

Windows 365 Enterprise – The ultimate step-by-step deployment guide – By Robin Hobo

-Published on Mar6,2023

Windows 365 is a cloud-based service that provides Cloud PCs to end users. It's not just a virtual machine running in Azure. Beside an own personalized desktop in the cloud, which can be accessed from anywhere on any device, and which is optimized for Microsoft 365 including Microsoft Teams AV redirection, it comes with some nice and unique features that can be offered to end users. For example, an option to restore the Cloud PC from a snapshot without the need for an IT administrator.

For the IT administrator, Windows 365 is optimized for simplicity. It can be deployed in a few clicks (I will show that step-by-step in this post). It is fully integrated in the Microsoft Intune admin center where you can apply the same policies and publish the same applications as you do on your current Intune managed devices. So, no need for additional VDI knowledge, no need to create a complete other policy set and no need to manage separate IT environments. It also comes with a fixed price per-user per-month, no matter you many hours you use the Cloud PC in a month.

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In this post I will cover the following steps:

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1 - Windows 365 Enterprise requirements

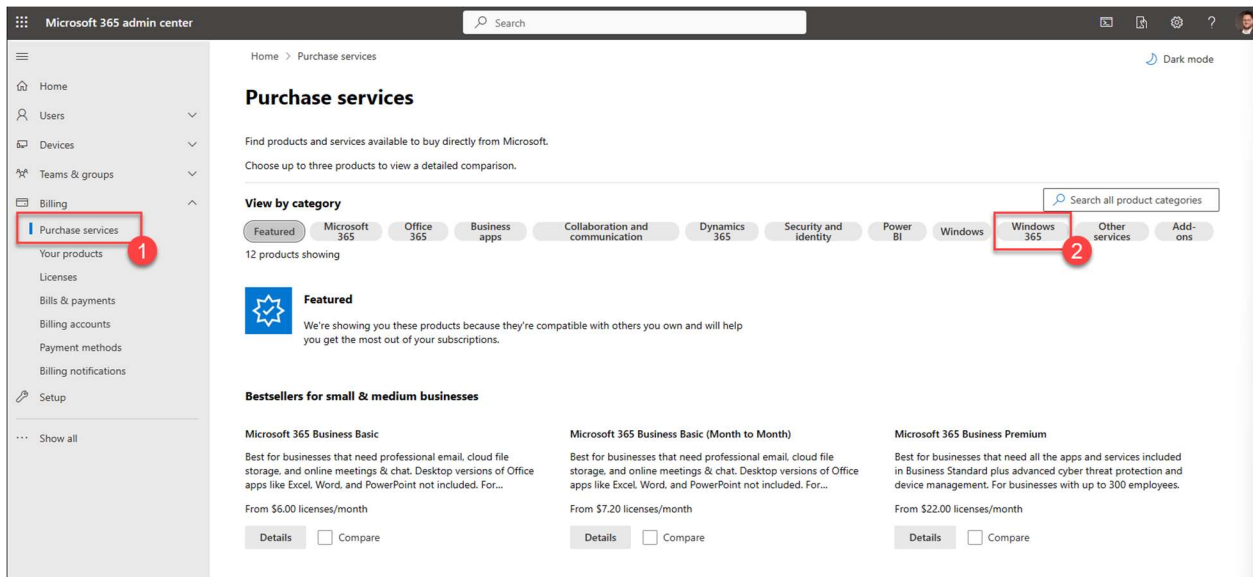
The following requisites needs to be in place before you can start with the Windows 365 Enterprise Cloud PC deployment.

- An Azure subscription (if you want to make use of an own hosted vNet)
- Windows 365 Enterprise license

- Microsoft Intune + Windows 10/11 Enterprise + Azure AD P1 (or Microsoft 365 F3/E3/E5/A3/A5 licenses or Microsoft 365 Business Premium or Microsoft 365 Education Student Use Benefit subscriptions)
- Azure AD environment up and running
- Microsoft Intune environment up and running
- Optional: Azure Network configuration (vNet) up and running (including correct DNS configuration).
- Optional: "on-premises" Active directory up and running
- Optional: Site-to-Site VPN / Express route to have access to the domain controllers within the Azure Network (as an alternative the domain controllers can also run in Azure itself)
- Optional: Azure AD Connect up and running with Hybrid Azure AD configuration (computer objects for Cloud PC needs to sync to Azure)

2 - Assign Windows 365 licenses to the users

There are several ways to assign licenses to users, for example in the Microsoft Entra portal, in the Azure AD portal and in the Microsoft 365 admin center. In the Microsoft 365 admin center, there is also an option to request a free trial license, so I will cover this way.



Open the [Microsoft 365 admin center](#) and navigate to **Billing > Purchase service**. Click **Windows 365**.

Microsoft 365 admin center

Home > Purchase services


Purchase services

Find products and services available to buy directly from Microsoft.
Choose up to three products to view a detailed comparison.

View by category

Featured Microsoft 365 Office 365 Business apps Collaboration and communication Dynamics 365 Security and identity

15 products showing



Windows 365

Windows 365 is the next evolution in personal computing. Windows 365 is your desktop, apps, settings and content streamed on any supported device.

Windows 365 Enterprise

Windows 365 Enterprise is for larger businesses needing to deploy Cloud PCs across their organization, with no license limit. It allows you to provision and manage Cloud PCs using...

From \$28.00 licenses/month


Details

Windows 365 Business

Windows 365 Business gives you up to 300 licenses for Cloud PCs in your organization. Securely stream your Windows experience - including your personalized apps, content, and...

From \$32.00 licenses/month

Details



Featured

We're showing you these products because they're compatible with others you own and will help you get the most out of your subscriptions.

Under Windows 365 Enterprise, click **Details**

Microsoft 365 admin center

Home > Purchase services > Product details

Windows 365 Enterprise

Windows 365 Enterprise is for larger businesses needing to deploy Cloud PCs across their organization, using Microsoft Endpoint Manager. To use Windows 365 Enterprise, each user needs to be licensed for: • Azure Active Directory P1 or • One of the following versions of Microsoft 365: Business Premium, A3, A5, (subscriptions) Securely stream your Windows experience - including your personalized apps, content, and Windows 365 Cloud PC.

[Learn more about Windows 365 Enterprise plans](#)

Choose a plan below based on your processing, RAM, and storage needs.

Select a plan

Choose one from below

- Try for free**
- 2 vCPU, 8 GB, 128 GB
- 2 vCPU, 4 GB
- 2 vCPU, 4 GB, 64 GB
- 2 vCPU, 4 GB, 128 GB
- 2 vCPU, 4 GB, 256 GB
- 2 vCPU, 8 GB
- 2 vCPU, 8 GB, 128 GB

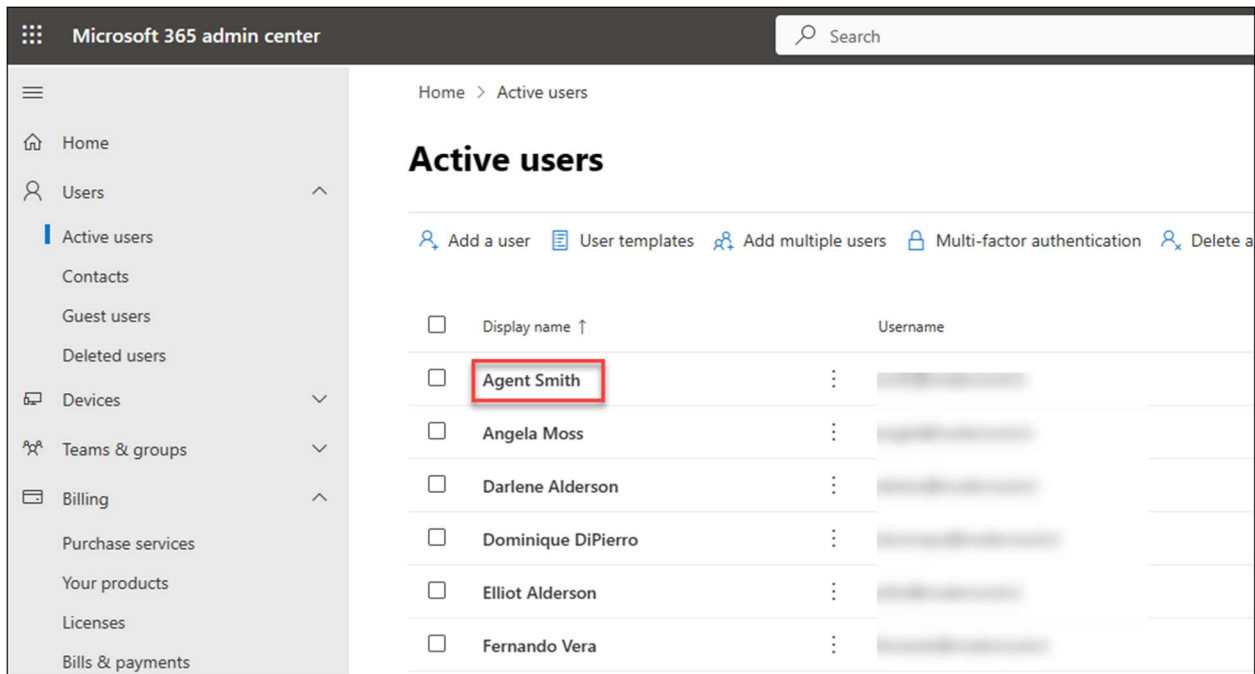
Select license quantity

1

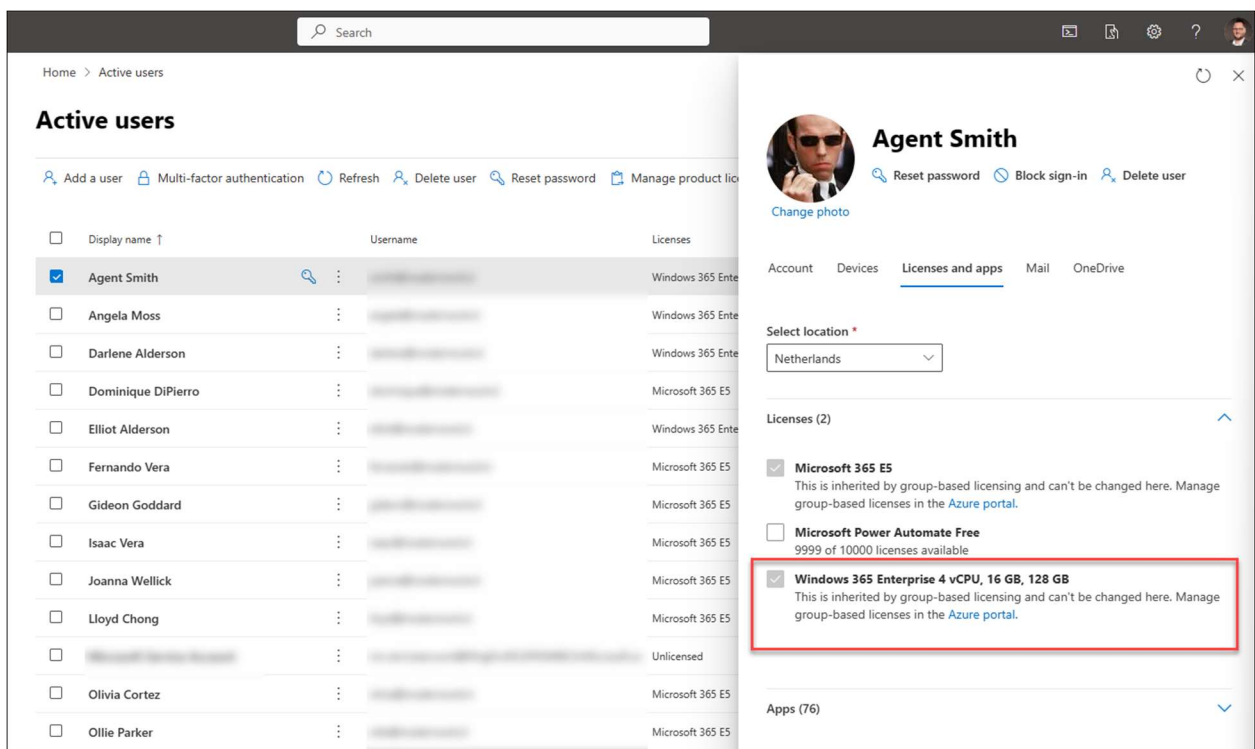
Storage

64 GB
128 GB

If you don't have Windows 365 licenses yet and to want to try it, you can activate a free trial license. In the **Select a plan** pull down menu you have the option to **Try for free** so you can start with Windows 365 directly.



To assign a license to a user, navigate to **Users > Active users** and click on the user to want to assign a Windows 365 license.

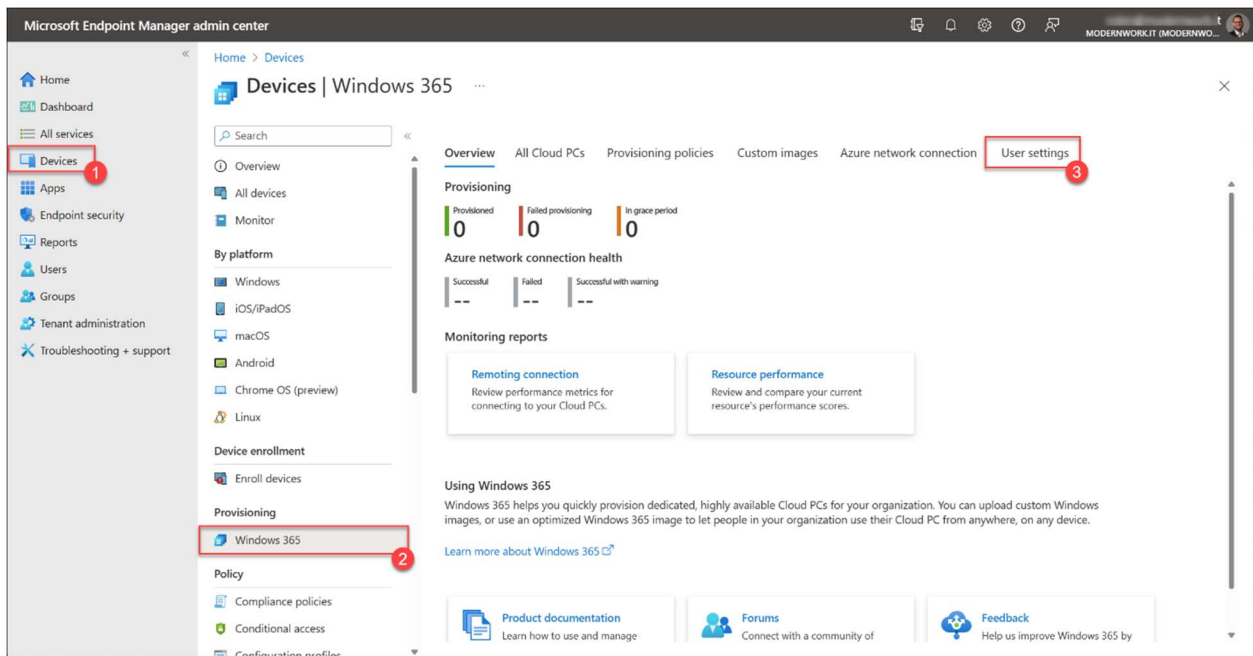


Select the **Licenses and apps** page and assign the **Windows 365 Enterprise** license.

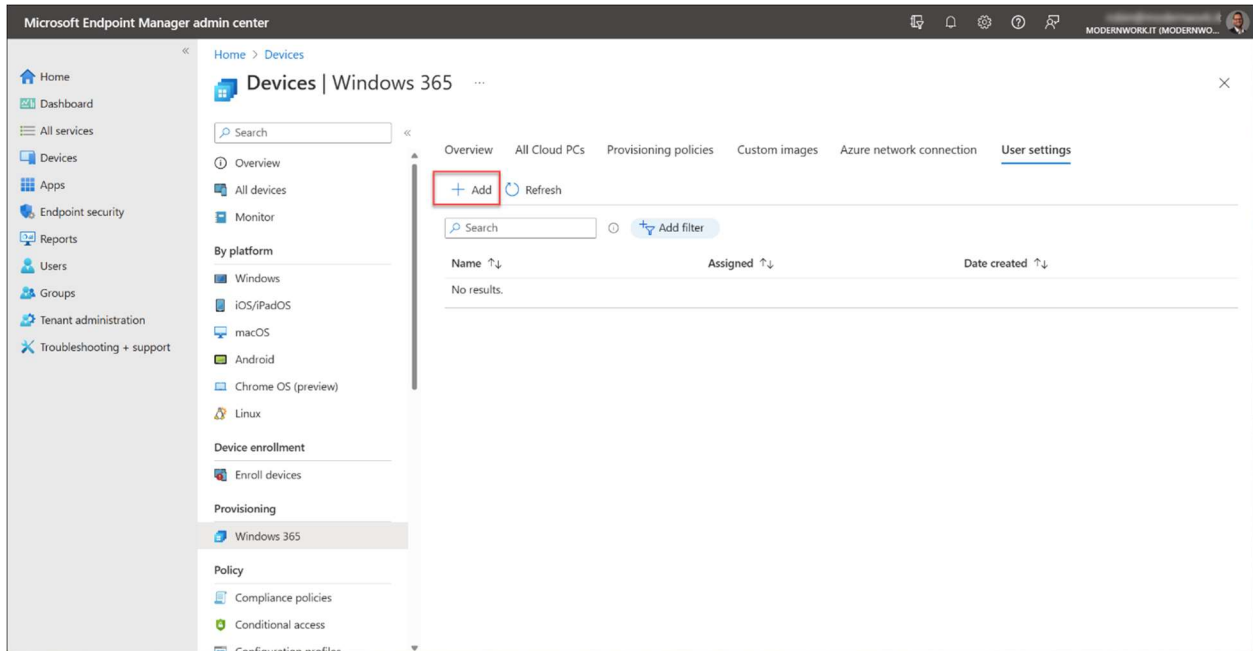
As an alternative you can also assign licenses based on group membership in Azure AD.

3 - Configure User settings

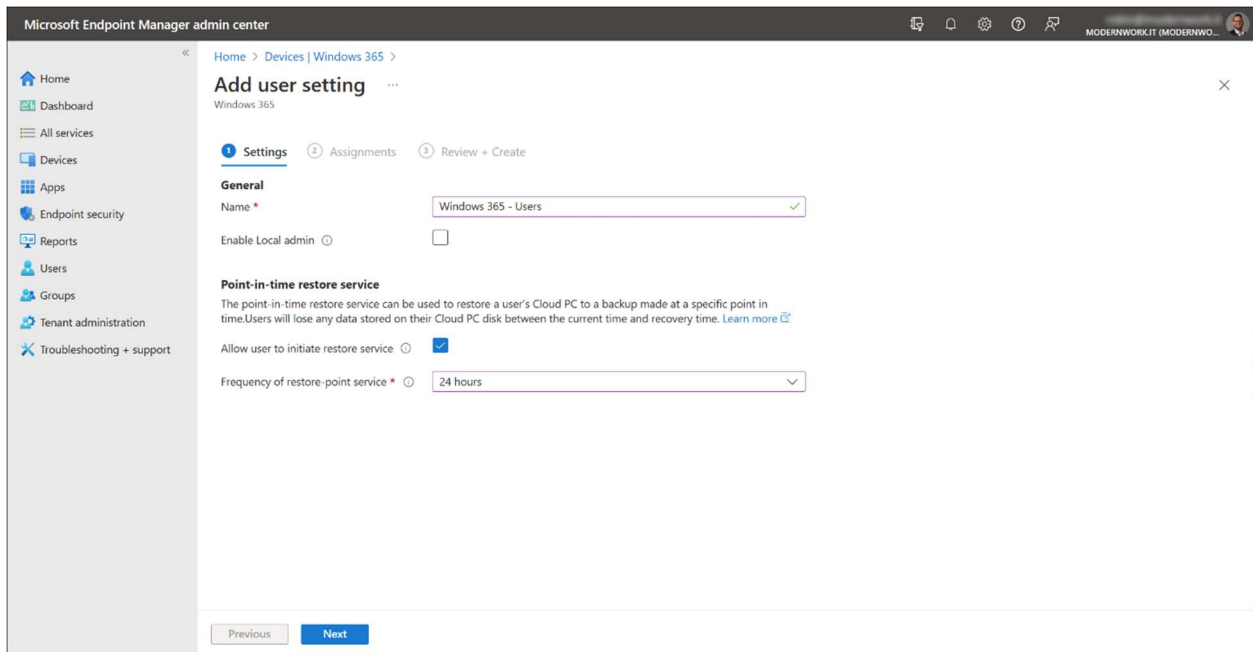
With user settings you can determine if a user needs to get local admin rights or not. You can also configure if you want to offer the user a point-in-time restore service where snapshots of the Cloud PC are created in the frequency you configure. User settings policies are published to Azure AD groups and you can create different User settings policies for different groups of users.



In the [Microsoft Intune admin center](#), navigate to **Devices > Windows 365** and click **User settings**

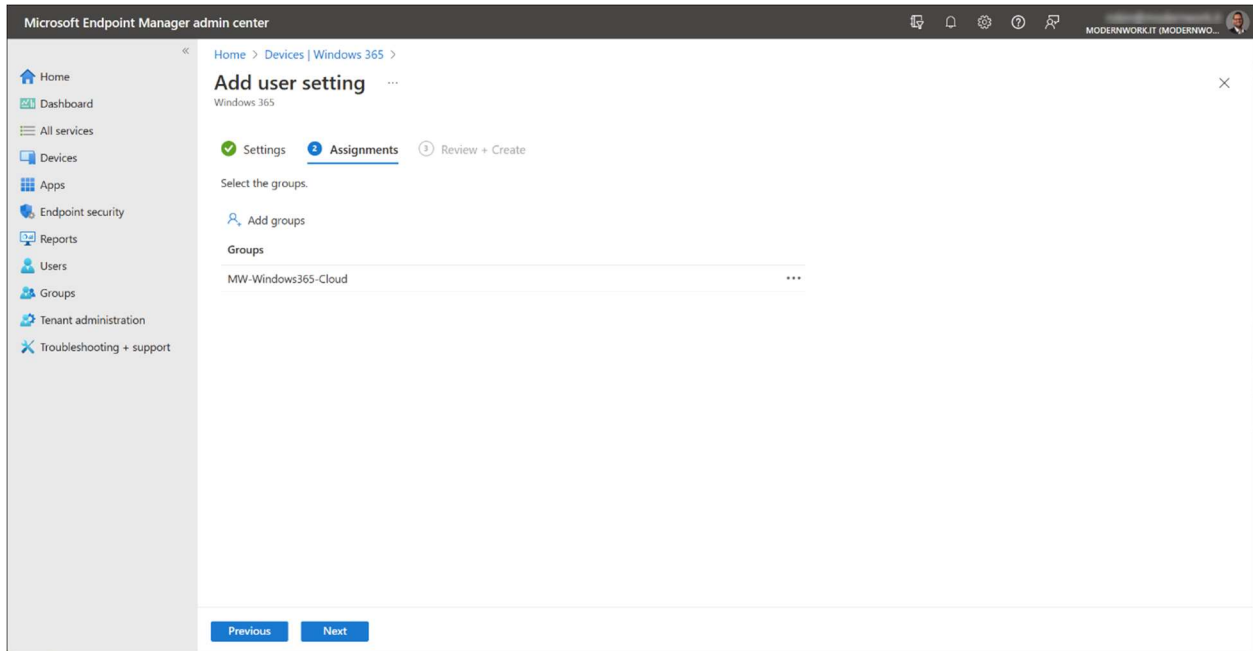


Click **+ Add**

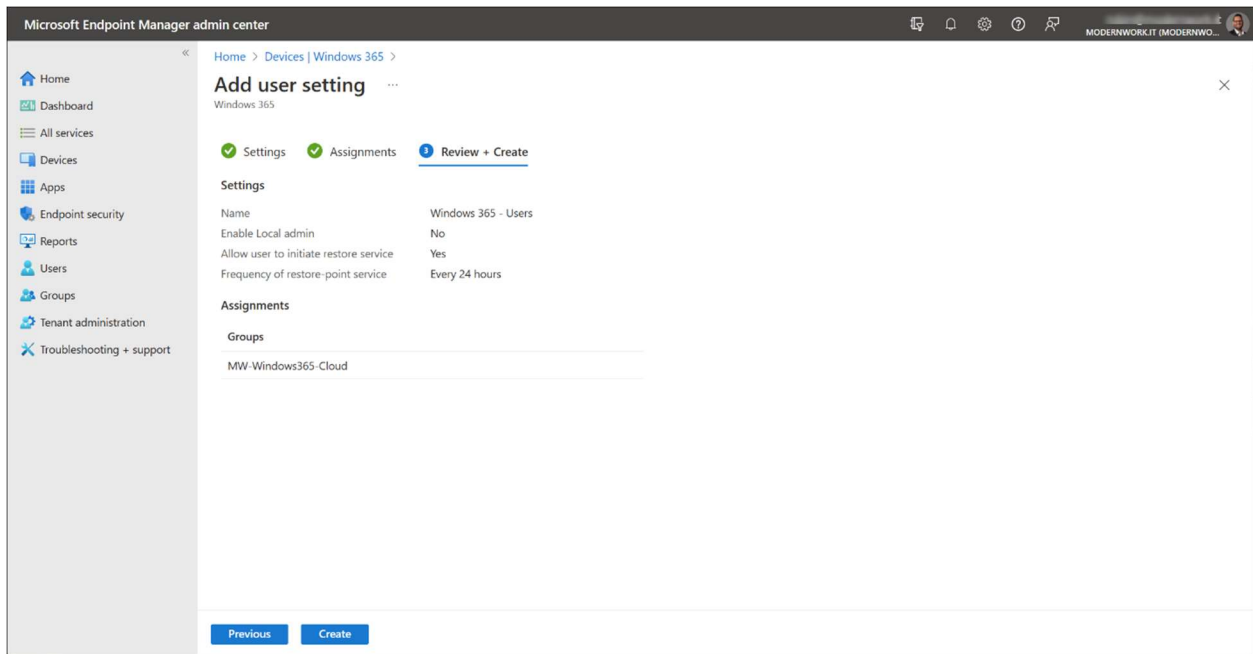


Give the policy a name and configure whether you want that users get local admin rights or not. For the point-in-time restore service a maximum of 10 snapshots will be created. So, the frequency of the restore-point determines how far you can go back with a restore.

Click **Next**



Select an Azure AD user group and click **Next**

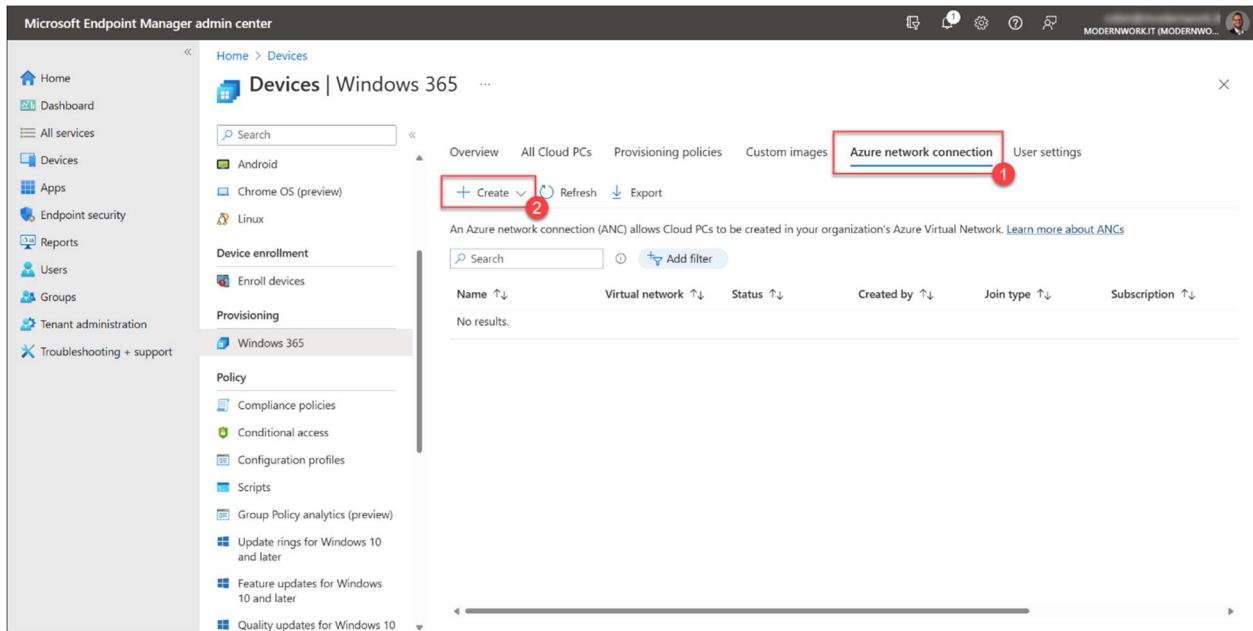


Click **Create**

4 - Create an Azure network connection (optional)

An Azure network connection can be created. This is required if you need a direct connection to your back-end environment without the need of a VPN solution. The

network needs to be already configured in Azure as a vNet. If this is not a requirement you can use the Microsoft hosted network.

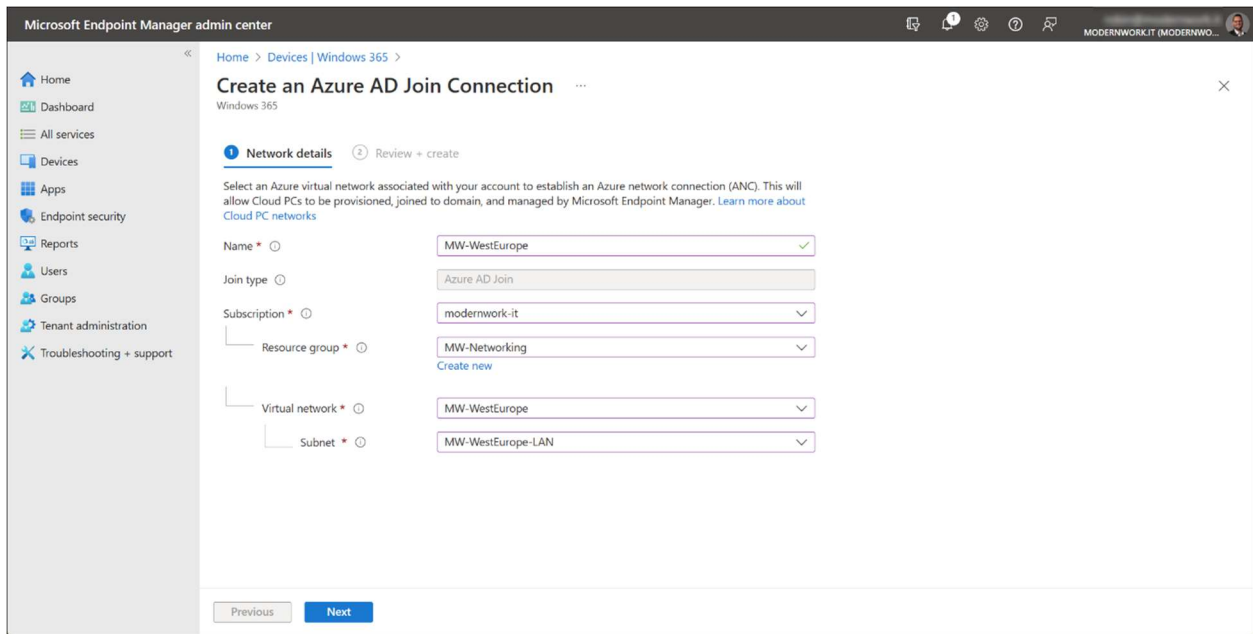


To make an Azure network connection, open the **Azure network connection** tab and click **+ Add** and choose one of the following options.

Azure AD Join: If Azure AD Join only is sufficient.

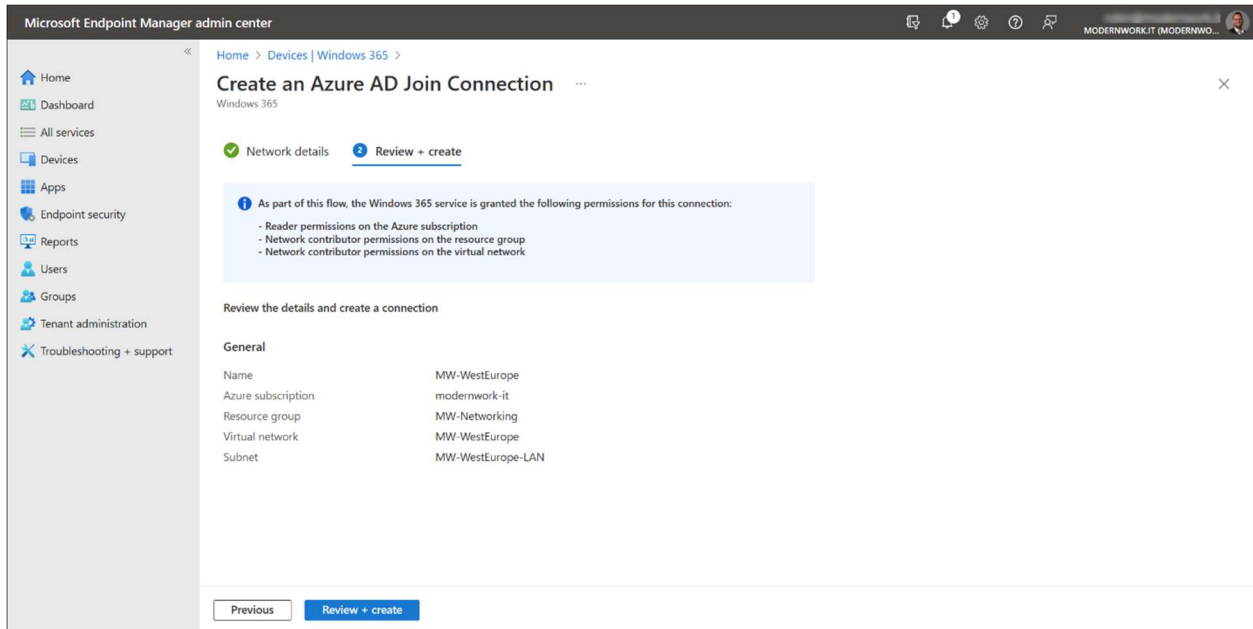
Hybrid Azure AD Join: If an (local) AD domain join is also required. Be aware that additional Intune and Azure AD Connect configuration is required for Hybrid Azure AD Join.

In this case I will choose for Azure AD Join only.

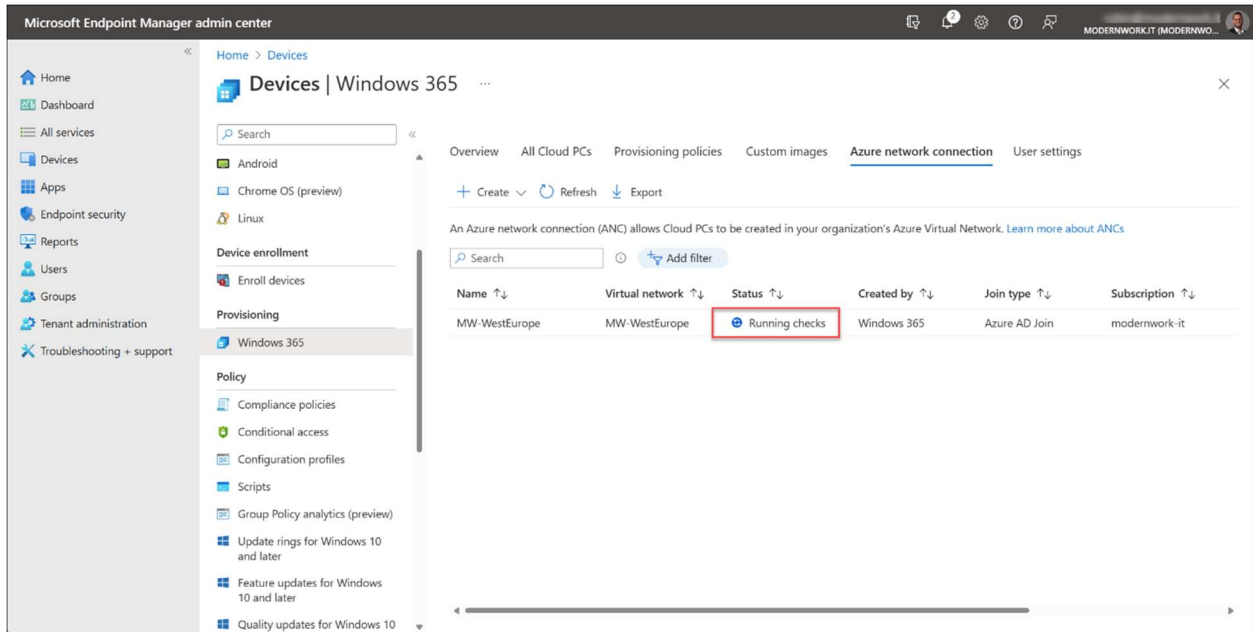


Give the Azure Network connection a **name**. Select your **subscription**, the **resource group** and **virtual network** including the **subnet**.

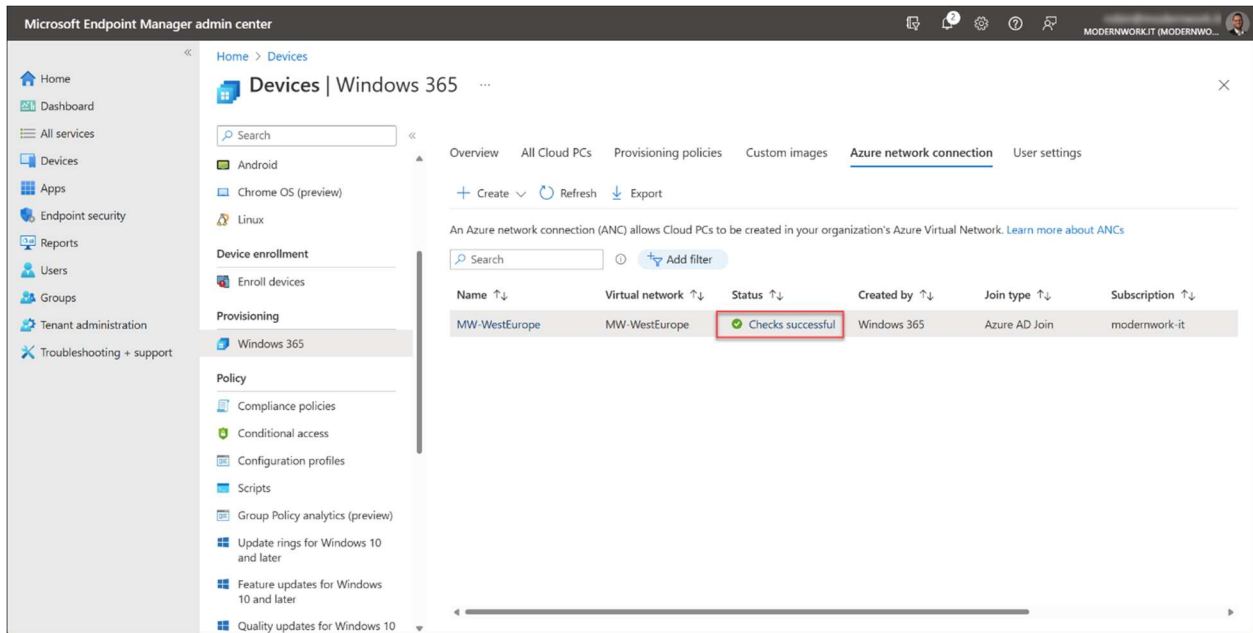
Click **Next**



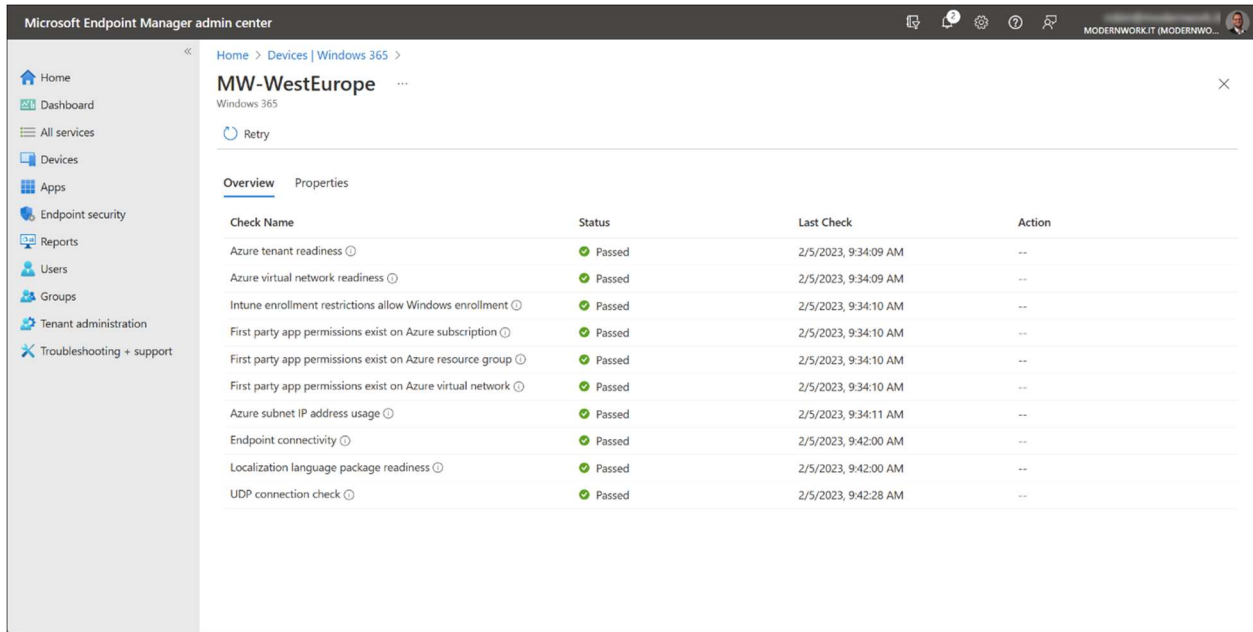
Click **Review + create**



This will start the creation of the Azure network connection within the Microsoft Intune admin center.



After a few minutes the Azure network connection is created and a "checks successful" status will be displayed (if everything is configured correctly). You can click on the status to get more info.

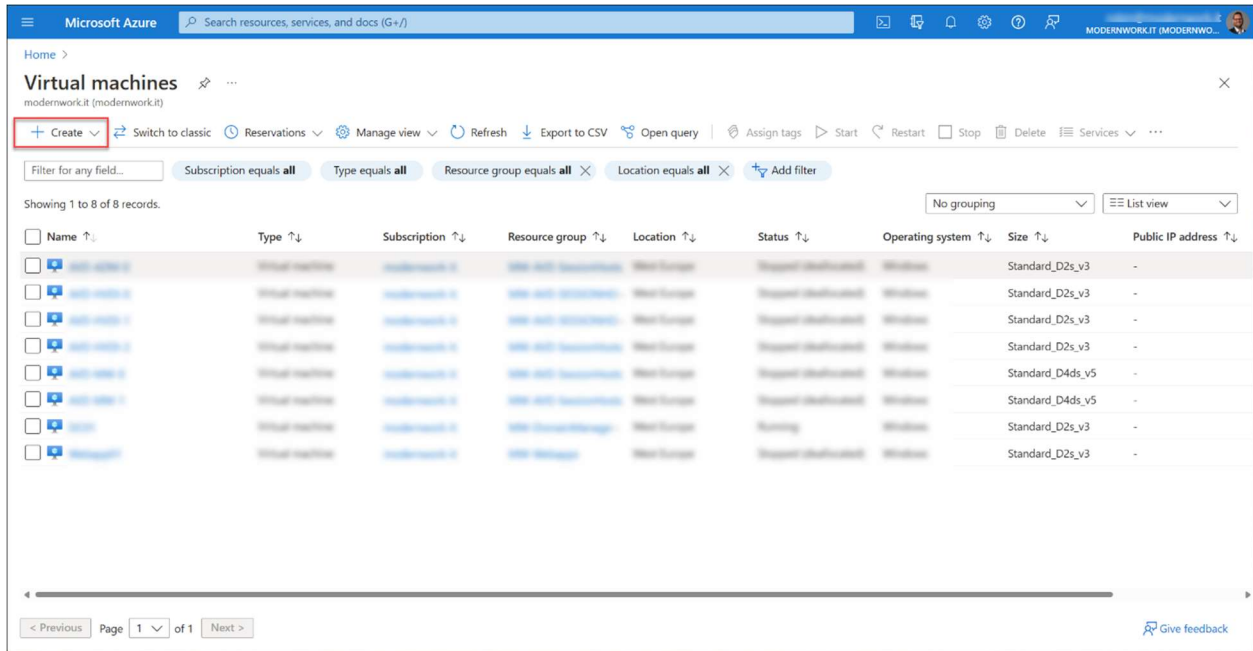


If there is a warning or error you can find more information here.

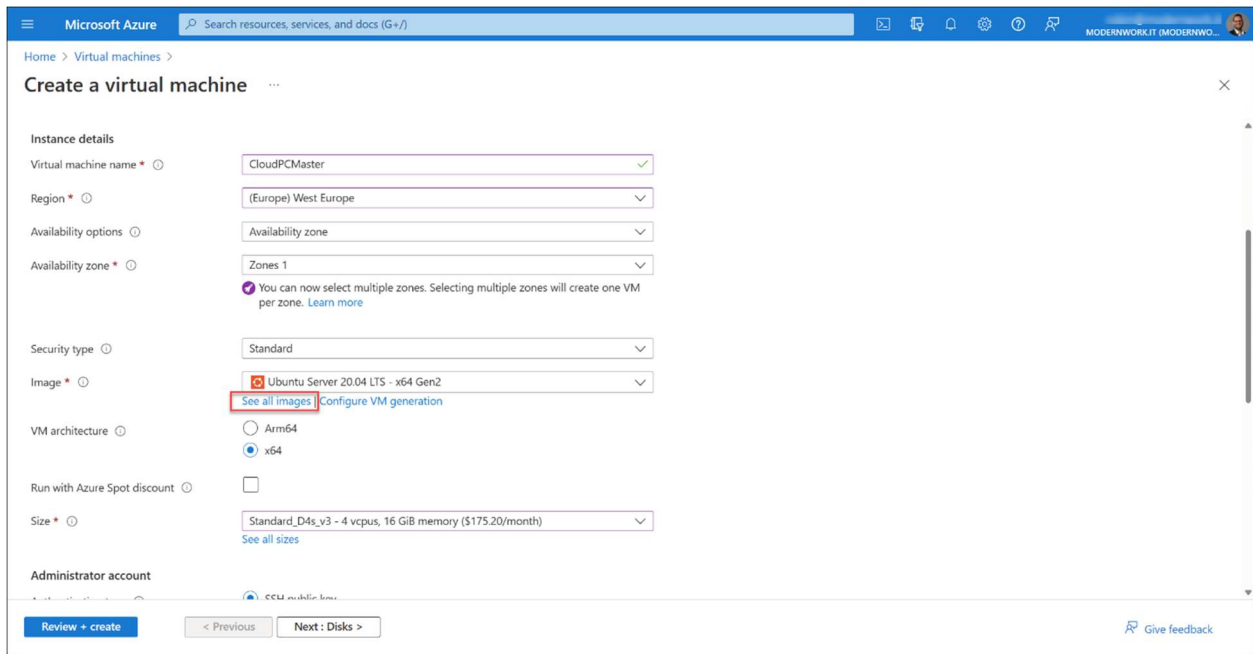
5 - Create a Custom image (optional)

It is possible to create custom images for deploying the Cloud PCs. However, it is optional and personally I would try to avoid this because image management takes a lot of time and effort. With modern management it is recommended to start with a "clean as possible" installation of Windows 11 where all policies will be applied and all applications will be installed from Microsoft Intune. This gives you the most flexibility, just like with Windows Autopilot.

However, if there is an use case where custom images are useful you have the option to use it. To create a custom image, first a new Virtual Machine needs to be created in Azure. For the next steps go to the [Microsoft Azure Portal](#).



Open the **Virtual Machines** blade and click **+ Create**



Give the virtual machine a **name**. And select the other required fields like **subscription** and **resource group**. Click **See all images**.

Microsoft Azure Search resources, services, and docs (G+/)

Home > Virtual machines > Create a virtual machine >

Select an image

Other Items

- My Images
- Shared Images
- Community Images (PREVIEW)
- Direct Shared Images (PREVIEW)

Marketplace

- All
- Recently created
- Private products

Categories

- Security (13)
- Identity (11)
- IT & Management Tools (10)







Marketplace

Windows 365

Azure benefit eligible only ⓘ

Pricing: All × Operating System Security Type: All × Publisher name

Showing 1 to 20 of 31 results for 'Windows 365' with 1 selected filters. [Clear search + filters](#)

 <p>Windows 365 Cloud PC image template Microsoft Virtual Machine Windows 365 Cloud PC image template</p> <p>Select ▾ </p>	 <p>Windows multi-session + Microsoft 365 Apps Microsoft Virtual Machine Windows Enterprise multi-session Virtual Machine Image</p> <p>Select ▾ </p>	 <p>Data Science Virtual Machine - Windows 2019 Microsoft Virtual Machine Development and modeling tools for AI, data science and analytics</p> <p>Select ▾ </p>
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Search for **Windows 365** and click **Select** under **Windows 365 Cloud PC image template**.

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines > Create a virtual machine >

Select an image

Other Items

- My Images
- Shared Images
- Community Images (PREVIEW)
- Direct Shared Images (PREVIEW)

Marketplace

- All
- Recently created
- Private products

Categories

- Security (13)
- Identity (11)
- IT & Management Tools (10)
- Storage (7)
- Analytics (5)
- Compute (5)
- Databases (2)
- Developer Tools (2)
- Monitoring & Diagnostics (2)
- Networking (2)
- Migration (1)
- Web (1)
- AI + Machine Learning (0)

Marketplace

Windows 365

Azure benefit eligible only

Pricing: All Operating System: All Publisher Type: All Security Type: All Publisher name: All

Showing 1 to 20 of 31 results for 'Windows 365' with 1 selected filters. [Clear search + filters](#)

Windows 11 Enterprise Cloud PC + Microsoft 365 Apps, version 21H2 - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 21H2 + Microsoft 365 Apps - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 21H2 + Microsoft 365 Apps - x64 Gen 1		
Windows 11 Enterprise Cloud PC + OS Optimizations, version 21H2 - x64 Gen 2		
Windows 11 Enterprise Cloud PC + Microsoft 365 Apps, version 22H2 - x64 Gen 2		
Windows 11 Enterprise Cloud PC + OS Optimizations, version 22H2 - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 22H2 + Microsoft 365 Apps - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 22H2 + OS Optimizations - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 21H2 + OS Optimizations - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 21H2 + OS Optimizations - x64 Gen 1		
Windows 10 Enterprise Cloud PC, version 20H2 + Microsoft 365 Apps - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 20H2 + Microsoft 365 Apps - x64 Gen 1		
Windows 10 Enterprise Cloud PC, version 20H2 + OS Optimizations - x64 Gen 2		
Windows 10 Enterprise Cloud PC, version 20H2 + OS Optimizations - x64 Gen 1		

Data Science Virtual Machine - Windows 2019

Microsoft

Virtual Machine

Development and modeling tools for AI, data science and analytics

Starts at \$0.025/hour

ADFS 5.0 Server Windows 2019

Cloud Infrastructure Services

Virtual Machine

Quickly deploy a new ADFS 2019 server preloaded with the ADFS role, ADFS powershell module & prereqs

Starts at \$0.025/hour

Azure AD Connect Server on Windows Server 2016

Cloud Infrastructure Services

Virtual Machine

Deploy Azure AD Connect server to sync your on-premises Active Directory with Azure AD

Starts at \$0.036/hour

NetVault® for Office 365

Quest

Virtual Machine

Cloud Ready Data Protection for Office 365

Bring your own license

Select the image of your choice. Windows 10 or 11, with or without the Microsoft 365 Apps and the build number.

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines >

Create a virtual machine

Instance details

Virtual machine name *

Region *

Availability options

Availability zone *

You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type

Image *

[See all images](#) | [Configure VM generation](#)

VM architecture Arm64 x64 Arm64 is not supported with the selected image.

Run with Azure Spot discount

Size *

[See all sizes](#)

[Review + create](#) < Previous Next >: Disks >

[Give feedback](#)

Configure the rest of the settings of the virtual machine. I'm skipping these steps for now and let everything default. Click **Review + create**

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines >

Create a virtual machine

Validation passed

Username

Username

Public inbound ports

Already have a Windows license? Yes

License type

Azure Spot No

Disks

OS disk type

Use managed disks Yes

Delete OS disk with VM Enabled

Ephemeral OS disk No

Networking

Virtual network

Subnet

Public IP

Accelerated networking Off

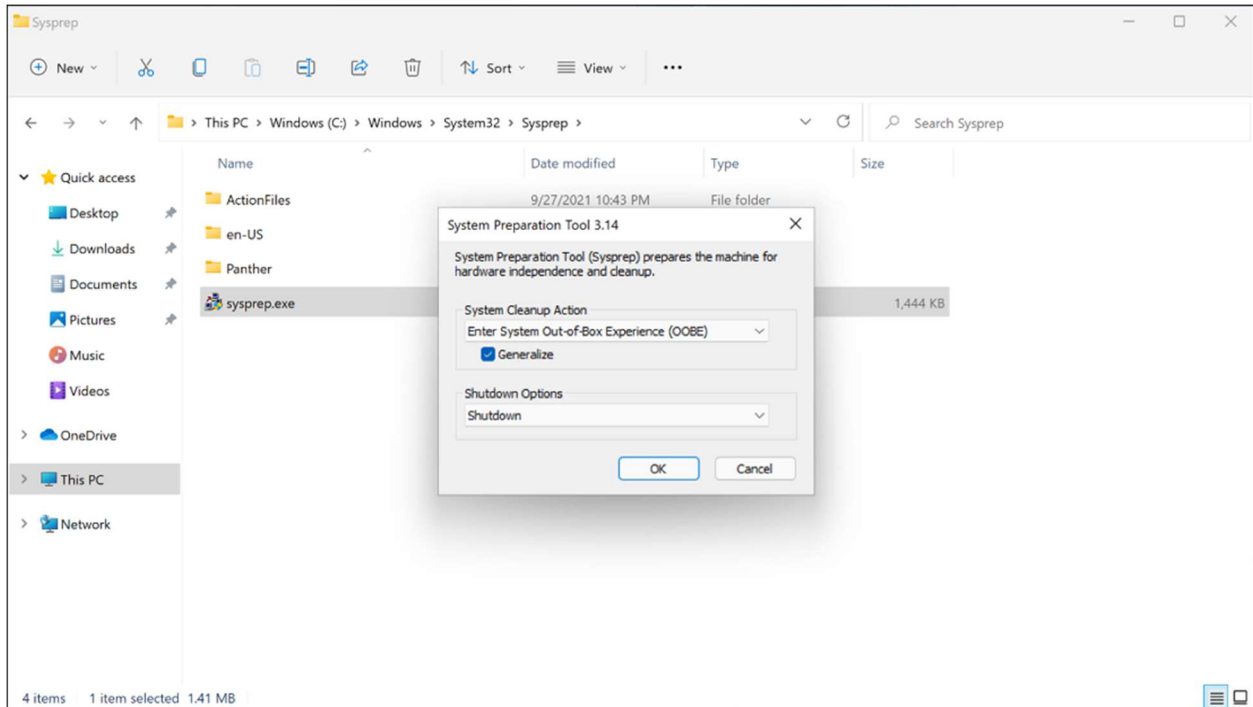
Place this virtual machine behind an existing load balancing solution? No

Delete public IP and NIC when VM is deleted Enabled

[Create](#) < Previous Next >: Download a template for automation

[Give feedback](#)

Click **Create**.

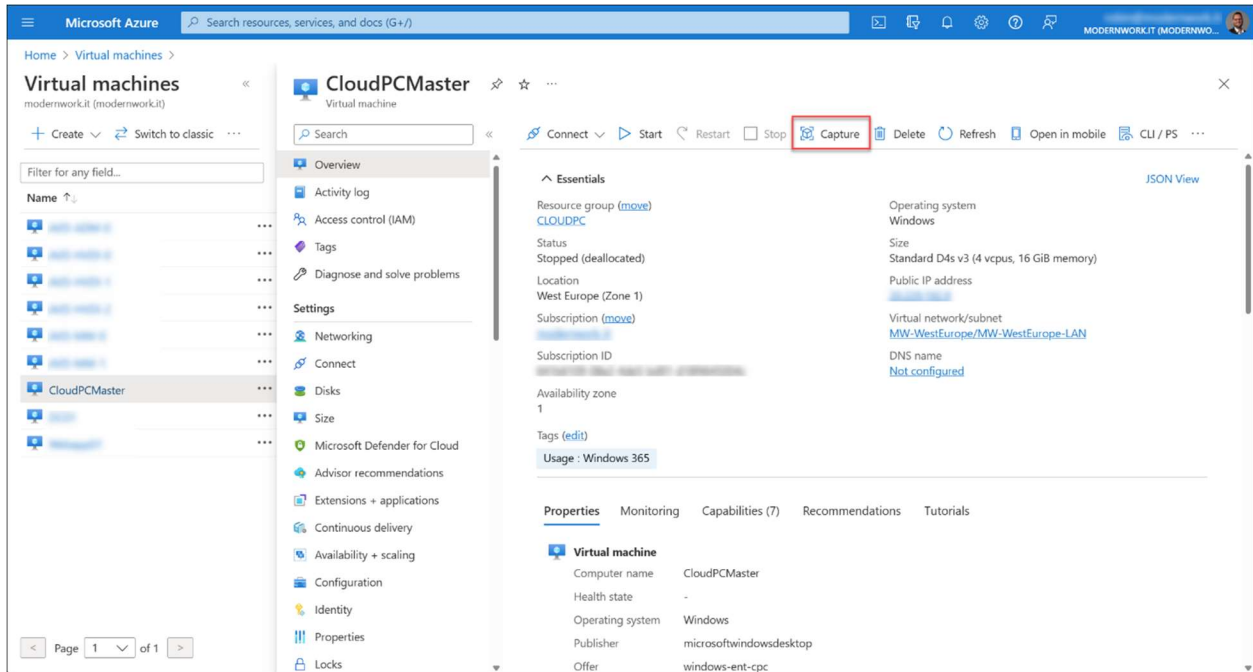


When the virtual machine is deployed. Connect to it and make all required settings and install all required applications.

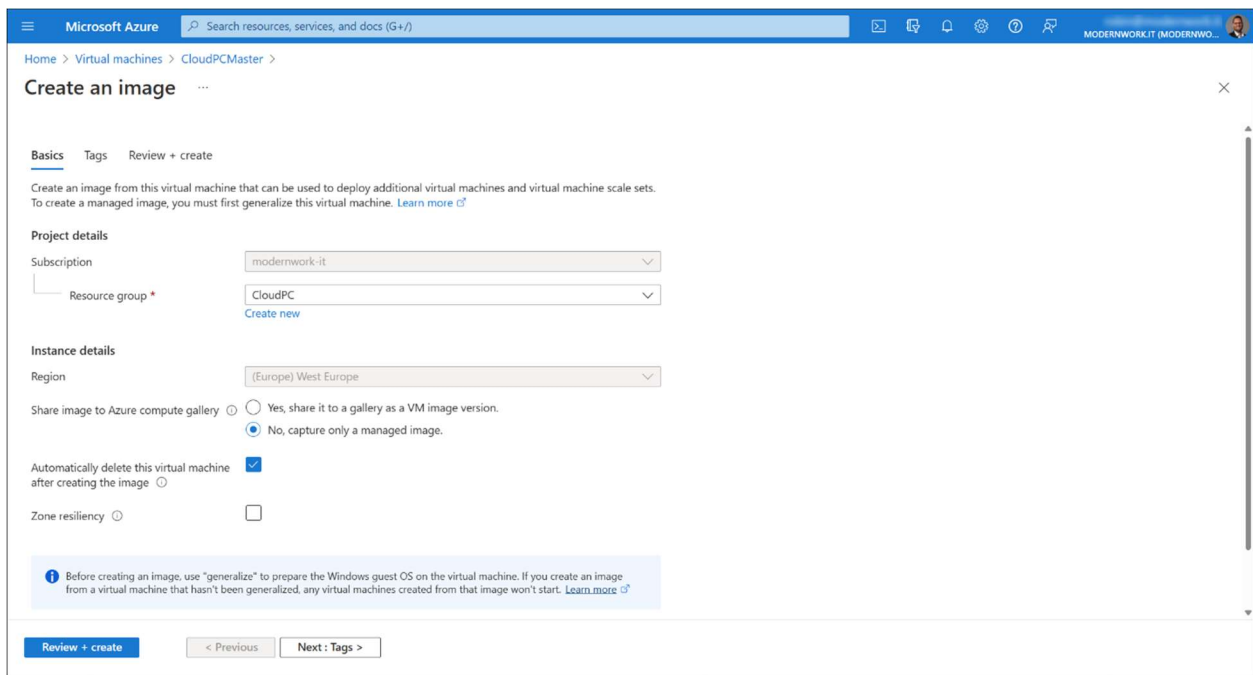
When ready, run **c:\Windows\System32\Sysprep\sysprep.exe**

Select **Enter System Out-of-Box-Experience (OOBE)** as **System Cleanup Action**. Make sure **Generalize** is selected. As **Shutdown Options**, select **Shutdown** and click **OK**.

Once the virtual machine has the **Stopped** status in Azure, deallocate the virtual machine.

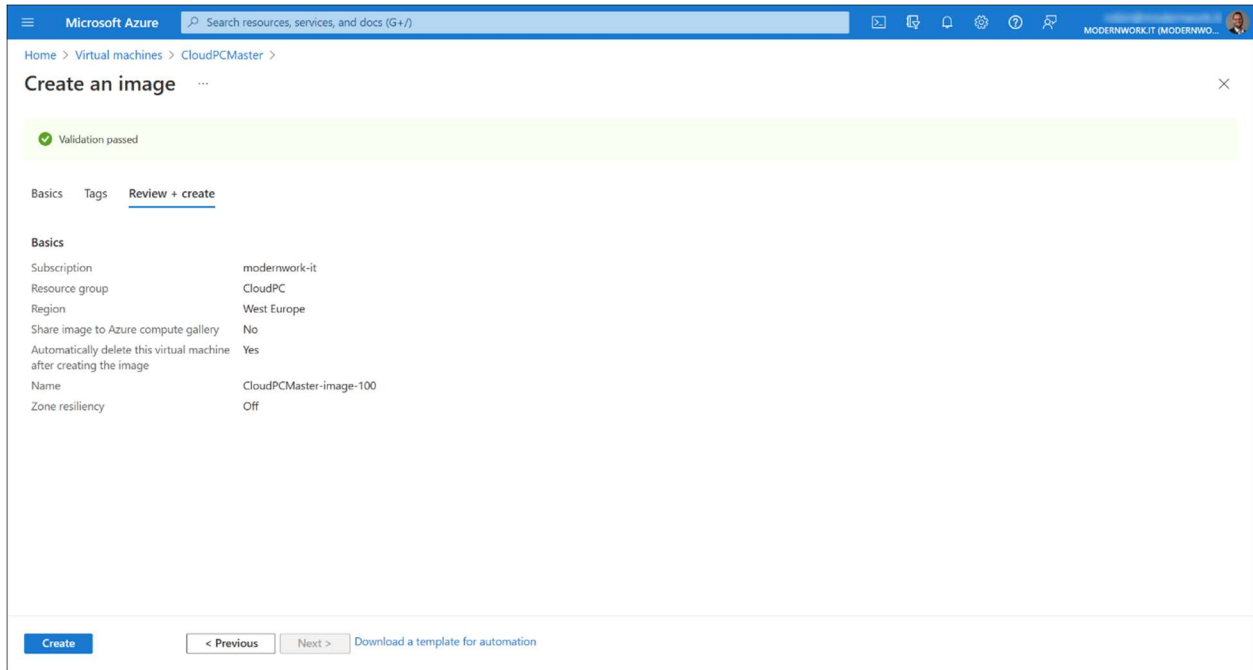


Within the Microsoft Azure portal open the **Overview** page of the Virtual Machine and click **Capture**.

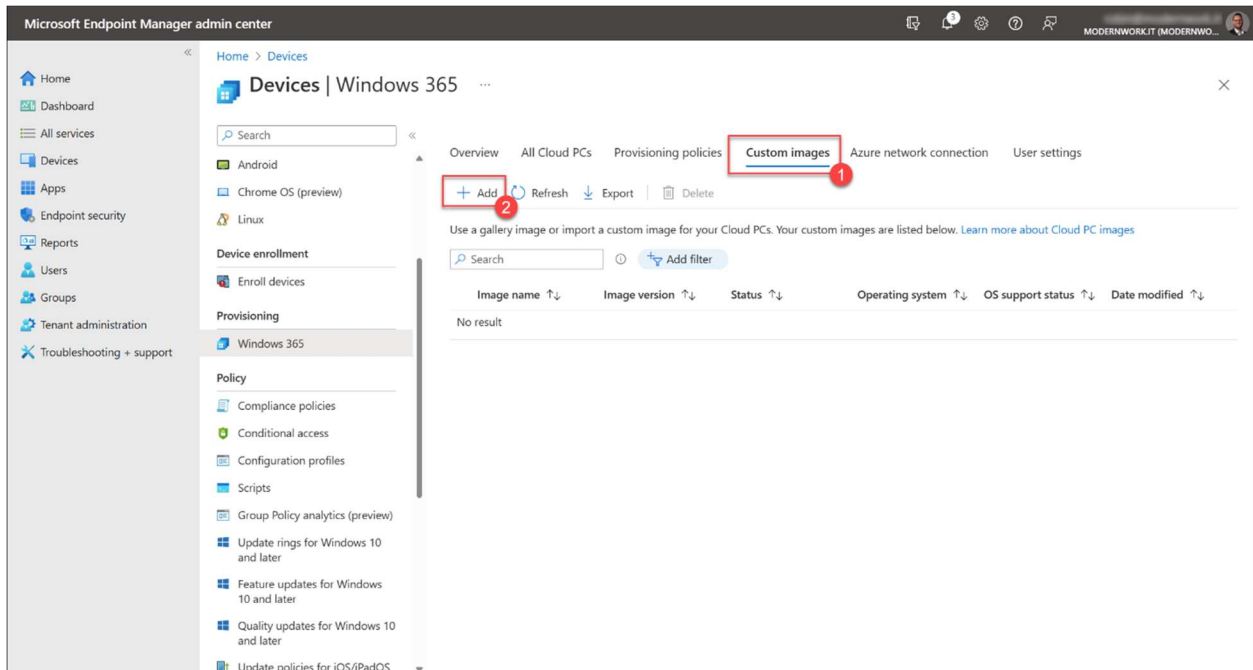


Select the Resource group for the VM capture. You can share this image to a gallery. However, this is not a requirement for Windows 365 Enterprise Cloud PC. For now, I will skip the gallery steps and just store the image in the Azure Resource Group.

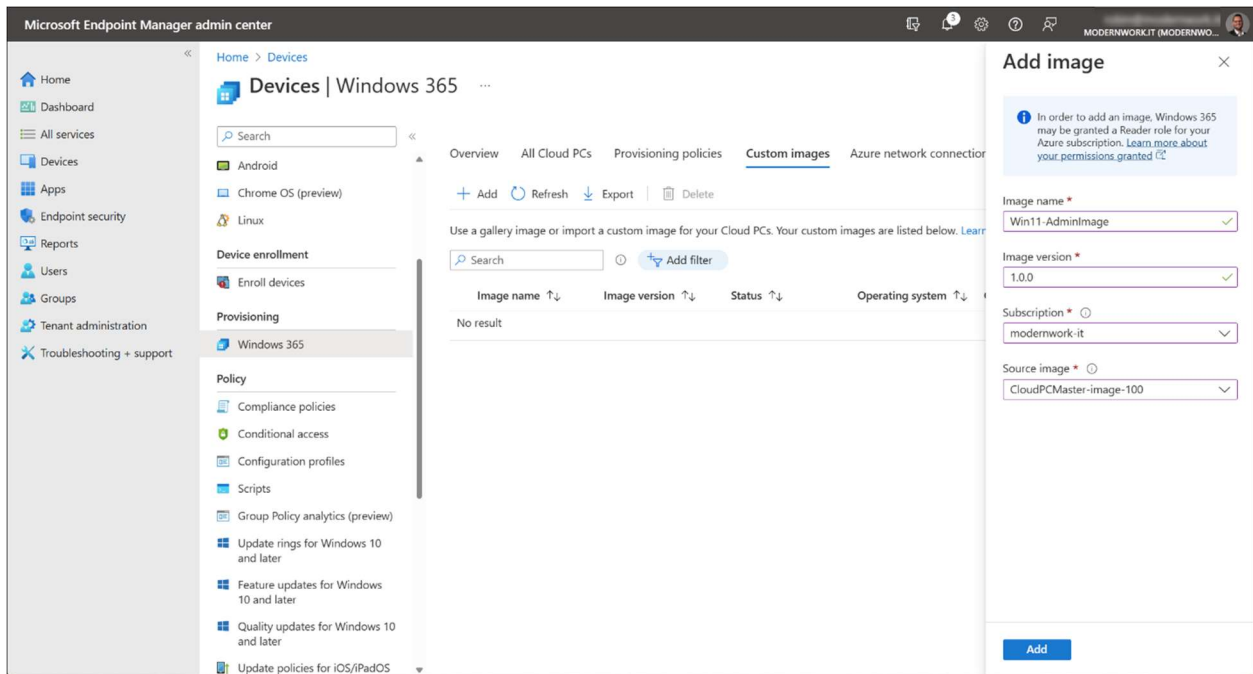
Select **Automatically delete this virtual machine after creating the image** (you can't use the VM anyway since you run Sysprep). Give the image a **Name** and click **Review + Create**.



Click **Create**

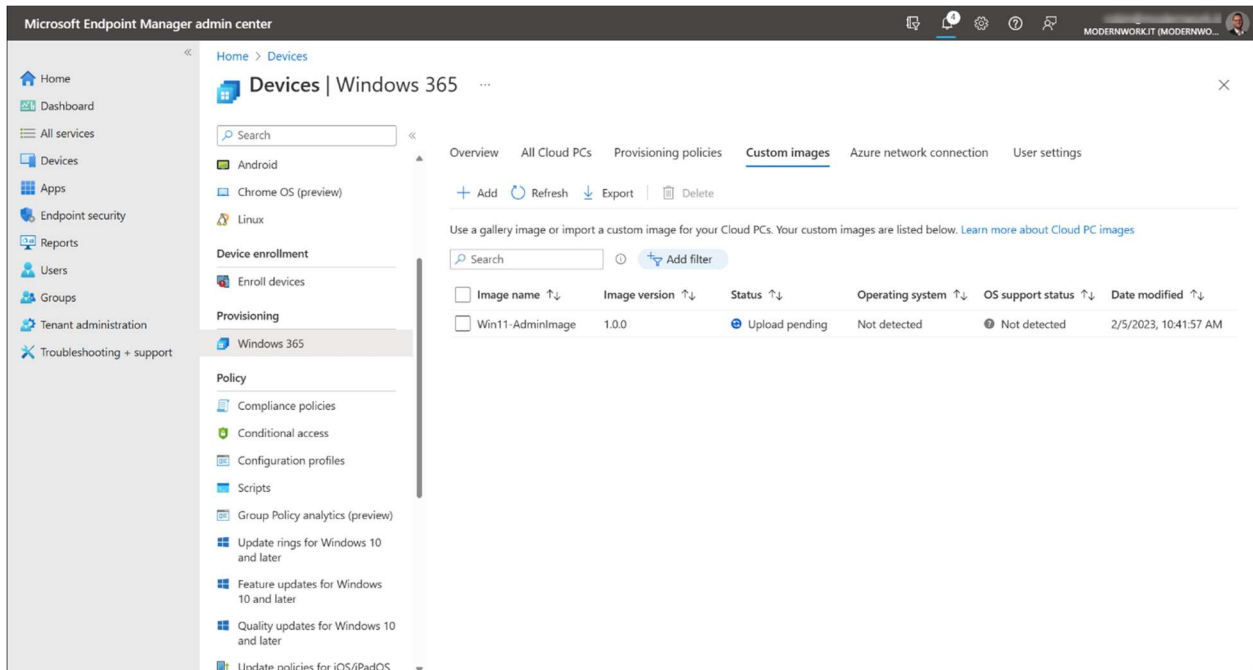


Go back to the Microsoft Intune admin center, click **Custom images** and click **+ Add**.

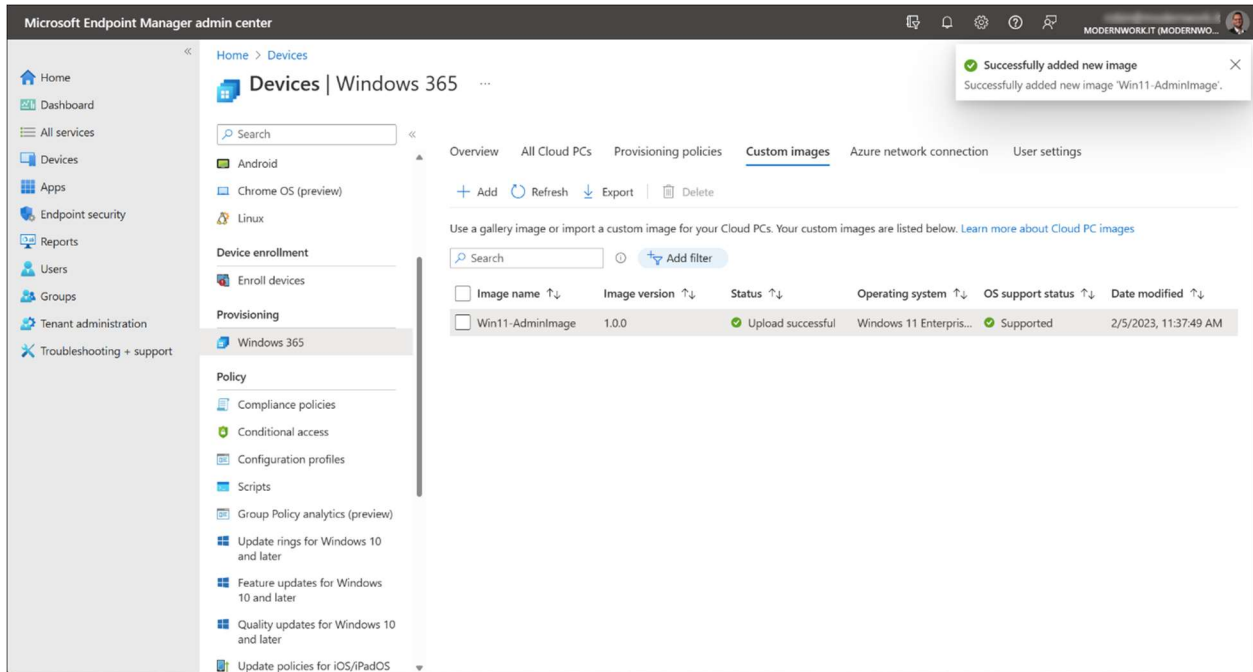


Give the image a **Name** and an **Image version**. This must be in the "x.x.x" format, so for example, 1.0.0.

Select the subscription. The just created image will be selectable in the pull down menu. Click **Add**.



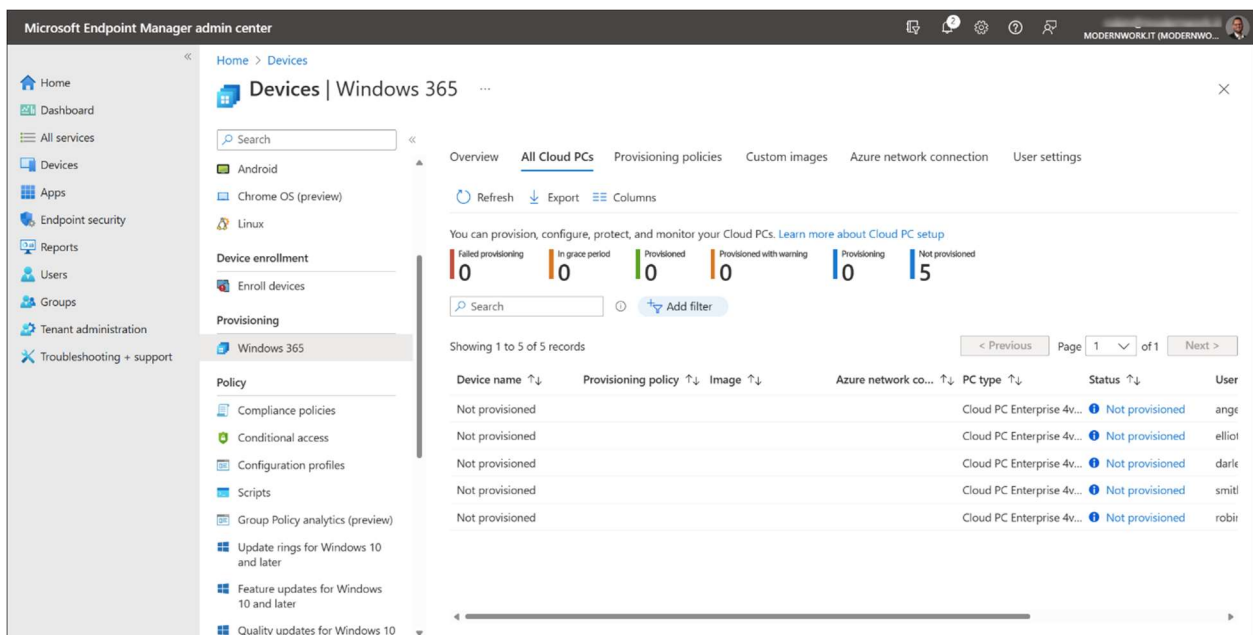
The upload will now start, this may take a moment.



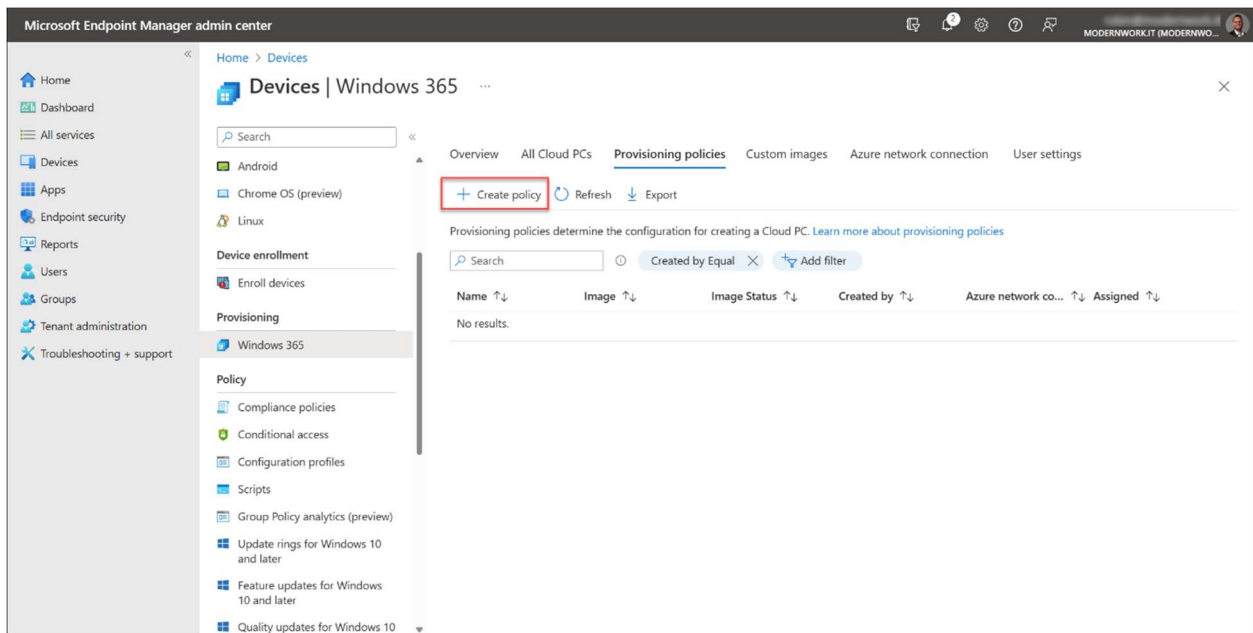
After the upload is complete, the status will be changed to "Upload successful".

6 - Create a Provisioning Policy

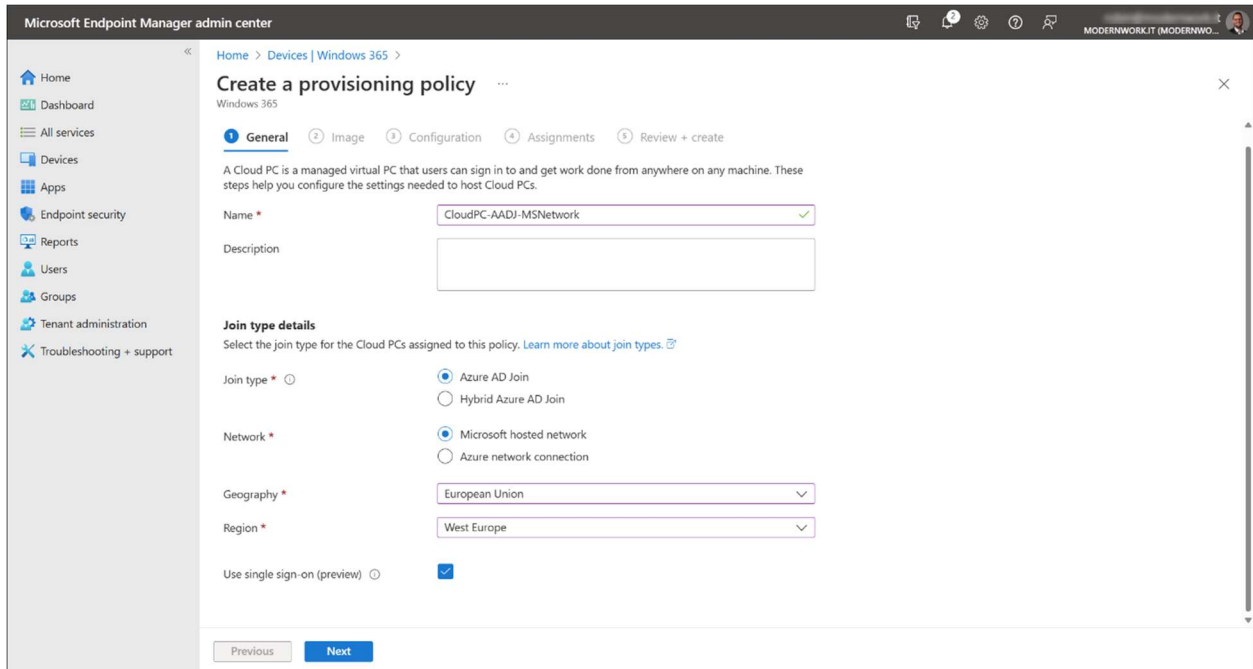
A Provisioning Policy needs to be created to provision the Cloud PC with an image of choice. You can create multiple Provisioning policies and assign them to different Azure AD security groups.



As you can see in the screenshot above, no provisioning policies have been created and assigned. The Cloud PCs all have the status "Not provisioned".



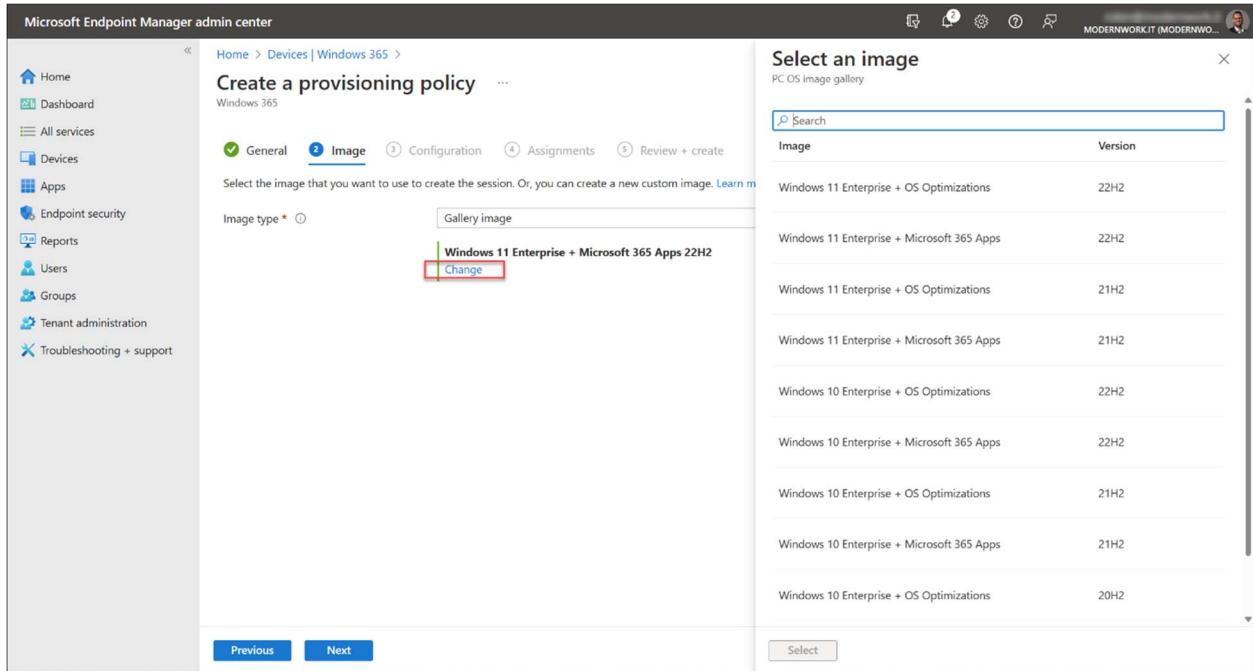
Open the **Provisioning policies** tab and click **+ Create policy**



Give the policy a **Name** and select the **Join type**. Azure AD Join or Hybrid Azure AD Join. For **Network**, select the **Microsoft hosted network**, or an existing **Azure network**

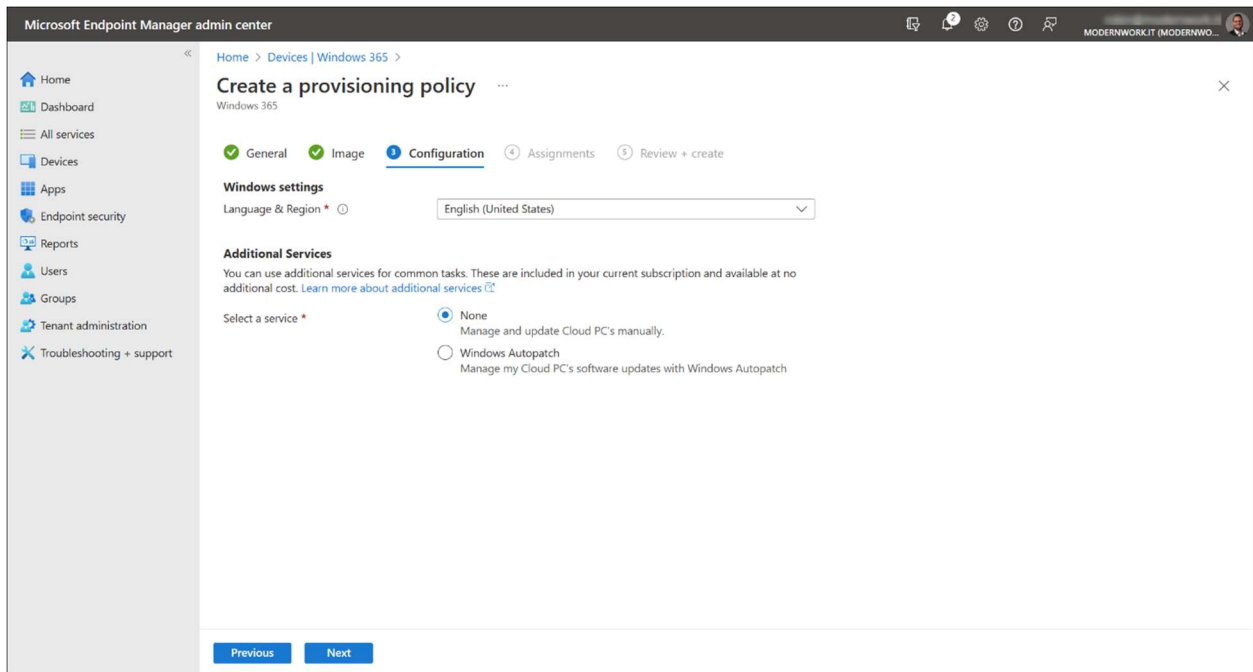
connection (see previous steps). When you select the **Microsoft hosted network**, make a selection of the **Geography** and **Region**.

Select **Use single sign-on** and click **Next**



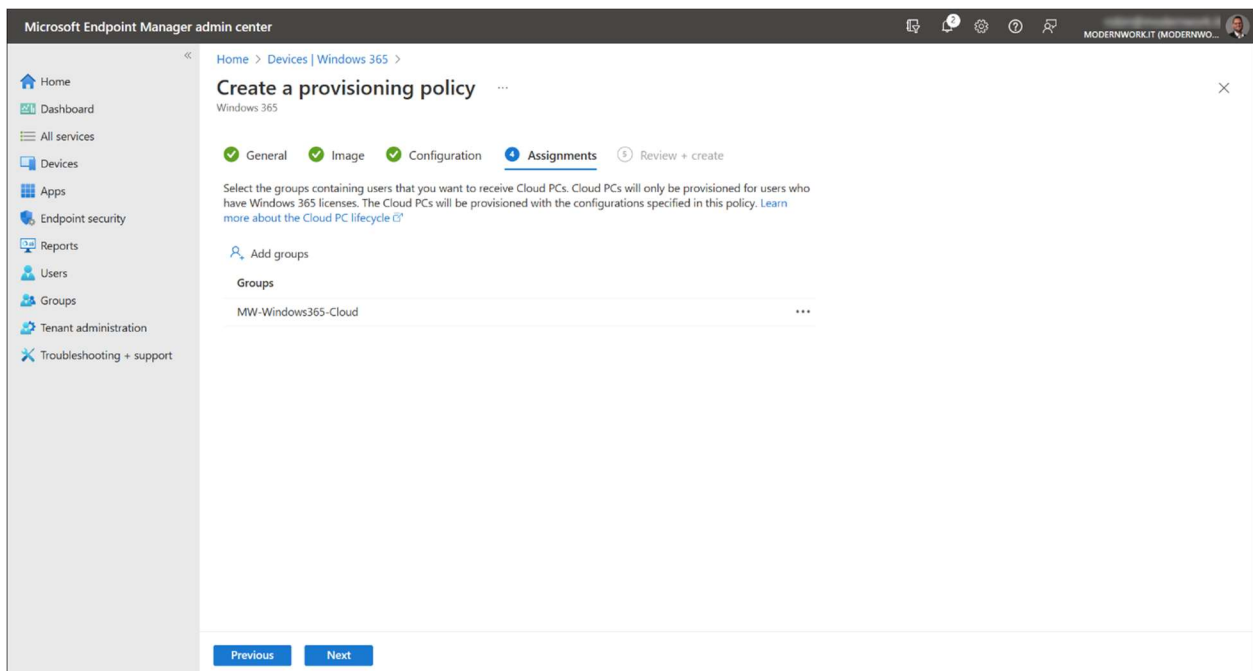
Select an image from the Gallery image or a custom image. When you choose **Gallery image** you have the choice for Windows 10 or 11, with or without the Microsoft 365 apps and the version/build.

Select the image of choice and click **Next**

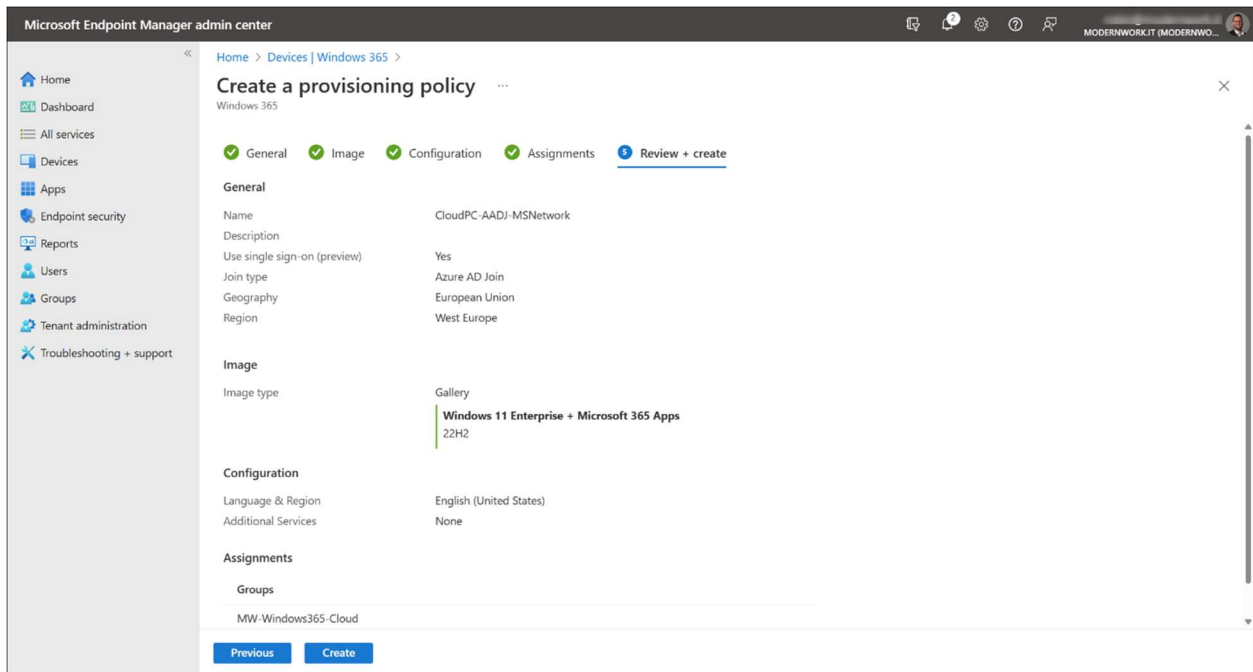


Select the **Language & Region** of your choice and the way you want to update the Cloud PC. This can be manually (via Windows update policies in Microsoft Intune) or via the [Autopatch service](#).

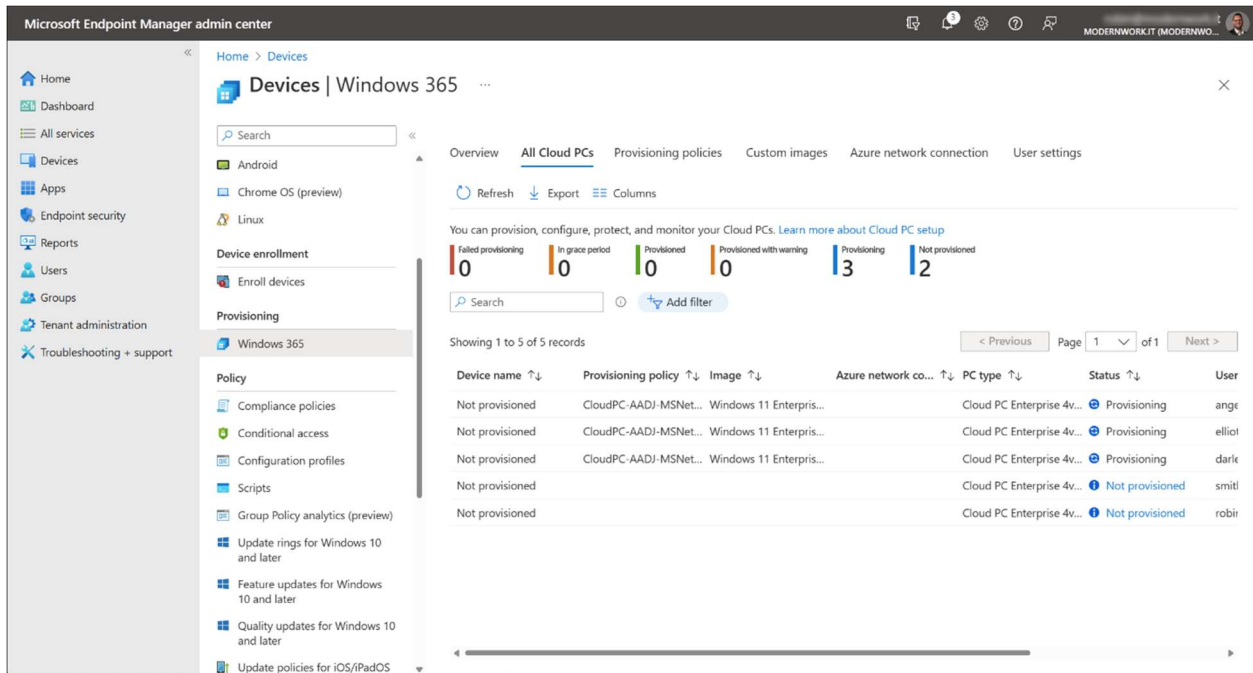
Click **Next**



Select an Azure AD security group and click **Next**.



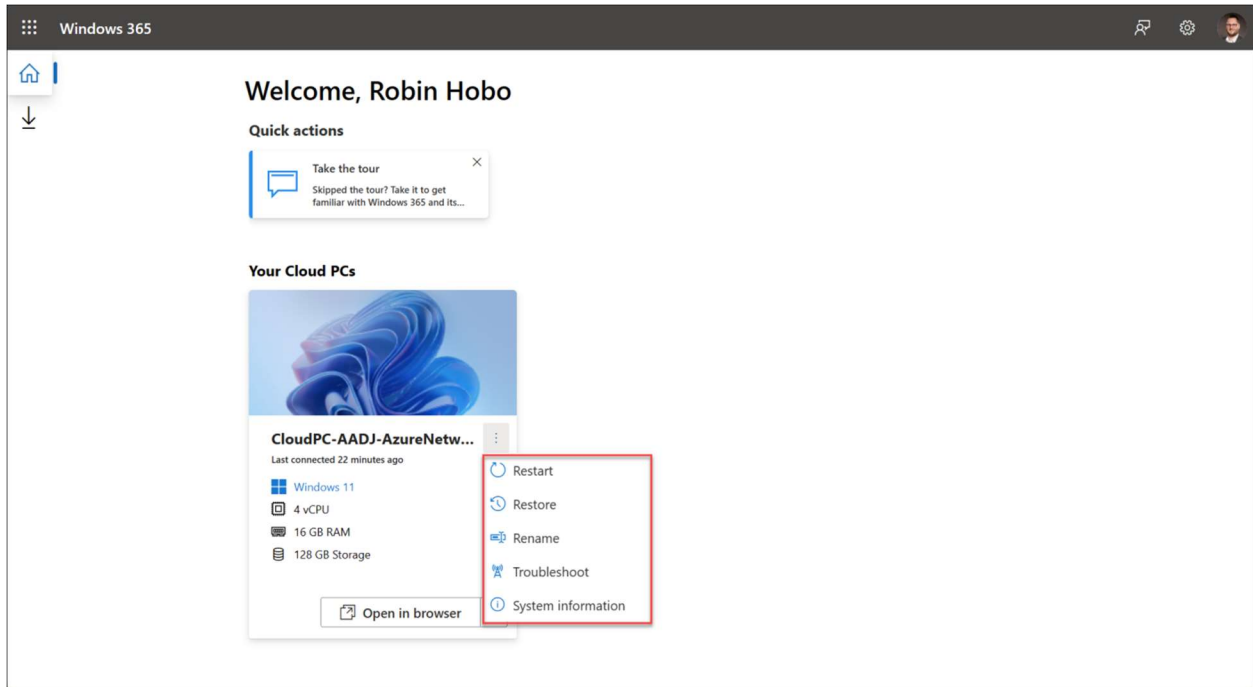
Click **Create**



After the provisioning policy is created, Cloud PCs of assigned users will be provisioned. After the provisioning is finished, the status will be changed to "Provisioned" and the Cloud PC is ready to use.

7 - Connect to the Windows 365 Cloud PC

Let's connect to the Windows 365 Cloud PC. You can use different clients for this, depending on the operating system you are using on the (local) client. First, let's use the web client. Navigate to <https://windows365.microsoft.com/>




After signing in, you will see your Cloud PC. There are options for the user to restart, restore the Cloud PC and some other options from this web interface.

Windows 365

Download an app to use Windows 365 from your device

Windows 365 app


Use your Cloud PC like another desktop on your local PC. Manage your Cloud PC, using the self-serve tools built into the app.

**Windows 365 for Windows**
Microsoft Corporation

[Go to Microsoft Store](#)


Microsoft Remote Desktop apps

Connect to devices and services, including your Cloud PC. You won't be able to manage your Cloud PC from the app, and your Cloud PC won't be integrated into your local device.

**Microsoft Remote Desktop for Windows**
Microsoft Corporation


[Get subscription URL](#)

[Download 64 bit](#)

**Microsoft Remote Desktop for Mac**
Microsoft Corporation


[Get subscription URL](#)

[Go to Mac App Store](#)

**Microsoft Remote Desktop for iOS**
Microsoft Corporation

[Get subscription URL](#)

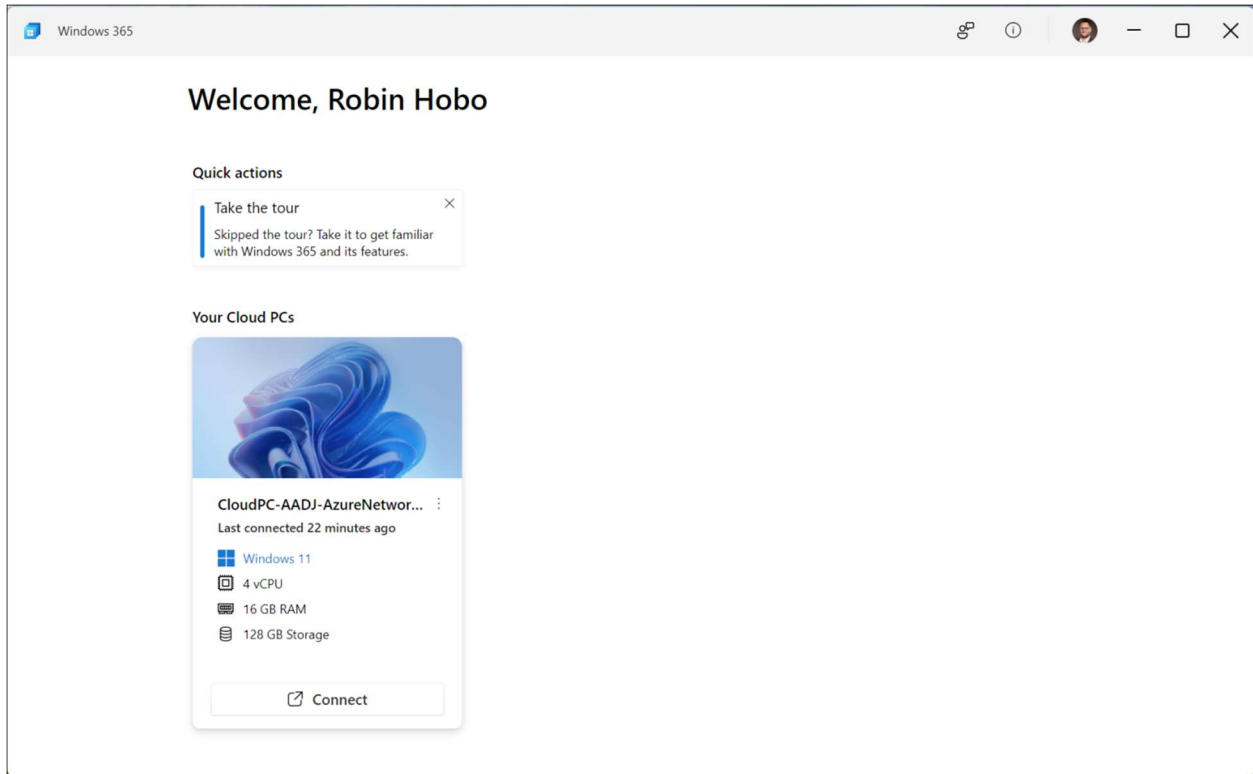
[Go to App Store](#)

**Microsoft Remote Desktop for Android**
Microsoft Corporation

[Get subscription URL](#)

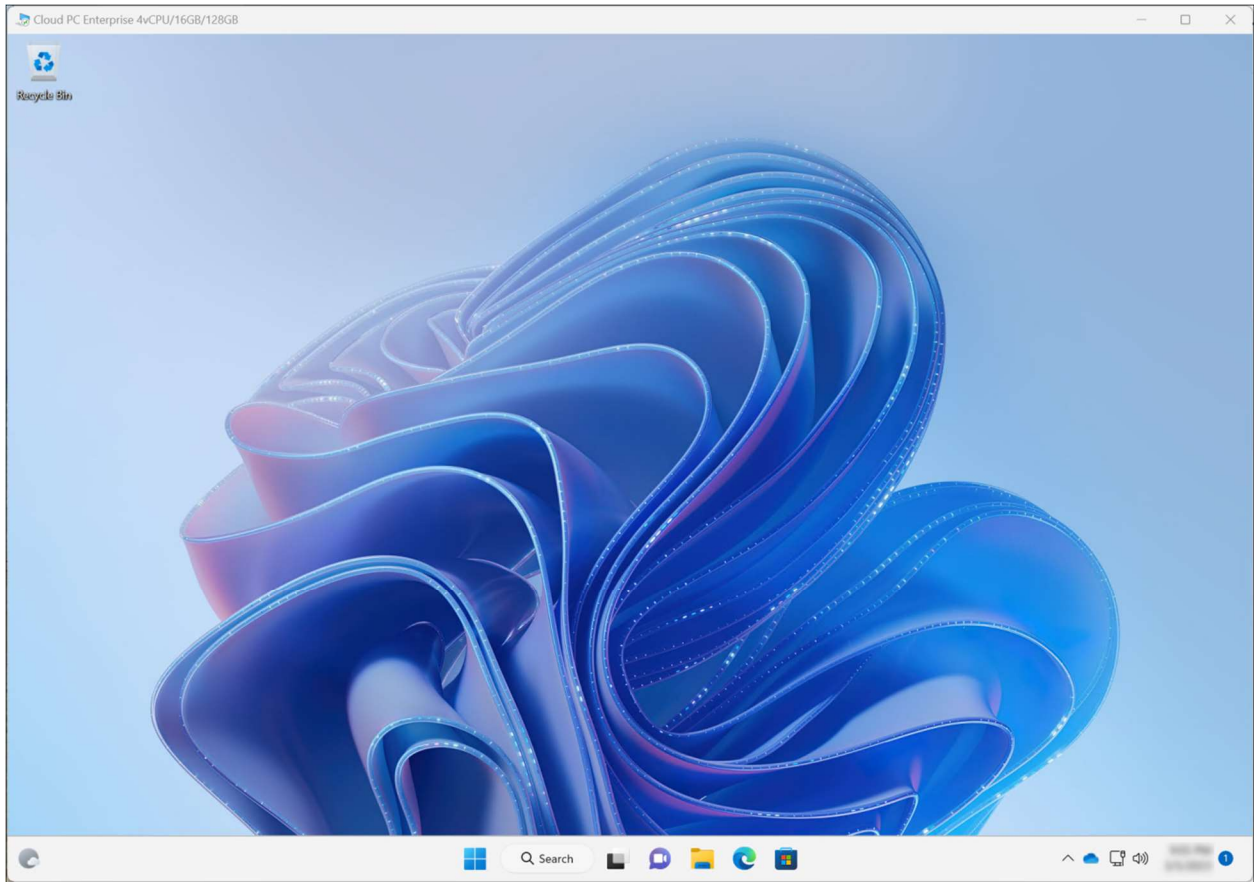
[Go to Google Play Store](#)

When opening the **Remote Desktop Clients** page, you can find the download links and information to all other available clients.



For example the new Windows 365 for Windows app you can download straight from the Windows store.

Click **Connect**



In a few second you have access to your Windows 365 Cloud PC.