# citrix

# **Citrix HDX Plus for Windows 365**





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# What's new

#### November 19, 2024

The goal of Citrix is to deliver new features and updates to Citrix HDX Plus W365 customers when they are available. DaaS releases regular updates to the HDX Plus W365, so check back here regularly to find out about new features and functionality.

#### Important!

We are continuously releasing new functionality and strive to announce these features when first available. This means the newer features that you see at the top of this list might be in the release process and it can take a few days to be available for a particular customer.

#### November 2024

#### Support for Windows 365 Frontline.

You can now use HDX Plus for Windows 365 to onboard and deliver Windows 365 Frontline Cloud PCs with Citrix Cloud.

#### September 2023

#### Group assignment support for HDX Plus for Windows 365 licenses.

Previously, you could only assign licenses to individual users. With this feature, you can now assign licenses to Entra ID groups for greater flexibility and simplicity of user license assignment.

This feature does not support Active Directory, only Entra ID. For more information, see Assign Citrix Licenses to Users.

# **Citrix for Windows 365**

#### January 16, 2025

Citrix for Windows 365 allows you to integrate Citrix Cloud with Windows 365 to use Citrix HDX technologies for an enhanced and more secure Windows 365 Cloud PC experience in addition to other Citrix Cloud services for enhanced manageability.

#### **Pre-requisites**

Following are the pre-requisites for the solution:

#### Citrix

- Citrix DaaS
- Citrix administrator account with full administrator rights.
- Cloud PCs must have access to the following:
  - Citrix Cloud registration service:
    - \* US: https://cloudpcregistration.apps.cloud.com
    - \* EU:https://cloudpcregistration-eu.apps.cloud.com
    - \* APS: https://cloudpcregistration-ap-s.apps.cloud.com
  - https://\*.xendesktop.net on TCP 443. If you can't allow all subdomains in that manner, you can use https://<customer\_ID>.xendesktop.net, where <customer\_ID> is your Citrix Cloud customer ID as shown in the Citrix Cloud administrator portal.
  - https://\*.\*.nssvc.net on TCP 443 for the control connection with Gateway Service.
  - https://\*.\*.nssvc.netonTCP 443 and UDP 443 for HDX sessions over TCP and EDT, respectively.
    - Note:

If you can't allow all subdomains using https://\*.\*.nssvc.net, you can use https://\*.c.nssvc.net and https://\*.g.nssvc.net instead. For more information, see Knowledge Center article CTX270584.

- https://\*.infra.windows365.microsoft.comandhttps://cpcstprovprod
   \*.blob.core.windows.net for downloading the VDA and VDA Registration Tool.
- https://\*.dl.delivery.mp.microsoft.com for downloading Microsoft Edge WebView2 Runtime during the Citrix Workspace app installation (see Allow list for Microsoft Edge endpoints for details).
- https://msedge.api.cdp.microsoft.com for Microsoft Edge WebView2 Runtime update checks.
- If deploying Entra hybrid joined Cloud PCs, see Entra hybrid joined deployments for additional requirements specific to Entra hybrid joined environments.

#### Microsoft

- Microsoft Intune entitlement
- Entra ID directory in the same tenant as Microsoft Intune
- Windows 365 Enterprise or Windows 365 Frontline licenses in the same tenant as Microsoft Intune

#### Note:

If using Windows 365 Frontline, only dedicated mode is supported. Shared mode cannot be used with Citrix at this time.

- Azure administrator account:
  - Entra ID Global administrator
  - Intune Global administrator
- Cloud PCs must have the appropriate PowerShell Execution Policy configuration to allow the automatic installation and configuration of the VDA
  - The execution policy must be one of the following: AllSigned, Bypass, RemoteSigned, or Unrestricted
  - The scope must be MachinePolicy or LocalMachine
    - Note:

Keep in mind that the MachinePolicy scope takes precedence over LocalMachine. Therefore, ensure that the execution policy configuration is set so that the effective execution policy is adequate.

For more information, see PowerShell execution policies.

# **Supported Configurations**

Citrix for Windows 365 supports integrating with Windows 365 deployments with Entra joined, and Entra hybrid joined Cloud PCs. Following are details of the supported configurations for each scenario.

#### Supported infrastructure

					NetScaler	
Machine		CVAD	Citrix	Citrix	Gateway	NetScaler
identity	Citrix Cloud	On-prem	Workspace	StoreFront	Service	Gateway
Entra	Yes	No	Yes	No	Yes	No
joined						
Entra	Yes	No	Yes	Yes	Yes	Yes
hybrid						
joined						

### Note

Neither Local Host Cache (LHC) nor Service Continuity are available for Entra hybrid joined Cloud PCs when using StoreFront with the default connector-less VDA model. See Entra hybrid joined deployments if you want to leverage LHC when using StoreFront and Entra hybrid joined Cloud PCs.

#### Supported identity providers

Machine identity	Azure Active Directory	Active Directory	Active Directory + Token	Okta	SAML	Citrix Gateway	Adaptive Authenti- cation
Entra joined	Yes	No	No	No	Yes	No	No
Entra hybrid joined	Yes	Yes	Yes	Yes	Yes	Yes	Yes

#### Note

If using an identity provider other than Active Directory or Active Directory + Token with Entra hybrid joined deployments, you need Citrix Federated Authentication Service (FAS) to achieve single sign-on (SSO) to the Cloud PC. Refer to the FAS documentation for details.

If you plan to use SAML as your identity provider, see the Citrix Cloud documentation for information on configuring SAML with Entra ID identities.

# **Configuration Overview**

To configure W365, complete the following steps in order:

- 1. Enable the Citrix connector for Windows 365
- 2. Connect Azure Active Directory to Citrix Cloud
- 3. Configure Citrix Workspace
- 4. Connect Windows 365 to Citrix Cloud
- 5. Assign Citrix licenses to your users
- 6. Provision Cloud PCs

Once Citrix licenses are assigned to users, Citrix communicates to the Windows 365 service that the selected users are entitled to use Citrix to access their Cloud PCs. If the selected users already have

Cloud PCs provisioned, Windows 365 automatically installs the Citrix Virtual Delivery Agent (VDA) on those Cloud PCs and switches the user's access to Citrix. If the selected users do not have Cloud PCs assigned, the VDA is installed immediately after the Cloud PC is provisioned at the time of Windows 365 license assignment.

After the VDA is installed, it registers with Citrix Cloud and any necessary Machine Catalogs and Delivery Groups are created automatically. Cloud PCs are then available through Citrix Workspace. A Citrix policy is also created for each Windows 365 delivery group to enable required features.

The next sections provide detailed instructions for each of the above configuration steps.

#### Note:

Citrix recommends leveraging the VDA Upgrade Service to manage VDA upgrades in your Cloud PCs. For more information, see the following:

- Upgrade VDAs using the Full Configuration interface
- Citrix VDA Upgrade service Tech Brief

#### Limitations and Known Issues

- Citrix HDX Plus for Windows 365 is not available in Citrix Cloud Japan, Citrix Cloud Gov, or CSP tenants.
- Single sign-on for Entra joined Cloud PCs is not available at this time.
- Windows Hello is not supported to log into the virtual desktop. For more information, see Provision Cloud PCs.
- If performing in-place Windows upgrades, you must upgrade to one of the following Windows versions. Otherwise, the VDA will not be able to register with the Citrix site after the upgrade, and users will not be able to launch their desktops.
  - Windows 11 with 2023-07 Cumulative Update for Windows 11 (KB5028185) or later installed (build 22621.1992 or later).
  - Windows 10 with 2023-07 Dynamic Update for Windows 10 (KB5028311) installed.

#### **Additional resources**

- Windows 365 Enterprise
- Windows 365 Frontline
- Citrix Cloud
- Citrix DaaS
- Citrix HDX policies
- HDX virtual channel security

- HDX device support
- HDX graphics
- HDX multimedia
- HDX content redirection
- HDX printing
- HDX Adaptive Transport and Enlightened Data Transport (EDT)
- HDX Rendezvous V2

# **Enable the Citrix Connector for Windows 365**

#### September 1, 2023

#### Enable the Citrix partner connector for Windows 365 in the Microsoft Intune console:

Note:

This is not related to Citrix Cloud Connectors used as part of the Citrix Cloud infrastructure.

- 1. Go to endpoint.microsoft.com and log in with an account that has Global Administrator privileges in MEM.
- 2. Select Tenant administration.

Microsoft Endpoint Manager admin center			
*	Win365_Citrix_Dev		
合 Home	·		
Zh Dashboard	Home Microsoft Managed Desktop		
E All services			
Devices	Status		
Apps			
, Endpoint security	Errors/failures Healthy		
Reports	2 5		
📩 Users			
🧏 Groups	Device compliance		
Tenant administration	Windows 365		
X Troubleshooting + support	Account status		
	Client apps		
	Connector status		
	Device configuration		
	Service health		



#### 3. Select Connectors and tokens.

#### 4. Select Windows 365 partner connectors.

Microsoft Intune admin center			¶\$r Ļi
«	Home > Tenant admin   Connectors and	d tokens >	
1 Home	Connectors and tol	<b>kens</b>   Windows enterprise certificate	
🖾 Dashboard	•		
All services	✓ Search «	↑ Essentials	
Devices	Windows	Status: Last updated: Not set up Not available	
Apps	📮 Windows enterprise certificate	Issued To: Days until expiration:	
5 Endpoint security	Microsoft Endpoint Configuration Manager	Not available Not available Expiration:	
Reports	Windows 365 partner connectors	Not available	
👱 Users	Windows data	Specify a code-signing certificate to distribute line-of-business apps to your managed Windows devices, if you don't want to use an	
Sroups		existing code-signing certificate from a public certification authority already trusted by your Windows devices. If multiple certificates have been uploaded, only the latest certificate to be uploaded will be used.	
Tenant administration	Apple		
X Troubleshooting + support	Apple VPP Tokens		
	Android and Chrome OS	Code-signing certificate file * ① Select a file	
	Managed Google Play		
	🖳 Chrome Enterprise (preview)		
	Firmware over-the-air update (preview)	Upload	
	Cross platform		
	Ø Microsoft Defender for Endpoint		
	🚺 Mobile Threat Defense		
	Rartner device management		
	Rartner compliance management		
	TeamViewer connector		
	ServiceNow connector		
	Certificate connectors		
	Served Credentials		

5. Click Add, select Citrix from the list, set the toggle to On and click Add.



6. Proceed to connect Active Directory to Citrix Cloud.

# **Connect Entra ID to Citrix Cloud**

#### March 8, 2024

#### Note

If you are integrating Windows 365 with an existing Citrix Cloud tenant to which you already connected Entra ID, you can skip this section and proceed to **Configure Citrix Workspace**.

#### The following steps are to be performed in the Citrix DaaS full configuration console:

1. Open a browser and navigate to citrix.cloud.com and Log in with your Citrix Cloud administrator credentials. 2. Select Manage in the Citrix DaaS tile.

Library Offering	Call 1 Control	Domains Notification	s Open Tickets
My Services (3)			
Analytics Security, performance and usage insights.	DaaS ⑦ Deliver virtual apps and desktops on any device.	Workspace Environment Management Optimized resources, user environment and profile management.	
Manage Learn more	Manage Learn more	Manage Learn more	
Available Services (16)			
Analytics Security, performance and usage insights.	Preview Rep Builder Create no-code data-driven apps to customize work and communication	App Delivery and Security Deliver and secure your apps and API's across multi-cloud with a self-healing service	Application Delivery Mangement Hybrid management analytics service for Citrix Heaving on commenses and

3. If you are not already in the Full Configuration console, place the cursor over the arrow in the **Manage** tab to expand the menu and select **Full Configuration**.

	Manage 🗸 Monitor	
۵	Full Configuration	
Q	Azure Quick Deploy	
، <del>ٿِ</del> ،	Environment Management	rvice overview
ന്റ്റ് ി		urces
	Environment Management (We	eb)
ı آ	Session Recording	7
		Machines

4. Select Quick Deploy.

#### Citrix HDX Plus for Windows 365

Manage 🗸	Monitor	
Home	_	문 Service overview
Q Search		Resources
년 Machine Catalogs		

- 5. A Windows 365 node appears. Select **Get Started**.
- 6. Select Go to Identity and Access next to **Connect to Azure Active Directory**.

	Manage 🗸 Monitor	
© ∳	Windows 365 Get Started	Windows 365 integration checklist
0 G 6 6 7 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7 7	License Assignments Account	Give users HDX experiences on their Cloud PCs. Prerequisites and best practices Windows 365 pre-implementation checklist
₽ ℃ &		Connect Azure Active Directory Connect your organization's Azure Active Directory to allow users to access Cloud PCs with their company credentials. Product documentation
■		Configure Citrix Workspace  Configure Workspace to allow users to access their Cloud PCs.  Product documentation
		Connect to Windows 365
		Optimize user experience on Cloud PCs 4 Deliver Citrix HDX experience to users on their Cloud PCs. Product documentation Start

7. Select the three dots next to **Azure Active directory** and select **Connect**.

← Identity and Access Management



8. Confirm your custom administrator sign-in URL if prompted.

	zure Global Admin to complete this step.
ou can change the	sign-in URL later if needed.
ttps://	/s in

- 9. Log into Entra ID with a Global administrator account.
- 10. Accept the requested permissions.

	-Directory-Staging ud.com			
This application is not published by Microsoft or your organization.				
Thi	s app would like to:			
$\sim$	Sign in and read user profile			
$\sim$	Read all users' basic profiles			
$\sim$	Read all users' full profiles			
$\sim$	Read group memberships			
$\sim$	Read all users' full profiles			
$\sim$	Read directory data			
$\sim$	Read all group memberships			
If you accept, this app will get access to the specified resources for all users in your organization. No one else will be prompted to review these permissions.				
Accepting these permissions. Accepting these permissions means that you allow this app to use your data as specified in their terms of service and privacy statement. The publisher has not provided links to their terms for you to review. You can change these permissions at https://mwaps.microsoft.comShow details				
Doe	s this app look suspicious? Report it here			

#### Note

Please refer to **Default connection between Azure AD and Citrix Cloud** for details on the required permissions.

11. Citrix Cloud is now connected to your Azure Active Directory tenant.

Azure Active Directory: Admin Sign-in URL:	n	Connected	
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12. Proceed to Configure Citrix Workspace.

# **Configure Citrix Workspace**

#### March 8, 2024

#### The following steps are to be done in the Citrix Cloud administrative console:

#### Note

If you are integrating Windows 365 with an existing Citrix Cloud tenant in which you already configured Citrix Workspace, please make sure to review the **Supported Configurations** for HDX Plus for Windows 365 to ensure your current configuration will work with your Windows 365 deployment.

1. Select the options menu on the upper left corner, expand **My Services**, and select **DaaS**.

×	citrix		
Home			Management
My Se	rvices	^	
Sec	ure Private Access		s API Access [
Daa	S		your Citrix Cloud adminis
Librar	y		

- 2. Hover over the **Manage** tab to expand the menu and select **Full Configuration**.
- 3. Select Quick Deploy.
- 4. Select Go to Workspace Configuration next to Configure Citrix Workspace.



5. Select the Access tab.

≡	citrıx									
<b>←</b>	Worksp	bace Config	uration 💿							
	Access	Authentication	Customize	Service Integrations	Sites					
lindo	r Morka		notovou	r Citrix Morko		I This is	theaddr	a that w	0.1.r.1.c.0	~

- 6. Under **Workspace URL** note your Citrix Workspace URL. This is the address that your users use to access their Cloud PCs. By default, it's set to CitrixCustomerID.cloud.com.
- 7. If you want to customize your Workspace URL, select Edit.

Workspace URL	
This is the URL your subscriber will use to access their Workspace from their browser. Customize the URL by editing it	
https://o.com	Edit

8. Enter your wanted subdomain, review and acknowledge the considerations, and select **Save**.

Edit the Workspace URL X This is the URL your end user will use to access their Workspace from their browser.
Customize the Workspace URL:   https://   .cloudburrito.com   URL preview: https:// .cloudburrito.com  Understand that: Changes to my Workspace URL can take up to 10 minutes and will cause an outage to your subscribers during this time. You will need to distribute the new URL to your subscribers. You will need to manually update Citrix Workspace apps to the new Workspace URL. Citrix Files links made before the URL change will no longer work.
Save Cancel

9. Select the **Authentication** tab.



- 10. Select the appropriate option for your environment. Please refer to Citrix Workspace documentation for details on configuring authentication methods.
- 11. Select Customize > Preferences.

≡	citrıx			
¢	Workspace Confi	guration	0	
	Access Authentication	Customize	Service Integrations	Sites
	Appearance Fea	tures	Preferences	

12. If you want the Cloud PC session to launch automatically after users log into Workspace, look for **Automatically Launch Desktop**, set the toggle to **Enabled**, and click **Save**.

Automatically Launch Desktop
Enabled
Enabling and Disabling Desktop Auto-Launch When enabled, a desktop automatically launches after sign-in when only one is available.
Save

- 13. [OPTIONAL] Disable the Federated Identity Provider Sessions option in Workspace if:
  - Your users' client devices are Entra joined or Entra hybrid joined, and you want single signon into Citrix Workspace (IdP must be Entra ID).
  - Your users will use the Windows 365 web portal instead of accessing Citrix Workspace directly, and you want single sign-on into Workspace to avoid prompting users for credentials a second time. Note that this is only relevant if your Azure and Workspace IdPs are the same.



14. Proceed to Connect Windows 365 to Citrix Cloud.

# **Connect Windows 365 to Citrix Cloud**

#### March 29, 2024

The following steps are to be performed in the Citrix Cloud administrative console.

1. Click on the options menu on the upper left corner, expand **My Services**, and select **DaaS**.

×	citrıx		
Home			Management
My Se	rvices	^	s APLAccess [
Sec	ure Private Access		S API Access L
Daa	S		your Citrix Cloud admini؛
Librar	ý		trix.cloudburrito.com

- 2. Place the cursor over the arrow in the **Manage** tab to expand the menu and select **Full Config-uration**.
- 3. Select **Quick Deploy** on the left side.
- 4. Select Connect next to Connect to Windows 365.



5. Log in with the global administrator account and accept the requested permissions.



6. Proceed to Assign Citrix licenses to your users.

#### Entra ID Permissions for HDX Plus for Windows 365

An application called Citrix Virtual Apps and Desktops (application ID 7e1dd8af-3a41-44f1-9009-89a982753609) is created with the following permissions:

API Name	Claim value	Permission	Туре
Microsoft Graph	Device.Read.All	Read all devices	Application
Microsoft Graph	Group.Read.All	Read all groups	Application
Microsoft Graph	User.Read.All	Read all users'full profiles	Application
Microsoft Graph	CloudPC.ReadWrite.All	Read and write Cloud PCs	Application
Windows 365	CloudPC.PartnerReadWr	it <b>e</b> a⁄tther read and write cloud pc	Application

#### Considerations

The following are considerations for establishing a connection between Citrix Cloud and Windows 365:

- The user must be a Global Administrator. Otherwise, the application registration will not complete successfully, and the connection will fail.
- There must be Windows 365 Enterprise licenses in the Azure tenant. Otherwise, the connection to Windows 365 will fail.
- If the Entra ID tenant connected to Citrix Cloud differs from the tenant for Windows 365, the connection will fail.
- Occasionally, a delay in propagating the application permissions in Azure will cause the connection to fail. Retrying the connection to Windows 365 within 15 minutes may solve the problem.

# **Assign Citrix Licenses to Users**

#### March 29, 2024

Note:

If you are onboarding Entra hybrid joined Cloud PCs, please review Entra hybrid joined deployments before you proceed.

#### You can assign licenses to individual users or to Azure AD groups.

The following steps are to be done in the Citrix DaaS full configuration console:

1. If there are no licenses assigned, click **Assign** next to **Assign Citrix licenses**. To view the existing license assignments, click **Review** next to **Assign Citrix licenses**.



2. On the License Assignments blade, click Assign licenses.



3. On the **License Assignments** blade, select **Groups**, **Users**, or both in the **Select object type** field.

Assign Citrix licenses	$\otimes$
Select object type: Groups,Users	
Search users or groups: Sear	ch
Search to add users or groups.	
Save Cancel	

- 4. Search for the users or groups you want to assign a Citrix license to and click **Search**. You can enter:
  - Full user name or UPN to search for an exact match.
  - Part of the name or User Principal Name (UPN) to search for all users that match that search criteria.
  - Leave the text box blank to retrieve all users (not recommended for large directories).
  - Part of the group name to search for all group names that match that search criteria.
  - Full group name to search for an exact match.
- 5. Select the user or group that you want to assign a license to and click **Save**.

#### Note

You can select up to 20 users at a time. However, there is no limit on the number of groups.

Nested groups are not supported. Users must be direct members of the group.

Select object type:			
Groups, Users		$\sim$	
Search users or groups:			iearch
Name 🗸	User principal name	Ту	pe
	u.	Git	ap 🛈 _
		Us	_
		Us	_
	•		aup 🔟
			anp 🔟
	•	Gr	w 🛈

The **Type** column shows the type of object (user versus group) and the **Status** column shows the state of the licenses assigned.

CİİTIX   DaaS Premiu	m			4 <mark>2</mark> 0 ~
Manage 🗸 Monitor				All tenants V Downloads
Get Started	License assignmen Assign Citrix licenses to ut	nts sers or groups to deliver HDX technologies for an enhanced Cloud PC experie	ance.	c
License Assignments	Assign licenses			Search
Account	□ Name ↓	User principal name	Type	Status
			User	Assignment Completed
			User	Assignment Completed
			User	Assignment Completed

#### 6. Click **Refresh** if the **License assignments** table does not reflect your selection.

#### Note

If a user is already assigned a license as part of another Citrix Cloud Customer, the new license assignment fails.

7. Citrix communicates to the Windows 365 service that the selected users are entitled to use Citrix.

If the selected users already have Cloud PCs provisioned, Windows 365 will automatically install the Citrix Virtual Delivery Agent (VDA) on those Cloud PCs and switch the user access to Citrix. If the selected users do not have Cloud PCs assigned yet, the VDA will be installed on their Cloud PCs immediately after the Cloud PC is provisioned at the time of Cloud PC license assignment.

8. Proceed to Provision Cloud PCs.

#### Considerations

The following are considerations for successfully deploying the Citrix VDA to Cloud PCs:

- Ensure that the Cloud PCs can reach the necessary URLs to register with Citrix Cloud successfully. Refer to the prerequisites for details.
- If you want to deploy Cloud PCs using an image with a VDA already installed, it must be version 2203 CU2 or newer CU for LTSR, or 2209 or newer for CR.
- If there is an issue with the VDA installation, the status of the Cloud PC in the Windows 365 Devices section in Intune shows "Provisioned with warning." Clicking the warning shows additional information on the issue, and an option to "Retry Citrix agent installation."

#### **Unassign Citrix Licenses**

You can un-assign licenses to groups or users.

To unassign the previously assigned licenses to users or groups, follow these steps:

1. On the **License assignments** blade, select the users or groups you want to unassign the licenses

fro	m.					
≡	CÌÌГIŻ ∣ DaaS Premium					A Straight
	Manage 🗸 Monitor					All tenants
6	1 Windows 305	License assignments				C
Q	Get Started	Assign Citrix licenses to users or groups to deli	iver HDX technologies for an enhanced Cloud PC exp	erience.		
S.	License Assignments	Assign licenses 🕕 Remove				Search
Ø	Account	Name U	User principal name	Туре	Cloud PC	Status
				Group		Assignment Completed
Ø				Group		C Unassignment Pending
f		8		User		Assignment Completed
8				User		Assignment Completed
				User		Assignment Completed
				User		Assignment Completed
Ţ				Group		Assignment Failed
0						
@ \$						
V						
						<u>a</u>

#### 2. Click Remove.

The **Type** column shows the type of object (user versus group) and the **Status** column shows the state of the unassigned licenses.

Note

Click **Refresh** to see your changes.

# **Provision Cloud PCs**

#### March 29, 2024

Provisioning of Cloud PCs is done in the Microsoft Intune console. Please refer to the Microsoft documentation for details. Once Cloud PCs have been provisioned, your users are ready to Launch Cloud PCs to access the Cloud PCs using Citrix HDX.

Note:

See Assign Citrix Licenses to Users for details on the initial VDA installation.

For the ongoing management of VDA upgrades, Citrix recommends leveraging the VDA Upgrade Service. For more information, see the following:

- Upgrade VDAs using the Full Configuration interface
- Citrix VDA Upgrade service Tech Brief

#### **Entra Hybrid Joined**

If you plan to deploy Cloud PCs that are Entra hybrid joined, please review Entra hybrid joined deployments before proceeding.

#### **Windows Hello for Business**

Windows Hello for Business is not currently supported as a login option on a virtual desktop. Therefore, to avoid issues with users logging into their virtual desktops, the automatic Windows Hello provisioning is disabled automatically.

If you need to change the Windows Hello configuration to support specific needs in your deployment, see:

• Intune configuration profiles

 Group policy: Computer Configuration > Policies > Administrative Templates > Windows Components > Windows Hello for Business

For more information, see Microsoft's documentation on configuring Windows Hello for Business.

# Launch Cloud PCs

#### April 5, 2024

Once the configuration is complete and Cloud PCs have been provisioned, users can access their Cloud PCs. There are a few options available for accessing the Cloud PCs:

- 1. Citrix Workspace app
- 2. Citrix Workspace
- 3. Windows 365 user portal

#### **Citrix Workspace app**

Follow these steps to use Workspace app to access Cloud PCs:

- 1. Download and install the Citrix Workspace app client.
  - a) Workspace app for Windows
  - b) Workspace app for Mac
  - c) Workspace app for Linux
  - d) Workspace app for Chrome OS
- 2. After the installation is complete, open Workspace app.
- 3. Enter the Workspace URL from the **Configure Citrix Workspace** section and select **Continue**.



# Welcome to Citrix Workspace



- 4. Log in with your Azure AD credentials.
- 5. Select Allow.



6. You Cloud PCs are displayed.

Citrix Workspace		M
Desktops All	↓† A to Z	All Favorites
☆ CTX-Windows365- westus3		

7. If you only have one Cloud PC assigned, it should open automatically at this point.

All	A to Z
CTX-Windows365- westus3	×

- 8. If you have multiple Cloud PCs, or the autolaunch fails, select the Cloud PC to launch a session.
- Enter your credentials in the virtual desktop to log in.
   You can start using your Cloud PC.

#### Note

Steps 1–3 only need to be done once. After Workspace app is installed and configured, you can simply open the Workspace app client to access your Cloud PCs.

#### **Citrix Workspace**

Follow these steps to launch the Cloud PC through Citrix Workspace:

- 1. Open a browser and navigate to the Workspace URL from the **Configure Citrix Workspace** section.
- 2. Log in with Azure AD credentials.

3. If prompted, select **Detect Workspace**. We recommend you download and install Workspace app for the best user experience. Alternatively, you can choose to use web browser to access your Cloud PC without installing a client and can move onto step 7.

Citrix Workspace
Welcome to Citrix Workspace
For the best experience, use the full set of features bundled with Citrix Workspace for Windows. Click Detect Workspace to get started.
Detect Workspace
If you do not want to detect/install Citrix Workspace you can use the light version, with fewer features, in your browser.
<u>Use web browser</u>

4. If Workspace app is not detected in your device, you are given the option to download it.

Citrix Workspace			
Just a moment, we're detecting if Citrix Wor already installed.	kspace is		
If Citrix Workspace is detected, you will see a window ir Please choose <b>Launch Application</b> .	n a few seconds.		
If no window appears, proceed to download.			
✓ I agree with the <u>Citrix license agreement</u>	Download		
Detect again Use web browser Already installed	Security details		
already installed. If Citrix Workspace is detected, you will see a window in Please choose Launch Application. If no window appears, proceed to download. I agree with the <u>Citrix license agreement</u>	n a few seconds.		

5. After the installation is complete, return to the browser and select Continue.



- 6. If prompted, select to always allow the site to open links and select **Open**.
- 7. You now see your Cloud PCs.

□ ● +	Citrix Workspace
	Desktops
	All
	☆ CTX-Windows365- westus3

- 8. If you only have one Cloud PC assigned, it should open automatically at this point.
- 9. If you have multiple Cloud PCs, or the autolaunch fails, select the Cloud PC to launch a session.
- 10. Enter your credentials in the virtual desktop to log in. You can start using your Cloud PC.

#### Note

Steps 3–6 only have to be performed the first time a user logs in.

#### Windows 365 User Portal

Follow these steps to launch the Cloud PC through the Windows 365 user portal:

- 1. Open a browser and navigate to windows365.microsoft.com.
- 2. Log in with your Azure AD user account.
- 3. You now see your Cloud PCs.
- 4. Select Open in Citrix.

 Windows 11 2 vCPU
8 GB RAM
128 GB Storage
💪 Open in Citrix

5. A new tab opens and takes the user to Citrix Workspace.

	Citrix Workspace
+	Desktops All
	☆ CTX-Windows365- westus3

- 6. You now see your Cloud PCs.
- 7. If you only have one Cloud PC assigned, it opens automatically at this point.
- 8. If you have multiple Cloud PCs, or the autolaunch fails, select the Cloud PC to launch a session.
- Enter your credentials in the virtual desktop to log in.
   You can start using your Cloud PC.

# Entra hybrid joined deployments

March 11, 2024

Additional requirements must be addressed for HDX Plus for Windows 365 to work correctly with Entra hybrid joined Cloud PCs. These requirements are:

- The Entra ID directory must be synchronized from the AD domain the Cloud PCs belong to.
- Your deployment must include Cloud Connectors.

#### **Cloud Connectors**

When using Entra hybrid joined Cloud PCs, your deployment must include Cloud Connectors. The number, type, and configuration required depend on whether you plan to leverage the default connector-less VDA registration model or want the VDAs in your Cloud PCs to register through Cloud Connectors.

#### **Connector-less VDA registration**

By default, VDAs are configured in connector-less mode in HDX Plus for Windows 365. This means the VDA communicates directly with the Citrix Cloud control plane without needing a Cloud Connector to proxy this communication.

In this scenario, the Cloud Connectors are only needed for Citrix Cloud to connect to your Active Directory domain to be able to look up machine and user identities.

If you are using HDX Plus for Windows 365 in an existing Citrix DaaS environment with Cloud Connectors already deployed, you don't need to add any additional Cloud Connectors.

When planning a new deployment, you must register a Cloud Connector with the default Resource Location. Citrix recommends you deploy at least two Cloud Connectors for high availability.

Note:

You can use either the Windows-based Cloud Connector or the Connector Appliance for this case. For more information on configuring the connectors, see Citrix Cloud Connector and Connector Appliance for Cloud Services.

#### **Cloud Connector VDA registration**

The VDA in the Cloud PCs can be configured to register with your DaaS site through Cloud Connectors if needed.

Things to know:

- You must use the Windows-based Cloud Connector.
- Resource Locations will be created for every Azure region where you deploy Cloud PCs.

- You will need Cloud Connectors for every Resource Location.
- Refer to Size and scale considerations for Cloud Connectors for guidance on determining sizing and number of Cloud Connectors.

#### Important

The following settings must be present in the Cloud PCs before they are onboarded via HDX Plus for Windows 365 (that is, before the Citrix entitlement is assigned to the corresponding user):

- Key: HKLM\Software\Citrix\WebSocketVdaRegistrationTool
- Value type: DWORD
- Value name: VdaRegistrationViaConnectorEnabled
- Data: 1
- Key: HKLM\Software\Citrix\VirtualDesktopAgent
- Value type: String (REG\_SZ)
- Value name: ListOfDDCs
- Data: Space-separated list of Cloud Connector FQDNs

The following are two possible options to achieve this:

- Configure the registry values in a GPO that will be applied to the Cloud PCs when joined to the AD domain.
- Provision Cloud PCs using a custom image with the VDA already installed and these settings configured.

If you plan on using a custom image, consider using the same installation command used for the automatic VDA installation in HDX Plus for Windows 365:

```
<installer.exe> /quiet /remotepc /virtualmachine /enable_hdx_ports
  /enable_hdx_udp_ports /enablerestorecleanup /noreboot /noresume
  /includeadditional "Citrix Profile Management","Citrix Profile
Management WMI Plug-in","Citrix VDA Upgrade Agent"
```

Following are the step-by-step instructions for onboarding Entra hybrid joined Cloud PCs with VDA registration through Cloud Connectors for new and existing deployments.

**Onboarding Entra hybrid joined Cloud PCs to a new Citrix DaaS site** If you are configuring HDX Plus for Windows 365 in a new Citrix DaaS deployment, follow these steps for the initial configuration:

1. Create your Cloud Connector machines but do not install the Cloud Connector software.

- 2. Install the Cloud Connector software on one of the machines created and register it with the default resource location (My Resource Location).
- 3. Ensure that you have a GPO or a custom image with the settings mentioned above configured and that the ListOfDDCs includes the FQDN of the Cloud Connector from Step 2 (in addition to other Cloud Connectors created for the Cloud PCs'Resource Location). This will ensure these settings are present before the VDA is configured so it can register with your site successfully.
- 4. Proceed to Assign Citrix Licenses to Users. At this point, we recommend assigning a license to a single user and waiting to assign licenses to the rest of the users or groups once the initial configuration is complete (step 9).
- 5. When the first Cloud PC in the region registers with Citrix DaaS, a Resource Location for that region will be created automatically in your Citrix Cloud tenant.
- 6. Once the Resource Location has been created, install the Cloud Connector software on your Cloud Connector machines and register them with the appropriate Resource Location.
- 7. Uninstall the Cloud Connector software from the machine from Step 2.
- 8. Re-install the Cloud Connector software on the machine and register it with the appropriate Resource Location.
- 9. Proceed to Assign Citrix Licenses to the remainder of your users or groups.
- 10. Repeat step 9 to onboard new Cloud PCs on the Resource Location. If you are using a group to assign the Citrix entitlement, you only need to add the users to the group.
- 11. If you want to onboard Cloud PCs hosted in regions that do not already have a corresponding Resource Location in Citrix Cloud, repeat steps 1 9.

**Onboarding Entra hybrid joined Cloud PCs to an existing Citrix DaaS site** If you are configuring HDX Plus for Windows 365 in an existing Citrix DaaS deployment, follow these steps for the initial configuration:

- 1. Create your Cloud Connector machines but do not install the Cloud Connector software.
- 2. Create a new Resource Location in Citrix Cloud. This will be temporary to facilitate the initial configuration. Alternatively, you may use any existing Resource Location that is not currently in use.
- 3. Install the Cloud Connector software on one of the machines created and register it with the temporary resource location from step 2.
- 4. Ensure that you have a GPO or a custom image with the settings mentioned above configured and that the ListOfDDCs includes the FQDN of the Cloud Connector from Step 3 (in addition to other Cloud Connectors created for the Cloud PCs'Resource Location). This will ensure these settings are present before the VDA is configured so it can register with your site successfully.
- 5. Proceed to Assign Citrix Licenses to Users. At this point, we recommend assigning a license to a single user and waiting to assign licenses to the rest of the users or groups once the initial configuration is complete (step 10).

- 6. When the first Cloud PC in the region registers with Citrix DaaS, a Resource Location for that region will be created automatically in your Citrix Cloud tenant.
- 7. Once the Resource Location has been created, install the Cloud Connector software on your Cloud Connector machines and register them with the appropriate Resource Location.
- 8. Uninstall the Cloud Connector software from the machine from Step 3.
- 9. Re-install the Cloud Connector software on the machine and register it with the appropriate Resource Location.
- 10. Proceed to Assign Citrix Licenses to the remainder of your users or groups.
- 11. If you want, you can delete the temporary Resource Location from step 2.
- 12. Repeat step 10 to onboard new Cloud PCs on the Resource Location. If you are using a group to assign the Citrix entitlement, you only need to add the users to the group.
- 13. If you want to onboard Cloud PCs hosted in regions that do not already have a corresponding Resource Location in Citrix Cloud, repeat steps 1 10.

# Troubleshooting

March 11, 2024

#### **Connection to Windows 365**

If you are having issues connecting to Windows 365, check the following:

- 1. Check that the Windows 365 Citrix connector is enabled in Intune.
- 2. Check that the credentials provided when connecting to Windows 365 have the appropriate permissions.
- 3. Check that the Entra ID directory connected to Citrix Cloud is in the same tenant as the Intune/Windows 365 instance you are trying to connect to.

#### Note:

Occasionally, a delay in propagating the application permissions in Azure will cause the connection to fail. Retrying the connection to Windows 365 within 15 minutes may solve the problem.

#### VDA installation and configuration

If you are having trouble with the VDA installation and configuration, check the following:

- 1. If you are not seeing any errors and the VDA has not been installed after the Citrix entitlement was assigned, please ensure enough time has elapsed to allow the VDA installation and configuration to complete. This may take up to 60 minutes.
- 2. Check that the Windows 365 Citrix connector is enabled in Intune.
- 3. Ensure all connectivity requirements in the pre-requisites section and the Windows 365 documentation are met.
- 4. Check for additional details and retry the VDA installation in Intune:
  - a) Go to Devices > Windows 365 > All Cloud PCs
  - b) Make sure that the **Third-party connector** column is displayed. You can add this column by selecting **Columns > Third party connector**.
  - c) Locate a Cloud PC to install the VDA.
  - d) Check the message under the **Third-party connector** column. If it shows **Citrix install failed**, it confirms that the installation was attempted.
  - e) Select the warning under the Status column, which reads Provisioned with warning.
  - f) A blade opens with additional information on the issue.
  - g) Select the **Retry Citrix agent installation** button at the top of the blade to retry VDA installation.
- 5. If your Cloud PCs already have a VDA installed when the Citrix entitlement is assigned, or if you are using custom images with the VDA installed to provision your Cloud PCs, ensure that it is version 2209 or newer. If you are using 2203 LTSR version, make sure it is 2203 CU3 or newer.
- 6. Make sure the PowerShell execution policy is configured correctly on the Cloud PCs. For more information, see pre-requisites.
- 7. Make sure no security configurations restrict the software installation on the Cloud PC.
- 8. If the installation or configuration issue is related to the Intune installation process, the following logs in the Cloud PC might contain additional information:
  - a) C:\Packages\Plugins\Microsoft.Compute.CustomScriptExtension<version>\Status
  - b) C:\WindowsAzure\Logs\Plugins\Microsoft.Compute.CustomScriptExtension<version>\CustomScriptH
  - c) C:\Packages\Plugins\Microsoft.Powershell.DSC<version>\Status
  - d) C:\WindowsAzure\Logs\Plugins\Microsoft.Powershell.DSC<version>\DscExtensionHandler.\*.log
- 9. If the installation or configuration issue is related to the VDA installer or VDA registration tool, the following logs in the Cloud PC might contain additional information:
  - a) VDA installation logs: C:\WINDOWS\TEMP\Citrix\XenDesktop Installer
  - b) VDA Registration Tool: C:\CitrixRegistrationToolFolder\WebSocketVdaRegistrationTool

#### VDA is not registered after successful installation

• Review the HDX Rendezvous V2 requirements and considerations.

• Review the Application log in the Cloud PC's Event Viewer and look for Citrix Desktop Service errors and warnings.

# FAQ

September 19, 2024

The following FAQs are for Citrix HDX Plus for Windows 365:

#### How do I install the Virtual Delivery Agent (VDA) on the Cloud PCs?

Microsoft Intune installs the VDA automatically after the user is assigned a Citrix license.

#### Which VDA version is installed on the Cloud PCs?

Version 2402 LTSR.

#### Can I change the VDA version?

Currently, the version of the VDA installed initially cannot be changed. However, you can choose any version when upgrading the VDA afterward.

#### Can users access Cloud PCs using RDP?

When the VDA is installed on the Cloud PC, only HDX connections are allowed for regular users. Users with administrator privileges in the Cloud PC can connect via RDP.

#### What happens if I unassign a Citrix license?

Citrix communicates to the Windows 365 service that the license for that user has been unassigned, and Microsoft Intune automatically uninstalls the VDA from the Cloud PC and switches user access to RDP.

# What happens if the Citrix connector is disabled in Microsoft Intune?

If the connector is not re-enabled within seven days, Microsoft Intune uninstalls the VDA from all Cloud PCs and Citrix deletes all delivery groups, machine catalogs, and associated policies.

# citrix

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