WINDOWS VIRTUAL DESKTOP

Lab guide

Abstract

In this lab you will teach how to get started with Windows Virtual Desktop in Azure.

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Contents

1. Version

Version	Name	Comment
20190510	Jonathan Andersson	First version
20190525	Martin Modin	Comments
20190602	Jonathan Andersson	Updated

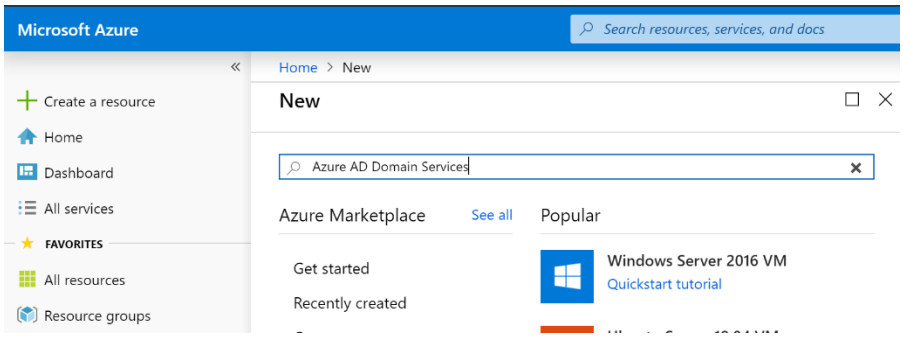
2. Configure domain controller, Vnet and DNS

Note: This step can be replaced with an Active Directory Domain Controller that syncs identities to Azure Active Directory by the connector. That is not covered in the lab.

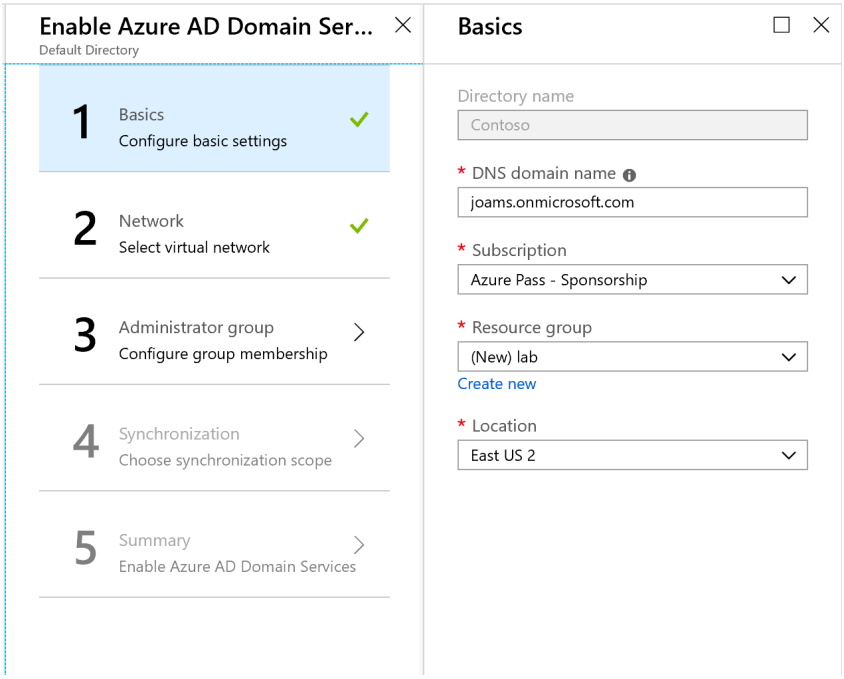
2.1 Create Azure Active Directory Domain Services

https://docs.microsoft.com/en-us/azure/active-directory-domain-services/active-directory-ds-getting-started

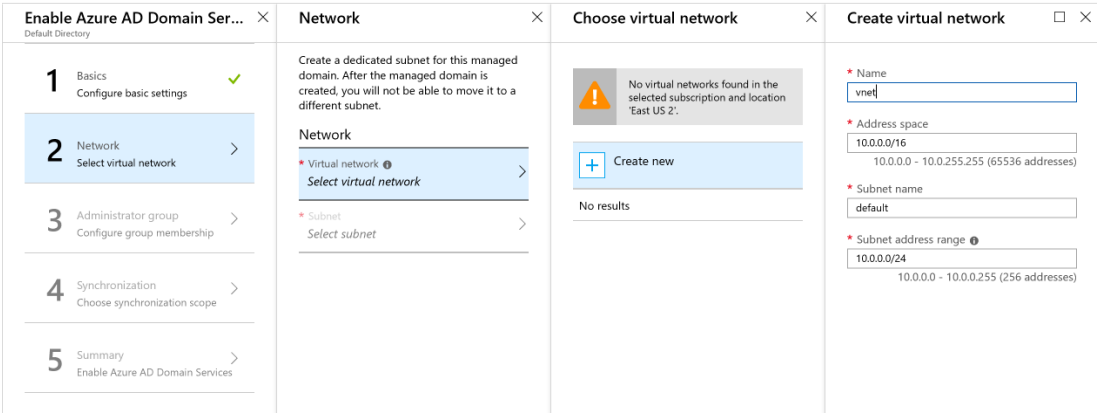
2.1.1 Click Create a resource in the portal and search for Azure AD Domain Services.



2.1.2 Fill in the information in the form and use the location East US 2.



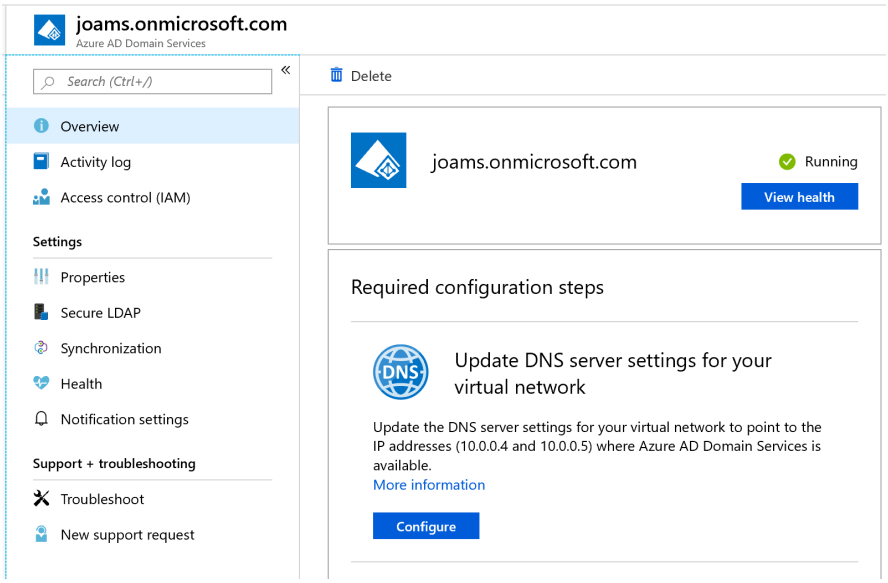
2.1.3 At the network configuration, configure it as the picture below.



2.1.4 Accept all the defaults on step 3-5 and click create.
Creating AD Domain Services take 45 min up to 2h.

2.2 Add DNS to the vnet by clicking Configure on Update DNS server settings for your virtual network.

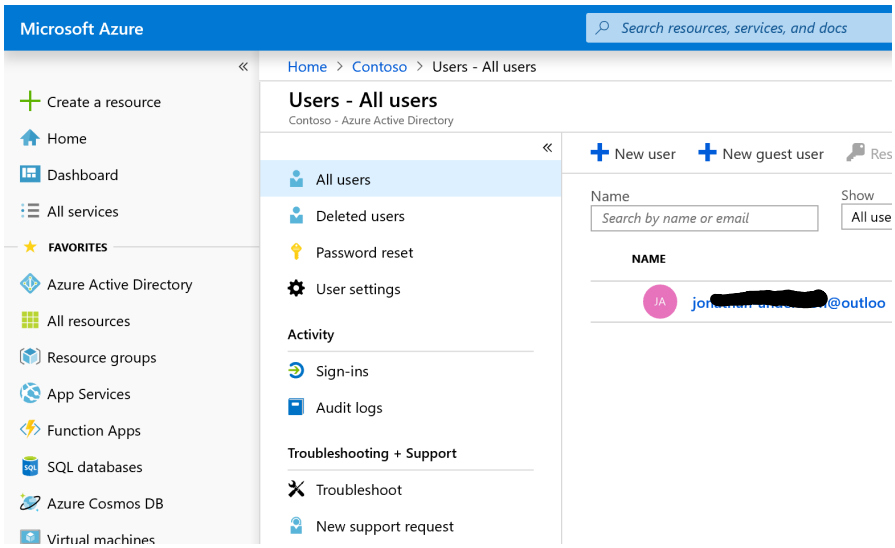
2.2.1 Click Configure on Update DNS server settings for your virtual network.



3. Administrator user

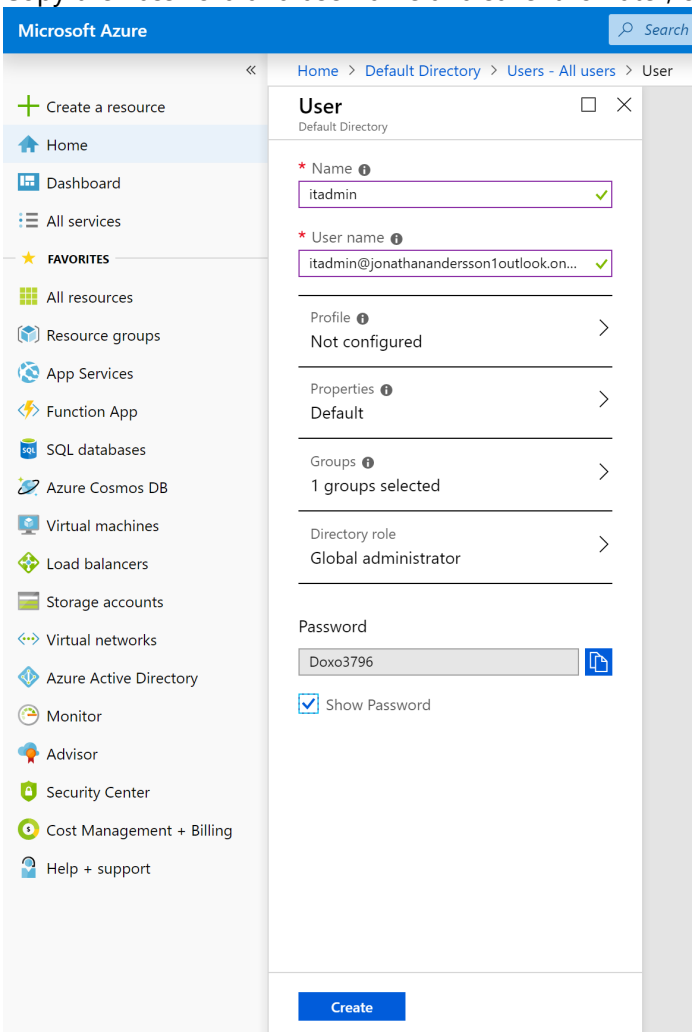
3.1 Create an administrator user

3.1.1 In the portal go to Azure Active Directory and click *New user.*



3.1.2 Add an itadmin account and add it to the AAD DC Administrators group under Groups and Global Administrator under Directory role.

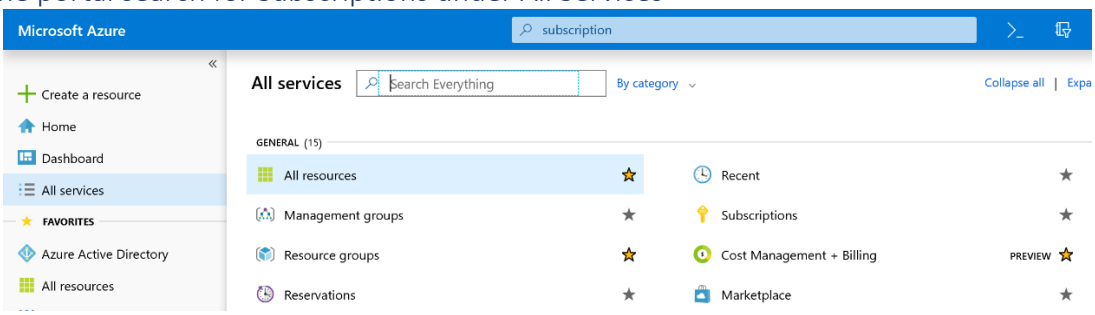
Copy the Password and username and save it for later, click Create.



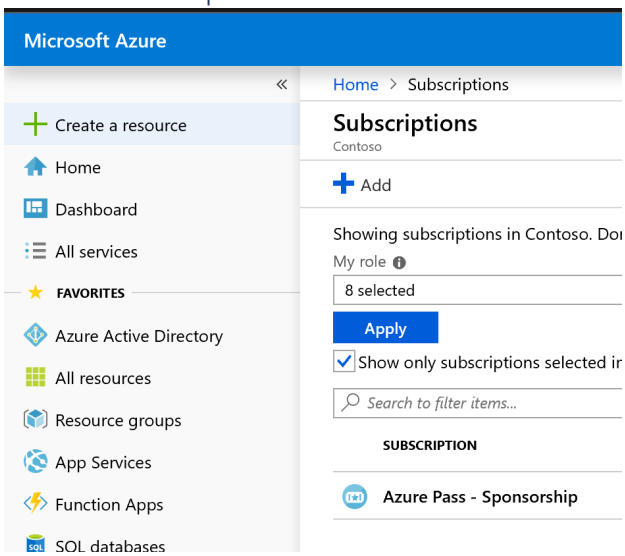
4. Owner at the Subscription

4.1 Add the new user (itadmin) as an Owner at the Subscription

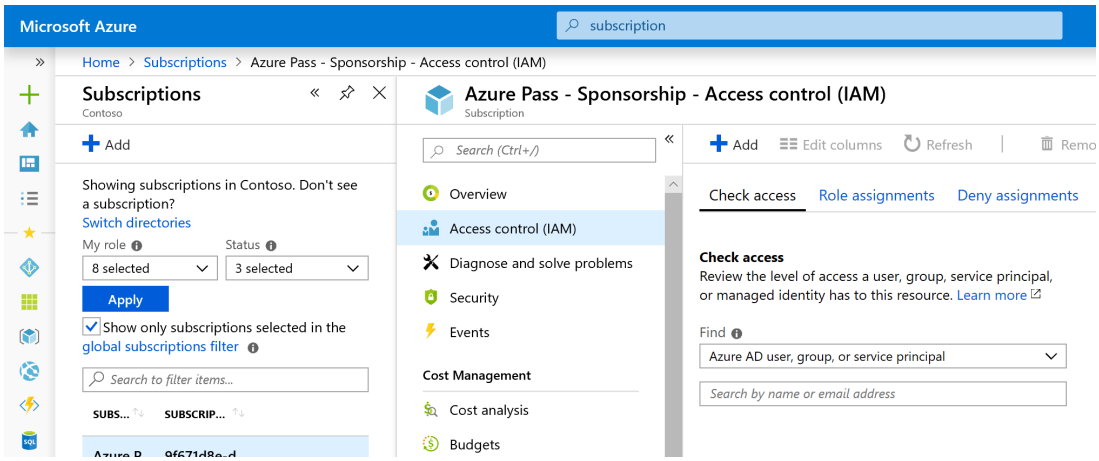
4.1.1 In the portal search for Subscriptions under All Services



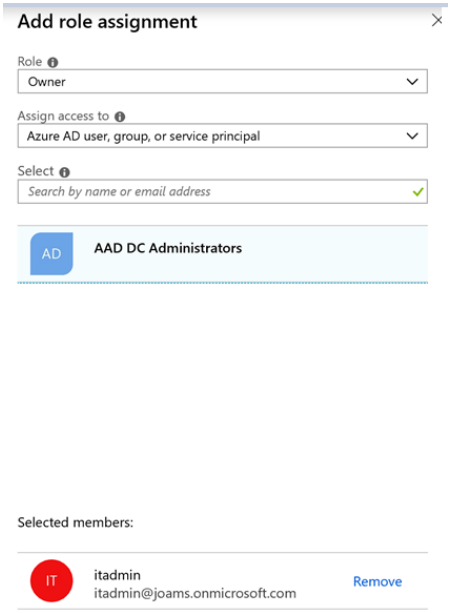
4.1.2 Click on the Subscription



4.1.3 Click Access control (IAM) and click *Add* and then *Add role assignment.*



4.1.4 Add the *itadmin* user to the Role Owner.



5. Login with *itadmin*

Log out from the Azure Portal and login with the user *itadmin*. Change password at login.

6. Create a Windows Virtual Desktop Tenant

6.1 Grant Azure Active Directory permissions to the Windows Virtual Desktop Preview service

6.1.1 https://docs.microsoft.com/en-us/azure/virtual-desktop/tenant-setup-azure-active-directory#grant-azure-active-directory-permissions-to-the-windows-virtual-desktop-preview-service

Use the account *itadmin* to login.

6.2 Assign the TenantCreator application role to a user in your Azure Active Directory tenant

6.2.1 https://docs.microsoft.com/en-us/azure/virtual-desktop/tenant-setup-azure-active-directory#assign-the-tenantcreator-application-role-to-a-user-in-your-azure-active-directory-tenant

Use the account *itadmin*.

6.3 Create a new Windows Virtual Desktop tenant

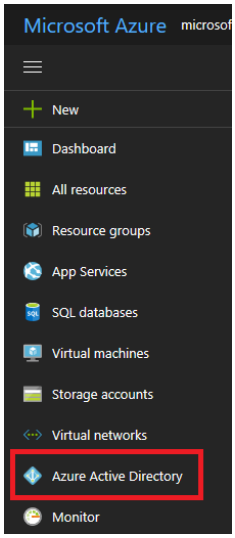
Documentation for reference if needed at 6.3.1 https://docs.microsoft.com/en-us/azure/virtual-desktop/tenant-setup-azure-active-directory#create-a-windows-virtual-desktop-preview-tenant

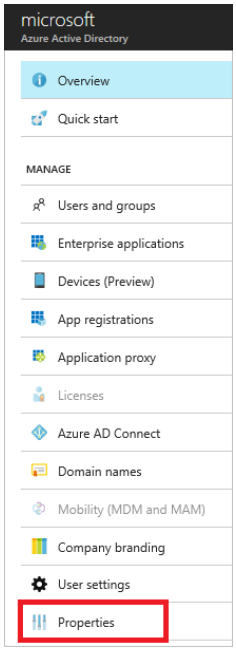
6.3.1 Open Windows PowerShell ISE as an administrator and run the following lines one-by-one.

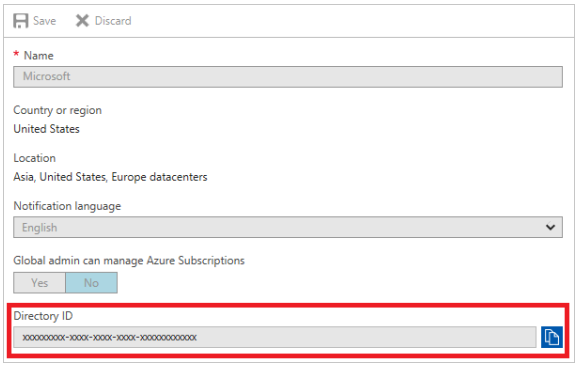
```
# Install and import Windows Virtual Desktop module
Install-Module -Name Microsoft.RDInfra.RDPowerShell
Import-Module -Name Microsoft.RDInfra.RDPowerShell

# Sign into Windows Virtual Desktop using the TenantCreator user account (itadmin) with this cmdlet:
Add-RdsAccount -DeploymentUrl "https://rdbroker.wvd.microsoft.com"

# Create a new Windows Virtual Desktop tenant associated with the Azure Active Directory tenant
$RdsTenantName='<Tenant name needs to be unique>'
$AadTenantId='<For more info see below>'
$AzureSubscriptionId='<For more info see below>'
New-RdsTenant -Name $RdsTenantName -AadTenantId $AadTenantId -AzureSubscriptionId
$AzureSubscriptionId
```

To find information for the parameters see the information below.

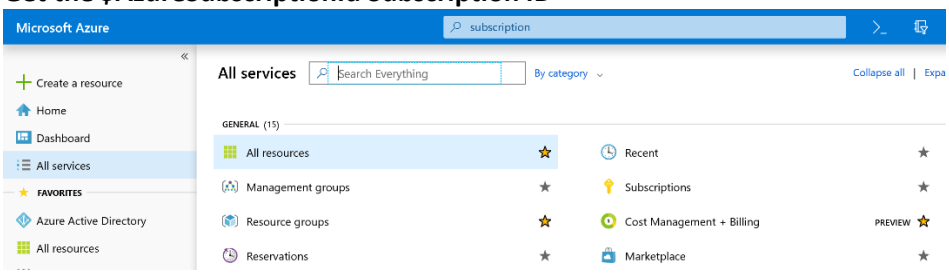
Get the $AadTenantId



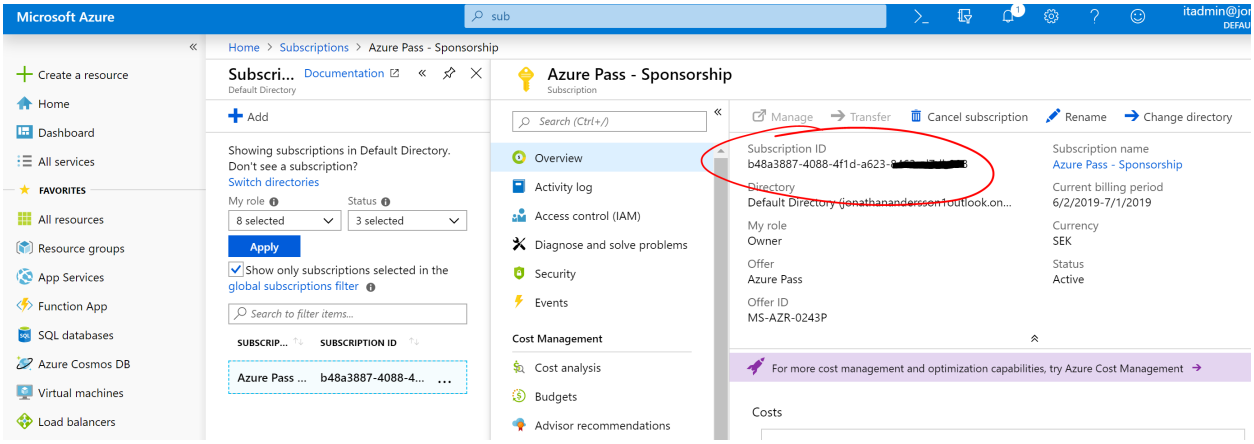




Get the $AzureSubscriptionId Subscription ID



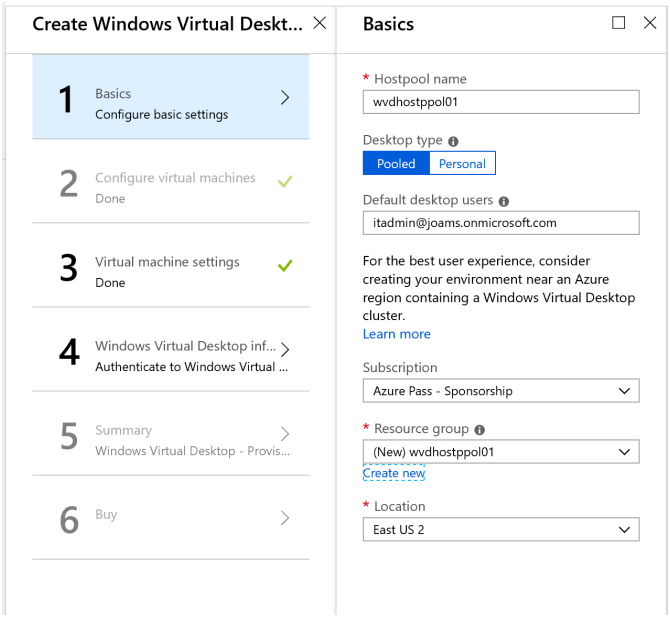
Click subscription and copy the Subscription ID.



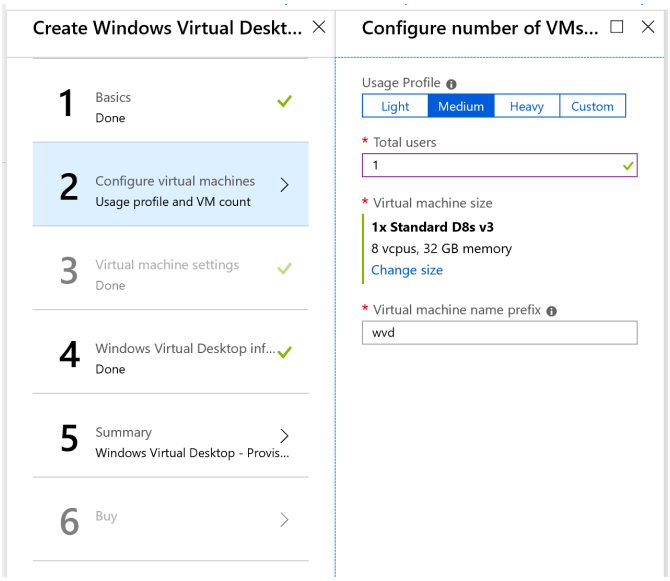
6.4 Create a host pool with Azure Marketplace

https://docs.microsoft.com/en-us/azure/virtual-desktop/create-host-pools-azure-marketplace

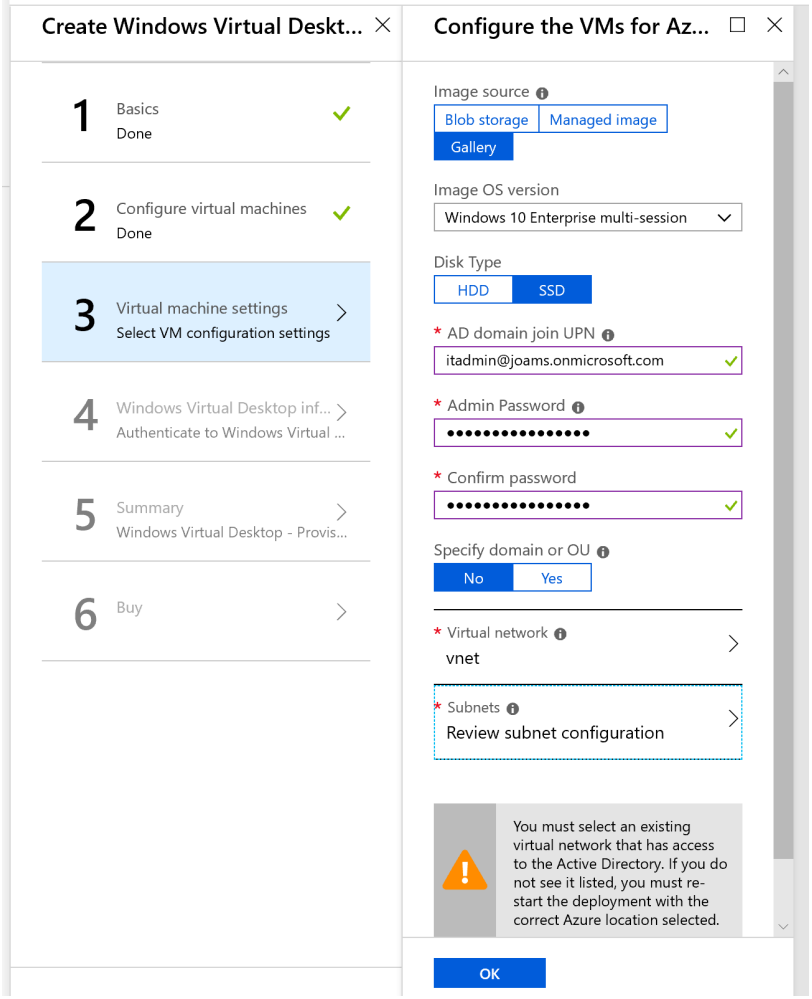
6.4.1 In the portal search for the Windows Virtual Desktop and choose it.
Fill in the form with similar values.



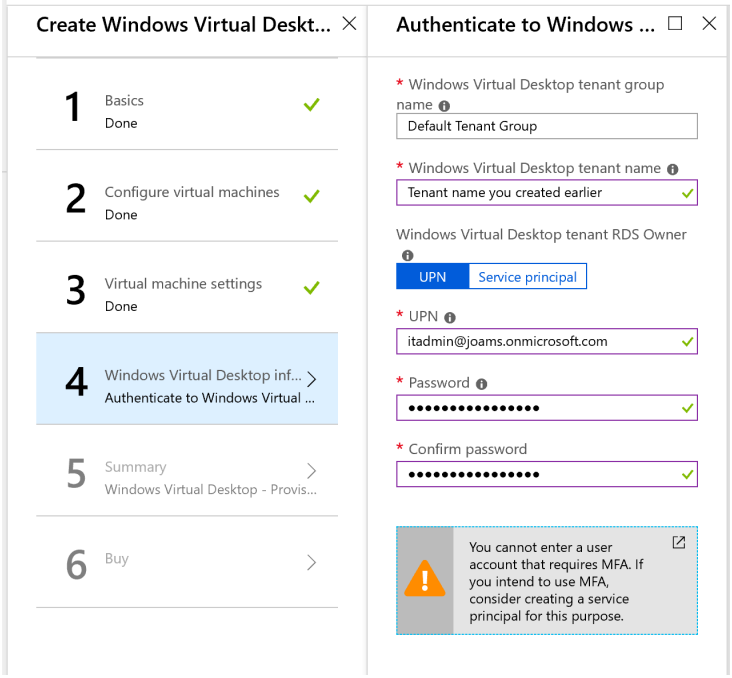
Fill in information about Virtual machines.



Fill in information about settings.



Note: Important that the *Windows Virtual Desktop tenant name* is the one you created earlier.



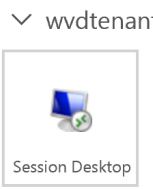
This step can take up to 30 min.

7. Access the applications with a browser

https://rdweb.wvd.microsoft.com/webclient

Log in with user itadmin.

7.1 Click on Session Desktop



Login with itadmin to the Session Desktop.

8. Publish an application

8.1 Application publishing to new user

8.1.1 Create a new user in Azure Active Directory with username bob. See earlier step for this.

8.1.2 Open Windows PowerShell ISE and run the following lines one-by-one.

```
# Create a RemoteApp group
$HostPoolName = "wvdhostpool"
$AppGroupName = "Apps"
$user = "<add the user you created in step 7.1.1>"

# Run the following PowerShell cmdlet to create a new empty RemoteApp group.
New-RdsAppGroup -TenantName $RdsTenantName -HostPoolName $HostPoolName -Name $AppGroupName -
ResourceType "RemoteApp"

# Run the following cmdlet to get a list of start menu apps on the host pool's virtual machine image. Write down the
values for FilePath, IconPath, IconIndex, and other important information for the application you want to publish.
Get-RdsStartMenuApp -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName | Out-File -FilePath "C:\Temp\apps.txt"
# Run the following cmdlet to publish a new RemoteApp to the application group created in step 1.
New-RdsRemoteApp -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName -Name "Wordpad" -Filepath "C:\Program Files\Windows NT\Accessories\wordpad.exe" -IconPath
"C:\Program Files\Windows NT\Accessories\wordpad.exe" -IconIndex 0
New-RdsRemoteApp -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName -Name "Task Manager" -Filepath "C:\windows\system32\taskmgr.exe" -IconPath
"C:\windows\system32\taskmgr.exe" -IconIndex 0
New-RdsRemoteApp -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName -Name "Paint" -Filepath "C:\windows\system32\mspaint.exe" -IconPath
"C:\windows\system32\mspaint.exe" -IconIndex 0

# To verify that the app was published, run the following cmdlet.
Get-RdsRemoteApp -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName
# Run the following cmdlet to grant users access to the RemoteApps in the app group.
Add-RdsAppGroupUser -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName -UserPrincipalName $user
Get-RdsAppGroupUser -TenantName $RdsTenantName -HostPoolName $HostPoolName -AppGroupName
$AppGroupName
```

8.2 Check that you can access the applications

8.2.1 Log in with user bob to https://rdweb.wvd.microsoft.com/webclient with a new private browser. Check that you see the application below.