

THE DENODO PLATFORM ON AWS CLOUD: Frequently Asked Questions

1. How can I get started with the Denodo Platform or Denodo Standard on AWS Cloud?

The Denodo Platform can be installed on the AWS Cloud as Infrastructure as a Service (IaaS) or via the AWS Marketplace. When using AWS as a cloud infrastructure, you can install the Denodo Platform via Bring your own License (BYOL), working directly with the Denodo sales team. With Denodo 8, Denodo has also introduced a new entry level version of Denodo data virtualization for cloud marketplaces called **Denodo Standard**. It provides a cost-effective (pay-asyou-go) option to get started with Denodo in the cloud marketplaces. The Denodo Platform on AWS Cloud **landing page** is a good resource for further exploration.

2. What is the difference between Denodo deployment using BYOL and Marketplace? Is it the same offering?

The Denodo Platform is the same whether it is deployed using AWS laaS or AWS Marketplace. The underlying software is exactly the same in terms of features and capabilities although the marketplace version supports only a single server deployment.

3. Does Denodo have a SaaS offering on AWS?

Currently, there is no SaaS offering from Denodo. It is currently available in the form of an Amazon Machine Image (AMI). Denodo might offer a SaaS-based offering in the future.

4. Is the Denodo Platform available on the AWS Gov Marketplace, and if so, is it FedRamp compliant?

Yes, Denodo offerings are available on AWS Gov Marketplace (East and West regions). The offerings are similar to what is commercially available via AWS Marketplace. Denodo is not a Cloud Service Provider (CSP), so it does need to be FedRamp compliant, but Government agencies can leverage a CSP to deploy and manage the Denodo Platform on the Intelligence Community (IC) Marketplace.

5. What type of AWS data sources are supported by Denodo Platform?

The Denodo Platform supports a wide range of data sources on the AWS Cloud. You can use JDBC or ODBC to connect to a variety of data sources for integration purposes. Here are the key data sources supported via connectors in the Denodo Platform:

- Amazon RDS (MySQL, PostgreSQL, Oracle, SQL Server)
- Amazon Redshift
- Amazon EMR
- Amazon S3 (CSV, Parquet, Avro, JSON, XML)
- Amazon Athena

We are always adding support for new data sources, so please check the documentation for future reference.

6. Does the Denodo Platform support a hybrid cloud architecture?

Yes, the Denodo Platform can be installed on the AWS Cloud and in an on-premises datacenter, and the two instances can talk to one another. The best practice is to deploy the Denodo Platform as close as possible to your data sources. For a hybrid cloud architecture, the network connectivity between your datacenter and AWS Cloud becomes a key driver for performance SLA considerations. Most of our clients migrating to the cloud leverage a hybrid deployment architecture.

7. Does Denodo have customers running on AWS Cloud?

Several Denodo Platform customers have a deployment on AWS Cloud, and you can find their **case studies** on the Denodo website.Some examples are Logitech, Autodesk, Indiana University, and 2U. For any specific questions, you can reach out to cloud.solutions@denodo.com.

8. What are the key use cases for which customers are leveraging the Denodo Platform on the AWS Cloud?

Customers can exercise a wide variety of use cases, and some of the popular ones are logical data warehouse (LDW), semantic data access layer, cloud data warehouse modernization, accelerating data science in the cloud, and data as a service (DaaS). Refer to the Denodo Platform for AWS **Datasheet** for more details.

9. Where can I learn more about the Denodo Platform on AWS Cloud?

We offer several learning assets, including:

- Denodo Platform for AWS Cloud Datasheet
- **Denodo Test Drive for AWS** (Agile BI Analytics and Data Catalog/Data Science)
- Denodo Platform for AWS Whitepaper

10. How is the Denodo Platform licensed on AWS Cloud?

The Denodo Platform is licensed the same way in the cloud as on-premises, which is based on CPU cores/ vCPU. Users typically go through a sizing exercise which determines the number of vCPUs needed for the EC2 instances. On the AWS Marketplace, pricing is a combination of the offering type (based on the number of data sources) and the type of EC2 instance where the Denodo Platform is deployed.

11. What type of EC2 instances are recommended for the Denodo Platform on AWS Cloud?

AWS is always coming up with newer and better EC2 instances for variety of workloads. We usually recommend general purpose compute EC2 instances, such as M5 and I5 EC2. Users go through a sizing exercise, and depending on the number of data sources, types of queries, and user concurrency, they can choose the vCPUs accordingly. AWS Marketplace instances are Linux based only, but you can leverage any type of instance when deploying using BYOL.

12. Does Denodo have a container version (such as Docker) and can it be deployed on Amazon ECS or EKS?

Yes, Denodo has a docker container version that can be used for automated deployment. Please refer to the **Denodo Platform and Docker** datasheet for more details. The Denodo Platform can also be deployed using Amazon ECS and EKS services. Licensing/ pricing for the container version is the same as that for the enterprise version.

13. Can the Denodo Platform be deployed with Kubernetes?

Yes, Denodo can be configured with Kubernetes. Please refer to the **Deploying Denodo in Kubernetes** Knowledge Base article for details.

14. What data sources can be used as a cache with the Denodo Platform on AWS?

AWS Redshift and RDS (Aurora) data sources can be configured as a Denodo Platform cache, for performance optimization.

15. What are our authentication options if we don't have our directory service (LDAP) in AWS?

Denodo supports various forms of authentication such as Active Directory (AD) and LDAP. Most customers have VPN access back to on-premises Active Directory/LDAP and use the same authentication mechanism for cloud instances, assuming that they do not have AD services configured in AWS. Denodo also supports third-party authentication services such as PingFederate and Okta (which uses SAML and OAuth). In Denodo Platform 8, we will also support single signon in all platform modules.

16. What is the recommended setup for the Denodo Platform on AWS? What ports need to be opened to connect to Denodo VDP Server?

If your data consumers are going to be running outside of the VPC where the Denodo Platform is deployed, we recommend that the Denodo Platform be installed in a public subnet while the data sources are usually configured in the private subnet. The Denodo Platform can also be deployed in a private subnet within your VPC along with a load balancer in the public subnet. This follows the best practice of deploying applications on AWS, whereby the load balancer communicates with the Denodo VDP server in the private subnet. Data consumers can easily connect to the load balancer, which then delegates requests as needed. The ports used by the Denodo Platform on AWS are the same as those used by the Denodo Platform when deployed on-premises. Remember to open the inbound ports in the AWS Security Group attached to the Denodo instance. When using auto scaling, the autoscaling group can span Availability Zones to support failover and redundancy. Using Amazon RDS (MySQL) for the Denodo cache also allows you to create "read replicas" on another availability zone, for resilience within the cache.

17. What are the different AWS services required for the Denodo Platform on AWS Cloud?

The Denodo Platform works with a variety of AWS services, some of which are mandatory, while others are optional.

- AWS EC2 (VM) This is the VM (instance) where the Denodo Platform is installed.
- AWS VPC (private subnet and security groups)
 the Denodo Platform will be installed in Client VPC.
- AWS HA/load balancer (ELB ALB NLB) See the Denodo Platform HA configuration.
- AWS auto-scaling groups See how to set up Denodo for auto scaling.
- AWS S3 storage (optional) See the KB article
 How to Store Denodo Logs in S3. S3 can also be one of the data sources.
- AWS EBS storage The Denodo Platform software will be installed here.
- AWS Route 53 (optional) DNS service, depending on HA configuration.
- AWS CloudWatch for monitoring Integration with Denodo Platform monitoring capabilities.
- AWS Data sources (Such as Redshift, RDS, Databricks, S3, EMR) - These are all the data sources that the Denodo Platform can connect to on AWS Cloud.
- AWS Internet gateway (optional) This provides routing to the data sources over the Internet (such as SaaS applications).
- AWS storage gateway (optional) This comes into play when a hybrid architecture (on-premises and cloud) drives storage of logs and backups to S3 in the AWS public cloud.
- AWS direct connect/VPN (optional) This is a service that enterprise users would normally have in their setup to establish a high bandwidth connection for a hybrid architecture setup.

18. Is there a free trial available to conduct a POC/ validation with the Denodo Platform or Denodo Standard on AWS?

Yes indeed. You can take advantage of the 30 days free trial of **Denodo Standard** available via Cloud Marketplaces. You can register here to get started with the **free trial**.

19. Does Denodo support AWS private offers via the AWS Marketplace?

Yes, we have customers who are part of the Enterprise Discount Program (EDP) with AWS. They can use funds from their EDP to do a private offer transaction via the AWS Marketplace. This allows pricing and licensing terms to be negotiated with Denodo. To get started with a private offer, talk to your Denodo account manager.

20. Is Denodo technical support included for customers who have purchased a Denodo Platform subscription via the AWS Marketplace?

Yes, Denodo Platform Premium Support is included with all AWS Marketplace subscriptions. Subscribers can register for support via the AWS Marketplace after signing up for the subscription. Subscribers are also eligible for on-demand training courses, which are included as part of their subscription. More details are available **here**.

21. Is Denodo Platform well architected for the AWS Cloud?

The Denodo Platform is designed and built to support a well-architecture solution on AWS cloud. It thrives on the key principles enabling operational excellence, security, reliability, performance and cost optimization. For example, the containerization helps with a microservices architecture while the auto-scaling and security capabilities allow the users to build a robust and cost-effective solution in the cloud.



