Installing Sybase Tier Collectors

This section includes the following topics:

Pre-installation tasks

This section describes the pre-installation tasks for Precise for Sybase.

Pre-installation tasks for Sybase

Verify that you have a Sybase user with the system administrator privileges. Verify that the Sybase PC Open Client of one the supported versions is installed.

The following table describes the supported Open Client and the related ODBC versions.

Table 22-1 Supported Open Client and related ODBC versions

Open Client	ODBC Version
12.5.1 ESD #2	Sybase Adaptive Server Enterprise ODBC driver version 4.20.00.67
12.5.1 ESD 15	Adaptive Server Enterprise version 12.05.01.529
15.x	Adaptive Server Enterprise version 15.0.0.152

The recommended versions are Open Client 15.x and 12.5.1 ESD 15. In addition, verify that the following components are installed:

- Embedded SQL/C
- Monitor Client Library
- ODBC driver (see the previous table)

The following steps are necessary to check which PC Open Client and ODBC driver versions are installed.

To check which PC Open Client and ODBC driver versions are installed

1. Open the command prompt and run the following command:
   `"%SYBASE%\%SYBASE_OCS%\bin\isql" -v`
   This shows the PC Open Client version.
2. Click Setting>Control Panel>Administrative Tools>Data Sources(ODBC).
   This shows the ODBC driver version.

Setting ASE configuration parameters

To enable monitoring of the Sybase Tier, you need to adjust the Adaptive Server Enterprise (ASE) configuration parameters.

In addition to the configuration parameters below, in ASE versions 15.0.2 and higher you can enable actual execution count reporting for ad-hoc statements.

To enable actual execution count reporting for ad-hoc statements

1. In Sybase ASE configuration, set the "enable stmt cache monitoring" value to "1."
2. In the Collector registry file, add the following entry:
   `<pss_exec_proc>YES</pss_exec_proc>`

The following table specifies the parameter values for ASE version 12.5.0.3 and higher.

Table 22-2 Parameter values for ASE version 12.5.0.3 and later

Parameter	Value
max SQL text monitored	16384
enable monitoring	1
SQL batch capture	1
wait event timing	1

The following table specifies the parameter values for ASE versions 11.9.2, 12.0, and 12.5.

Table 22-3 Parameter values for ASE versions earlier 11.9.2, 12.0, and 12.5

Parameter	Value
max SQL text monitored	16384
event buffer per engine	2000

ⓘ The value given for the event buffer per engine parameter in both tables is a minimum value. You may also use a higher value if required.

Granting the mon_role and sa_role server roles

With ASE versions 12.5.0.3 and higher, verify that the user used to monitor the Sybase instance is a member of the mon_role and sa_role server roles

To grant the mon_role and sa_role server roles, run the following command:

```
grant role mon_role to user name
grant role sa_role to user name
```

For example, if you connect as system administrator, run the command as:

```
grant role mon_role to sa grant role sa_role to sa
```

Activating tables in ASE versions lower than 12.5.0.3

To be able to monitor an instance, Precise for Sybase requires that Monitor Server be installed. For information on how to install Monitor Server, see the Sybase Help.

Activating tables in ASE 12.5.0.3 and higher

Precise for Sybase monitors ASE 12.5.0.3 and higher without Monitor Server. Therefore, if you work with this version, you need to activate the following tables:

- monProcessSQLText
- monProcess

For instructions on how to activate these tables, see Sybase's book *Performance Tuning: Monitoring and Analyzing (for ASE version 15.0)* at:

http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc20022_1251/html/monito ring/monitoring61.htm

Registering the instance in the sysservers table

Verify that the master.sysservers table includes the following entry:

```
sp_addserver logical name,'local',physical name
```

where:

- logical name is the name used to address the server on your system
- physical name is the name of the instance as it appears in the interface file (this file is usually located in the `sybase root dir/ini/sql.ini` folder or the `sybase root dir/interfaces` folder)

The entry points to the Sybase instance as the local server (`srvclass=0`). If this entry does not exist, add it to the table.

Ensuring proper functioning of the Statistics tab

To function properly, the Statistics tab requires that you comply with the following requirements:

- ASE versions lower than 12.5.3:

Do not run the `sp_sysmon` system stored procedure.

- ASE 12.5.3 and higher:

Run the `sp_sysmon` system stored procedure with the `noclear` option set only. For example: `sp_sysmon "00:01:00", noclear`

Otherwise, incorrect and illogical data will occur in the time slice following the execution of this procedure.

Installing a Sybase Tier instance

This section describes the procedures that are needed to install a Sybase Tier instance. You have the option of adding a new instance, as well as adding a new application. For information on editing or removing an existing instance, see Editing or removing Tier instances or clusters on page 200.

Adding a Sybase Tier instance

On the AdminPoint Instances screen, you can add a new Tier instance.

> ⓘ   Before adding a Tier instance, create a list of all required inputs based on the screen information below.

To add a Tier instance

1. From StartPoint, click the AdminPoint tab.
2. Click the Setup tab.
3. From the drop-down menu, select **Instances & Clusters**.
4. Click the **All instances** tree item
5. At the bottom of the Display Instances & Clusters screen, click **Add Instance**. An Add New Instance dialog box appears.
6. Select the required technology from the list.
7. Select the application from the list. If the desired application is not on the list, follow steps a-d:
     a. Click **Add**.
     b. In the Application Name field, type in the new application name.
     c. On the Application System field, select the system application from the list.
     d. Click **OK**.

> ⓘ   To install an instance in an application, you must have `ADMINISTRATE.INSTALL` permission for the application in which you want to install the instance. If you only have permission for a specific technology, you will only be able to install in an application that is either empty, or is comprised of only the same technology.

8. Select a Tier from the list.
9. Click **OK** to view the next screen.

> ⓘ   Always refresh AdminPoint after adding an instance.

Defining Sybase property settings

To enter a Tier instance for Sybase

1. In the "Sybase server" textbox, enter the name or IP address of the UNIX or Windows server on which Sybase is installed. In case of a clustered Sybase configuration, supply the virtual IP address of the cluster server as it appears in the Sybase sql.ini file.
2. In the "Sybase ASE instance" textbox, enter the Sybase instance you want to monitor, as it appears in the Sybase sql.ini file.
3. In the "Sybase server port" textbox, enter the port number of the Sybase data server, as it appears in the Sybase sql.ini file.
4. In the "Monitor from this server" textbox, enter the server where you want to install the Sybase Tier. The server name or IP address only appears in the list if you previously defined it as a Precise server. Click **Add** to enter the name of a Sybase server not on the list. For more information, see see Adding a new server.
5. In the Login textbox, enter an existing Sybase user name with the system administrator privileges.
6. In the Password textbox, enter the password.
7. Click **Next**.

About the Windows Authentication Settings screen

If the PMDB is using Windows Authentication, clicking **Next** in the Properties screen will take you to the Windows Authentication Settings screen. On this screen enter accounts with the following permissions:

Table 22-4 Permissions

When	Permission	Where
PMDB using Windows Authentication	User who is allowed to use Windows Authentication	On the PMDB server
	User with full control permission	On the Precise folder

To add the parameters

1. On the Windows Authentication Settings screen, enter the User name.
2. Enter the Password.
3. Enter the Domain or Server name.
4. Click **Next**.

About the AdminPoint Tier installation preview screen

The preview screen signifies that the AdminPoint Tier installer has gathered enough information to begin the installation phase.

The preview screen displays the following details before installation begins:

- Server name or IP address
- The name of the monitored server
- What actions will be performed in their respective order
- Installation folder (location)
- Required disk space
- Currently available disk space

At this screen, you can still change any of the settings displayed. Click **Back** to change any of the displayed settings. Click **Next** to continue installation. Click **Cancel** to stop the installation process.

About the AdminPoint Tier installation progress screen

This screen appears when the AdminPoint Tier installer is actually performing installation. Installation may take several minutes.

The progress screen visually displays the progress of actual installation on selected servers.

About the AdminPoint Tier installation complete screen

This screen appears when the AdminPoint Tier Installer has completed installation of all Tier instances.

If there are no action items, click **Finish** (it will be the only option available) to complete the instance installation. If there are action items, click **Next** (it will be the only option available).

About the AdminPoint Tier Action Items screen

After a Tier instance is installed, you must perform post-installation tasks as may be required. Only after completing any post-installation tasks required can you start using the Tier instances you have just installed.

Perform any tasks displayed on this screen. Click **Execute** for Precise to perform the action items. Click **Mark as done** if you have performed the action items yourself.

Post-installation action items

When the Sybase Tier Collectors have been installed, you might need to perform post-installation tasks. Follow any instructions that appear on the screen.