



How to configure a VDP Backup server in the Solution Manager

Revision 20200601

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1 GOAL

This document describes the recommended approach to configuring the environments and servers in the Denodo Solution Manager for those scenarios where there is a Hot Backup or a Cold Backup server.

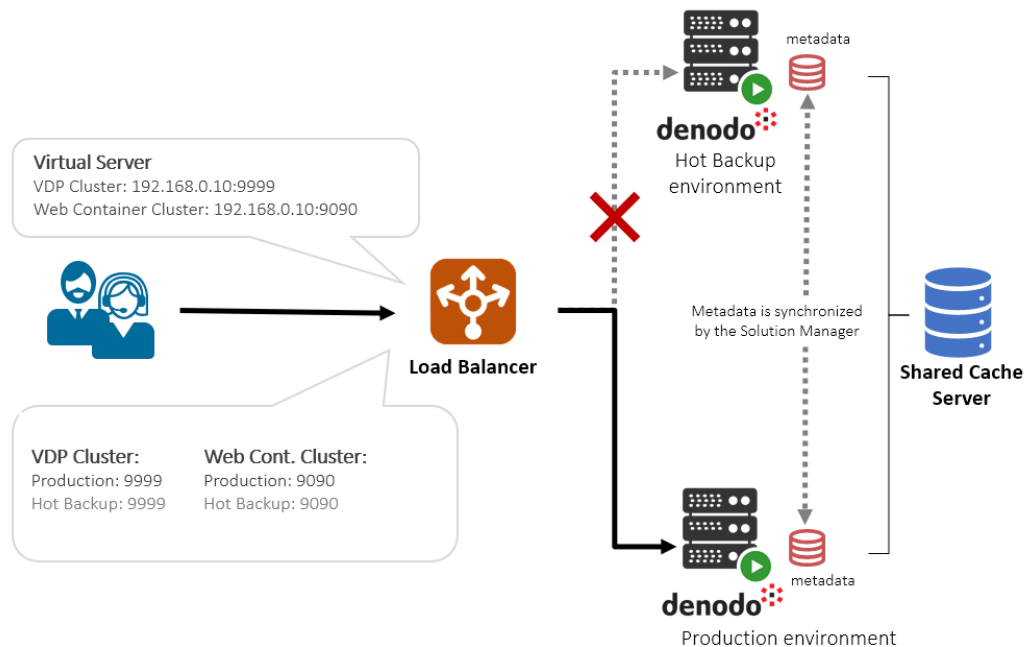
2 VDP BACKUP SCENARIOS OVERVIEW

In a Denodo production installation, it is recommended to have a backup server that will be connected to the Load Balancer when some of the main servers are not working for an unexpected reason.

For those scenarios, if it's allowed by your license, you can configure Hot Backups or Cold Backup servers in order to maintain its metadata in sync with the Production servers so they can quickly replace the Production ones if they fail.

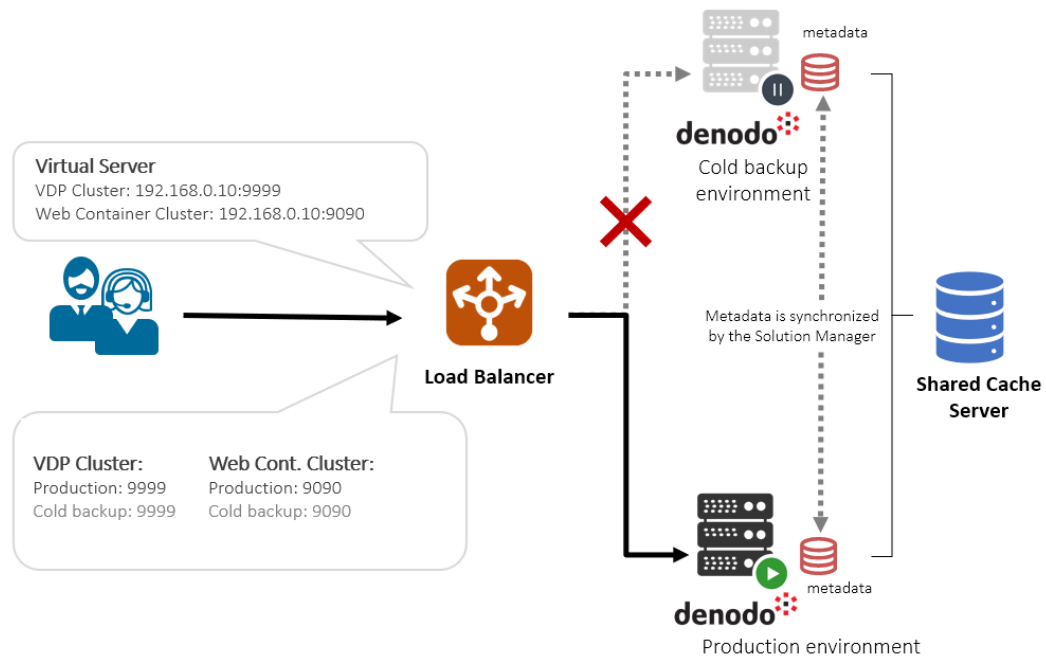
Let's see the difference between a Hot Backup and a Cold Backup:

2.1 HOT BACKUP



A **Hot Backup** architecture contains one or more Denodo VDP servers that will be up and running with exactly the same metadata as the Production VDP servers. The difference is that they must not receive any petition from the Load Balancer unless one of the Production VDP servers fails. When this happens, the Load Balancer will add the Hot backup server to the cluster.

2.2 COLD BACKUP



A **Cold Backup** architecture will have one or more Denodo VDP servers that will host the same VDP metadata as the Production servers. The difference with the Hot Backup is that the Cold backup servers must remain turned off unless a failure is detected on any of the Production ones. When one of the Production VDP servers fails, the Cold backup servers should be manually turned on and added to the cluster.

The Cold backup server can be started only for synchronizing the metadata when a new deployment is performed through the Solution Manager.

3 CONFIGURING THE VDP BACKUP SERVER IN THE SOLUTION MANAGER

In this section, you will learn how to configure a Backup Server (Hot Backup or Cold Backup) in the Denodo Solution Manager so the Solution Manager server will be able to automatically deploy the same metadata as in the production nodes in those backup servers that you have configured for the same environment.

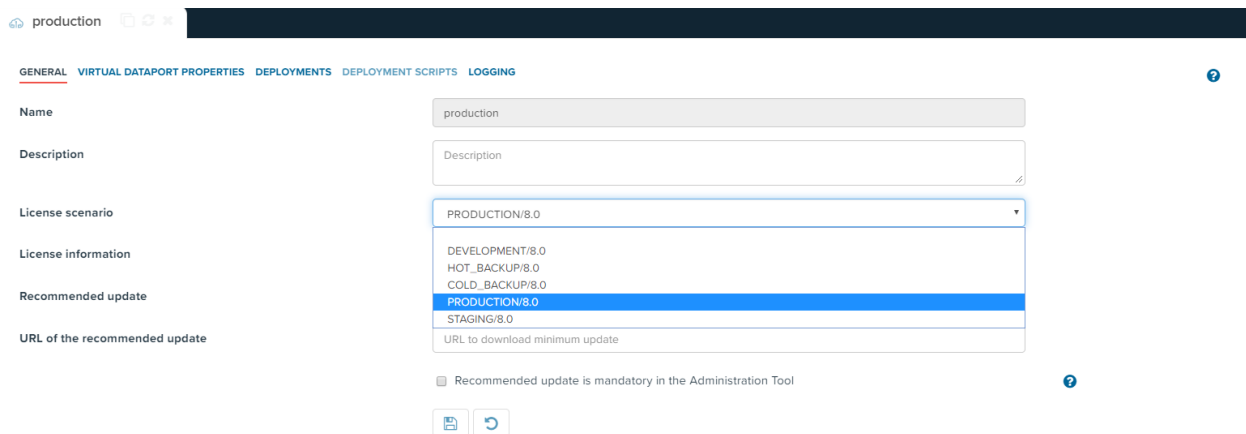
Important note: The steps described here are valid from Denodo Solution Manager 7.0 Update 20190312.

In the example, we are going to show how to create a Production environment together with a Hot Backup.

3.1 CREATING THE ENVIRONMENT

The first step is creating a new environment that will contain all the Production servers in our Denodo installation. Virtual DataPort, Scheduler, ITPilot or Data Catalog Servers. You can follow the section [Creating Environments](#) of the Solution Manager Administration Guide for more information regarding the different parameters.

In the License scenario, we will select the value to be used in this environment for the main servers, in this example, it will be PRODUCTION. Do not select BACKUP scenario at this point, it will be configured later.



The screenshot shows the configuration page for a new environment named "production". The interface includes a breadcrumb trail "production" and a navigation menu with tabs: GENERAL, VIRTUAL DATAPORT PROPERTIES, DEPLOYMENTS, DEPLOYMENT SCRIPTS, and LOGGING. The "GENERAL" tab is active. The configuration fields are as follows:

- Name:** production
- Description:** Description
- License scenario:** A dropdown menu with "PRODUCTION/8.0" selected.
- License information:** A list of options: DEVELOPMENT/8.0, HOT_BACKUP/8.0, COLD_BACKUP/8.0, PRODUCTION/8.0 (highlighted), and STAGING/8.0.
- Recommended update:** URL to download minimum update
- URL of the recommended update:** (empty field)

At the bottom, there is a checkbox labeled "Recommended update is mandatory in the Administration Tool" which is checked. There are also icons for help and refresh.

In order to enable deployments on the full environment, so all the servers will be updated at once, we need to enable the deployments in the Deployments tab for this environment. You can check the [Configuring Deployments](#) section for more information regarding the different parameters in this menu. In addition, you can check the

[Configuring Deployment Scripts](#) section in case you want to configure some scripts to be executed in the Load Balancer to enable/disable clusters or servers.



* production

GENERAL VIRTUAL DATAPORT PROPERTIES **DEPLOYMENTS** DEPLOYMENT SCRIPTS LOGGING

Enable deployments YES

Save backup in VCS when the deployment finishes

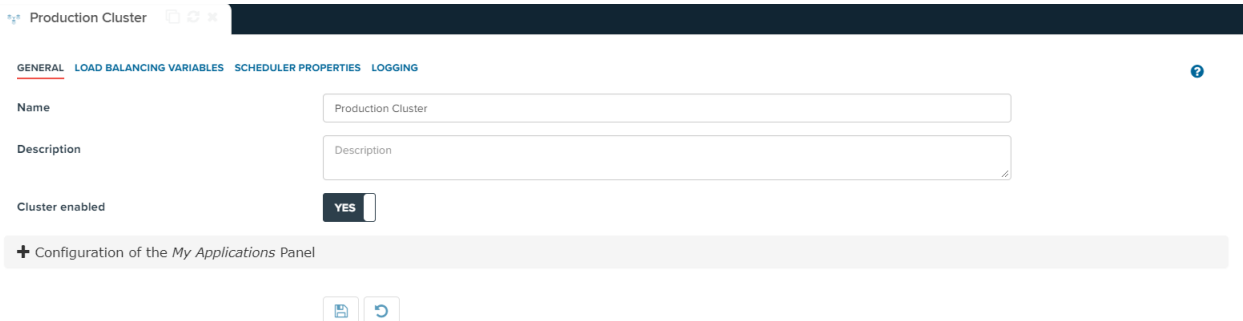
Rollback when the deployment fails in the first server

Deployment type ?

Number of clusters installed (disabled clusters and clusters without Virtual DataPort servers are ignored)

3.2 CREATING THE CLUSTER

Once we have created our production environment, we should proceed with the creation of the cluster. In our example, we will create just one cluster. You can check the [Creating clusters](#) section for more information about this process.



* Production Cluster

GENERAL **LOAD BALANCING VARIABLES** SCHEDULER PROPERTIES LOGGING ?

Name

Description

Cluster enabled YES

+ Configuration of the My Applications Panel

3.3 CREATING THE SERVERS

The final step is creating the servers in the cluster. We can create different servers depending on the Denodo Platform tools we have installed in our environment. In this example, we have created 1 production VDP server, 1 production Scheduler server and 1 production Data Catalog server. We are going to focus on the VDP server for this article.

In order to create the production VDP server, you can follow the information described in the [Creating Servers](#) section that explains the different configuration parameters.

VDP Production

GENERAL LOAD BALANCING VARIABLES LOGGING

Name: VDP Production

Description: Description

Host: production_vdp_hostname

Port: 9999

Type: Virtual DataPort

License scenario: Default PRODUCTION/8.0 - default

User: admin

Password:

Use Kerberos with user / password above

Authenticate with current user credentials for creating revisions

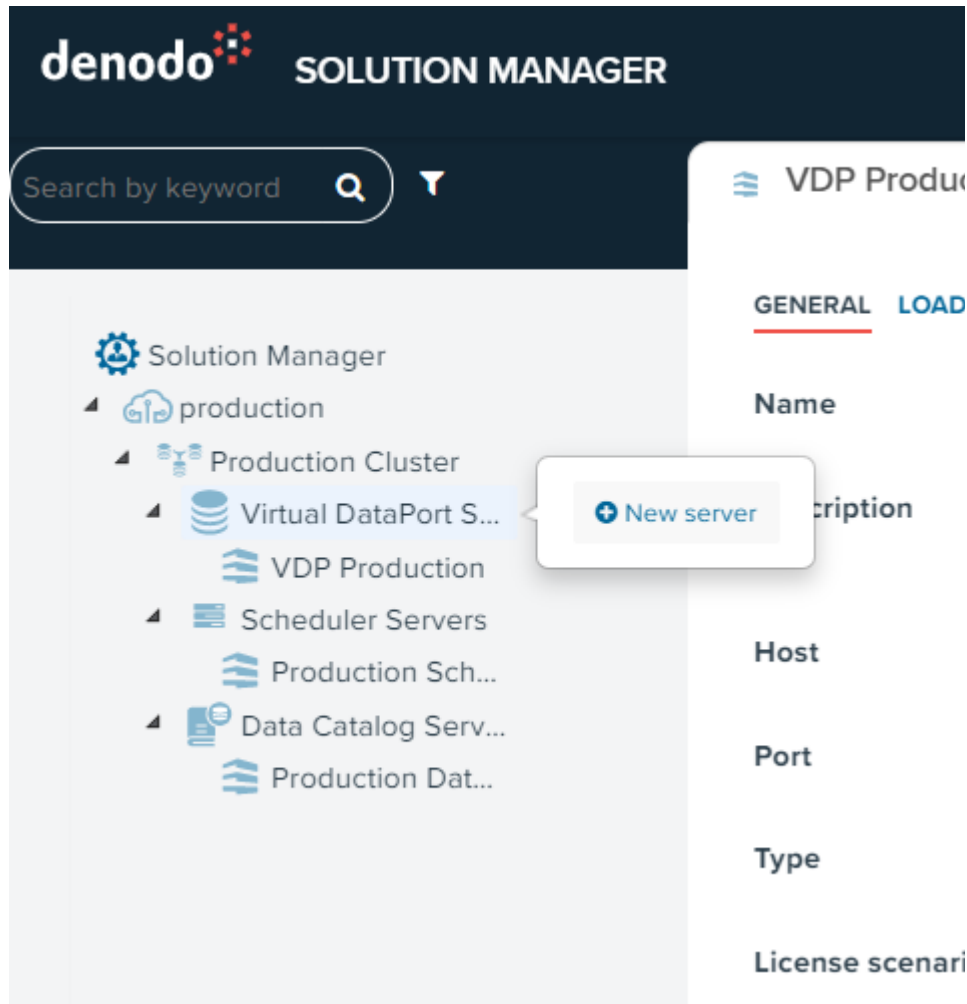
Server enabled

Save Refresh

Keep in mind that you should keep the Default License scenario value for those servers that will be the production one. As explained in the previous step, we have selected PRODUCTION for this environment so keeping the default value at this point will assign that scenario to these servers.

3.4 CREATING THE VDP BACKUP SERVER

Finally, we need to add a backup server in our cluster. In order to do this the first step is adding a new VDP server right-clicking on the Virtual DataPort Servers menu:



Enter the different details for this server. Check the [Creating Servers](#) section that explains the different parameters. Since this backup server will not use the default PRODUCTION value for the License scenario, we need to select a different one for this attribute. In this example, we have selected HOT_BACKUP/8.0.

* New Server

GENERAL

Name: VDP Production Hot Backup

Description: Description

Host: 192.168.0.18

Port: 9999

Type: Virtual DataPort

License scenario: Custom (dropdown menu open showing: HOT_BACKUP/8.0, COLD_BACKUP/8.0)

User: admin

Password:

Enter the latest details as the user, password and save the server.

denodo SOLUTION MANAGER

Environments Promotions Licenses Configuration Help

Search by keyword

VDP Production Hot Backup

GENERAL LOAD BALANCING VARIABLES LOGGING

Name: VDP Production Hot Backup

Description: Description

Host: 192.168.0.18

Port: 9999

Type: Virtual DataPort

License scenario: Custom (dropdown menu open showing: HOT_BACKUP/8.0)

User: admin

Password:

Use Kerberos with user / password above

Authenticate with current user credentials for creating revisions

Server enabled

3.5 PROMOTION PROCESS

Once we have configured our environment and cluster, the Solution Manager will allow creating Revisions and Deploying them.

Since we have added our backup server to the cluster, this server will be automatically updated by the Solution Manager when any revision is deployed so the metadata of all the servers will be updated. Check the [Deploying Revisions](#) section of the Solution Manager Administration Guide for more information regarding the deployments and the different [Deployment Paradigms](#) available in the Solution Manager.

Note: When using a Cold Backup, you need to temporarily start the server during the Promotion process to be able to update the metadata and then stop it once the Promotion has finished.

4 REFERENCES

Solution Manager Administration Guide: [Creating Environments](#)
Solution Manager Administration Guide: [Creating clusters](#)
Solution Manager Administration Guide: [Creating Servers](#)
Solution Manager Administration Guide: [Deploying Revisions](#)