application management (UAM):** The preferred method for deploying applications. Supports multiple repositories such as SCCM, Intune, and Winget. Organizations can also create private Winget repositories for custom applications.
3. **ConfigMgr/Intune:** If you already use SCCM or Intune, you can integrate them with Nerdio to manage and deploy applications directly from the Nerdio console.



Profile management is a critical factor when migrating from **Citrix** to **Azure Virtual Desktop**. The migration method depends on the existing profile management solution used in Citrix.

1. **Citrix user profile management (UPM):** Citrix's built-in profile management solution that enhances login speed and user experience.
2. **FSLogix:** Many Citrix environments use FSLogix, which is Microsoft's recommended profile management solution.
3. **Third-party solutions:** Some organizations use third-party tools like Liquidware or Ivanti, but these are less common as FSLogix and Citrix UPM have improved.

A guide to migrating from Citrix to Azure Virtual Desktop with Nerdio

Migrating Citrix profiles to FSLogix with Nerdio

Many Citrix environments already use **FSLogix**. If so, migration is straightforward. If **Citrix UPM** is in use, it is recommended to create **new profiles** when migrating to AVD.

Steps to deploy FSLogix profiles with Nerdio:

1. Create a storage account and file share

- Traditionally, profile data was stored on **Citrix Profile Management** or on-premises file services.
- In **AVD + Nerdio**, user profiles are stored in **Azure Files** or **Azure NetApp Files**.

The screenshot displays the Nerdio Manager console interface. On the left is a navigation sidebar with options like HOME, USERS, CLOUDS, EXCHANGE ONLINE, DESKTOP IMAGES, AVD, INTUNE, POLICY MANAGEMENT, APPLICATIONS, SERVICES, NETWORK, AZURE FILES, BACKUP, RECOVERY SERVICE, SCRIPTED ACTIONS, MONITORING, REPORTS, RESERVATIONS, SETTINGS, and LOGS. The main panel is titled 'AZURE FILES SHARES' and contains a table with columns: NAME, STORAGE ACCOUNT, USAGE & CAPACITY, AUTO-SCALE, and MONTHLY SAVINGS & COSTS. Below this is a section for 'AZURE FILES TASKS' with a table showing task details like TASK, RESOURCE NAME, USER, STATUS, CREATED, and COMPLETED.

NAME	STORAGE ACCOUNT	USAGE & CAPACITY	AUTO-SCALE	MONTHLY SAVINGS & COSTS
entradg	entradg-profiles (us-east-1)	3.21 GB used / 100 GB Premium (Current usage: 3.21 GB / 100 GB)	OFF	Not available
profiles	entradg-profiles (us-east-1)	3.72 GB used / 100 GB Premium (Current usage: 3.72 GB / 100 GB)	OFF	Not available
profiles	entradg-profiles (us-east-1)	4.21 GB used / 100 GB Premium (Current usage: 4.21 GB / 100 GB)	OFF	Not available

TASK	RESOURCE NAME	USER	STATUS	CREATED	COMPLETED	DETAILS	HIDE
Upload file share	profiles		✓ COMPLETE	Dec 11, 2024 08:07:30 PM	Dec 11, 2024 08:07:30 PM	Details	Hide
Upload file share	profiles		✓ COMPLETE	Dec 11, 2024 08:07:21 PM	Dec 11, 2024 08:07:21 PM	Details	Hide
Upload file share	profiles		✗ ERROR	Nov 15, 2024 05:05:58 AM	Nov 15, 2024 05:05:58 AM	Details	Hide
Upload file share	profiles		✗ ERROR	Nov 14, 2024 07:06:38 AM	Nov 14, 2024 07:06:38 AM	Details	Hide

2. Set up Azure Files for FSLogix storage

- Navigate to the **Nerdio Manager console**.
- Go to **Azure Files > Add Azure Files**.
- Enter the required details.

CREATE AZURE FILES SHARE

Storage account: randomstore876545

Resource group: NMM-SalesDemos-WinHart

Location: UK South

Performance: Premium

Redundancy: Locally-redundant storage (LRS)

File Share name: fslogixprofiles

Provisioned capacity (GB): 100

Permissions (SMB Share Contributors)

Type user or group name: Select...

Add users/groups from host pools: Select...

☒ Join to AD: Entra ID (Entra ID)

☒ Assign NTFS file-level permissions

Show advanced settings

☒ Enable SMB Multichannel

Cancel OK

3. Configure FSLogix settings

- Once the Azure Files storage is created, configure FSLogix policies in **Nerdio Manager**.
- Assign FSLogix configurations to **host pools**.

ADD FSLOGIX PROFILES STORAGE CONFIGURATION ⓘ

Name
FSLogixtest ⓘ

☐ Use Cloud Cache ⓘ

☒ Configure session hosts registry for Microsoft Entra joined storage ⓘ

☒ Exclude the Nerdio stored admin account from FSLogix ⓘ

☒ Exclude the domain admin account from FSLogix ⓘ

Domain admin username
Leave empty for using domain admin username from AD config ⓘ

FSLogix version ⓘ
Latest - FSLogix 2210 hotfix 4 (2.9.8884.27471) ⓘ

FSLogix Profiles path (VHDLocation): ⓘ
1. fslogixprofiles (virtualhmttest.file.core.windows.net/fslogixprofiles) ⓘ

FSLogix Registry Options: ⓘ
Common settings ⓘ

DeleteLocalProfileWhenVHDShouldApply	1 ⓘ	Reset
FlipFlopProfileDirectoryName	0 ⓘ	Reset
PreventLoginWithFailure ⓘ	1 ⓘ	Reset
PreventLoginWithTempProfile ⓘ	1 ⓘ	Reset
RedirXMLSourceFolder ⓘ	Not configured ⓘ	Reset
SizeInMBs ⓘ	Not configured ⓘ	Reset
VolumeType ⓘ	vhd ⓘ	Reset

Configure Office Container to redirect Microsoft Office user data ⓘ

Redirections ⓘ

4. Apply FSLogix settings to host pools

- In **Nerdio Manager**, navigate to **AVD > Host Pools > Properties**.
- Under **FSLogix settings**, apply the necessary profile configurations.

AVD DEMO - APAC (ENTRA ID) PROPERTIES

Active Directory
AVD
VM Deployment
Azure Capacity Extender
Custom RDP
FSLogix*
Azure Monitor
Session time limits

USE FSLOGIX PROFILES: ⓘ

FSLogixtest ⓘ

☐ Use Cloud Cache ⓘ

☒ Configure session hosts registry for Microsoft Entra joined storage ⓘ

☒ Exclude the Nerdio stored admin account from FSLogix ⓘ

☒ Exclude the domain admin account from FSLogix ⓘ

Domain admin username
Leave empty for using domain admin username from AD config ⓘ

FSLogix version ⓘ
Latest - FSLogix 2210 Hotfix 4 (2.9.8884.27471) ⓘ

FSLogix Profiles path (VHDLocation): ⓘ
1. fslogixprofiles (virtualhmttest.file.core.windows.net/fslogixprofiles) ⓘ

FSLogix Registry Options: ⓘ
Common settings ⓘ

DeleteLocalProfileWhenVHDShouldApply	1 ⓘ	Reset
FlipFlopProfileDirectoryName	0 ⓘ	Reset
PreventLoginWithFailure ⓘ	1 ⓘ	Reset
PreventLoginWithTempProfile ⓘ	1 ⓘ	Reset
RedirXMLSourceFolder ⓘ	Not configured ⓘ	Reset
SizeInMBs ⓘ	Not configured ⓘ	Reset
VolumeType ⓘ	vhd ⓘ	Reset

Configure Office Container to redirect Microsoft Office user data ⓘ

Redirections ⓘ

☐ Apply to existing hosts

These changes will apply only to newly created (or re-imaged) hosts.

Connectivity: Citrix vs. Azure Virtual Desktop

Citrix connectivity is managed through the Citrix Workspace app, which supports various protocols and offers features such as session roaming and high-definition user experiences.

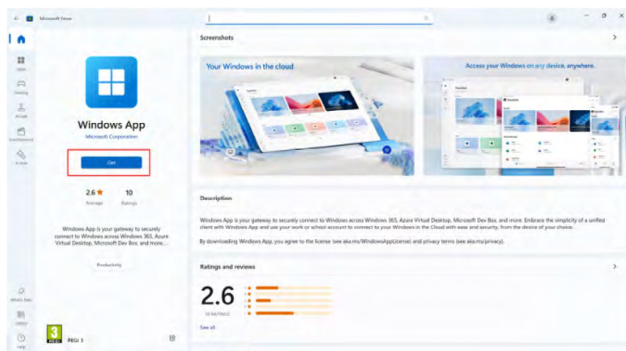
Azure Virtual Desktop uses the Windows App or browser-based access for connectivity. It supports RDP Shortpath, a feature that enhances RDP performance by optimizing the network path, reducing latency, and improving user experience.

Deploying the Windows App

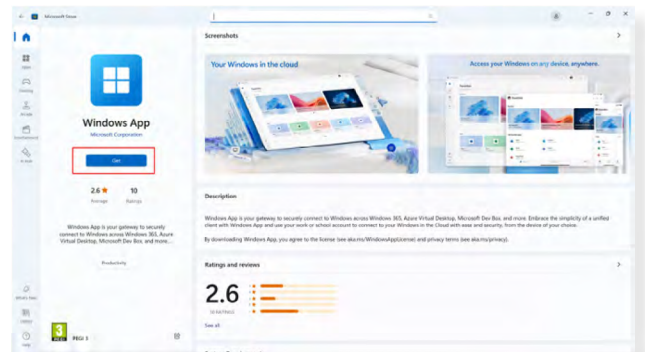
The preferred method of connecting to Azure Virtual Desktop or Windows 365 is via the Windows App. The Windows App is deployed from the Windows Store and can be deployed into Windows, macOS, iOS/iPadOS, Android/Chrome OS, and a browser version. It can also be deployed as an MSI application if required.

Installing from the Windows Store

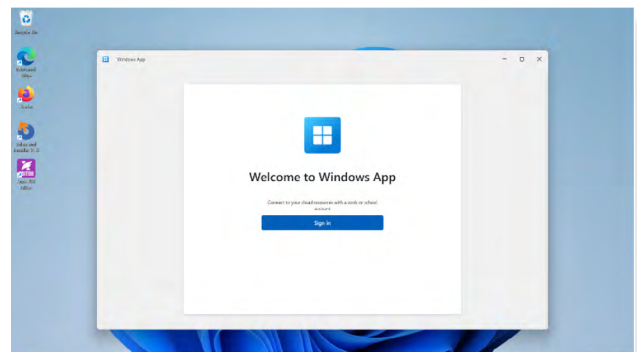
1. On the device that you want to install the Windows App on, head over to the Windows Store, search for “Windows App,” and select “Get.”



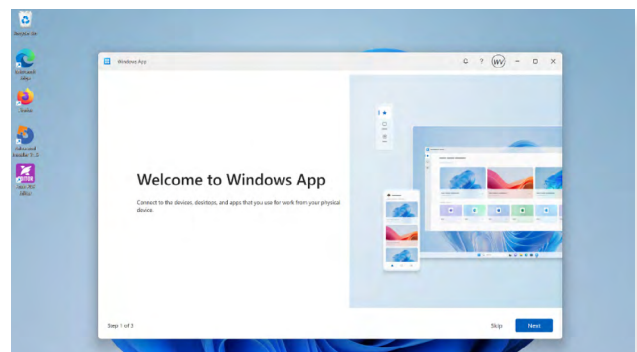
2. Once it has been installed, select “Open.”



3. You will be prompted for your sign-in credentials.



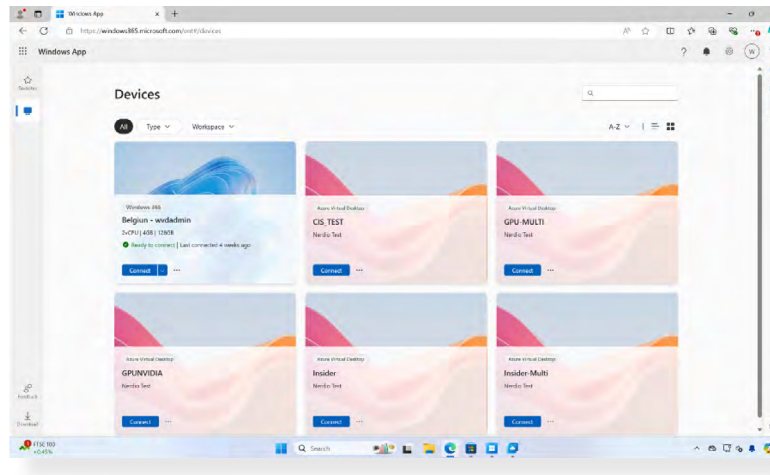
4. Once the credentials have been entered, you will receive a “Welcome to the Windows App” screen. Select next to continue.



Windows app web

A web URL can also be used to access the Windows app, like how Citrix customers used to connect to StoreFront. The web URL to use is <https://windows.cloud.microsoft/>.

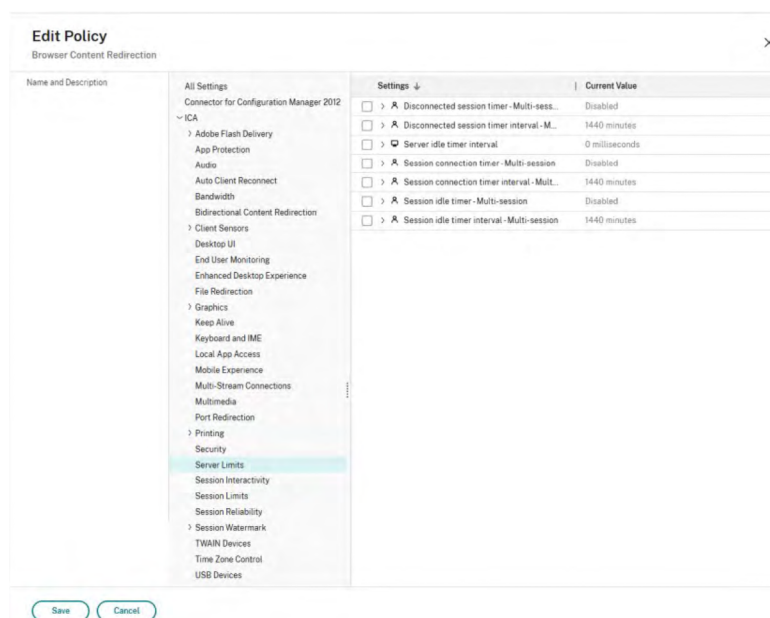
This has the same interface that the Windows App client uses.



Policies

The way that user policy settings are applied via Citrix and Azure Virtual Desktop are quite different and need to be managed accordingly.

Citrix HDX Policies were very customizable, and you could target different machine catalogs, users, devices, etc.



APAC - AVD DEMO PROPERTIES

Active Directory

AVD

VM Deployment

Azure Capacity Extender

Custom RDP

FSLogix

Azure Monitor

Session time limits

Enable user desktop session time limits to control what happens to disconnected, idle or long sessions.

ENABLE USER SESSION TIME LIMITS: On

LOG OFF DISCONNECTED SESSIONS AFTER: 30 minutes

DISCONNECT IDLE SESSIONS AFTER: 30 minutes

DISCONNECT ACTIVE SESSIONS AFTER: Not configured

LOG OFF, INSTEAD OF DISCONNECTING, ACTIVE AND IDLE SESSIONS: Not configured

☐ Apply to existing hosts

These changes will apply only to newly created (or re-imaged) hosts.

Cancel Save Save & close

Azure Virtual Desktop policies can be managed via Nerdio, and a lot of the settings are similar, such as disconnection timeout settings. However, the most notable change is that you cannot manage user policies with Azure Virtual Desktop like you could with Citrix.

Any user-specific settings should be managed by Group Policy or Intune.

Within Nerdio, you can configure policies in two separate locations.

The first section is the properties of the host pool. The image to the right shows how to configure session time limits.

For a complete list of available policy settings, please [visit this page](#).

APAC - AVD DEMO PROPERTIES

Active Directory

AVD

VM Deployment

Azure Capacity Extender

Custom RDP

FSLogix

Azure Monitor

Session time limits

Edit mode

Common settings

<input checked="" type="checkbox"/> Redirect microphone (audiocapturemode)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect speaker (audiomode)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect cameras (camerastoredirect)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect local drives (drivestoredirect)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect clipboard (redirectclipboard)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect printers (redirectprinters)	Not configured	Reset
<input checked="" type="checkbox"/> Redirect location	Not configured	Reset
<input checked="" type="checkbox"/> Full screen (screen mode id)	Not configured	Reset
<input checked="" type="checkbox"/> Multi-monitor (use multimon)	Not configured	Reset
<input checked="" type="checkbox"/> RDP efficient multimedia streaming (videoplaybackmode)	Not configured	Reset
<input checked="" type="checkbox"/> Auto-reconnect (autoreconnection enabled)	Not configured	Reset
<input checked="" type="checkbox"/> Entra ID authentication (targetisaadjoined)	1	Reset

All settings

Refer [this KB article](#) for more information about options above

Cancel Save Save & close



Summary

Migrating from Citrix to Azure Virtual Desktop with Nerdio provides a streamlined path to modernize virtual desktops, reduce costs, and boost performance. With careful planning and the support of Nerdio's powerful management tools, organizations can fully leverage Azure's cloud infrastructure.

Nerdio's comprehensive toolkit is designed to make the migration process as smooth and seamless as possible. For additional assistance, feel free to contact our team.

About Nerdio

Nerdio is a leading provider of powerful, simplified cloud management solutions for businesses of all sizes. Trusted by managed service providers (MSPs) and enterprise IT departments alike, Nerdio equips organizations with seamless, cost-effective management tools for Azure Virtual Desktop (AVD), Windows 365, and comprehensive Modern Work solutions.

With thousands of customers worldwide, Nerdio accelerates cloud adoption, enabling companies to thrive in an era of hybrid work by providing modern, future-proof technology that adapts to evolving workplace needs.

For more information, please visit **www.getnerdio.com**.



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