



Veritas Implementation Guide

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EDB

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CONTENTS

1	‘Partner Information’	3
2	‘Solution Summary’	5
3	‘Configuring the Integration’	7
3.1	Prerequisites	7
3.2	Configuring Veritas NetBackup for PostgreSQL	7
3.3	Configuring EDB Postgres Advanced Server	8
4	‘Using Veritas NetBackup for PostgreSQL’	9
4.1	Performing Backups	9
4.2	Querying Backups	9
4.3	Performing Restores	9
4.4	Local Restore	10
4.5	Redirected Restore	10
5	‘Certification Environment’	11

EDB GlobalConnect Technology Partner Implementation Guide
Veritas NetBackup for PostgreSQL

‘PARTNER INFORMATION’

1	2
Partner Name	Veritas
Partner Product	NetBackup for PostgreSQL
Web Site	https://www.veritas.com/
Version & Platform	NetBackup for PostgreSQL 9.1: Linux, Windows
Product Description	NetBackup gives enterprise IT a simple and powerful way to ensure the integrity and availability of their data – from edge to core to cloud. NetBackup for PostgreSQL Agent extends the capabilities of NetBackup to include backup and restore of PostgreSQL databases.

‘SOLUTION SUMMARY’

NetBackup provides a non-disruptive way of validating your resiliency plan for assurance and compliance through automated recovery and rehearsal of business-critical applications. Moving data and spinning up applications when and where you need to without risking data loss requires business-level resiliency. Veritas NetBackup for PostgreSQL Agent extends the capabilities of NetBackup to include backup and restore of PostgreSQL databases. If a NetBackup environment is operational within an organization, then users can backup and restore EDB Postgres Advanced Server and EDB Postgres Extended Server with the help of Veritas NetBackup for PostgreSQL Agent.

‘CONFIGURING THE INTEGRATION’

Implementing Veritas NetBackup solution for backup/restore of PostgreSQL databases requires the following components:

- EDB Postgres Advanced Server.
- Veritas NetBackup Server.
- Veritas NetBackup Client.
- Veritas NetBackup Agent for PostgreSQL.

3.1 Prerequisites

- A running EDB Postgres Advanced Server.
- A running Veritas NetBackup Server.
- Veritas NetBackup Client installed on the EDB Postgres Advanced Server host.
- Veritas NetBackup PostgreSQL Agent installed on the EDB Postgres Advanced Server host.

Configuring Veritas NetBackup for PostgreSQL consists of configuring the following components:

- Veritas NetBackup Agent for PostgreSQL.
- PostgreSQL server.

The steps below show an example of how to configure Veritas NetBackup for PostgreSQL for EDB Postgres Advanced Server.

3.2 Configuring Veritas NetBackup for PostgreSQL

1. Log on to the NetBackup Administration Console:
 - a. Use the credentials for the **root** user
 - b. Select the hostname for the NetBackup Master Server you want to administer
2. Create a policy for EDB Postgres Advanced Server:

Note: Refer to the [Veritas NetBackup Administrator's Guide](#) for detailed information on policies.

- a. Click on **NetBackupManagement>Policies** , select the NetBackup server
- b. Right mouse click and select **NewPolicy**

- c. Enter the policy name in the **AddNewPolicy** dialog box and click **OK**
- d. Select the **Clients** tab e. Click on **New** f. Enter the NetBackup client name in the **AddClient** dialog box, and click **OK**
- g. Select the **Attributes** tab h. Select **DataStore** for **Policytype**
- h. Select **Polycstorage** from available values
- i. Set any other parameters you require for your policy and then click **OK**
3. On the NetBackup Client, update the agent configuration file `/usr/NBPostgreSQLAgent/nbpgsql.conf` to set the necessary parameters to make the agent work successfully with EDB Postgres Advanced Server: `edb_notranlate_0`

Note: Value of **PGSQL_LIB_INSTALL_PATH** will be dependent on the version of EDB Postgres Advanced Server installed. Values of **MASTER_SERVER_NAME** and **POLICY_NAME** parameters must match the names of your NetBackup Master Server and DataStore Policy respectively.

In the sample configuration file above, the values for **DB_USER** , **DB_PORT** , **DB_INSTANCE_NAME** , and **PGSQL_LIB_INSTALL_PATH** have been substituted for EDB Postgres Advanced Server as the default values are for Postgres. Refer to the [Veritas NetBackup for PostgreSQL Administrator's Guide](#) for detailed description of the parameters.

3.3 Configuring EDB Postgres Advanced Server

Set up WAL archiving on the EDB Postgres Advanced Server server by using the steps below. WAL archiving prepares Postgresql/EDB Postgres Advanced Server database servers for backup/recovery operations and is a precondition for any backup/recovery tool to work with the database server.

1. Create a writeable `<archivedir>` directory at your desired location.
2. Set the required parameters in the `postgresql.conf` file to turn on WAL archiving: `edb_notranlate_1`

Note: Replace `<archivedir>` in the `archive_command` parameter with the location of the directory created in Step 1.

3. Restart the PostgreSQL server.

Refer to the [Veritas NetBackup for PostgreSQL Administrator's Guide](#) for detailed information on how to configure EDB Postgres Advanced Server for Veritas NetBackup Agent for PostgreSQL.

‘USING VERITAS NETBACKUP FOR POSTGRESQL’

Common backup/restore operations for PostgreSQL databases using Veritas NetBackup for PostgreSQL are:

- Performing backups - takes backup of the database and stores it in a predetermined location.
- Querying backups - lists available database backups.
- Performing restores - restores the database from a backup previously taken: - Local restore - database files are restored to the same host as the client. - Redirected restore - database files are restored to a different host than the client.

4.1 Performing Backups

To take a backup of the database, enter the command on the NetBackup Client:

```
/usr/NBPostgreSQLAgent/nbpgsql -o backup
```

4.2 Querying Backups

To list available database backups, enter the command on the NetBackup Client:

```
/usr/NBPostgreSQLAgent/nbpgsql -o query
```

4.3 Performing Restores

Database restores can be performed in the following two scenarios:

- Local Restore.
- Redirected Restore.

4.4 Local Restore

In this scenario, the database files are restored on the original (source) database server host (default option).

To perform a local restore, use the steps below:

1. Stop the database server.
2. Create the target directory to store the database files to be used for the restore operation.
3. Determine the database backup id you want to use for the restore by querying available backups:

```
/usr/NBPostgreSQLAgent/nbpgsql -o query
```

4. Restore the database files to the target directory:

```
/usr/NBPostgreSQLAgent/nbpgsql -o restore -t <target-directory> -id <db-backup-id>
```

5. Once the restore operation is completed, replace the data directory (PGDATA) with the contents of the target directory.
6. Set the `restore_command` parameter in the `postgresql.conf` file: `edb_notranlate_1`
7. Start the PostgreSQL server.

4.5 Redirected Restore

In this scenario, the database files are restored on a (target) database server host which is different from the original (source) database server.

To perform a redirected restore, use the steps below:

1. Stop the database server on the target host.
2. Create the target directory on the target host to store the database files to be used for the restore operation.
3. Determine the database backup id you want to use for the restore by querying available backups on the source host:

```
/usr/NBPostgreSQLAgent/nbpgsql -o query -C <source-db-server-host>
```

4. Restore the database files to the target directory on the target host:

```
/usr/NBPostgreSQLAgent/nbpgsql -o restore -t <target-directory> -id <db-backup-id> -C  
<source-db-server-host>
```

5. Once the restore operation is completed, replace the data directory PGDATA on the target host with the contents of the target directory.
6. Set the `restore_command` parameter in the `postgresql.conf` file on the target host: `edb_notranlate_1`
7. Start the PostgreSQL server on the target host.

‘CERTIFICATION ENVIRONMENT’

1	2
Certification Test Date	December 28, 2021
EDB Postgres Advanced Server	11,12,13,14
Veritas NetBackup for PostgreSQL	9.1
Veritas NetBackup Server	9.1
Veritas NetBackup Client	9.1