Denodo Platform for Azure 6.0 - Quick Start Guide

Revision 20190911

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CONTENTS

The Denodo Platform for Azure 6.0 offering have no longer be available for new customers.

Denodo recommends Denodo Platform 6.0 users the migration to Denodo Platform 7.0 that incorporates many new features and improvements.

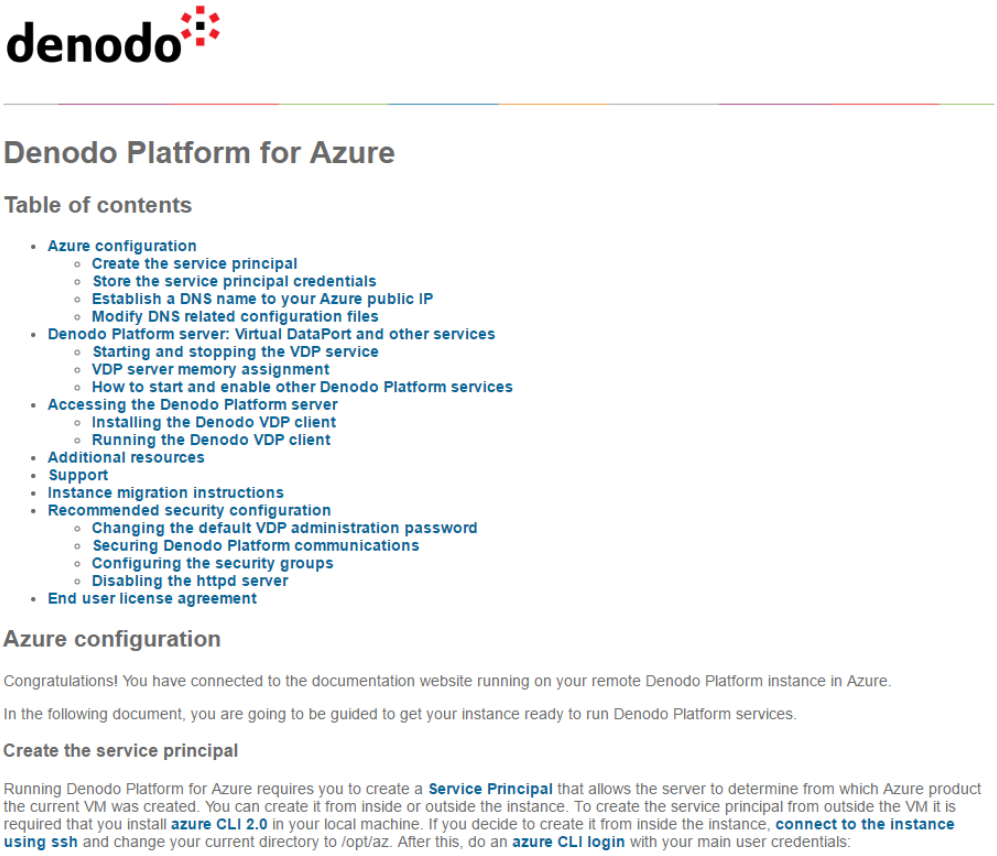
1 DENODO PLATFORM FOR AZURE ARCHITECTURE OVERVIEW

The Denodo Platform for Azure is derived from our enterprise-class product, the Denodo Platform, and they share the same main building blocks:

- Virtual DataPort (VDP): this is the main data virtualization product, that allows to connect to a variety of data sources, combine their data and publish the results for client applications to consume. It's composed of a server (VDP server or VQL server), the VDP Administration Tool (a desktop client that you will use for both administration of the server and development of data virtualization solutions) and the Self-Service Information Tool (a browser-based tool that allows end users to easily consume data services).
- ITPilot (ITP): this is the semi-structured information module. It is normally used for web automation, mainly for accessing web pages and extracting information from them.
- Aracne (ARN): the unstructured data module, used for indexing documents so they are available to enrich other structured sources in your organization.
- Scheduler (SCHED): this is our batch processing tool, that connects to data sources and the VDP server and allows to regularly run data exports, refresh and/or invalidate caches, etc. It is composed of the Scheduler server and the Scheduler Administration Tool (a web application).

2 USAGE INSTRUCTIONS

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

Table of contents

- Azure configuration
  - Create the service principal
  - Store the service principal credentials
  - Establish a DNS name to your Azure public IP
  - Modify DNS related configuration files
- Denodo Platform server: Virtual DataPort and other services
  - Starting and stopping the VDP service
  - VDP server memory assignment
  - How to start and enable other Denodo Platform services
- Accessing the Denodo Platform server
  - Installing the Denodo VDP client
  - Running the Denodo VDP client
- Additional resources
- Support
- Instance migration instructions
- Recommended security configuration
  - Changing the default VDP administration password
  - Securing Denodo Platform communications
  - Configuring the security groups
  - Disabling the httpd server
- End user license agreement

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:

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

1. Create the service principal
2. Start the VDP service
3. Install the Denodo client

2.1 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.

2.2 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.

2.3 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.

3 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.

3.1 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.

3.2 CONFIGURING THE SECURITY GROUPS

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 specify 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

3.3 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
```

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
- Knowledge base
- Product documentation

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 6.0 in the quickest time, we recommend you to take advantage of Denodo Professional Services.

5 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.

6 FAQ

What is Azure Marketplace?

Microsoft Azure Marketplace is an online store that makes it easy for customers to find, compare, and immediately start using the software and services that run on the Microsoft Azure cloud computing platform that they need to build products and run their businesses. Visitors to the marketplace can use Azure Marketplace to quickly launch pre-configured software and pay only for what they use, by the hour. Azure handles billing and payments, and software charges appear on customers' Azure bill.

Who is the intended customer base for the Denodo Platform for Azure?

Literally any organization of any size can use and benefit from the Denodo Platform for Azure.

What are the possible scenarios?

Denodo Platform for Azure can be used the same as other enterprise-class Denodo Platform versions: production workloads for analytics, logical data warehouse, cloud integration, data as a service... and also staging, development, disaster recovery, proof of concept...

What do I need to buy the Denodo Platform for Azure on Azure Marketplace?

Any customer eligible to use Azure products is also able to shop on Azure Marketplace. Customers must have an Microsoft Azure subscription.

What happens when Denodo updates their product?

Denodo will deliver updates for the Denodo Platform for Azure in two ways:

- Publishing an updated Denodo Platform for Azure virtual machine. When Denodo publishes a virtual machine image with an update to a Denodo Platform for Azure you are subscribed to, you should receive a notification email from Azure Marketplace that contains information about the update and provides migration instructions.
- Publishing a Denodo Platform update in the Denodo Support Site. If you are registered for Denodo Support, Denodo Platform updates will be available from the Denodo Support Site. You can download updates to be applied to a Denodo Platform for Azure virtual machine instance of which you are subscribed to, without the need to migrate between your current instance and an updated one.

How am I billed for the Denodo Platform for Azure?

If you are using a Denodo Platform for Azure virtual machine instance product that has a pay per use fee, you will be billed by Azure for your use of this software. You will receive a bill for the software at the same time that you receive your Azure subscription bill.