Greenplum
The Data Computing Division of EMC

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Welcome to PowerExchange for Greenplum 3.0.1.0

PowerExchange for Greenplum integrates Informatica's PowerCenter with Greenplum Database by leveraging the bulk loading capabilities of the Greenplum Database's `gpload` utility. The Integration Service invokes the `gpload` utility to load data into Greenplum targets. Greenplum targets represent tables in the Greenplum Database system.

See the following sections for more information about this release.

- New Features
- Resolved Issues in PowerExchange for Greenplum 3.0.1.0
- Installing PowerExchange for Greenplum 3.0.1.0
- Upgrading to PowerExchange for Greenplum 3.0.1.0
- PowerExchange for Greenplum 3.0.1.0 Compatibility Information
- PowerExchange for Greenplum Documentation

New Features

PowerExchange for Greenplum 3.0.1.0 includes the following new feature:

Support for Informatica PowerCenter 9.0.1 and 9.1

Both the Red Hat Enterprise Linux 5 (64 bit) and the Windows (64-bit) version of PowerExchange now include support for Informatica PowerCenter 9.0.1 and 9.1.

Resolved Issues in PowerExchange for Greenplum 3.0.1.0

This section lists customer reported issues that are now resolved in 3.0.1.0:

Table A.1 Resolved Issues in 3.0.1.0

Issue Number	Category	Description
208	Performance	**PowerExchange for Windows Experiences Performance Issues** Under certain conditions, PowerExchange running on Windows-based platforms could experience sub-optimal performance. This issue was caused by a limitation in the way the Windows operating system handles Named Pipes. To resolve the performance issue, a new "Window Pipe Buffer Size" configuration option has been added to the PowerExchange user interface (in the Target Properties within the Mapping Tab).

Installing PowerExchange for Greenplum 3.0.1.0

Pre-Installation Tasks

See Greenplum Database documentation for information about installing and configuring Greenplum Database, and connectivity and loader packages. Before you install PowerExchange for Greenplum, complete the following tasks:

- Install or upgrade PowerCenter (see the PowerExchange for Greenplum 3.0.1.0 Compatibility Information section).

- Deploy Greenplum Database as a separate installation from PowerCenter (see the PowerExchange for Greenplum 3.0.1.0 Compatibility Information section).

- Install the connectivity package (`greenplum-connectivity-<version>-build-<####>-Win2k3-x86_32.msi`) to set up the database client libraries on the computer running the PowerCenter Client. By installing the connectivity package, you install the Greenplum ODBC driver to connect to the Greenplum database.

- Install the Greenplum loaders package on the computer configured to run the PowerCenter Integration Service. This package contains the `gpload` utility.

Table A.2 Loader Packages

OS	Loader Package
Windows x86 64-bit	`greenplum-loaders-<version>-build-<####>-WinXP-x86_32.msi`
RHEL 5 64-bit	`greenplum-loaders-<version>-build-<####>-RHEL5-x86.bin`

- Verify that the `gpload` utility can connect to Greenplum Database. For more information about installing and configuring the `gpload` utility, see the *Greenplum Database Administrator Guide*.

- If not already installed on the operating system, install Python 2.4.4 or later.

- Verify that the following environment variables are set after you install the loaders package:

Table A.3 Environment Variables

Environment Variable	Description
PATH	• Specify the location of the gpfdist utility. For example: `$GPHOME_LOADERS\bin` • Specify the location where Python is installed. For example: `c:\Python##` (Windows) or `/usr/bin/python` (RHEL)
GPHOME_LOADERS	Set one level up from the location where the gpload utility is installed. For example, if the gpload utility is installed in `<GPLoad Installation Directory>/bin`, set `GPHOME_LOADERS` to `<GPLoad Installation Directory>`.
PYTHONPATH	Set to the location of the pyyaml Python module. For example: `$GPHOME_LOADERS\bin\lib`

Restart both the PowerCenter Repository Server and the Integration Server after you update the environment variables. Note that you might also have to restart the computer so the PowerCenter Services reads the updated values for the environment variables.

● Verify that you have read, write, and execute permissions on the following directories:

<PowerCenter Installation Directory>/server/bin

<PowerCenter Installation Directory>/server/bin/Plugin

Installing and Configuring PowerExchange for Greenplum

To install and configure PowerExchange for Greenplum, do the following steps:
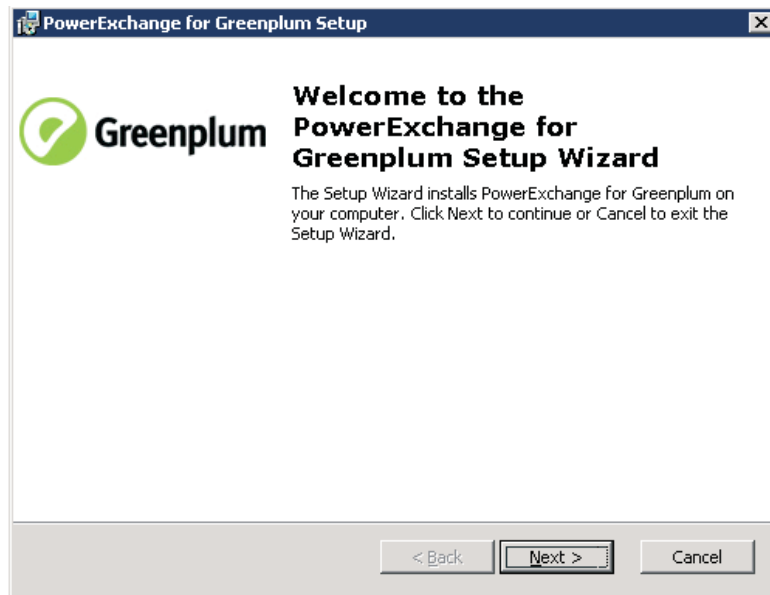
1. Install PowerExchange for Greenplum on Windows or Installing PowerExchange for Greenplum on Red Hat Enteprise Linux 5.

2. Register the Plug-in

3. Establish ODBC Connectivity

Install PowerExchange for Greenplum on Windows

Installing PowerExchange for Greenplum allows you to access Greenplum metadata that is stored in the repository and run sessions against a Greenplum database.

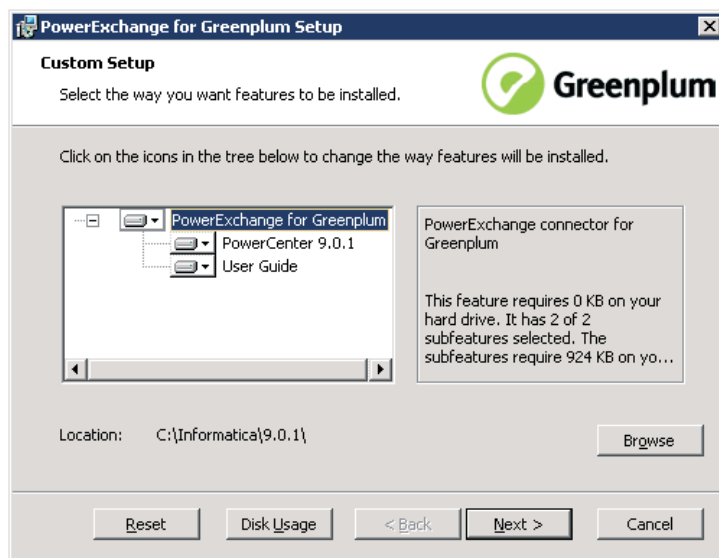1. Double-click `greenplum-pwx-<version>-build-<####>-Win2k3-x86_64.msi`.

   The PowerExchange for Greenplum Setup Wizard appears. The installer automatically detects the latest version of PowerCenter installed and retrieves the directory path where it is installed.
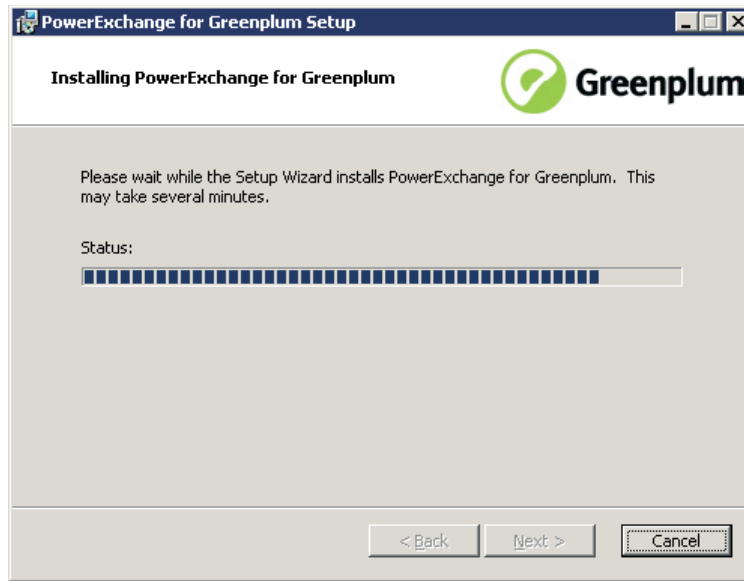

2. Click **Next**.

3. To accept the end-user license agreement, click **I Agree.**
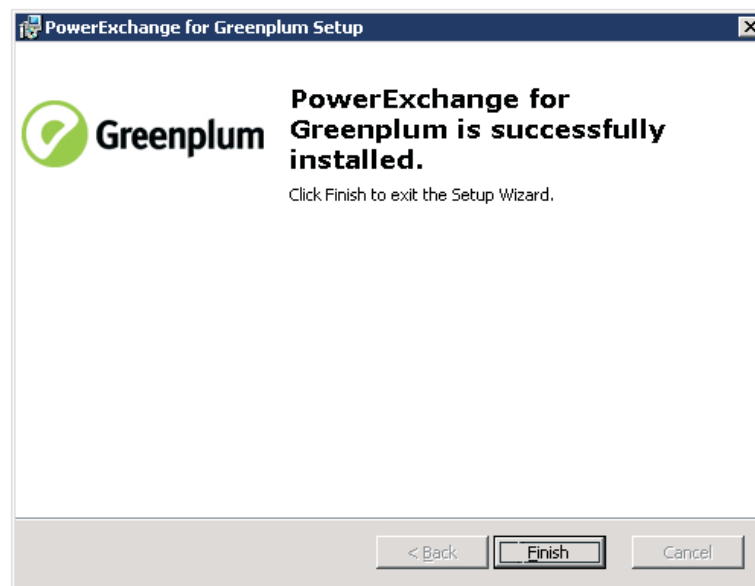
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4. Click **Next** to use the default options.

5. (optional) Click **Browse** to select a different PowerCenter installation location.

6. (optional) Click **Reset** to restore the default settings.

7. (optional) Click **Disk Usage** to verify that you have sufficient disk space to install the features that you selected.

8. Click **Next**.

9. Click **Install**.
   The installer displays the progress of the installation.

10. Click **Finish**.

11. Verify that the installer copied the following files to the system on which you installed PowerExchange for Greenplum:

Table A.4 Installed Files (Windows)

File Name	Location
pmgpwriter.dll	<PowerCenter Installation Directory>\server\bin
GreenplumConnector.xml	<PowerCenter Installation Directory>\server\bin \Plugin
PWXGreenplum_UserGuide.pdf	%userprofile%\Desktop

Installing PowerExchange for Greenplum on Red Hat Enteprise Linux 5

1. Enter the following command in a command line shell:

   ```
   ./greenplum-loaders-<version>-build-<####>-RHEL5-ix86.bin
   ```

> **Note:** You must have "execute" permissions on the installer script.

2. Enter `yes` or `y` to accept the end-user license agreement.

3. Enter the absolute path for the PowerCenter installation directory.

4. Enter `yes` or `y` to confirm the path.

   If you enter an invalid path, the installer prompts you to enter a valid PowerCenter installation path. If the installer detects a previous installation of PowerExchange for Greenplum, the installer prompts you to either overwrite or keep the previous version.

   The installer detects the PowerCenter version and copies the files to the PowerCenter installation directory.

5. Verify that the installer copies the following files to the system on which you installed PowerExchange for Greenplum:

Table A.5   Installed Files (Linux)

File Name	Location
pmgpwriter.dll	<PowerCenter Installation Directory>/server/bin
GreenplumConnector.xml	<PowerCenter Installation Directory>/server/bin /Plugin
PWXGreenplum_UserGuide.pdf	<PowerCenter Installation Directory>/server/bin /Plugin

Register the Plug-in

After you install PowerExchange for Greenplum, register the installed plug-in with the PowerCenter Repository. A plug-in is an XML file that defines the functionality of PowerExchange for Greenplum. When you register the plug-in, you add the functionality of the plug-in to the repository.

The plug-in file for PowerExchange for Greenplum is called GreenplumConnector.xml. When you install PowerExchange for Greenplum, the installer copies the plug-in XML file to the following directory:

```
<PowerCenter Installation Directory>\server\bin\Plugin
```

This GreenplumConnector.xml file must be copied to the same node where your PowerCenter Repository service is running.

You must have at least local administrator permissions to register the plug-in. When you register the plug-in, the repository must be running in "exclusive" mode. When you run the repository in exclusive mode, only one user can access the repository.

To register the plug-in, use the PowerCenter Administration Console or the `RegisterPlugin` command of the `pmrep` command-line utility. For more information about the `pmrep RegisterPlugin` command, see the *PowerCenter Command Reference*. For more information about installing the plug-in using the Administration Console, see the *PowerCenter Administrator Guide*.

Establish ODBC Connectivity

PowerCenter uses ODBC to connect to Greenplum to import Greenplum metadata. Greenplum target definitions represent metadata for Greenplum tables.

Create an ODBC data source on each PowerCenter Client machine where you want to access Greenplum metadata. Use the ODBC Data Source Administrator to create and configure a data source. A data source contains information to access the database. When you create a data source, use the Greenplum ODBC driver that the `greenplum-connectivity-<version>-build-<####>-Win2k3-x86_32.msi` connectivity package installed.

You specify an ODBC data source in the PowerCenter Designer when you import Greenplum tables as target definitions.
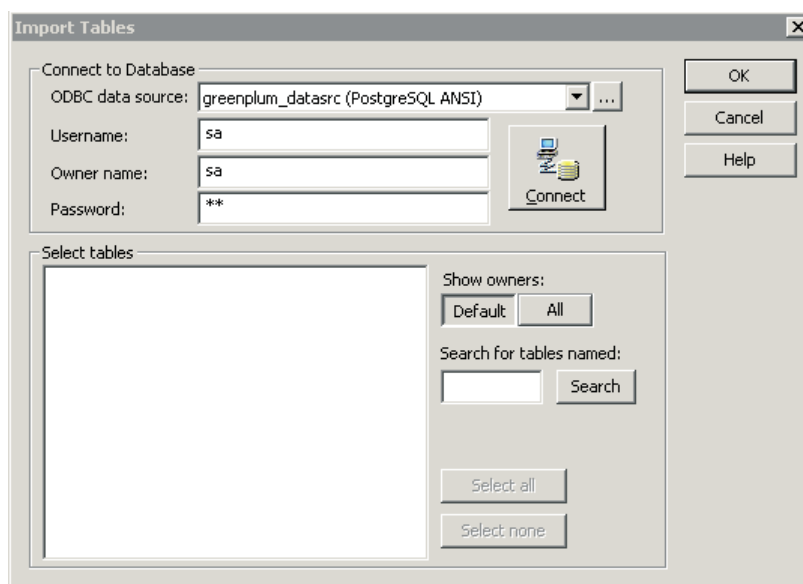
To specify an ODBC data source in the PowerCenter Designer, do the following steps:

1. In the PowerCenter Designer, connect to the repository from the Repository Navigator.

> **Note:** The options in the Tools menu are unavailable if you do not connect to a repository.

2. Click Tools > **Target Designer**.

3. Click Targets > **Import from Database**.
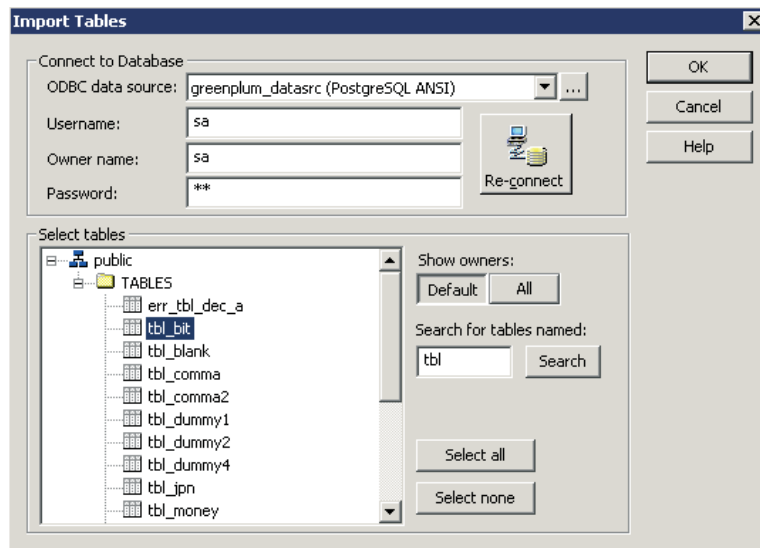
    The Import Tables dialog box appears.

4. To connect to the Greenplum database, select the ODBC data source that you created in the ODBC Data Source Administrator.

5. (optional) To create or modify the ODBC data source, click **Browse**.

6. Enter the user name and password to connect to the Greenplum database.

Importing Target Definitions

To import a Greenplum table as a target definition, do the following steps:

1. In the PowerCenter Designer, click Tools > **Target Designer**.

2. Click Targets > **Import from Database**.

The Import Tables dialog box appears.

3. Select the ODBC data source that you created under Administrative Tools > **Data Sources (ODBC)**.

4. Enter the user name and the password to connect to the Greenplum database.

If you are not the owner of the table that you want to import, specify the owner name.

5. Click **Connect**.

6. In the Select tables area, expand the schema nodes to list the tables in the Greenplum database.

7. Select the desired table to import the table schema as a target definition.

8. Click **OK**.

The target definition appears in the Target Designer.

For more information about importing Greenplum tables as target definitions, see "Working with Targets", in the *PowerCenter Designer Guide*.

Upgrading to PowerExchange for Greenplum 3.0.1.0

To upgrade to PowerExchange 3.0.1.0, you must:

1. Completely uninstall the existing version of PowerExchange on the system.

2. Install PowerExchange 3.0.1.0 as described in Installing PowerExchange for Greenplum 3.0.1.0.

See the "PowerExchange for Greenplum 3.0.1.0 Compatibility Information" section below to view a list of supported components.

Troubleshooting a Failed Upgrade

For technical support, go to Powerlink and select **Support**. On the Support page, you will see several options, including one for making a service request. Note that to open a service request, you must have a valid support agreement. Please contact your EMC sales representative for details about obtaining a valid support agreement or with questions about your account.

PowerExchange for Greenplum 3.0.1.0 Compatibility Information

PowerExchange 3.0.1.0 is compatible with the following versions of Greenplum Database and Informatica PowerCenter:

Table A.6 PowerExchange 3.0.1.0 Compatibility Information

Operating System	Greenplum Database Version	Greenplum Database Loader Version [1]	PowerCenter Version
Windows x86 64-bit	4.0.5.1 or above	4.0.5.1 or above	9.0.1 and 9.1
	4.1.1.1 or above	4.1.1.2 or above	9.0.1 and 9.1
Red Hat Enterprise Linux 5 64-bit	4.0.5.1 or above	4.0.5.1 or above	9.0.1 and 9.1
	4.1.1.1 or above	4.1.1.2 or above	9.0.1 and 9.1

1. See the "Client Compatibility Version" section of the *Greenplum Database Release Notes* for additional information about Greenplum Database loader and client compatibility.

PowerExchange for Greenplum Documentation

The *PowerExchange for Greenplum User Guide* (`PWXGreenplum_UserGuide.pdf`) is installed in the `user_profile\Desktop` folder.

The following Greenplum Database documentation is available on Powerlink (powerlink.emc.com). Greenplum documentation is provided in PDF format.

Table 2 Additional Greenplum Database Documentation

Title	Part Number	Revision[1]
4.1		
Greenplum Database 4.1 Administrator Guide	300-012-428	A02
Greenplum Database 4.1 Installation Guide	300-012-429	A02
Greenplum Performance Monitor 4.1 Administrator Guide	300-012-430	A02
4.0		
Greenplum Database 4.0 Administrator Guide	300-011-538	A03
Greenplum Database 4.0 Installation Guide	300-011-541	A03
Greenplum Performance Monitor 4.0 Administrator Guide	300-011-542	A02

1. Latest revision available at time of publishing.