Clean installation of the Precise Framework

This section includes the following topics:

- Preparing to install the Precise Framework
- Prerequisites for installing the Precise Framework
- Installation planning checklist
- Performing the installation
- Setting up the Precise Framework installation

This section describes the Precise installation process on a clean system. If you already have a Precise version installed on your system, this section is not relevant. Instead see Upgrading Precise.

Preparing to install the Precise Framework

Before installing this version of Precise, it is important to understand the high-level Precise architecture and plan the installation accordingly.

The Precise Framework must have a database to store performance data. This database is referred to as the PMDB. The PMDB needs to be installed and configured before the Precise installation begins.

The PMDB can either be an Oracle database or a Microsoft SQL Server database. Critical guidelines for selecting and configuring the PMDB:

- It is highly recommended to dedicate a new database instance for exclusive use as the PMDB.
- The PMDB uses the Oracle/SQL Server Database Enterprise Edition instance. Using the Standard Edition is possible but not recommended. Standard Editions have severe limitations regarding the number of instances and the amount of the data that can be stored and are also not supported when upgrading Precise.

If you choose Oracle Enterprise Edition:

- The Oracle Partitioning option of Oracle Database Enterprise Edition is required and must be enabled in the database.
- If Precise will be monitoring SQL Server and/or Sybase performance, or an ERP system that is based on SQL Server or Sybase (such as SAP), an SQL Server PMDB is needed.
- If Precise will be monitoring Oracle and/or DB2 performance, or an ERP system that is based on Oracle or DB2, such as SAP or Oracle E-Business Suite, an Oracle PMDB is needed.
- If you will be monitoring mixed landscapes consisting of databases (SQL Server / Sybase, AND Oracle / IBM DB2) you will need to install two PMDBs: one on Oracle and one on SQL Server.

Every version of the Precise framework should have its own schema. It is highly recommended to dedicate a new Oracle/SQL Server instance for use as the PMDB.

The Precise agents typically reside on the monitored servers and need to be able to communicate with the Precise Framework. Verify that the network settings (such as firewall configurations etc.) will enable that. For more information, see Communication Requirements.

Prerequisites for installing the Precise Framework

Before planning the installation process, verify that:

- All technologies and operating systems for Precise to be installed for monitoring are supported by Precise. Information regarding the supported
 operating systems and technologies can be found in the Precise Support Matrix at https://precise.secure.force.com/.
- All minimum requirements for installation are met, as per the Precise Minimum Requirements for Installation Guide. These requirements include hardware, vendor updates, end-user client server requirements for using the Precise user interface, communication requirements, and privileged user accounts.
- You have access to login credentials for all privileged user accounts (needed to complete the installation).

Installation planning checklist

The following checklist can be used to verify that you are ready to start installation of Precise:

- The Precise website was reviewed for a newer version of this document. If there is a newer version, download it and use it instead of this one. Visit the Precise website at https://idera.secure.force.com/precise/.
- The Precise deployment architecture is well understood.
- Precise Support Matrix was reviewed regarding the framework server.
- A server for the Precise Framework is ready.
- Installation prerequisites have been met (See Prerequisites for installing the Precise Framework).
- A database for the Precise PMDB is ready according to all above requirements.
- Communication requirements for allowing communication between the Precise Framework and the Precise agents are met.
- The Precise website was reviewed for product updates. Visit the Precise website at https://idera.secure.force.com/precise/.
- Downtime has been coordinated for the monitored instances.

Performing the installation

Before beginning the installation process, verify that you have planned the installation according to Preparing to install the Precise Framework.

The Precise Framework can be installed via a Windows-based user interface. Verify that the Windows server from which you will be installing the Precise Framework meets the following preconditions:

The user you will be logged in as when performing the Precise Framework installation has local administrator privileges on the server.
 The Microsoft .NET Framework version 2.0 SP1 is installed on the server.

To install the Precise Framework

- 1. Download the following:
- Precise vx.x.x from https://idera.secure.force.com/precise/.
- 2. Unzip the downloaded files for Precise vx.x.x into an empty folder.

It is recommended to keep the Precise vx.x.x download (or DVD) available for use after finishing the Precise installation.

- 3. On a Windows server, open the folder with the unzipped Precise vx.x.x files (or DVD), open the Precise x.x.x folder and double-click setup.exe. The Precise Framework installer will launch, and guide you through the Precise Framework installation. For step-by-step instructions regarding each framework installer screen, see Setting up the Precise Framework installation. Most of the screens
- require you to input details regarding your information systems. It is recommended to compile a list of all required user inputs before continuing. 4. Apply a valid license.
- When the Precise Framework installation process is complete, the "Precise Framework Installer Finished" screen appears.
- 5. Select Launch AdminPoint to apply Precise license.
- 6. Click Finish. This launches the Precise administrative interface ("AdminPoint"), used to apply Precise licenses.

Depending on your browser security settings, you may now be prompted to install a Precise component in the browser. In order for the Precise user interface to function properly, this component must be installed.

- 7. A login screen appears. The default administrative user is "admin" and the initial password for this user is "admin". Log in as this user.
- On the screen that appears, click Apply License and select the license file that you received when you bought Precise, for your installation. Should you not have received the license file, contact Precise Customer Support.
- 9. A pop-up window will appear, confirming that the license was successfully applied. Click OK.

Installing Precise with the Command Line Interface (CLI) utility

This version of Precise can also be installed with the CLI utility. Before installing using the CLI utility, verify that you have followed the planning and preparations mentioned above. For installing Precise with the CLI utility, see the Precise CLI Utility Reference Guide.

Installing Precise agents to monitor your technologies

Your Precise Framework is now fully installed. To monitor the performance of a technology, a Precise agent must be installed on the servers to monitor. Each agent has unique preparations and prerequisites, according to the technology that it monitors.

To plan this stage of installation, review the specific installation process, preparations, prerequisites, and post-installation action items for the technology that you wish to monitor with the current release of Precise. In addition, the Precise agent installation procedure varies slightly according to the operating system of the monitored server. For more details, see the appropriate section in this guide.

The following checklist can be used to verify that you are ready to install Precise agents:

- Ensure readiness for agents installation checklist
- Enumerate the technologies of which you wish to monitor performance
- Per technology to be monitored, ensure that all installation requirements are met
- · For all servers where the technologies to be monitored reside, ensure that the installation requirements are met
- Login access to privileged user accounts is readily available
- Communication requirements for allowing communication between the Precise Framework and the Precise agents are met

Installing instances

To install instances see the sections describing the relevant technologies in the Precise Installation Guide. When installing new instances of monitored technologies, a pop-up window requesting to locate files may appear on screen.

When the pop-up window titled "please locate the file *<filename*>" appears, you should supply the full path to the I3\distribution folder under the location where you unzipped the Precise download or on the DVD depending on which version you have installed.

Setting up the Precise Framework installation

The Precise Framework installer displays a series of screens. Most of the screens require you to input details regarding your information systems. Below is the Framework installation procedure, and a brief explanation of the requested input on each screen. It is recommended to compile a list of all required user inputs based on this section before continuing.

Welcome screen

The Welcome screen is the first screen in Framework installation. Click Next on the Welcome screen to begin the installation.

License agreement screen

Review the *Precise Software License Agreement* and mark **I accept the terms of the license agreement** to enable installation. Click **Next** to begin Precise Framework installation.

Selecting the Precise installation type

On the Installer Options screen, select Install Precise version x.x, and then click Next.

Selecting the server for Framework installation

To select the server for Framework installation

- 1. In the Server name or IP address text box, enter the server name or IP address.
- 2. In the Server type text box, select the available server type (Windows or UNIX) from the drop-down menu.
- 3. Click Next.

Framework installation on a Windows server

The Precise Framework can be installed through automatic or manual installation.

You should only select Windows manual installation mode in the event that you have a Windows server that does not allow remote installation, or if you encountered issues during the automatic Windows server installation.

To install the Precise Framework on your server using automatic installation, you must access it using a local administrator account.

To install the Precise Framework on your server using automatic installation

- 1. Using the credentials of the user currently accessing the server
 - a. Select Use Current Credentials.
 - b. Select an installation folder by clicking on the browse (...) button. The installation folder specifies the location on the server where Precise Framework files will be installed.
 - c. Click Next.
- 2. Using a different account with administrator permissions
 - a. Select Change Credentials.
 - b. Enter the following in their respective text boxes: User name (The name of a user with administrator privileges), Password, and Domain or Server.
 - c. Select an installation folder either by typing it in or by clicking on the browse (...) button. The installation folder specifies where the Precise Framework files will be installed.
 - d. Click Next.

To install the Precise Framework on your server using manual installation

- 1. Select Manual Installation.
- 2. Click Next.

(i)

For more information see Adding a Windows server using manual mode.

Framework installation on a UNIX server

You should only select UNIX manual installation mode in the event that you have a UNIX server without Telnet/SSH/SCP connection or if you encountered issues during the UNIX server installation using automatic mode.

To perform an automatic installation of the Precise Framework on a UNIX server (common server) with Telnet/SSH/SCP connection from the client PC to the Precise FocalPoint

- 1. Select Automatic Installation.
- 2. Enter the User name.
- 3. Enter the Password.
- 4. Select an installation folder either by typing it in or by clicking on the browse (...) button. The installation folder specifies where the Precise Framework files will be installed.
- 5. Click Next.

To install the Precise Framework on your server using manual installation

- 1. Select Manual Installation.
- 2. Click Next.

For more information, see Adding a UNIX server using manual mode.

Selecting the PMDB

To select the database to be used by the PMDB

a. Oracle

- 1. Select one of the following enabled options
 - b. Microsoft SQL Server (Using OS authentication)

The "Microsoft SQL Server (Using OS authentication)" option is only enabled when all the Framework servers are Windows (i) servers, and the servers' service authentications are either all configured to run with a user or are all set to the local system. If they are set to the local system, the service authentication is the user provided in the next step.

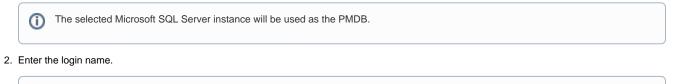
c. Microsoft SQL Server (Using SQL authentication)

2. Click Next.

Entering Microsoft SQL Server PMDB login information

To enter Microsoft SQL Server PMDB login information (using SQL authentication)

1. In the SQL Server instance field, click the drop-down menu and select the SQL Server instance from the list, or type in a different instance.



The login name will be used both for the PMDB installation, as well as for connecting to the SQL server when using the PMDB. (i)

- 3. Enter the password for the login name specified.
- 4. Enter the name of the database you want the PMDB to use. If a database with that name exists, it will be used. If not, a new database will be created. For a new database, fill the "data path" and "log path" fields.
- 5. By default the PMDB schema is automatically installed. To install the schema manually, see Manually installing the SQL Server PMDB schema.
- 6. Click Next.

To enter Microsoft SQL Server PMDB login information (using OS authentication)

1. In the SQL Server instance field, click the drop-down menu and select the SQL Server instance from the list, or type in a different instance.

The selected Microsoft SQL Server instance will be used as the PMDB. (i)

2. Enter the user name.

The User name will be used both for the PMDB installation, as well as for connecting to the SQL server when using the PMDB. (i)

- 3. Enter the password for the login name specified.
- 4. Enter the Domain or Server name.
- 5. Enter the name of the database you want the PMDB to use. If a database with that name exists, it will be used. If not, a new database will be created. For a new database, fill the "data path" and "log path" fields.
- 6. By default, the PMDB schema is automatically installed. To install the schema manually, see Manually installing the SQL Server PMDB schema. 7. Click Next.

Filling new database properties

To change the new database properties

- 1. In the PMDB Instance Parameters screen, click Advanced.
- 2. In the New Database Properties tab, fill in the following fields:
 - Collation. Choose a case sensitive collation
 - Data Size. Enter the initial size in MB
 - Data Growth. Enter the auto growth in MB

- Log Size. Enter the initial size in MB
- Log Growth. Enter the auto growth in percent
- 3. Click OK.

Manually installing the SQL Server PMDB schema

To manually install the PMDB schema

- 1. On the PMDB Instance Parameters screen, click Advanced.
- 2. In the Schema tab, mark the **Disable automatic schema installation** check box.
- 3. If the database contains partitioning, mark the Database contains partitioning check box.
- 4. Click the Database version drop-down menu and select the database version.
- 5. Click OK.
- 6. Perform the action items as provided.

Entering Oracle Server PMDB login information

To enter Oracle Server PMDB login information

- 1. In the Oracle database server field, click the drop-down menu, and then select the Oracle server from the list or type in a different server.
- 2. In the Oracle SID field, click the drop-down menu, and then select the Oracle SID or type it in.
- 3. Enter the Oracle Listener port number.
- 4. If you want to use RAC, select the Use Oracle RAC service name box.
- 5. If the PMDB database is to be installed in an Oracle Container database, then the PMDB needs to be installed in one of the PDBs and not the main Container. Select the Use Oracle RAC service name box. By default, the PMDB schema is automatically installed. To install the schema manually, see Manually installing the SQL Server PMDB schema.
- 6. Enter the user name of the Oracle DBA user.

This user name will be used only in the Framework installation, and will not be used again.

This field is not required and will be grayed out if the schema installation mode is set to manual.

7. Enter the password for the Oracle DBA user.

This field is not required and will be grayed out if the schema installation mode is set to manual.

8. Click Next.

Login Credentials

This section contains information regarding the Login Credentials screen.

Manually installing the Oracle PMDB schema

To manually install the PMDB schema

- 1. On the PMDB Instance Parameters screen, click Advanced.
- 2. Mark the Disable automatic schema installation check box.
- 3. If the database contains partitioning, mark the Instance partitioning option is enabled check box.
- 4. Click the Database version drop-down menu and select the database version.
- 5. Click **OK**.
- 6. Perform the action items as provided.

Entering Oracle server PMDB schema information

You now need to enter schema information for the Oracle server PMDB schema.

Storage parameters for the PMDB schema

Enter storage parameters for the PMDB schema.

For PMDB schema storage parameters, enter the following information:

- Datafiles storage folder location. The Datafiles storage folder location is where all datafiles are created (storage parameters). The folder must exist in the file system.
- Update the tablespaces definitions (optional). See Updating the tablespaces definitions.

To enter Oracle Server PMDB schema information

1. In the User name field, type a new Precise user name, or click the drop-down menu to select an existing Oracle schema user name.

	0	When using an Oracle 12c containerized databases as PMDB, it is recommended that the PMDB is set up on a PDB and not on the root container. This can be done by using the service name checkbox in the database details screen of the framework installer.
	(i)	This is the name of the Precise user to be created in the Oracle instance to hold the PMDB schema. You can create a new Precise
	Ŭ	user, or select an existing user from the list.
 Enter a new password to be assigned to the new user, or an existing password if you have chosen an existing user. Confirm password. 		
4.	Next to	the Store datafiles in this location field, click the browse button and select the folder for storing datafiles.
	(i)	For Oracle ASM, specify the ASM disk group. (For example: +DISKGRP1/ora11asm/).

5. Click Next.

Updating the tablespaces definitions

The PMDB schema defines eight tablespaces. Five tablespaces are used for tables and three are used for indexes. The tables and indexes have three different sized tablespaces: small, medium, and large. The tables also have additional sts and infra tablespaces.

Each tablespace has a corresponding datafile. Based on this, eight datafiles will be created. The filenames have the following format: <table_space_name> .DBF.

The Temporary tablespace is used for temporary calculations (storage parameters). This can be an existing temporary tablespace.

The Temporary tablespace storage location is the datafile associated with the temporary tablespace (storage parameters).

To update the tablespace definitions

- 1. Open the Advanced dialog box. The Advanced dialog box displays the following values currently defined for each tablespace: Tablespace name, initial size, uniform size, and extent size.
- 2. In the tablespaces definition table, click on a value to update it.
- 3. In the **Temporary tablespace name** field, click the drop-down menu and select a temporary tablespace.
- 4. In the Stored in datafile field, enter the datafile in which the temporary tablespace will be storied.
- 5. Click OK.

By default, the tablespaces are created as bigfiles. To create the tablespaces as regular tablespaces, clear the Create tablespaces as (i) bigfiles check-box.

Installation preview screen

The preview screen signifies that the Precise Framework Installer has gathered enough information to begin the installation phase.

The preview screen displays the following details:

- Server name
- Installation folder (location)

On this screen, you can still change any of the displayed settings.

- To change any of the displayed settings, click Back.
- To continue the installation, click Next.

Remember the Precise installation folder that you select during this stage. This folder is known as the <precise_root>, and is referred to and (i) needed during the upcoming procedures.

Framework installation progress screen

This screen appears when the Precise Framework Installer is actually performing installation. Installation may take several minutes. The progress screen visually displays the progress of actual installation.

Framework Apply License screen

Using this screen, apply a Precise license.

Framework Installer finished screen

This screen appears when Precise Framework Installer has completed the Framework installation. If the manual schema option was chosen, you will be asked to run the schema creation script and the required action item to finish the installation.