

Precise™ Business Storage Optimizer

Installation Guide

Version 9.7.0

PRECISE™

Precise™ Business Storage Optimizer Installation Guide v9.7.0

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Global Headquarters

Brookhollow Central III
2950 North Loop Freeway West, Suite 700
Houston, Texas 77092
Phone: +1-877-693-1886
Fax: +1-650-898-1666

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Precise Business Storage Optimizer

This section includes the following topics:

- Introduction
- Prerequisites for the Precise Business Storage Optimizer Installation
- Unsupported platforms and configurations
- Quick installation and configuration
- Installation and configuration of Precise Business Storage Optimizer
- Completing or editing your configuration settings
- Uninstallation

Introduction

The Precise Business Storage Optimizer Installer automates the installation and configuration of the Precise Business Storage Optimizer. This guide includes a quick installation and configuration section if you want to be up and running as quickly as possible and a detailed installation and configuration section explaining each of the Installer screens and the actions available in each.

The Precise Business Storage Optimizer can be found in the `\Business Storage Optimizer` folder of the Precise v9.0 download or DVD.

NOTE Before installing the Precise Business Storage Optimizer, check if there is a newer version of the product on the Precise Customer Portal (<http://www.idera.com/support/productsupport>). If this is the case, use the latest version.

NOTE During the installation of the product you will be asked to provide the credentials for your Precise application. The credentials are for the Admin user. For information on the Precise Business Storage Optimizer user, see the *Precise Business Storage Optimizer User Guide*.

NOTE You need to complete the full installation and configuration process otherwise the Precise Business Storage Optimizer will not work.

NOTE At the end of the installation and configuration process, the shortcuts to launch Precise Business Storage Optimizer and the Configuration Wizard are created automatically on the desktop.

Prerequisites for the Precise Business Storage Optimizer Installation

Precise Business Storage Optimizer can work with Precise version 9.0, Precise version 8.7, and Precise version 8.5. If you are working with Precise v8.5 the following updates need to be installed:

Table 1-1 Required Precise v8.5 updates

Type	Name
Update	BU_IN_850_000
Update	UI_UIFP_850_P000_HOT_FIX_005 (to be installed after update BU_IN_850_000 has been installed)
Update	OR_ORCOL_850_010 (to be installed after update BU_IN_850_000 has been installed)

The following are the other prerequisites for the Precise Business Storage Optimizer Installation on a Precise v9.0, v8.7, and v8.5 application:

- Internet Explorer 7 or 8.
- Precise for Oracle or Precise for SQL Server with Precise for Database & Storage monitoring the database/instance.

The following are Information gathering prerequisites for the Configuration phase:

- Precise connection parameters:
 - FocalPoint

NOTE If the Precise application is a federated application, the information should be taken from the Main Framework Node.

 - FocalPoint Network Port
 - Precise User Name (default "admin")
 - Precise Password (default "admin")
- Location of the Precise installation folder

If you want to see the Object size in Oracle instances, perform the following additional steps:

1. Open AdminPoint of your Precise application.
2. Click Warehouse>Processes.
3. Select Collect Schema Changes (for Oracle).

NOTE If the Precise application is a federated application, the information should be taken from the Main Framework Node.

4. Click Scheduling.
5. Mark Run the process in PMDB.
6. Leave the default schedule.
7. Mark the relevant Oracle instances and click **OK**.

NOTE This process retrieves statistical information about the analyzed Database objects, including the Object size.

Unsupported platforms and configurations

The Precise Business Storage Optimizer installation does not support the following platforms:

- Windows 2008
- Windows 7

Precise Business Storage Optimizer using a Precise application (v9.0, v8.7, and v8.5) with Precise for SQL Server and PMDB based on MS-SQL Server 2000 is not supported.

Quick installation and configuration

Follow these steps to quickly install and configure Precise Business Storage Optimizer

1. Double-click **Setup.exe**.
2. On the Welcome screen, click **Next**.
3. On the Prerequisite screen, verify the prerequisites and click **Next**.
4. On the License Agreement screen, select **I accept the terms of the license agreement** and click **Next**.
5. On the Port Selection screen, enter respectively the GUI port and Shutdown port numbers and click **Next**.
6. On the Folder Selection screen, click **Next**.
7. Click **Next** to begin the installation.

Installation and configuration of Precise Business Storage Optimizer

8. When the installation is complete, click **Next** to begin the configuration.
9. On the Precise Connection screen, enter the Precise connection parameters (**Server, FocalPoint Port, Precise User Name, and Precise Password**), enter the Precise root folder, and click **Next**.
10. On the Setting Parameters screen, indicate that you want to insert the parameters and click **Next**.
11. On the Connectivity Parameters screen, select the Monitored database technology, the Precise application, and the Precise Tier and click **Next**.
12. On the Device Cost Parameters screen, select the currency, enter the cost per 1 GB of storage for each device type, and click **Next**.
13. On the Ranking Thresholds Parameters screen, enter the recommended ranking thresholds for improvements and deterioration or use the defaults and click **Next**.
14. The configuration is complete. Click **Finish**.

About changing the time zone

The time zone can be changed after the product has been started. To change the time zone

1. In the Precise Business Storage Optimizer, double click **My Account** (in the top right corner of the screen).
2. Change the time zone.
3. Click **Save**.
4. Click **Back** on the right top corner of the window.
5. Sign out from the product and minimize the window.
6. Go to Start>Settings>Control Panel>Administrative tools>Services.
7. Restart the Precise Business Storage Optimizer process, close the windows and restart Precise Business Storage Optimizer.

Installation and configuration of Precise Business Storage Optimizer

There are two parts to the Installer wizard: The first installs Precise Business Storage Optimizer and the second performs the system configuration.

NOTE The following sections assume you have already completed all the prerequisite steps outlined in the section Prerequisites for the Precise Business Storage Optimizer Installation.

This section guides you through each of the installation and configuration screens. Installation:

- Welcome
- Prerequisites
- License Agreement
- Port Selection
- Folder Selection
- Installation Details
- File Extraction
- Installation Complete

Configuration:

- Precise Connection
- Setting Parameters
- Connectivity Parameters
- Device Cost Parameters
- Ranking Threshold Parameters
- Configuration Complete

Welcome

The Welcome screen informs you that you are about to install Precise Business Storage Optimizer on your computer and displays the prerequisites for that installation. The following actions can be performed:

Table 1-2 Actions table

Action	Result
Next button	Go to the next screen.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

Prerequisites

The Prerequisites screen provides you with the following:

- A general note regarding the requirements
- A request to click the Help button

This will give you a complete overview of the prerequisites and information that needs to be gathered before you begin the Precise Business Storage Optimizer installation and configuration.

Precise Business Storage Optimizer can work with Precise version 9.x, Precise version 8.7, and Precise version 8.5.

If you are working with Precise v8.5 the following updates need to be installed:

Table 1-3 Required Precise v8.5 updates

Type	Name
Update	BU_IN_850_000
Update	UI_UIFP_850_P000_HOT_FIX_005 (to be installed after update BU_IN_850_000 has been installed)
Update	OR_ORCOL_850_010 (to be installed after update BU_IN_850_000 has been installed)

The following are the other prerequisites for the Precise Business Storage Optimizer Installation on a Precise v9.0, v8.7, and v8.5 application:

- Internet Explorer 7 or 8.
- Precise for Oracle or Precise for SQL Server with Precise for Database & Storage monitoring the database/instance.

The following are Information gathering prerequisites for the Configuration phase:

- Precise connection parameters:
 - FocalPoint
-
- NOTE If the Precise application is a federated application, the information should be taken from the Main Framework Node.
-
- FocalPoint Network Port
 - Precise User Name (default "admin")
 - Precise Password (default "admin")
 - Location of the Precise installation folder

Table 1-4 Actions table

Action	Result
Help button	Provides context sensitive help.
Next button	Go to the next screen.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

If you want to see the Object size in Oracle instances, perform the following additional steps

1. Open AdminPoint of your Precise application.
2. Click Warehouse>Processes.
3. Select Collect Schema Changes (for Oracle).

NOTE By default this Warehouse process is grayed-out.

4. Click Scheduling.
5. Mark Run the process in PMDB.
6. Leave the default schedule.
7. Mark the relevant Oracle instances and click **OK**.

NOTE This process retrieves statistical information about the analyzed Database objects, including the Object size.

License Agreement

Displays the Precise Business Storage Optimizer license agreement.

Table 1-5 Actions table

Action	Result
Print button	Prints the license agreement.
I accept button	Accept license agreement. Automatically takes you to the next screen.
I do not accept button	You will be able to either click Back, moving to the previous screen, or click Cancel to abort the installation.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

Port Selection

This screen lets you enter the GUI port and Shutdown port numbers.

Table 1-6 Actions table

Action	Result
GUI Port field	Enter available GUI port number. This is the HTTP port, the port where your server listens for HTTP requests. This is the port you connect to from your Web browser.
Shutdown Port field	Enter available Shutdown port number. This is the port to which the shutdown script sends a message when you want the Tomcat server to shut down.
Help button	Provides context sensitive help.
Back button	Return to the previous screen.
Next button	Go to the next screen.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

Folder Selection

This screen lets you select the folder where the installation files will be placed.

Table 1-7 Actions table

Action	Result
Change button	Opens the My Computer folder so you can select an installation folder.
Back button	Return to the previous screen.
Next button	Go to the next screen.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

Installation Details

This screen displays details of the installation settings. If you agree with the settings you can click Install to begin the installation.

Table 1-8 Actions table

Action	Result
Back button	Return to the previous screen.
Next button	Accepts the current settings and begins the installation.
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

File Extraction

This screen displays a progress bar indicating the status of the installation.

Table 1-9 Actions table

Action	Result
Cancel button	Cancel the installation. You will have to start the installation from the beginning.

Installation Complete

This screen informs you that the installation was successful. Click **Next** to begin the configuration phase.

Table 1-10 Actions table

Action	Result
Next button	Go to the next screen.

Precise Connection

This screen lets you enter the Precise connection parameters.

Table 1-11 Actions table

Action	Result
Server field	Enter the FocalPoint name.
FocalPoint Port field	Enter the FocalPoint Port number (See "How to identify the FocalPoint port number" on page 13.).
User Name field	Enter the Precise user name (default "admin").
Password field	Enter the Precise user password (default "admin")
Import from the Precise root folder radio button	You select the root installation folder of the existing Precise installation you want to connect to.
Import Manually radio button	Copy the "crypt" folder from the <code><precise_root>\infra\listener\etc</code> folder to Precise Business Storage Optimizer (link to the Precise Business Storage Optimizer folder).
Help button	Go to the context sensitive help.
Next button	Go to the next screen.

Table 1-11 Actions table

Action	Result
Close button	A warning message is displayed. If you confirm the cancellation, the Configuration wizard is closed and your previous changes are saved. Next time you start the Configuration wizard, you will see the changes you have already made and can click Next until you advance to where you left off.

Note: If data is not entered in all of the fields a message is displayed reminding you to complete all fields.

How to identify the FocalPoint port number

Perform the following step to identify the FocalPoint port number

- 1 On the Precise FocalPoint, open the Precise root installation folder.
- 2 Go to the Infra folder.
- 3 View the `setup.xml` file.
- 4 Search for the `<N>` and `</N>` tags and note the number in between these tag (this is the FocalPoint port number).

Setting Parameters

This screen lets you select whether you will add the Connectivity, Device Cost, and Ranking Threshold parameters in the following steps or leave this part of the configuration for when you start the Precise Business Storage Optimizer.

Table 1-12 Actions table

Action	Result
Insert the required parameters radio button	You select this option and continue with Next to the following screen.
Skip the Parameter Setting phase radio button	You select this option (and thus decide to change the settings in the Settings page afterwards) and continue with Next to the Configuration Complete screen. The system will use the default settings.
Help button	Provides context sensitive help.
Back button	Return to the previous screen.
Next button	Go to the next screen.
Close button	A warning message is displayed. If you confirm the cancellation, the Configuration wizard is closed and your previous changes are saved. Next time you start the Configuration wizard, you will see the changes you have already made and can click Next until you advance to where you left off.

Connectivity Parameters

This screen lets you select the Connectivity parameters for Precise Business Storage Optimizer.

Table 1-13 Actions table

Actions	Result
Monitored database technology field	Select either Oracle or MS-SQL.
Precise application	Select the Precise application from the drop-down menu.

Table 1-13 Actions table

Actions	Result
Precise Tier	Select the Precise Tier from the drop-down menu.
Help button	Provides context sensitive help.
Back button	Return to the previous screen.
Next button	Go to the next screen.
Close button	A warning message is displayed. If you confirm the cancellation, the Configuration wizard is closed and your previous changes are saved. Next time you start the Configuration wizard, you will see the changes you have already made and can click Next until you advance to where you left off.

Device Cost Parameters

This screen lets you enter the cost per 1 GB of storage for each device type which will be used to calculate the improvement for different scenarios.

Note: If one of the values is zero (0), then the recommended ranking will only be based on the performance information.

Table 1-14 Action table

Action	Result
Currency	Select the appropriate currency.
Cost of 1GB on EFD	Enter the cost of 1GB of storage on an EFD device.
Cost of 1GB on FC	Enter the cost of 1GB of storage on an FC device.
Cost of 1GB on SATA	Enter the cost of 1GB of storage on a SATA device.
Help button	Provides context sensitive help.
Back button	Return to the previous screen.
Next button	Go to the next screen.
Close button	A warning message is displayed. If you confirm the cancellation, the Configuration wizard is closed and your previous changes are saved. Next time you start the Configuration wizard, you will see the changes you have already made and can click Next until you advance to where you left off.

Ranking Threshold Parameters

This screen lets you enter the recommended Ranking Threshold parameters for improvement and deterioration. The following is a short example of how the Ranking Thresholds are used applying the default parameters:

Table 1-15 Performance improvement

Level	Value
High performance improvements	60%
Medium performance improvements	45%
Low performance improvements	30%

Table 1-16 Performance deterioration

Level	Value
Low performance deterioration	6%
Medium performance deterioration	12%
High performance deterioration	20%

The following are examples based on the default thresholds in the above tables.

If the performance of a statement on an FC device is 1 hour and you simulate this statement on an EFD device, the performance improvement can be calculated. Based on the calculated value, the performance improvement can be for example 47%. This means that the performance improvement is medium. If you simulate this statement on a SATA device, there can be a deterioration of the performance of 7% and this is than low. This level of deterioration can be acceptable.

If the performance of a statement on an FC device is 1 hour and you simulate this statement on an EFD device, the performance improvement can be calculated. Based on the calculated value, the performance improvement can be for example 20%. This means that the performance improvement is lower than the set threshold, which means that the optimizer will not recommend to move the entity to an EFD device.

The fields in the Ranking Threshold Parameter screen are as follows:

Table 1-17 Action table

Action	Result
High performance improvement	Enter the recommender ranking threshold parameter in percentage for a high performance improvement. Note: When the default value is 60 and the calculated value is 60 or higher, the performance improvement is high.
Medium performance improvement	Enter the recommender ranking threshold parameter in percentage for a medium performance improvement. Note: When the default value is 45 and the calculated value is between 45 and 60, the performance improvement is medium.
Low performance improvement	Enter the recommender ranking threshold parameter in percentage for a low performance improvement. Note: When the default value is 30 and the calculated value is between 30 and 45, the performance improvement is low.
Low performance deterioration	Enter the recommender ranking threshold parameter in percentage for a low performance deterioration. Note: When the default value is 6 and the calculated value is between 6 and 12, the performance deterioration is low.
Medium performance deterioration	Enter the recommender ranking threshold parameter in percentage for a medium performance deterioration. Note: When the default value is 12 and the calculated value is between 12 and 20, the performance deterioration is medium.
High performance deterioration	Enter the recommender ranking threshold parameter in percentage for a high performance deterioration. Note: When the default value is 20 and the calculated value is between 20 and higher, the performance deterioration is high.
Help button	Provides context sensitive help.

Table 1-17 Action table

Action	Result
Back button	Return to the previous screen.
Next button	Go to the next screen.
Close button	A warning message is displayed. If you confirm the cancellation, the Configuration wizard is closed and your previous changes are saved. Next time you start the Configuration wizard, you will see the changes you have already made and can click Next until you advance to where you left off.

Configuration Complete

This screen is displayed when you have completed the configuration successfully.

Table 1-18 Actions table

Action	Result
Finish button	Exit the Configuration wizard.
Select check box	Launch to the user interface.

Completing or editing your configuration settings

If you have not completed your configuration settings or if you want to change the settings you made, follow these instructions.

Note: For the following procedure, if you do not have a shortcut to the Configuration Wizard on your desktop, click **Start>All Programs>Precise Business Storage Optimizer>Configuration Wizard**.

To complete or edit your configuration settings

- 1 On your desktop, click the shortcut to the Configuration Wizard
- 2 The Precise Connection screen is displayed with your previously entered settings. Follow the wizard instructions to add or edit your settings

Uninstallation

To uninstall do the following

- 1 Click **Start>Control Panel>Add or Remove Programs**.
- 2 Select Precise Business Storage Optimizer.
- 3 Click **Change/Remove**.

Or

- 1 Click **Start>Programs>Precise Business Storage Optimizer - <port>>Uninstall**.

Configuring Disk Types in The Precise Business Storage Optimizer

This section includes the following topics:

- [Introduction](#)
- [About retrieving the Product name from within the Precise application](#)
- [Updating the disk type list](#)

Introduction

If the Precise Business Storage Optimizer is not familiar with the disk type(s) in the selected application, the information that is displayed will be FC. This section describes the method on how to update the currently included disk types list in the Precise Business Storage Optimizer.

About retrieving the Product name from within the Precise application

The following instructions describe how to retrieve the Product name from within the Precise application in Oracle and SQL Server.

Retrieving the Product name in Precise for Oracle

To retrieve the Product name in Precise for Oracle

- 1 Double-click the StartPoint shortcut on the desktop.
- 2 Log in to Precise.
- 3 Click the Oracle application.
- 4 Go to the Objects tab.
- 5 Select the relevant instance and time frame.
- 6 In the selection menu of the Association area, select **EMC unit**.
- 7 Drill down into the relevant Unit ID.
- 8 Drill down into the device for which you need the Product name.
- 9 In the selection menu of the Association area, select **Hypers**.

The Product name can be found in the Disk Product ID column.

Retrieving the Product name in Precise for SQL Server

To retrieve the Product name in Precise for SQL Server

- 1 Double-click the StartPoint shortcut on the desktop.
- 2 Log in to Precise.
- 3 Click the SQL Server application.
- 4 Go to the Objects tab.
- 5 Select the relevant instance and time frame.
- 6 In the selection menu of the Association area, select **Storage Device**.
- 7 Drill down into the relevant Unit ID.
- 8 Drill down into the device for which you need the Product name.
- 9 In the selection menu of the Main area, select **Hypers**.

The Product name can be found in the Disk Product ID column.

Updating the disk type list

The following instructions describe how to update the disk type list.

Note: The Type and manufacture average response time is information that needs to be provided by the IT department.

To update the disk type list

- 1 On the server on which Precise Business Storage Optimizer has been installed go to the following folder:
`C:\Program Files\Precise\Precise Business Storage Optimizer\webapps\Precise_Storage_Tiering_Simulator\WEB-INF\properties`
- 2 Open the following file in a text editor:
`drive_specifications.properties`
- 3 Add the disk type information in the following format to the list:
Product name=Type|manufacture average response time
For example:
SX318203LC=FC|6
- 4 Save and close the file.