



Denodo Platform for Azure 7.0 - Quick Start Guide

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[Denodo Platform](#), the data virtualization leader for unifying enterprise data and delivering data services for the business, is available on Azure as a pay as you go (PAYG) virtual machine (VM). The VM contains the latest version of Denodo Platform, optimized for use with the Azure Virtual Machines service.

Thank you for your confidence in Denodo and for choosing the [Denodo Platform for Azure](#) as your data virtualization technology!

This quick start guide will give you an overview of the Denodo Platform and how to quickly start building data virtualization solutions on Azure.

1 DENODO PLATFORM FOR AZURE VM PYAG OFFERINGS USAGE INSTRUCTIONS

1.1 OVERVIEW

These Azure offerings are based on a pay per hour model (pay as you go, PAYG) under your Azure subscription.

Therefore it is expected that you already have an Azure subscription that you can use to logon to the Azure Marketplace in order to create and launch the Denodo Platform virtual machine through the Azure Portal.

There are several options available based both on Linux and on Windows Server. In the sections below you can find more information based on the operating system used as base.

2 DENODO PLATFORM FOR AZURE VM PYAG ON LINUX

As a summary of the instructions you will need to complete the following steps:

1. Subscribe to Denodo Platform for Azure on Linux
2. Create the service principal
3. Start the VDP service
4. Install the Denodo client
5. Review the Security Configuration
6. Register for Denodo Support

2.1 STEP 1 - SUBSCRIBE TO DENODO PLATFORM FOR AZURE ON LINUX

Log on to the Azure Marketplace, search for the [Denodo Platform for Azure offers](#) you prefer, and launch the VM through the Azure Portal. Select one of the Linux based offerings.

Once the Denodo Platform for Azure virtual machine instance is running you must follow the step-by-step installation instructions located in your running Denodo Platform for Azure virtual machine instance's web server. To access the instructions just point your Internet browser to your Azure virtual machine instance's public Internet name or IP address (screenshot below).



Denodo Platform for Azure

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Azure configuration

Congratulations! You have connected to the documentation website running on your remote Denodo Platform instance in Azure.

In the following document, you are going to be guided to get your instance ready to run Denodo Platform services.

Create the service principal

Running Denodo Platform for Azure requires you to create a [Service Principal](#) that allows the server to determine from which Azure product the current VM was created. You can create it from inside or outside the instance. To create the service principal from outside the VM it is required that you install [azure CLI 2.0](#) in your local machine. If you decide to create it from inside the instance, [connect to the instance using ssh](#) and change your current directory to `/opt/az`. After this, do an [azure CLI login](#) with your main user credentials:

2.2 STEP 2 - CREATE THE SERVICE PRINCIPAL

Running Denodo Platform for Azure requires you to create a Service Principal that allows the server to determine from which Azure product the current virtual machine was created. This ensures the Denodo license recognizes the Azure virtual machine as a valid product.

2.3 STEP 3 - START THE VDP SERVICE

Denodo Virtual DataPort server is not configured to be started at boot time - it wouldn't work without having the Service Principal configured as you have already done - so you must start it manually following step-by-step installation instructions described in your running Azure virtual machine instance's web server.

Remember to follow the recommended security configuration settings below, in particular changing the default administrator password.

2.4 STEP 4 - INSTALL THE DENODO CLIENT

You must download and install the Denodo Platform client to connect to the Denodo Platform server.

The Denodo Platform follows a client-server architecture, with the server (VDP) running in the Azure virtual machine instance, and the client (VDP Administration Tool) running in your local computer.

The client installer is distributed from the running Azure virtual machine instance; you can find links to the installers in step-by-step installation instructions described in your running Azure virtual machine instance's web server.

Once the graphical administration tool starts, it will prompt you for the connection details for the remote Denodo Platform server in the Azure virtual machine instance.

2.5 STEP 5 - REVIEW THE SECURITY CONFIGURATION

There are a couple of optional steps that we recommend you to take in order to improve the security of your Azure deployment.

2.5.1 Changing the Default VDP Administration Password

As the first step of the configuration of your new Denodo Platform virtual machine you should change the default administrator password. It is extremely important that you change this default password to ensure that you are operating under a secure environment.

2.5.2 Configuring the Security Groups

Please, check first the list of [Denodo Platform default ports](#) to review which ones are needed for operating your environment.

When a new virtual image is started Azure creates by default a new security group. This group contains all TCP ports that the Denodo Platform may need to use plus the ssh (for server administration) and http (for the installation instructions and client installers). The default configuration specifies that all those ports can be reached from any IP addresses - our strong recommendation is to modify the groups to:

1. Remove access to the HTTP port once you have completed the installation instructions, including the download of the Denodo client installer.
2. Configure the rest of security groups so they can only be accessed from the range of authorized IP addresses that you control instead of being publicly accessible.

To do this, follow the steps in the Azure guide located at: <https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-nsg-arm-portal>

2.5.3 Disabling the Public Web Server

The Denodo instance that you are currently connected to is using a public httpd server to host the step-by-step installation instructions and client installers. When you are done setting up your Azure virtual machine instance and Denodo client installation we recommend you to disable the public web server. This is accomplished in two steps:

1. Connect to the Denodo instance using ssh.
2. After opening a remote command line through ssh, type these commands to disable the httpd server:

```
sudo systemctl stop httpd
sudo systemctl disable httpd
```

2.6 STEP 6 - REGISTER FOR DENODO SUPPORT

Denodo is committed to helping you succeed with the Denodo Platform through our comprehensive network of technical support and services.

Denodo Platform for Azure Premium Support is available for all subscribers. To access this service, you must first register [on our website](#). After you have signed-up, you will have access to the [Denodo Support Site](#) where you can get web-based support, software updates and DenodoConnects, which will improve your data virtualization experience. Denodo version upgrades are not available as version upgrades require migration between Azure instances.

Denodo web-based support may be subject to reduced availability for hourly based subscriptions. You can always post your question directly on the [Q&A](#) section, a moderated forum on our [Community Site](#), where data virtualization professionals and enthusiasts will assist you. Our community is knowledgeable and tenacious and there is no question without a valid answer. Technical resources such as product documentation, Knowledge Base articles, step-by-step tutorials, and how-to videos are also available.

Customer will use commercially reasonable efforts to resolve issues before escalating them to Denodo. Denodo will make a commercially reasonable effort to provide support to customer and reserves the right to refuse providing Maintenance and Support Services for customers who do not reach a minimum commercially reasonable level of monthly usage of any of the Denodo Platform for Azure products.

3 DENODO PLATFORM FOR AZURE VM ON WINDOWS SERVER

As a summary of the instructions you will need to complete the following steps:

1. Subscribe to Denodo Platform for Azure on Windows Server
2. Activate the denodo User
3. Start Denodo Platform Services
4. Review the Security Configuration
5. Register for Denodo Support
6. (Optional) Using the Denodo Client for Remote VDP Administration

3.1 **STEP 1 - SUBSCRIBE TO DENODO PLATFORM FOR AZURE ON WINDOWS SERVER**

Log on to the Azure Marketplace, search for the [Denodo Platform for Azure offers](#) you prefer, and launch the VM through the Azure Portal. Select one of the Windows Server based offerings.

3.2 **STEP 2 - ACTIVATE THE DENODO USER**

Once the Denodo Platform for Azure on Windows Server virtual machine is running you have to log in Windows with your Administrator Account username through a Remote Desktop Connection. Detailed instructions are available on <https://docs.microsoft.com/en-us/azure/virtual-machines/windows/connect-logon>

Once connected as the administrator username for the VM you have to complete the following tasks:

1. Launch Computer Management on the Windows virtual machine.
2. Select Local Users and Groups > Users.

3. Right-click the denodo user.
4. Select Properties.
5. If it is not already, clear the Account is disabled checkbox.
6. Click Apply.
7. Right-click the denodo user.
8. Select Set Password.
9. Enter and confirm your new password.

After completing these steps for activating the denodo user, then you can log out and use Remote Desktop Connection to log in to the Windows virtual machine using the denodo user and the password you set.

3.3 STEP 3 - START DENODO PLATFORM SERVICES

Logged in as the denodo user through Remote Desktop Connection you can start enjoying Denodo Platform.

You have to launch the Denodo Platform Control Center that allows starting and stopping all Denodo Platform servers and tools, as well as a group of additional functions.

You can find more information on https://community.denodo.com/docs/html/browse/7.0/platform/installation/denodo_platform_control_center/denodo_platform_control_center

Through the Denodo Platform Control Center you can start the Virtual DataPort (VDP) server and then launch the Virtual DataPort Administration Tool to connect to VDP server.

Denodo VDP default administrator user is admin with admin as default password. You should change the administrator password as soon as possible to ensure that you are operating under a secure environment.

You can find more information on <https://community.denodo.com/docs/html/browse/7.0/vdp/administration/index>

3.4 STEP 4 - REVIEW THE SECURITY CONFIGURATION

There are a couple of optional steps that we recommend you to take in order to improve the security of your Azure deployment.

3.4.1 Changing the Default VDP Administration Password

As the first step of the configuration of your new Denodo Platform virtual machine you should change the default administrator password. It is extremely important that you change this default password to ensure that you are operating under a secure environment.

3.4.2 Configuring the Security Groups

Please, check first the list of [Denodo Platform default ports](#) to review which ones are needed for operating your environment.

When a new virtual image is started Azure creates by default a new security group. This group contains all TCP ports that the Denodo Platform may need to use plus the RDP (for server administration). The default configuration specifies that all those

ports can be reached from any IP addresses - our strong recommendation is to modify the groups so they can only be accessed from the range of authorized IP addresses that you control instead of being publicly accessible.

To do this, follow the steps in the Azure guide located at: <https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-nsg-arm-portal>

3.4.3 VDP Client Access from Outside of VM

You have to configure the Virtual DataPort server in order to receive connections from external clients to the VM.

The default ports for the Denodo Platform based on the connection protocol are:

- JDBC: TCP 9999 (additionally the TCP 9997 port has to be available).
- ODBC and ADO.NET: TCP 9996.
- Web Container: TCP 9090.

VM must be configured to allow the connections to ports enumerated above according to the connection protocol needed:

1. Update the Azure network Security Group associated with the VM network interface using the Azure Portal.
2. Update the Windows firewall in The Denodo Platform for Azure VM. You have to set up the appropriate Windows firewall rules. Log in the VM, start Control Panel > System and Security > Windows Firewall (or open PowerShell or Command Prompt and enter 'firewall.cpl'), clicking the advanced settings button, and create the Inbound Rules needed.

As a side note, take into account that by default an ephemeral external IP address is assigned to the VM instance. If you require a static external IP address, you may promote the address to static. Be sure that the VDP server is set correctly for accepting connections through that IP by [changing the Host Name in the VDP server](#).

3.5 STEP 5 - REGISTER FOR DENODO SUPPORT

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Denodo Platform for Azure Premium Support is available for all subscribers. To access this service, you must first register [on our website](#). After you have signed-up, you will have access to the [Denodo Support Site](#) where you can get web-based support, software updates and DenodoConnects, which will improve your data virtualization experience. Denodo version upgrades are not available as version upgrades require migration between Azure instances.

Denodo web-based support may be subject to reduced availability for hourly based subscriptions. You can always post your question directly on the [Q&A](#) section, a moderated forum on our [Community Site](#), where data virtualization professionals and enthusiasts will assist you. Our community is knowledgeable and tenacious and there is no question without a valid answer. Technical resources such as product documentation, Knowledge Base articles, step-by-step tutorials, and how-to videos are also available.

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3.6 STEP 6 - (OPTIONAL) USING THE DENODO CLIENT FOR REMOTE VDP ADMINISTRATION

You can download and install the Denodo Platform client to connect and administer the Denodo Platform server from a remote host.

The Denodo Platform follows a client-server architecture, with the server (VDP) running in the Azure virtual machine instance, and the client (VDP Administration Tool) running in your local computer.

The client installer is distributed from the running Azure virtual machine instance; you can find the installers in the following folder:

C:\Denodo\VDP Client Installers

Download one of the installers to your local host and start the installation. You can find more information in the following page - https://community.denodo.com/docs/html/browse/latest/vdp/administration/installation_and_execution/installation_and_execution

Once the VDP graphical administration tool starts, it will prompt you for the connection details for the remote Denodo Platform server in the Azure virtual machine instance. You can find more detailed information in the following page - https://community.denodo.com/docs/html/browse/latest/vdp/administration/installation_and_execution/launching_the_virtual_dataport_administration_tool/launching_the_virtual_dataport_administration_tool

Remember that the VM with VDP Server must be configured to accept connections from outside. Please, review the Security Configuration section in this guide.

4 FURTHER STEPS

Once you are all set to start building your data virtualization solutions on Azure, we recommend that you check out all the available Denodo information:

- [Denodo tutorials](#)
- [How-to videos](#)
- [Denodo Test Drives](#)
- [Knowledge base](#)
- [Product documentation](#)
- [Denodo on Cloud Marketplace FAQ](#)

If you want to move on to professionally guided training you can always check our course offerings on [our training site](#).

To get up and running on the Denodo Platform for Azure 7.0 in the quickest time, we recommend that you take advantage of [Denodo Professional Services](#).