@ptitude Observer

Part No. 32170700
Revision G

Installation Manual

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1 Requirements

@ptitude Observer can be used in a network of unlimited number of users. However, there are minimum requirements for computers running SKF @ptitude Monitoring Suite.

SKF @ptitude Monitoring Suite contains the following components;

- @ptitude Observer
- @ptitude Observer database administrator
- @ptitude Observer monitor
- @ptitude Observer on-line device configurator
- @ptitude Observer data pump

To be able to install SKF @ptitude Monitoring Suite, check the hardware and operating system requirements listed below.

Note that the requirements must be fulfilled. Otherwise, we advise not to install the software.

Hardware Requirements

- One available Ethernet network connection for on-line systems
- One serial port connection for portable data collector systems such as *Microlog*.
- A Pentium IV, 1.0 GHz or higher CPU
- A recommended minimum of 1.0 GB RAM
- Mouse, track-ball, digital board or similar
- Graphics chip capable of displaying 16 bit colors with a minimum resolution of 1 024 x 768. For optimal experience when using @ptitude Observer, it is recommended to have a resolution of 1 920 x 1 200 or more.
- A DVD ROM drive for installation
- Free space on a hard disk, 500 MB (client) and 1.2 GB (database server) excluding machine and measurement data. The space necessary for the database depends on the amount of stored data.
- A backup system is recommended

Operating System Requirements

SKF @ptitude Observer supports the following operating systems;

- Microsoft Windows XP Professional with Service Pack 3
- Microsoft Windows 2003 Server with Service Pack 1
- Microsoft Windows 2008 Server
- Microsoft Windows Vista
- Microsoft Windows 7

2
General Guideline

In order to have a properly functioning SKF @ptitude Observer, follow the listed general guideline on installation and setup.

1. Insert the **SKF @ptitude Observer DVD**.
2. Install **a database engine** which will be used by @ptitude Observer.

   The @ptitude Observer system uses Microsoft SQL Server 2008 as the recommended database engine, but it is also compatible with SQL Server 2000, 2005 and 2012, and Oracle as well.

   Included in the SKF @ptitude Observer DVD are a royalty free version of SQL Server called Microsoft SQL Server Express and a royalty free version of Oracle server called Oracle 10g Express Edition. Both royalty free versions can be used for databases with sizes up to 10 GB.

   - To install SQL Server Express version, follow the instructions in SQL Server Express Installation.

     If you were to install a different version of SQL Server other than Express, check the SQL Server documentation for installation instructions.
   - To install Oracle Server, follow the instructions in Oracle XE Installation.
3. Install **SKF @ptitude Monitoring Suite** components by following the instructions in @ptitude Observer Suite Installation.

   SKF @ptitude Monitoring Suite contains the following components:

   - **@ptitude Observer** is for data management and analysis of measurement data for condition monitoring. @ptitude Observer runs on all clients.
   - **@ptitude Observer database administrator** is the tool for administrating the @ptitude Observer databases.
   - **@ptitude Observer monitor** is the server service which works as the connector between IMx system, database, and @ptitude Observer clients. Detailed information can be found in @ptitude Observer Monitor Service.
   - **@ptitude Observer Online device configurator** is a tool which allows to set the network configuration and identification for the on-line device. It also allows to view what the on-line device is measuring right now, clear measurement data, show current measurement configuration and synchronize the time.
   - **@ptitude Observer data pump** allows to export and import @ptitude Analyst XML files.
4. Install **@ptitude Observer database**(s).

   To be able to run @ptitude Observer, at least one database must be installed.

   The database must be compatible to the latest installed @ptitude Observer version.

   The installation of a new database or upgrading of an existing database is done through @ptitude Observer Database administrator.

   If @ptitude Observer Database administrator component has not been installed, repeat step 3 and make sure that you select @ptitude Observer Database administrator at Custom Setup screen.

- Start @ptitude Observer Database administrator by clicking on the shortcut on the start menu located under **Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y Database administrator**.
- The instruction for installing Observer database is found in Install Observer Database section. In addition, the further detailed information are found in **Observer Database Administrator User Manual**.

The database settings are stored in a connection file for each database.

5. Set up **@ptitude Observer** with language and register with the license key.
   - Start @ptitude Observer by clicking on the shortcut on the start menu located under **Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y.**
   - Select a language to use.
   - Register with the license key.

   It is possible to change the language and license key after the initial settings have been made. For more information, refer to Edit Observer Settings.
6. Create a **connection between @ptitude Observer and database**(s).

   The connection between @ptitude Observer and database(s) is described in detail in Getting Started section of **@ptitude Observer User Manual**.
7. Set up the configuration of the **monitor settings**.

   To be able to use @ptitude Observer as an on-line system, the communication and database storage are performed by the @ptitude Observer monitor service. The configuration of the monitor settings are described in @ptitude Observer Monitor Settings.

   If @ptitude Observer monitor component has not been installed, repeat step 3 and make sure that you select @ptitude Observer monitor at Custom Setup screen.
8. Set up **@ptitude Observer monitor computer**.

   If you use a PC as the @ptitude Observer monitor computer, then you need to configure MasCon/IMx Network Settings and activate Time synchronization.
9. Upgrade **@ptitude Observer database(s)**.

   If you have any databases which you have used with a previous version of @ptitude Observer, you need to upgrade these databases to the latest version in order to use them with the new version of @ptitude Observer. Please note that it is possible to run several different versions of @ptitude Observer software on the same computer. For more information, refer to Software Upgrade.

3
SQL Server Express Installation

1. Insert the **SKF @ptitude Observer DVD**.

   If the installation program does not start, run the file Setup1.exe from the DVD.

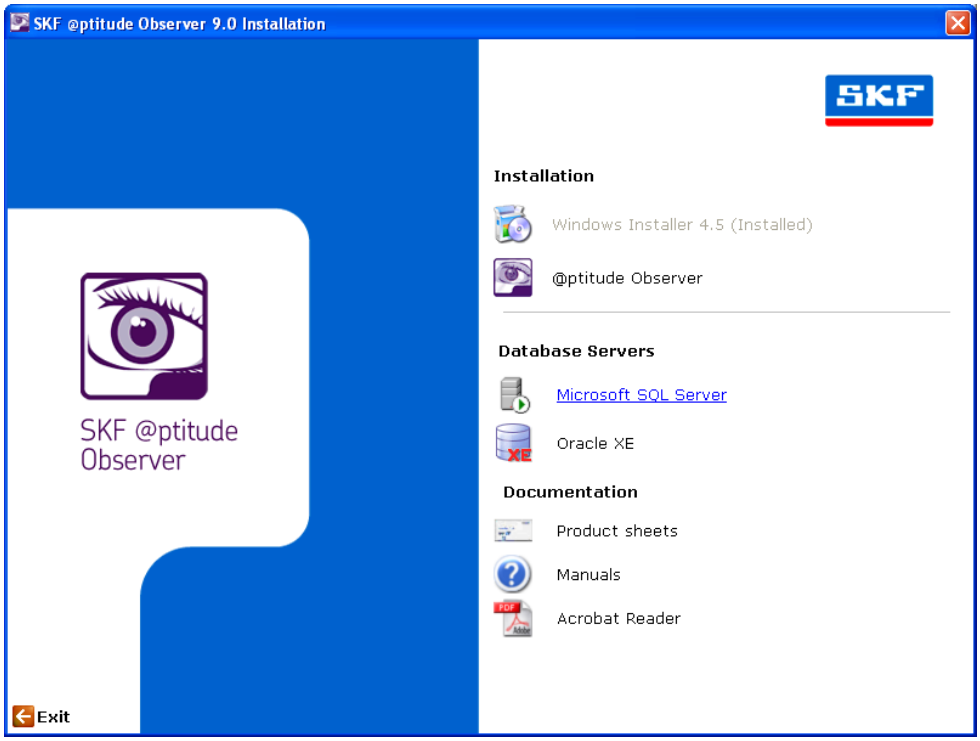

Figure 3-1: Database server installation start

2. Press **Microsoft SQL Server.**

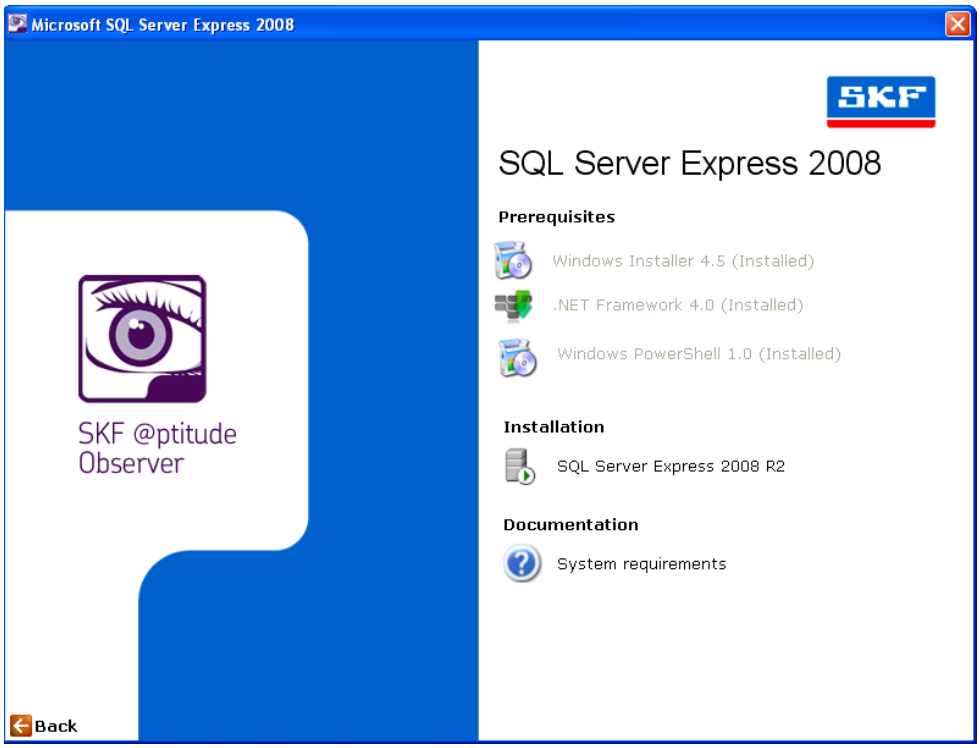

Figure 3-2: SQL server express 2008 installation

3. First, check the prerequisites before installing SQL Server Express 2008.

   The prerequisites are the system requirements in order to be able to install SQL Server Express 2008. You can find out which version of Windows Installer, .NET Framework and Windows PowerShell are installed in your computer by checking "Control Panel/Add or Remove Hardware".

   - Windows Installer 4.5 is required in order to install SQL Server Express 2008. If you don't have the Windows Installer 4.5 installed, press the link **Windows Installer 4.5** and follow the installation guides.
   - A minimum of .NET Framework 3.5 SP1 is required in order to install SQL Server Express 2008. If you don't have .NET Framework 3.5 SP1 installed, press the link **.NET Framework 4** and follow the installation guides.
   - Windows PowerShell 1.0 is required for Management studio express which is a free tool from Microsoft to administer SQL Server databases. However, this tool is not required to run @ptitude Observer.

   If the prerequisites are met, press the link **SQL Server Express 2008 R2**.

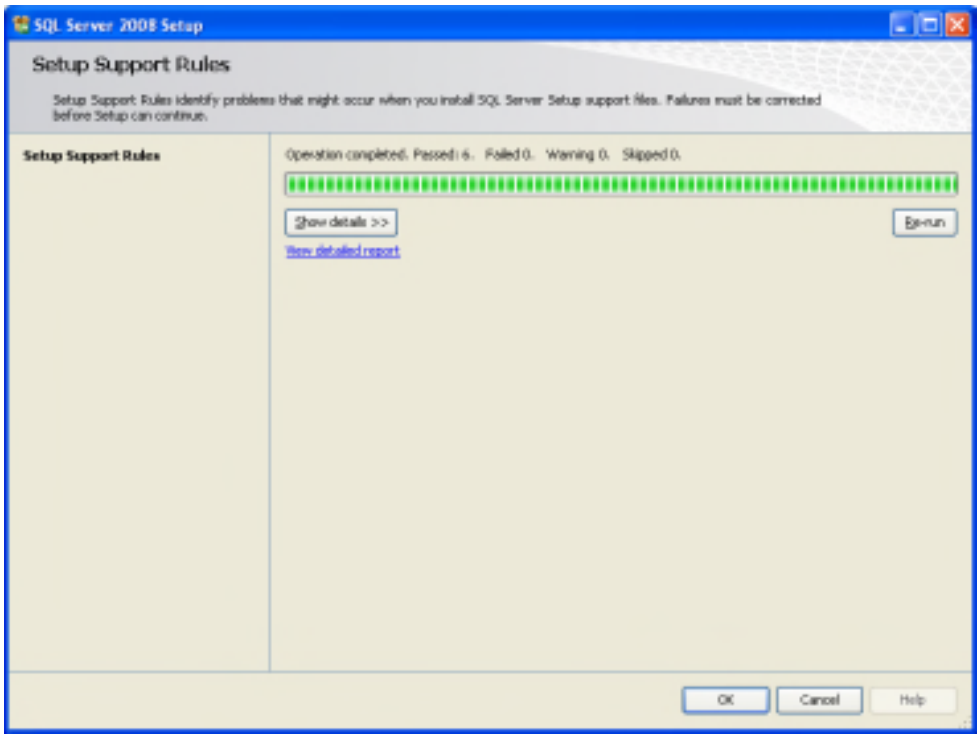

Figure 3-3: SQL server installation setup

4. On the Setup Support Rules screen press **OK** to continue the installation.

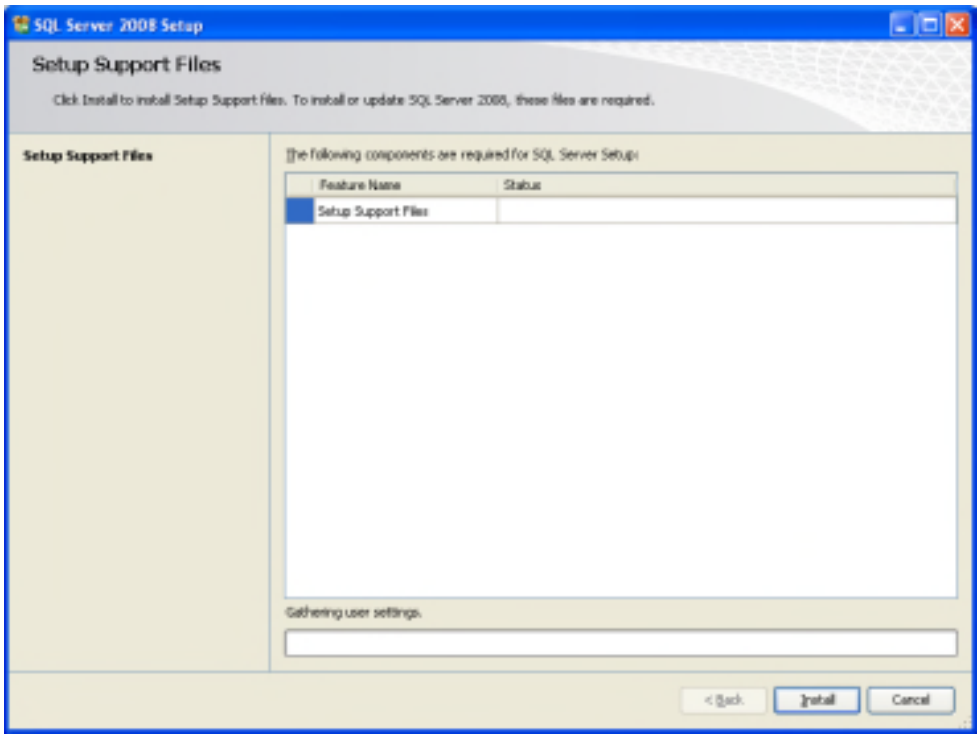

Figure 3-4: SQL server installation

5. Next, click **Install** to continue.

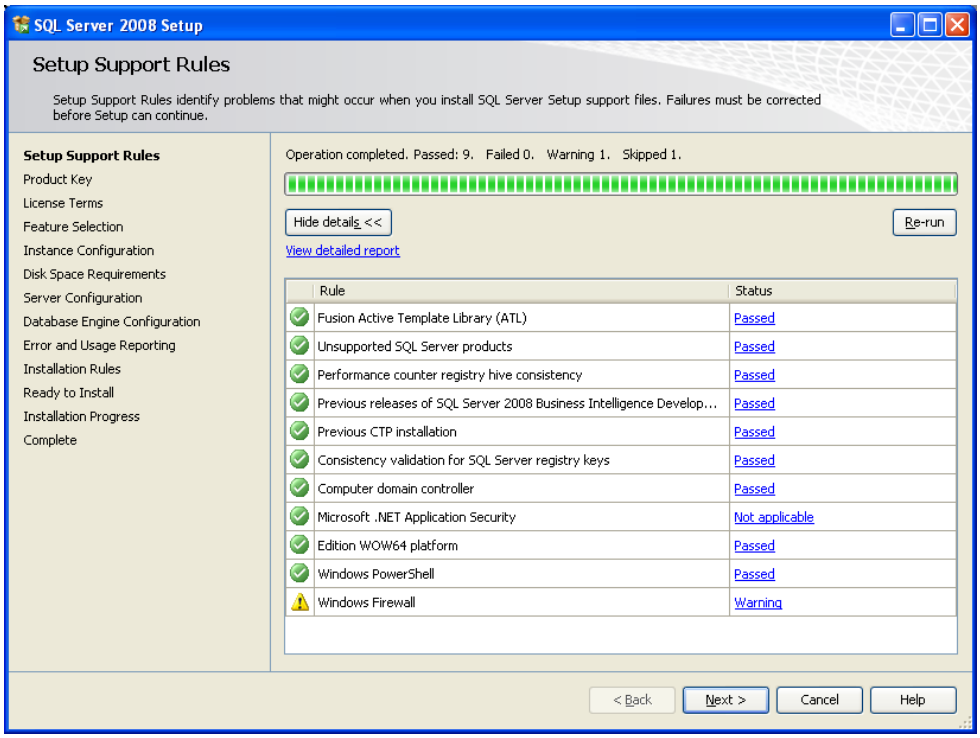

Figure 3-5: SQL support files installation

6. After the support files have been installed, the SQL Server installation checks the computer to see if all the necessary requirements were fulfilled. Warning messages and “Not applicable” messages are accepted and the installation can be continued. To continue, click **Next**.

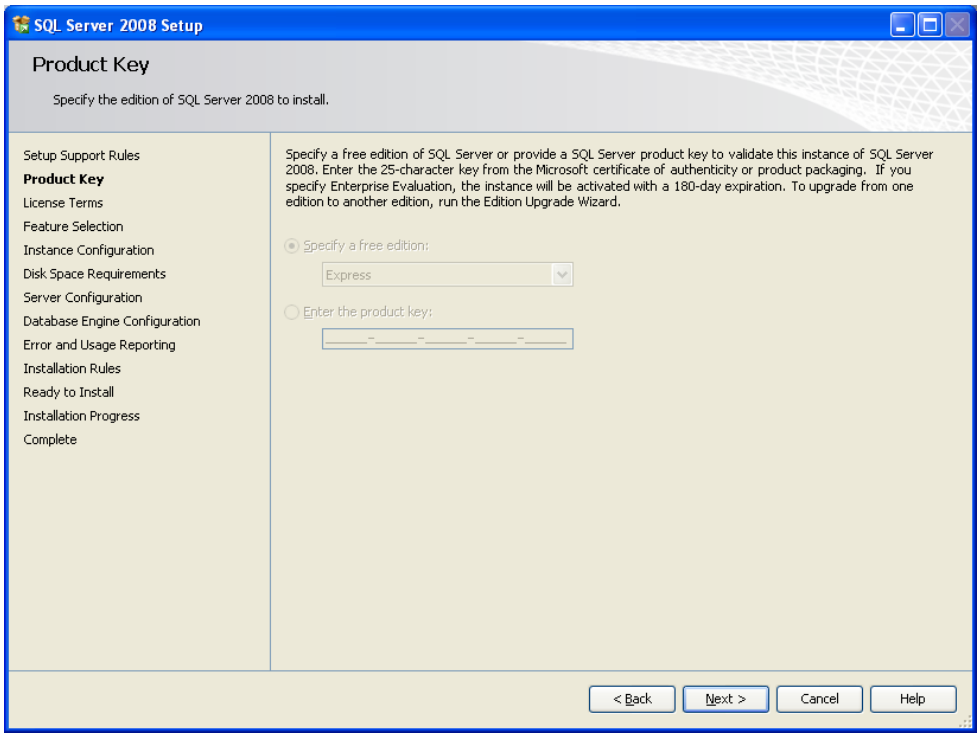

Figure 3-6: SQL product key installation

7. On Product Key screen, input controls should be disabled. To continue click **Next**.

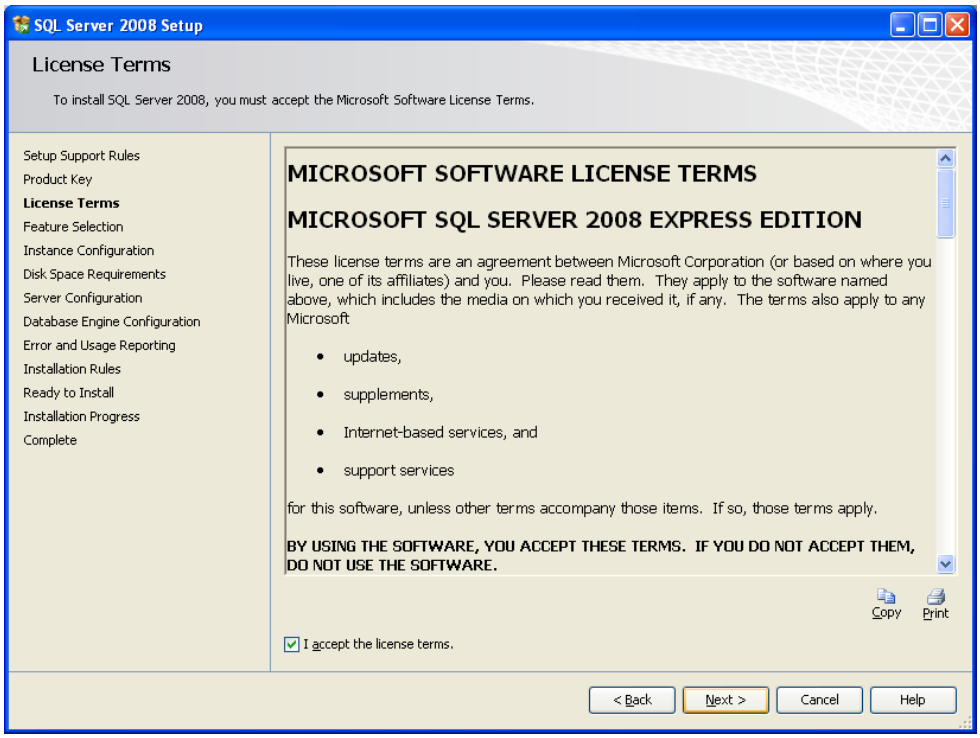

Figure 3-7: SQL installation license terms

8. On License Terms screen, the licence agreement is displayed. Read it through carefully. If you agree to the licence agreement, check “I accept the licence terms” and click **Next**.

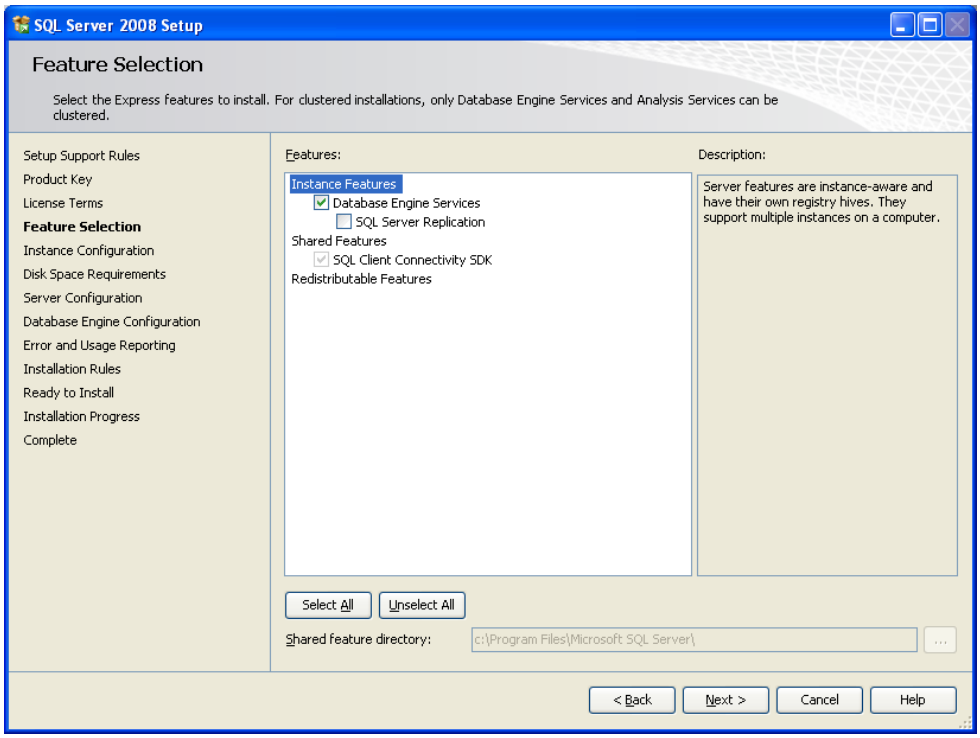

Figure 3-8: SQL installation feature selection

9. On Feature Selection screen, make sure the option “Database Engine Services” is selected and click **Next**.

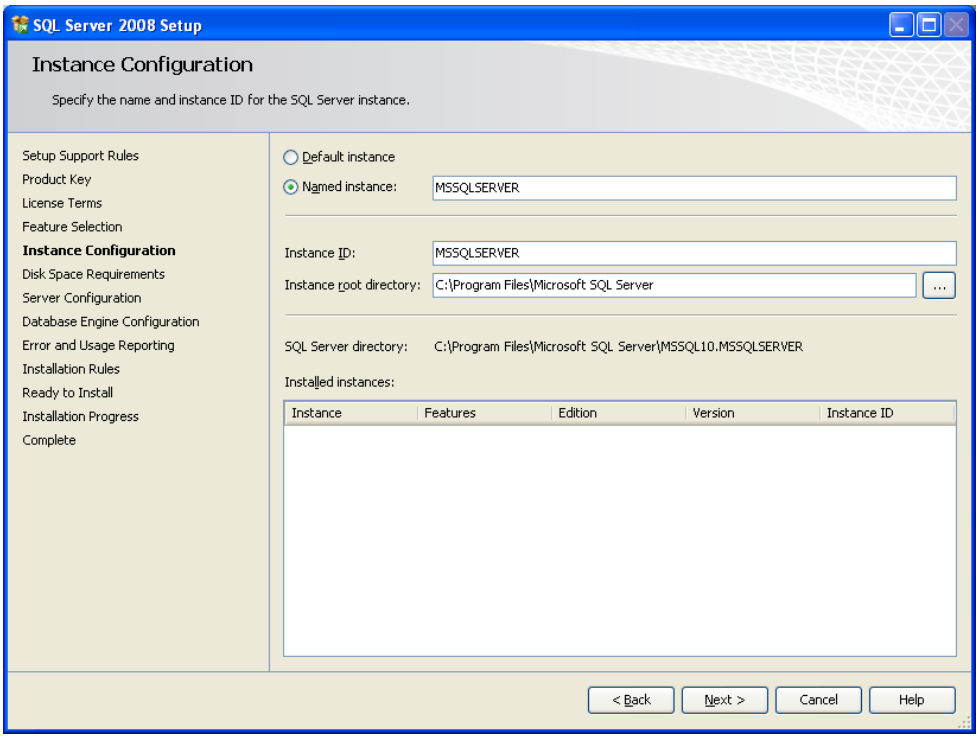

Figure 3-9: SQL installation instance configuration

10. On Instance Configuration screen, select Named instance and make sure the name is “MSSQLSERVER”. Click **Next** to proceed.

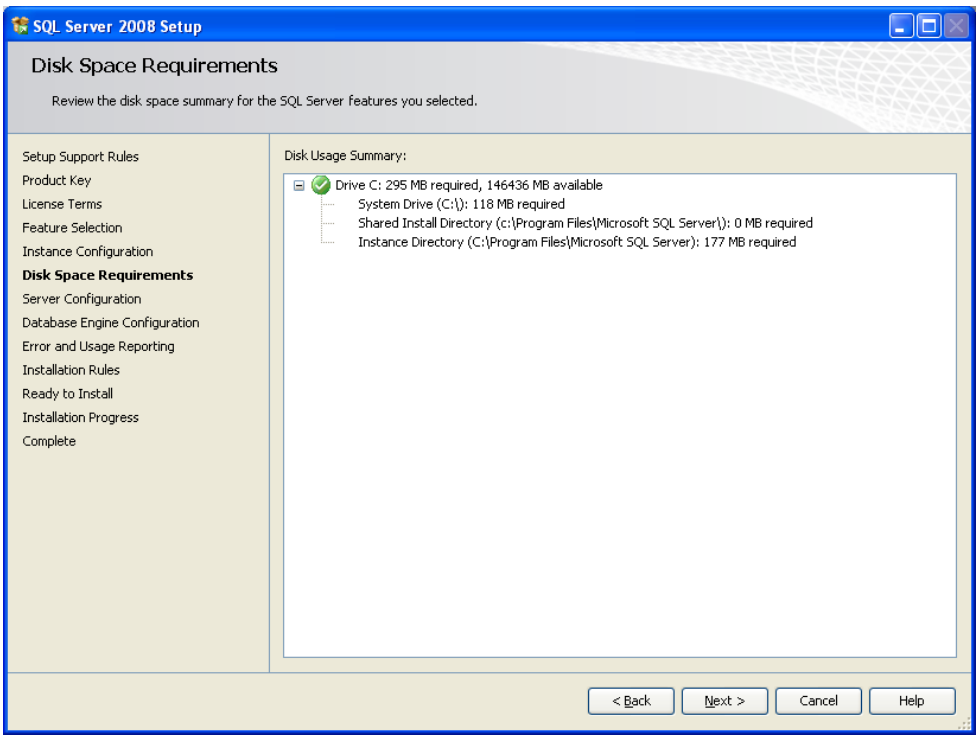

Figure 3-10: SQL installation disk space requirements

11. Review the disk space requirements and click **Next**.

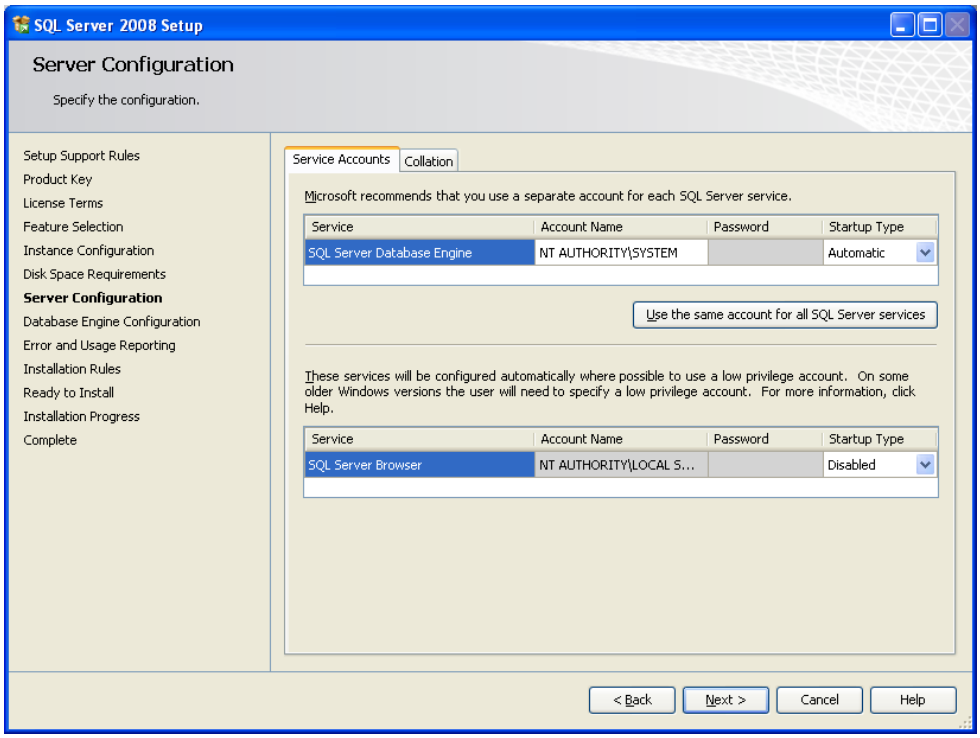

Figure 3-11: SQL installation server configuration

12. On Server Configuration screen, pick a user account which will be used for the installed SQL Services. If you don't know what to pick, the default settings will be recommended. Click **Next** to continue.

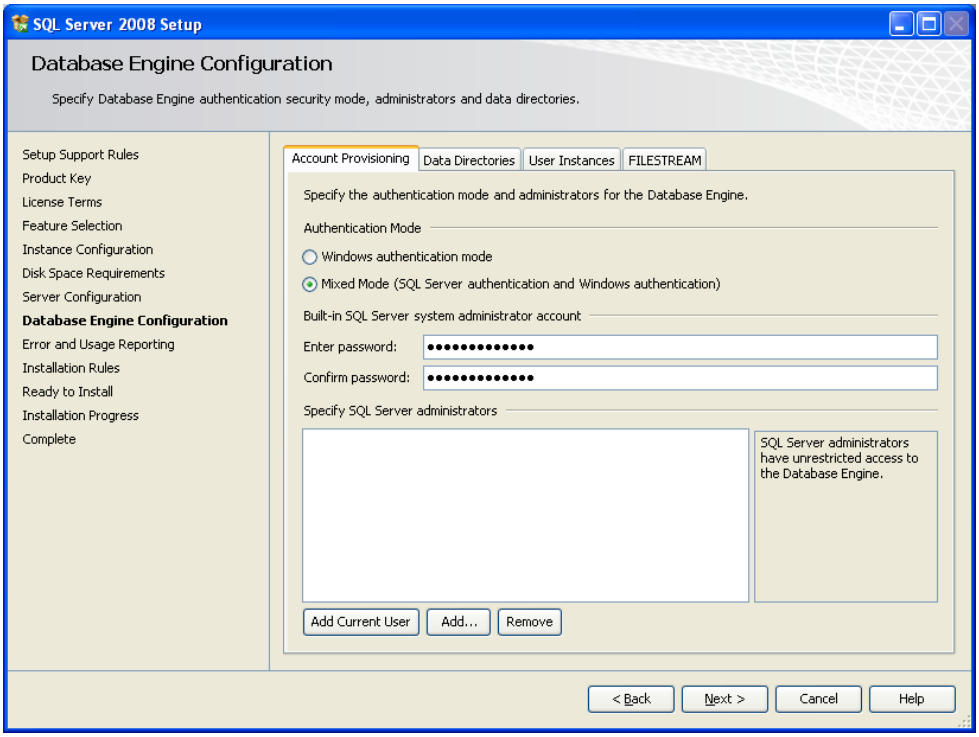

Figure 3-12: SQL installation database engine configuration

13. The SQL Server installation shows the configuration for the database engine.

    Here, you select an Authentication mode. @ptitude Observer is easiest to use in *Mixed Mode* which is recommended, but it also supports *Windows Authentication* Mode.

    Type in the password for the account. Remember to save the password in a safe place, since it will be required later when configuring the system, e.g. when installing a new Observer database.

    In addition, SQL Server 2008 needs to have a SQL Server administrator specified which was not required in the earlier versions of SQL Server. If you don't know which account to pick, it is recommended that you click the "Add Current User" button.

    Press **Next** to continue.

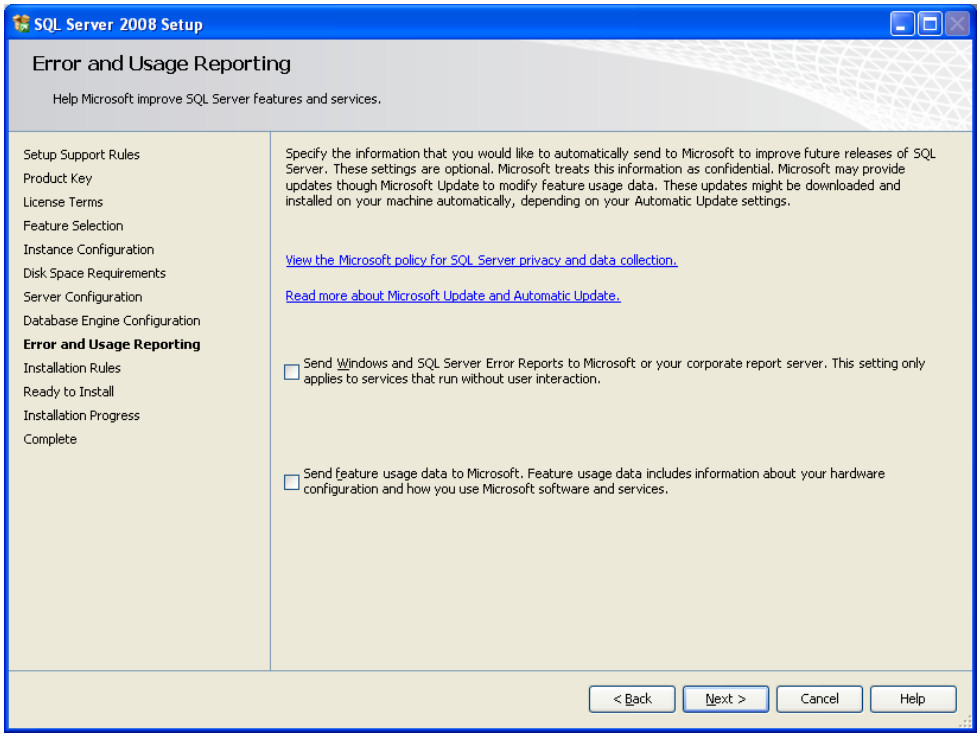

Figure 3-13: SQL installation error and usage reporting

14. Here, you can set whether you want to send error and usage reports to Microsoft or not. You can leave the check boxes unchecked which is recommended and press **Next.**

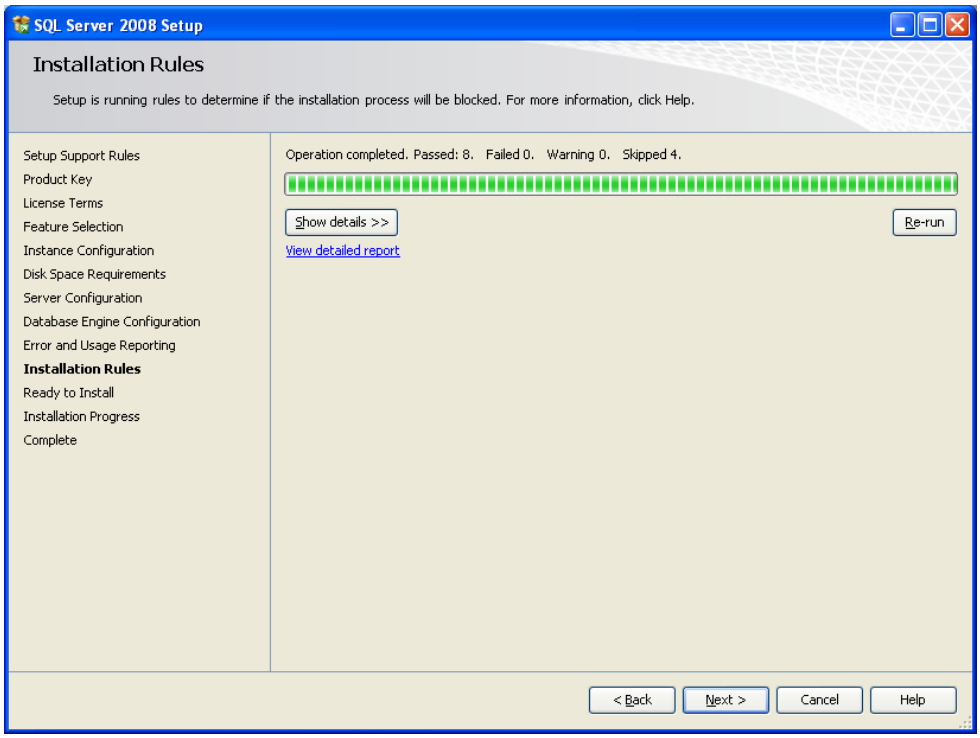

Figure 3-14: SQL installation rules

15. SQL Server checks the installation rules. To continue, click **Next**.

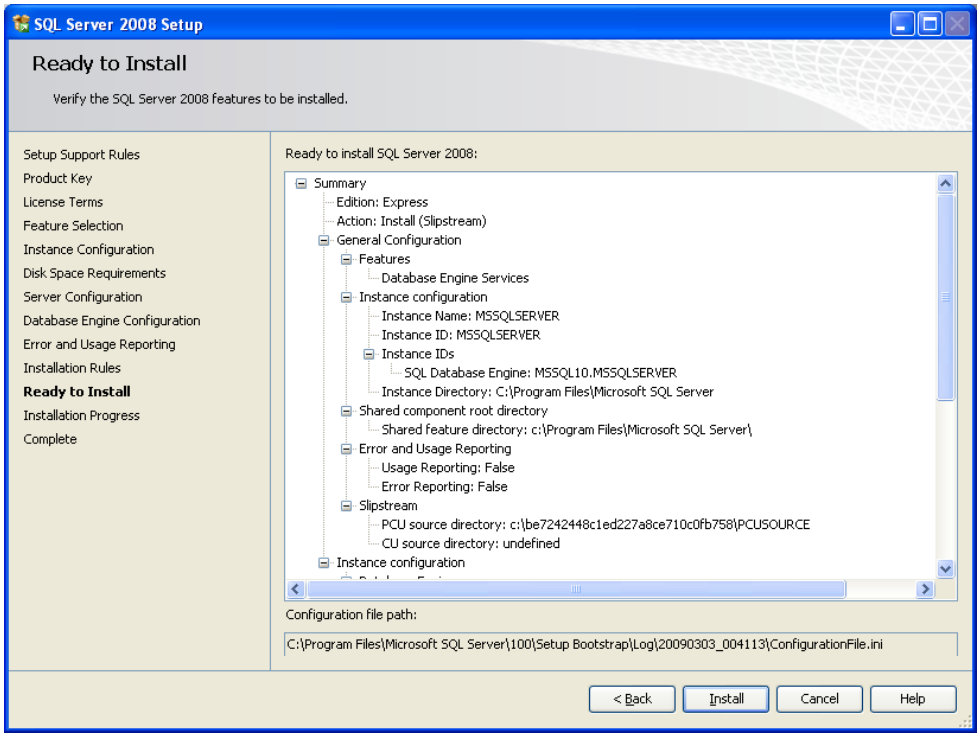

Figure 3-15: SQL installation ready

16. Now the setup is ready for installation. If you are satisfied with your settings, press **Install**.

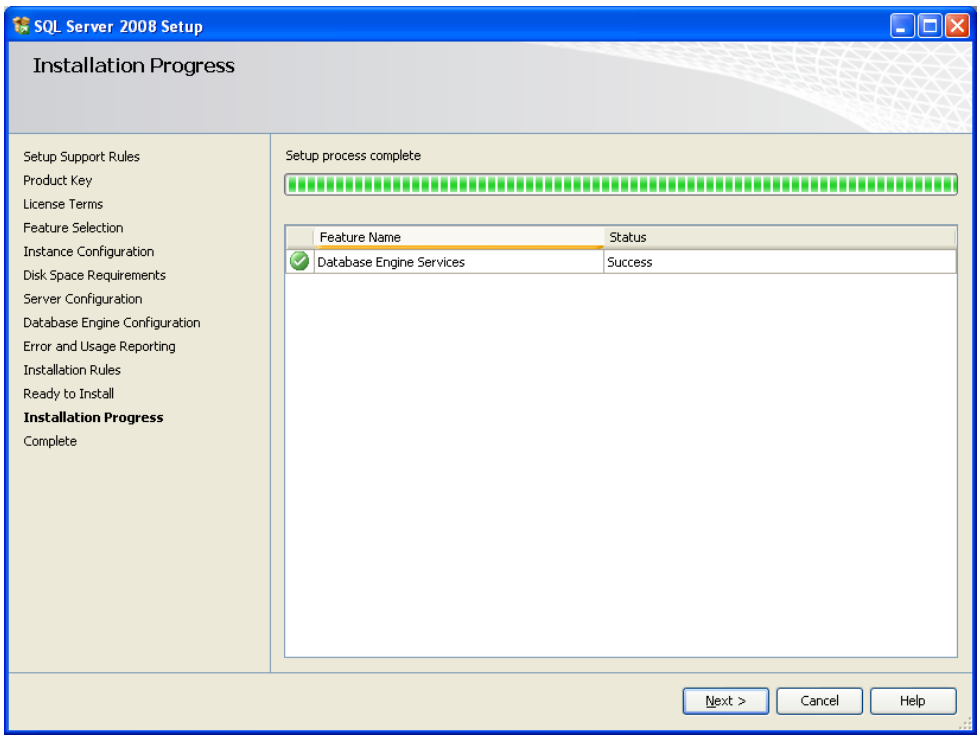

Figure 3-16: SQL installation progress

17. The setup displays the installation progress bar. After the installation is finished, click **Next** to display the summary dialog then click **Close** to finish the SQL Server installation.

4
Oracle XE Installation

1. Insert the **SKF @ptitude Observer DVD**.
   If the installation program does not start, run the file Setup1.exe from the DVD.

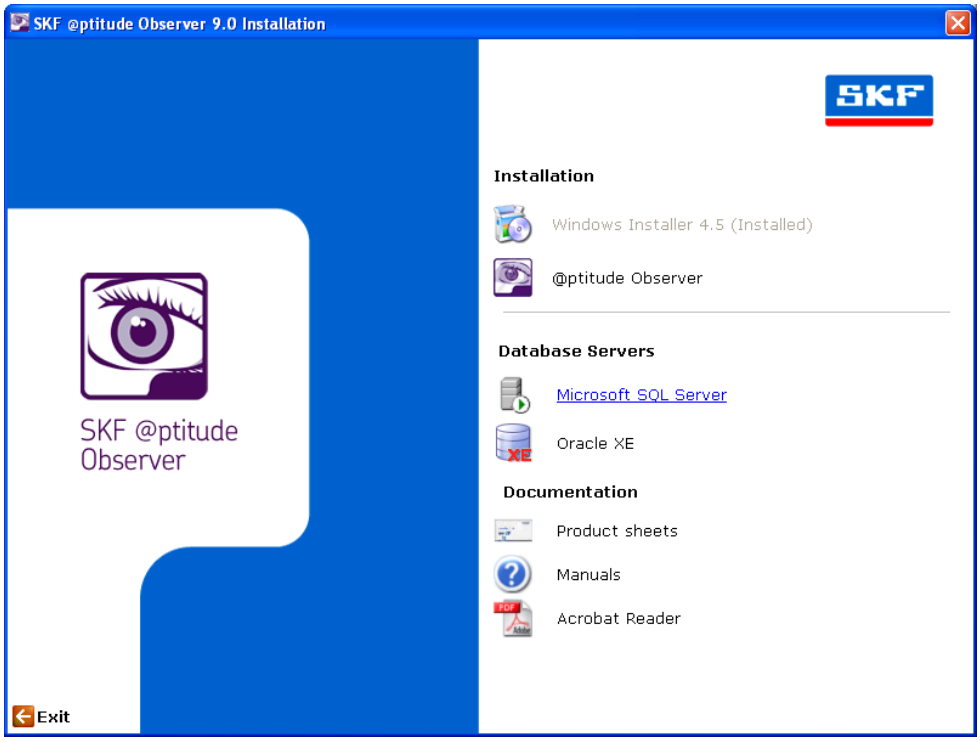

Figure 4-17: Database server installation start

2. Press **Oracle XE**.

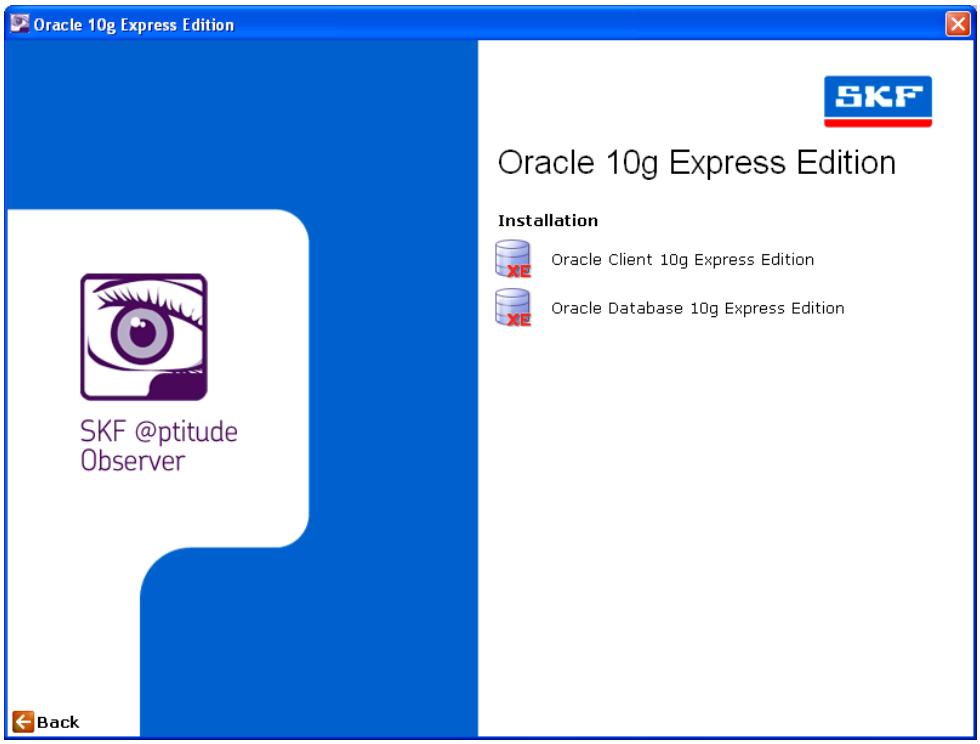

Figure 4-18: Oracle server installation options

3. There are two installation options.
   - **Oracle Client 10g Express Edition** is installed for a computer that is not used as the SKF @ptitude Observer database server.
   - **Oracle Database 10g Express Edition** is installed for a computer that serves as the SKF @ptitude Observer database server.

Oracle Client Expression Edition

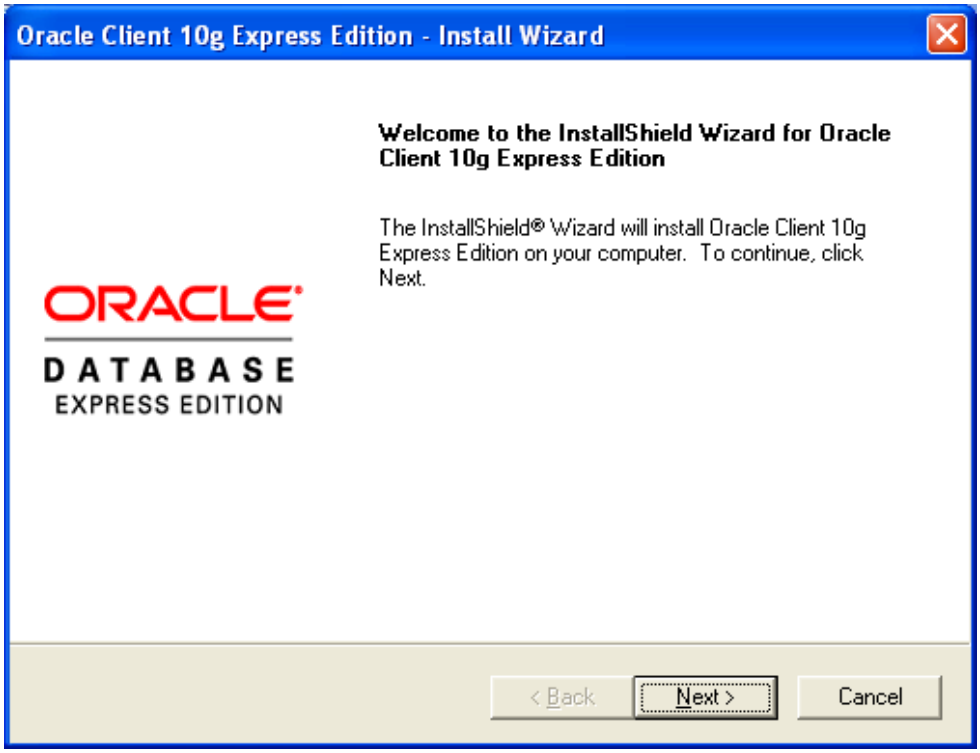

Figure 4-19: Oracle Client Express Edition installation

1. Click **Next** to continue installing Oracle Client Expression Edition.

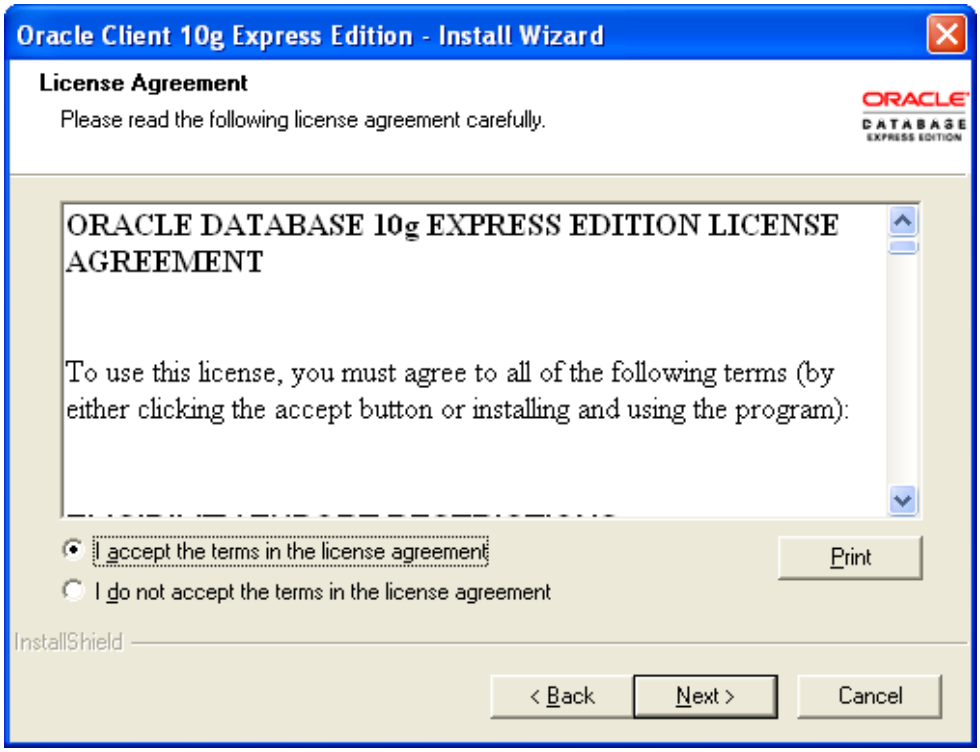

Figure 4-20: Oracle client installation license agreement

2. Mark "I accept the terms in the license agreement" and click **Next**.

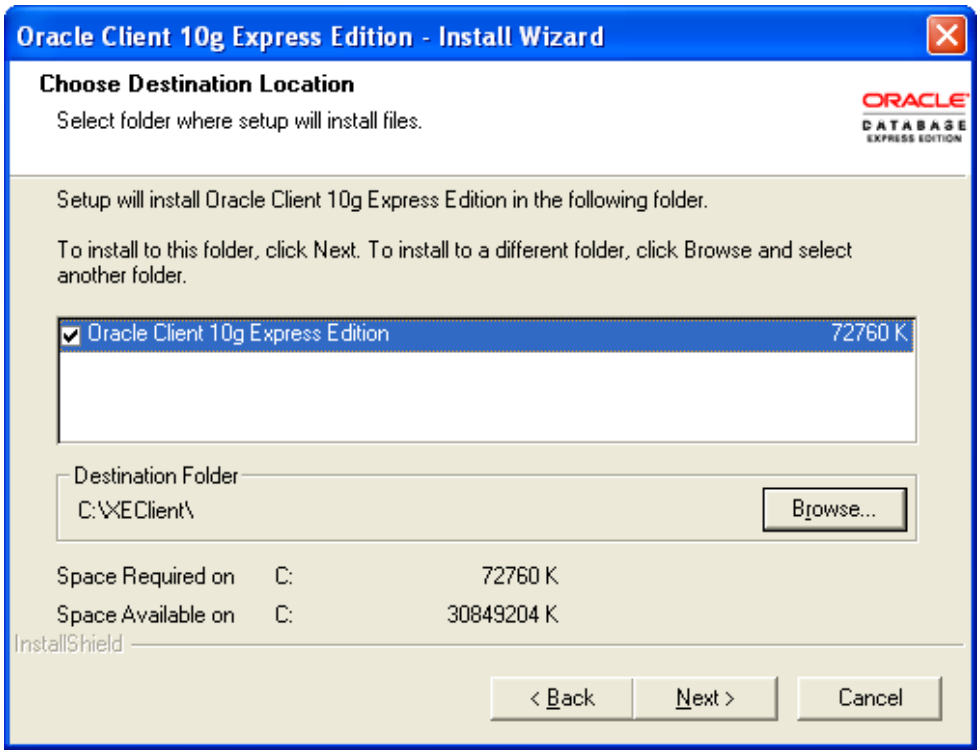

Figure 4-21: Oracle client installation destination location

3. Choose the destination of the Oracle Client Expression Edition settings, then click **Next**. This makes the InstallShield® Wizard to prepare the installation of Oracle Client Express Edition.

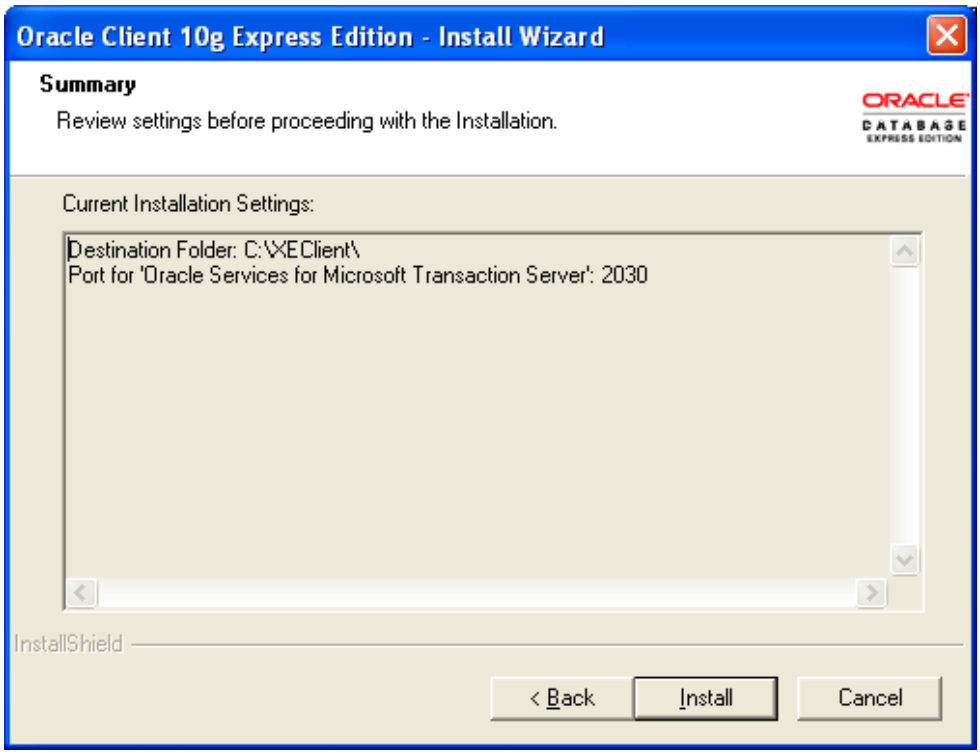

Figure 4-22: Oracle client installation settings summary

4. Review the settings before proceeding with the installation. If settings were set correctly, click **Install**.

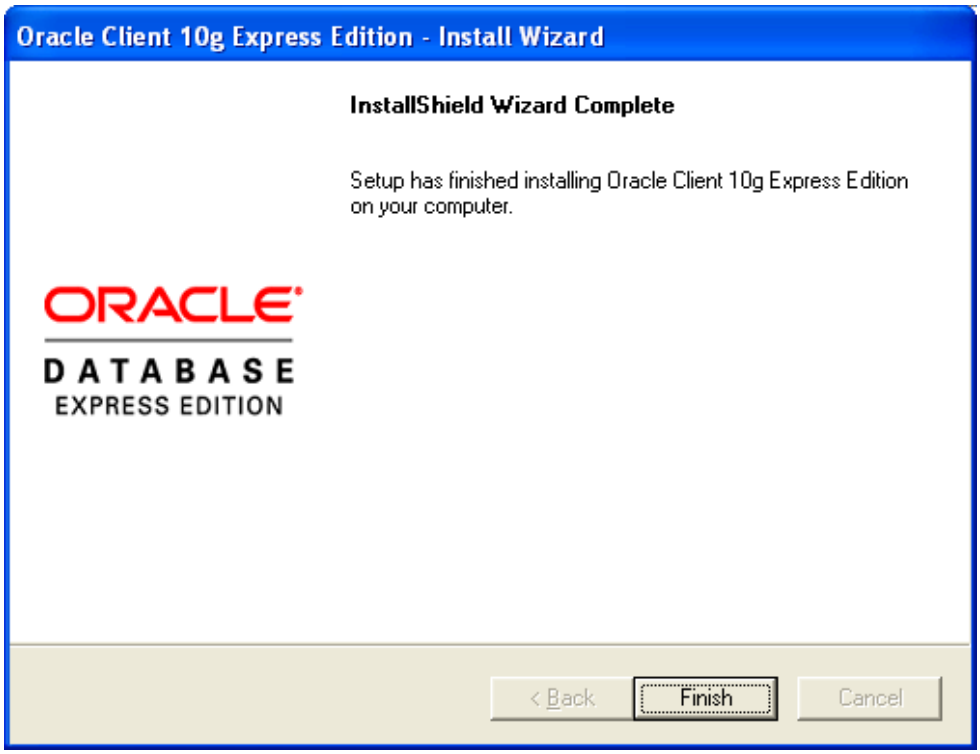

Figure 4-23: Oracle client installation to complete

5. Click **Finish** to complete the installation.

Oracle Database Expression Edition

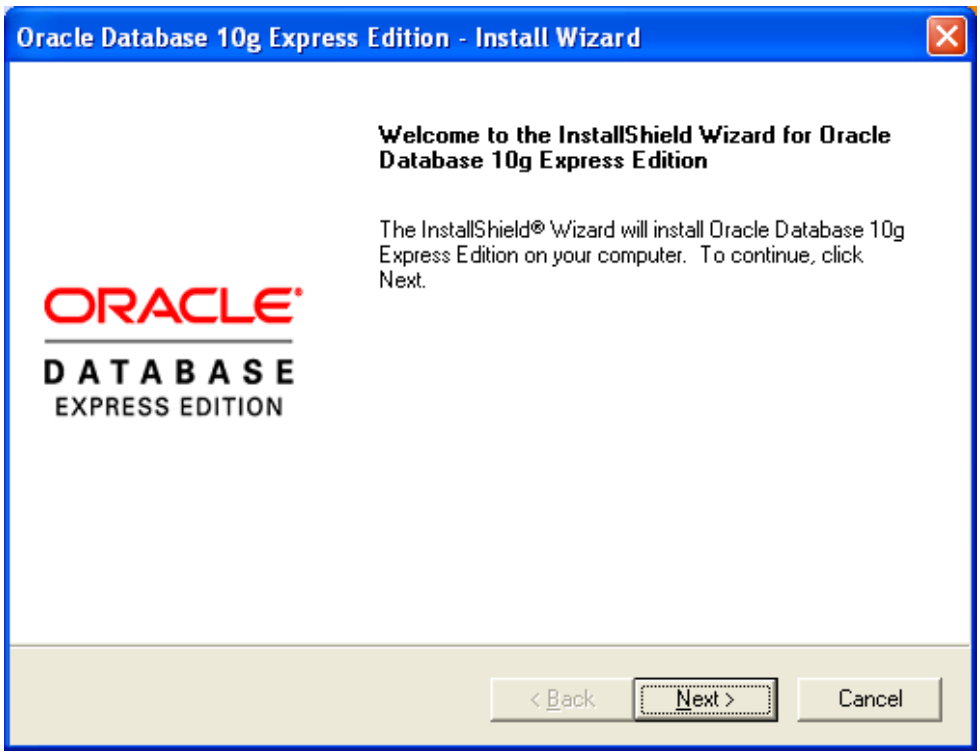

Figure 4-24: Oracle Database Express Edition installation

1. Click **Next** to continue installing Oracle Database Expression Edition.

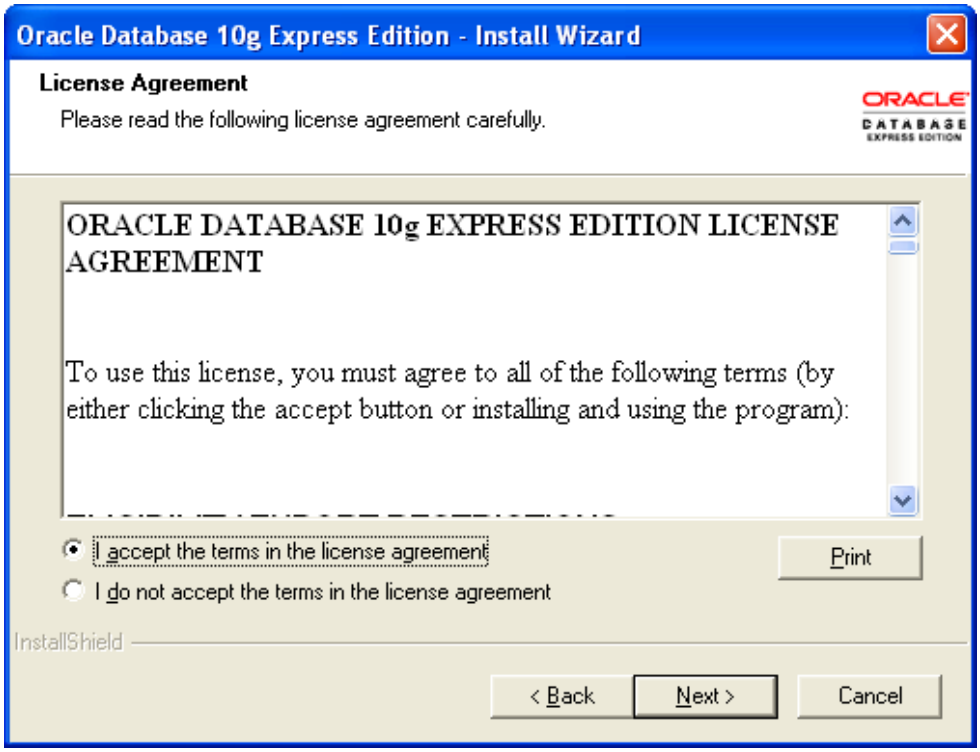

Figure 4-25: Oracle database installation license agreement

2. Mark "I accept the terms in the license agreement" and click **Next**.

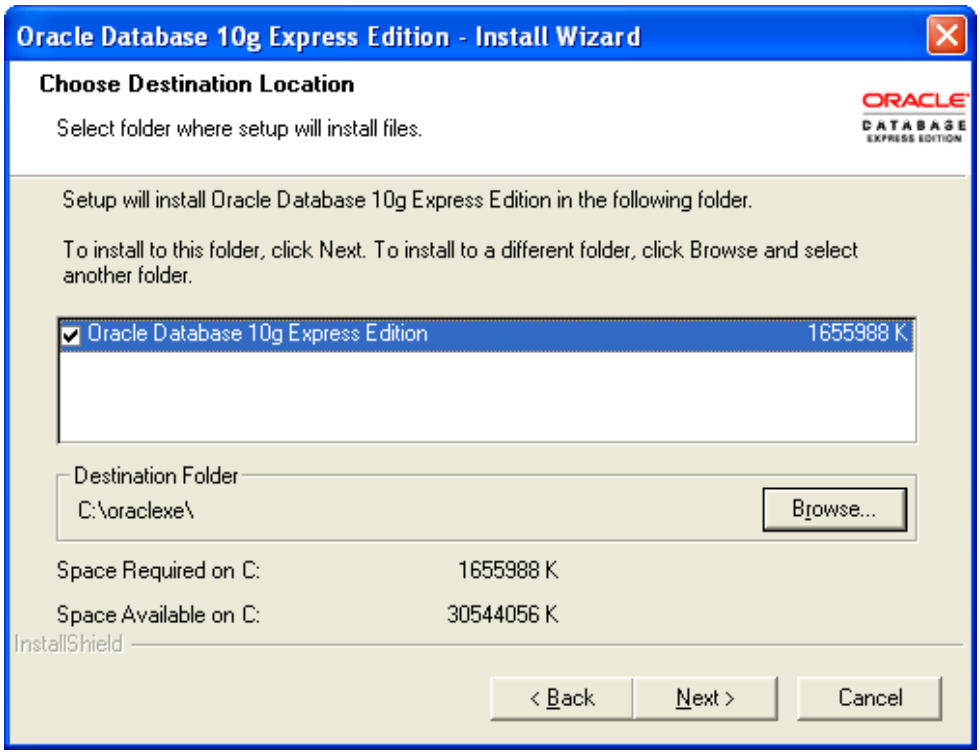

Figure 4-26: Oracle database installation destination location

3. Choose the destination of the Oracle Database Expression Edition settings, then click **Next**.

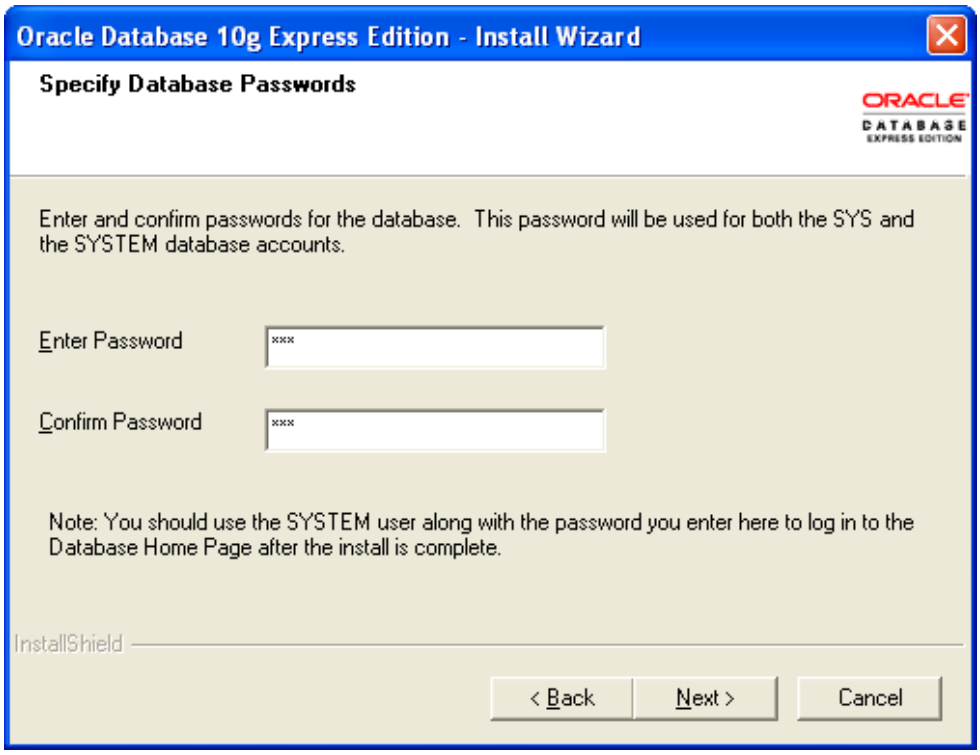

Figure 4-27: Oracle database password

4. Enter and confirm password for the database. This password will be used for both SYS and SYSTEM database accounts. Click **Next**. This makes the InstallShield® Wizard to prepare for the installation of Oracle Client Express Edition.

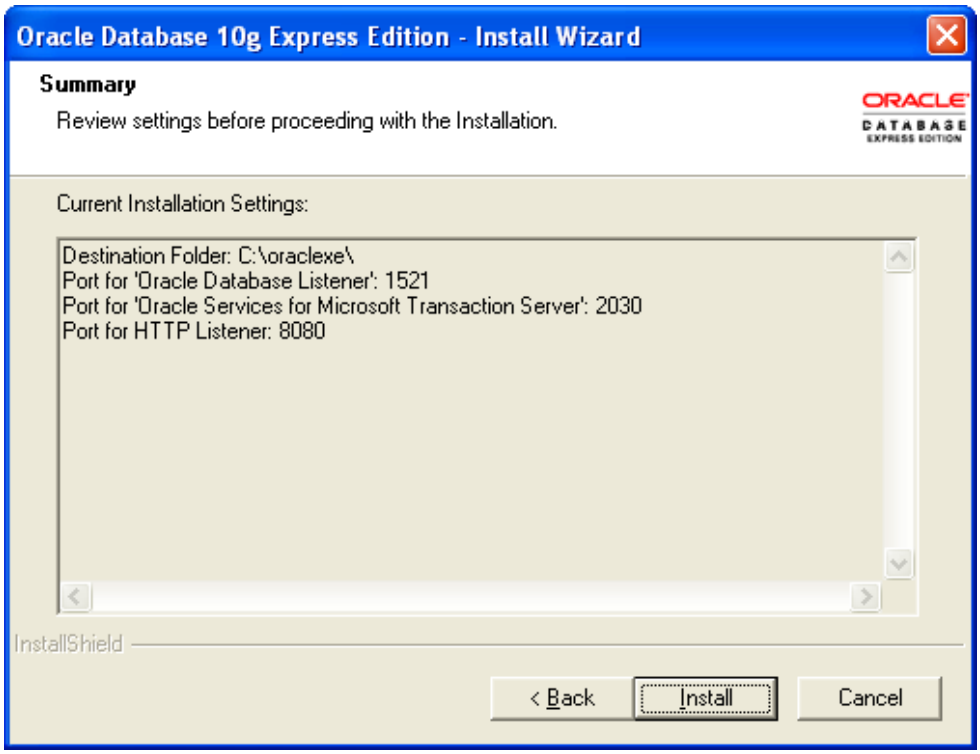

Figure 4-28: Oracle database installation settings summary

5. Review settings before proceeding with the installation. You may change Destination Folder setting. Click **Install** to continue.

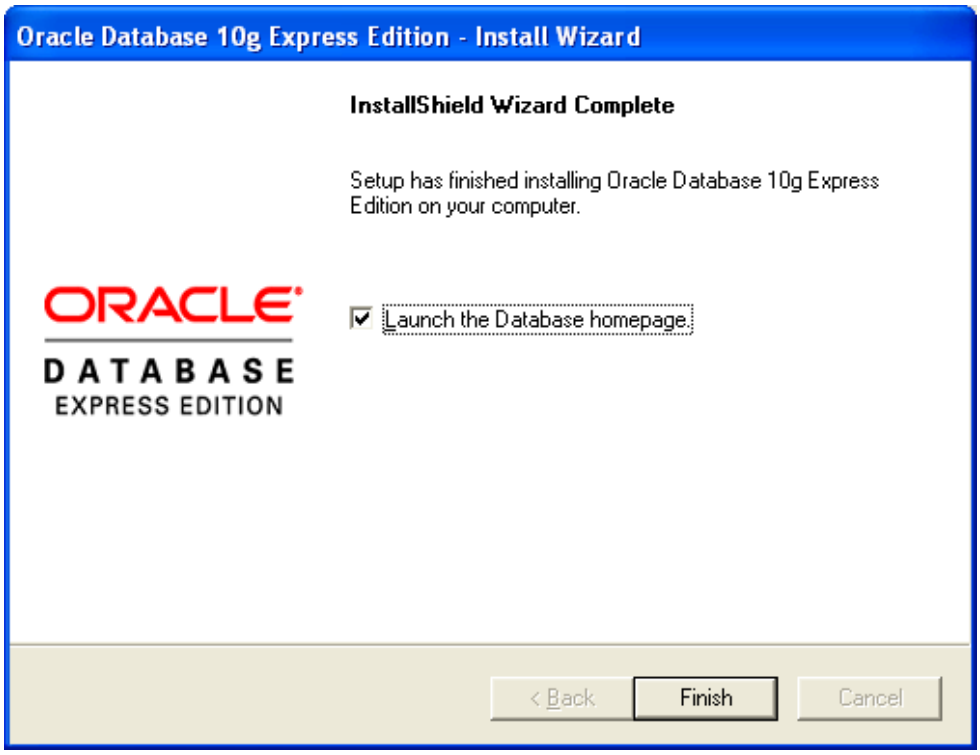

Figure 4-29: Oracle database installation to complete

6. Click **Finish** to complete the installation.

5

@ptitude Observer Suite Installation

1. Insert the **SKF @ptitude Observer DVD**.
   If the installation program does not start, run the file Setup1.exe from the DVD.

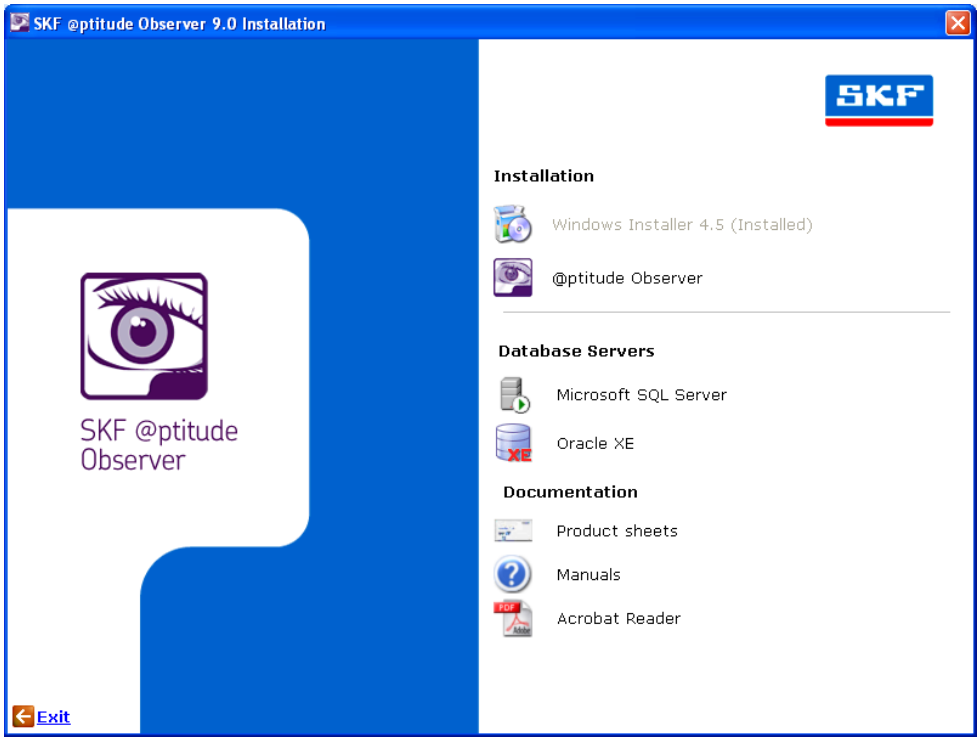

Figure 5-30: @ptitude Observer installation start

2. Press **@ptitude Observer**.

Figure 5-31: InstallShield Wizard for @ptitude Observer installation

3. InstallShiled® Wizard will guide you through the @ptitude Observer Suite installation. Click **Next** to continue.

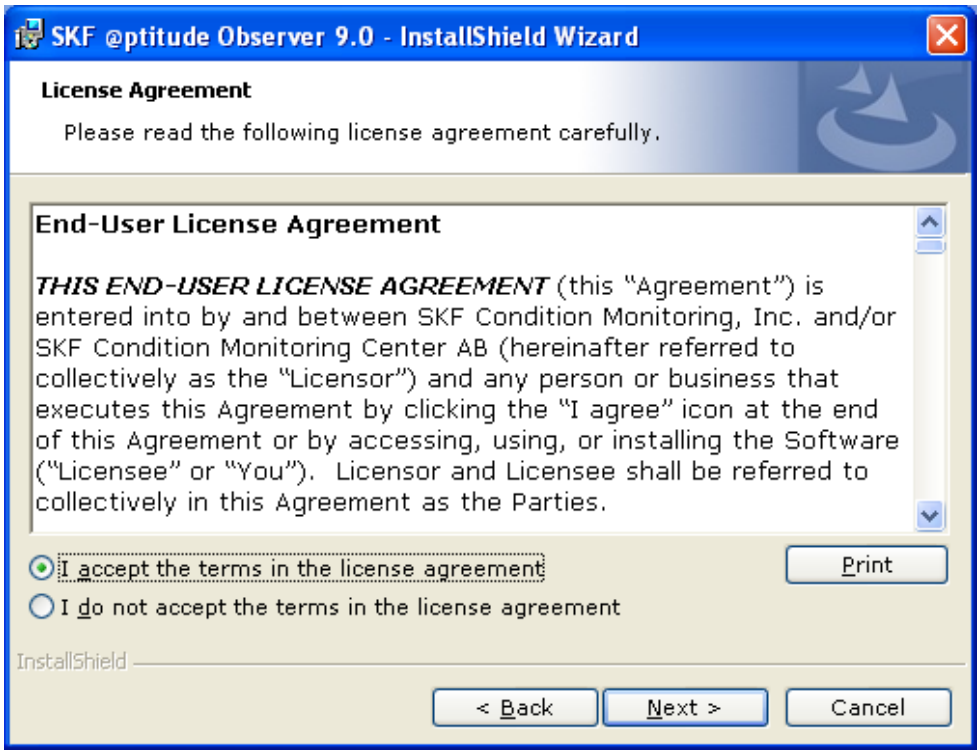

Figure 5-32: @ptitude Observer installation license agreement

4. Mark "I accept the terms in the license agreement" and click **Next**.

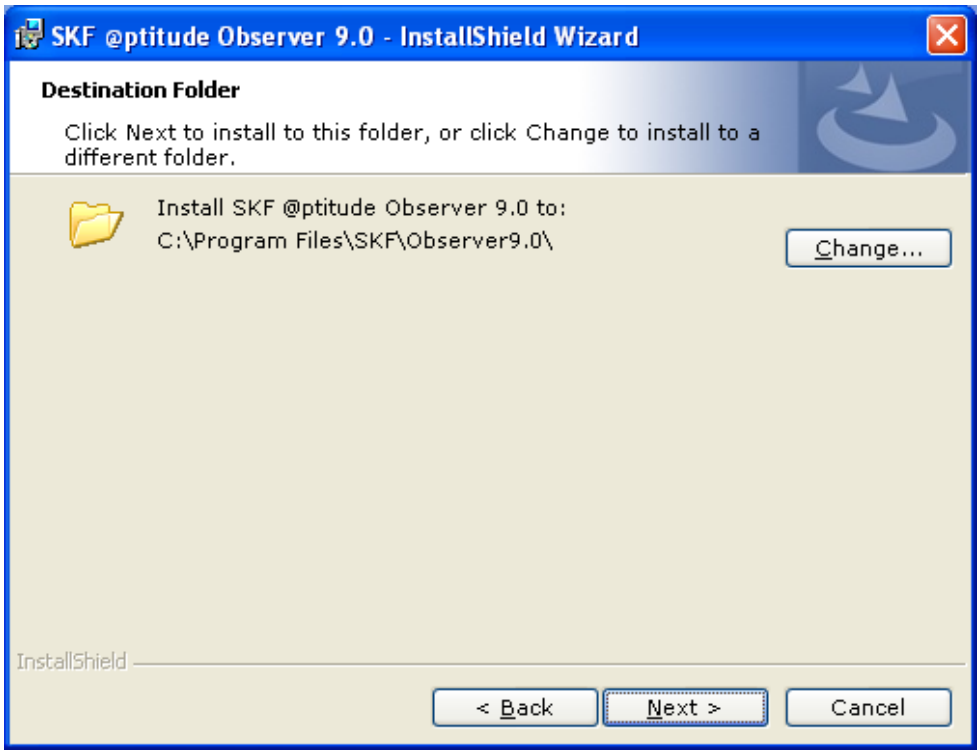

Figure 5-33: @ptitude Observer installation destination folder

5. Check the destination folder. If it was set to the correct folder, click **Next** to continue. Otherwise, click on Change to install to a different folder.

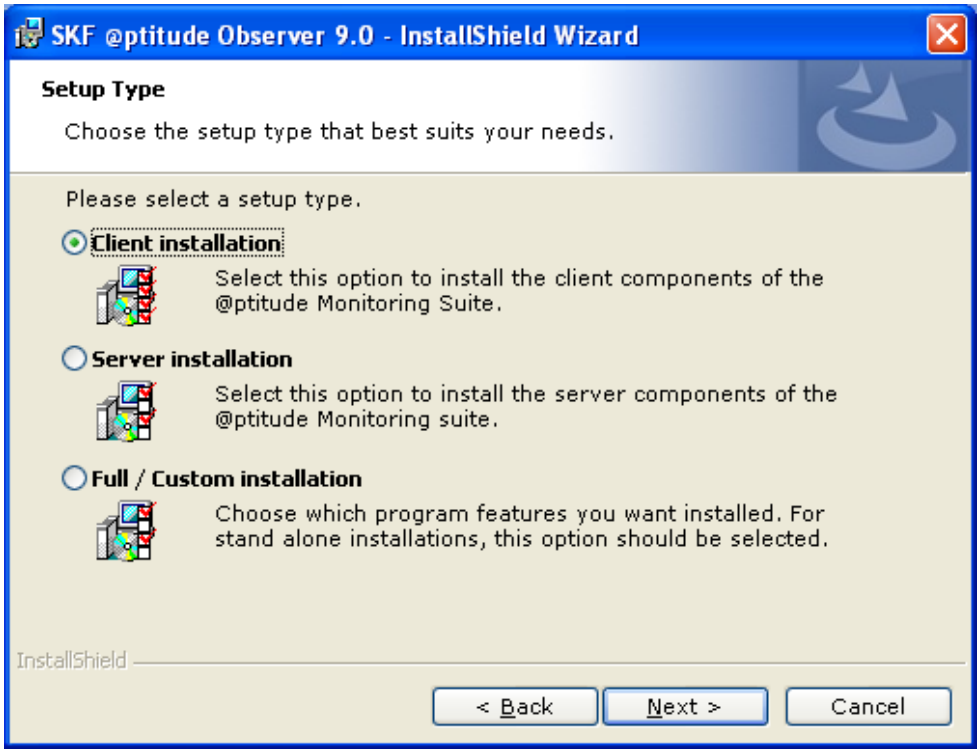

Figure 5-34: @ptitude Observer installation setup type

6. Choose a setup type and click **Next** to continue.

   Client installation and **Server installation** will install all the necessary components for you. Go to step 8.

However, **Full / Custom installation** requires you to choose which components to install as shown in the next step.

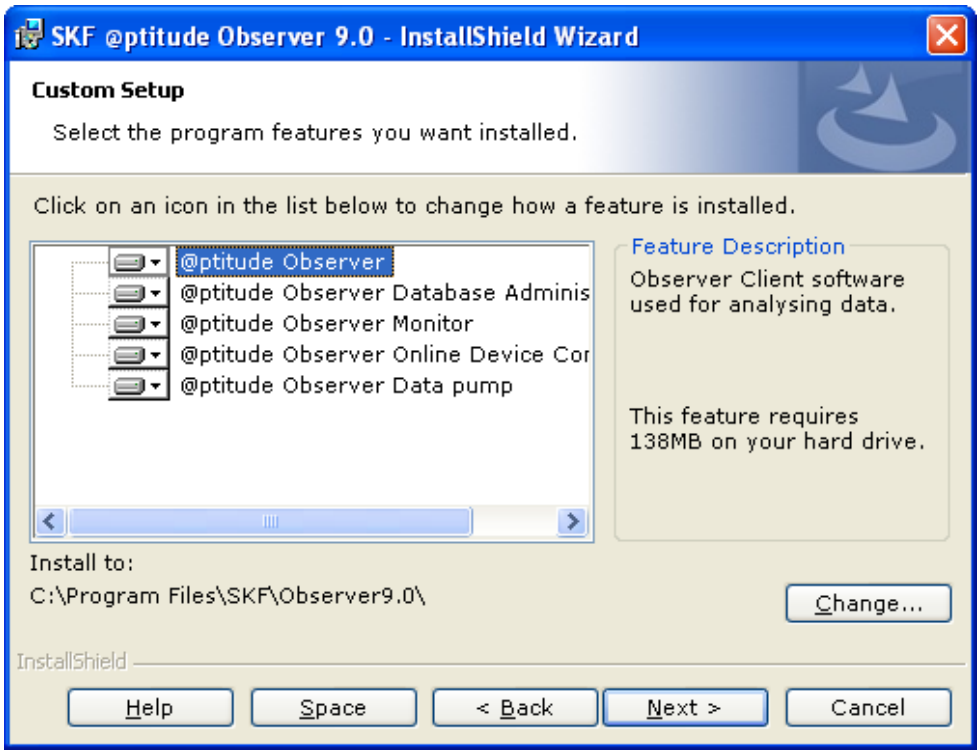

Figure 5-35: Example of @ptitude Observer installation custom setup

7. Select programs to install, then click **Next**. You may select program(s) to install by changing the installation option. There are different installation options as shown below.

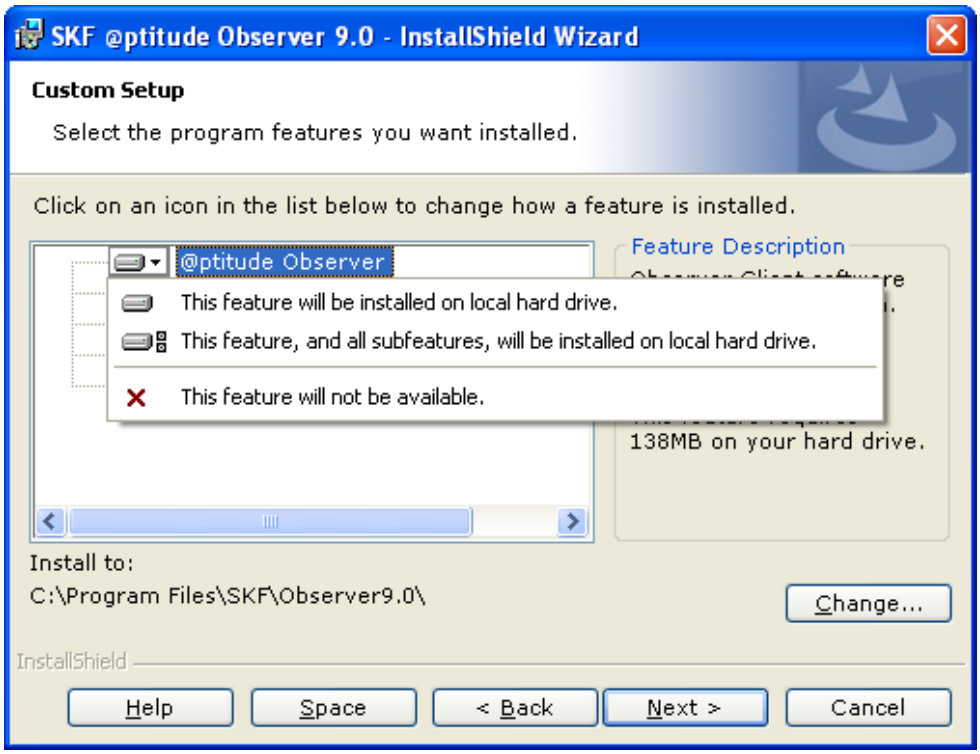

Figure 5-36: @ptitude Observer installation custom setup options

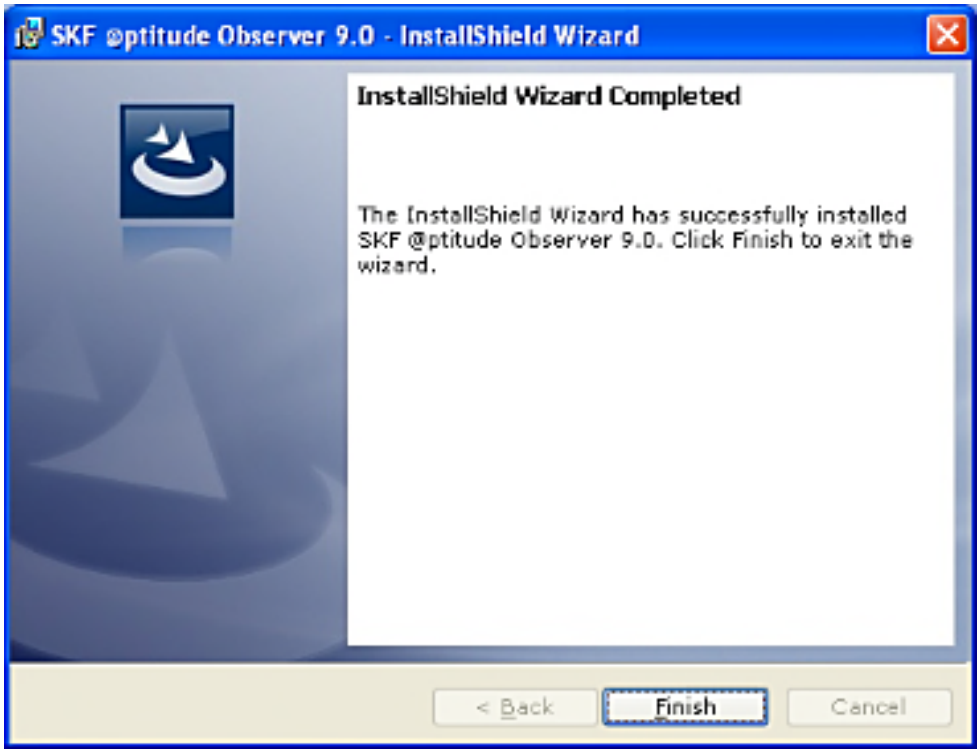

Figure 5-37: @ptitude Observer installation finish

8. Press **Finish** to complete the installation and exit InstallShield® Wizard.

6
Install Observer Database

After the @ptitude Observer suite has been installed, it's necessary to connect the suite to an Observer database.

If an Observer database already exists, the database needs to be upgraded to the version of the @ptitude Observer suite installed.

If there is no Observer database existing, it is necessary to install a new Observer database.

*Note - For more information about @ptitude Observer database administrator software, refer to **Observer Database Administrator user manual**.*

Upgrade an Existing Observer Database

1. Start the @ptitude Observer database administrator software by clicking on the shortcut on the start menu.
2. Log in to the database server using the login credentials specified when installing the SQL server.

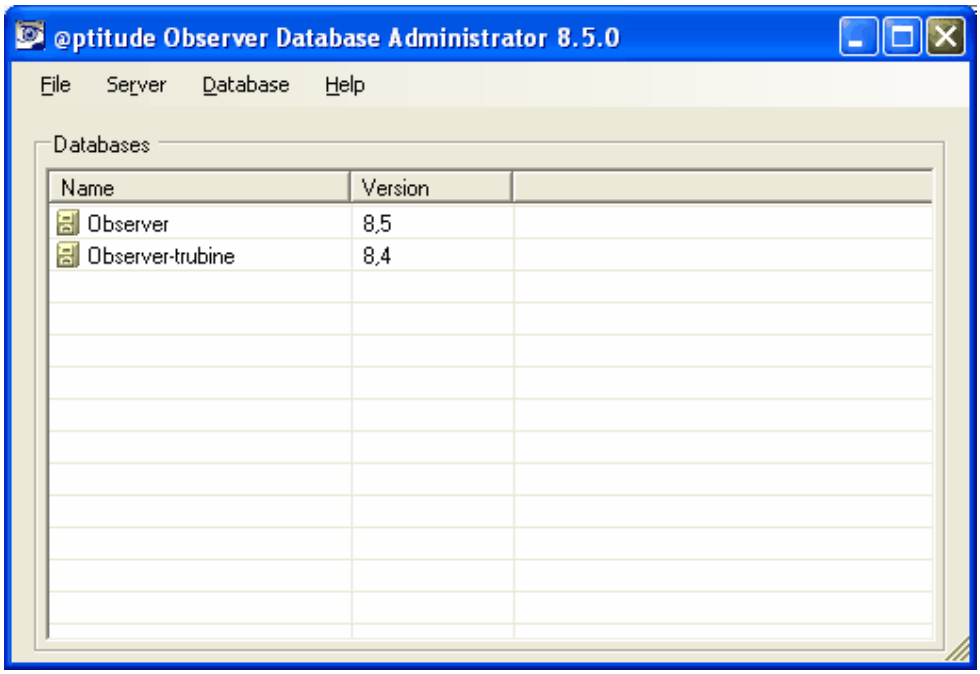

Figure 6-38: Example of Observer databases

3. In the database list, select the database to be upgraded and click the menu option **Database / Upgrade selected databases**.
4. Browse for the database definition file which contains information about how to upgrade the database and click OK. The definition file can be found in the folder \NewVer\Database administrator on the Observer DVD.
5. After the procedure is finished, the selected database is upgraded and the @ptitude Observer database administrator software can be closed.

Install a New Observer Database

1. Start the @ptitude Observer database administrator software by clicking on the shortcut from the start menu.
2. Log in to the database server using the login credentials specified when installing the SQL server.
3. Click on the menu option **Server / Create new database**.

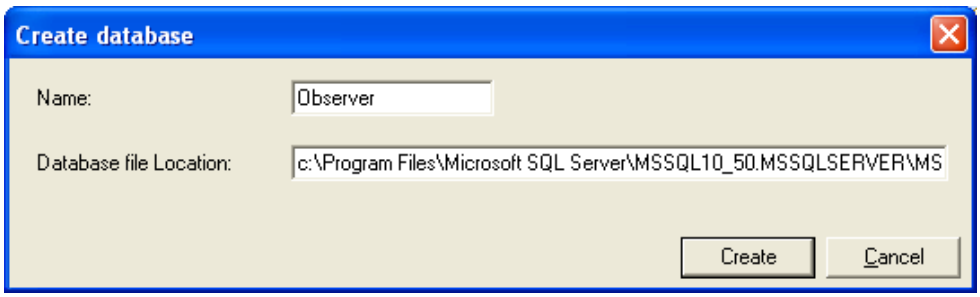

Figure 6-39: Example of Observer create database

4. Select a database name (default is Observer) and select where the database files should be stored (default is SQL server data directory).
5. Click on **Create** button.

Important - The database name cannot be the same as an already existing database.

6. During the installation, you will be asked if you want to install bearings and diagnosis rules. Click **Yes**.
7. You will be prompted for the location of the bearing file to import, please browse to the file bearing.brg which exists in the folder NewVer\Database administrator on the Observer DVD.
8. At the end of the Create database procedure you will be asked which measurement units to use for the standard diagnosis in Observer. Select the measurement units you want to use and click the **Update** button.

7

@ptitude Observer Monitor Service

To be able to use @ptitude Observer as an on-line system, the communication and database storage are performed by the @ptitude Observer monitor service. There can be several @ptitude Observer monitor services installed at the same time.

1. To start a @ptitude Observer monitor service, start the @ptitude Observer Monitor Manager software by clicking on the shortcut on the start menu located in **Programs\SKF @ptitude Monitoring Suite\@ptitude Observer X.Y Monitor Service Manager**.

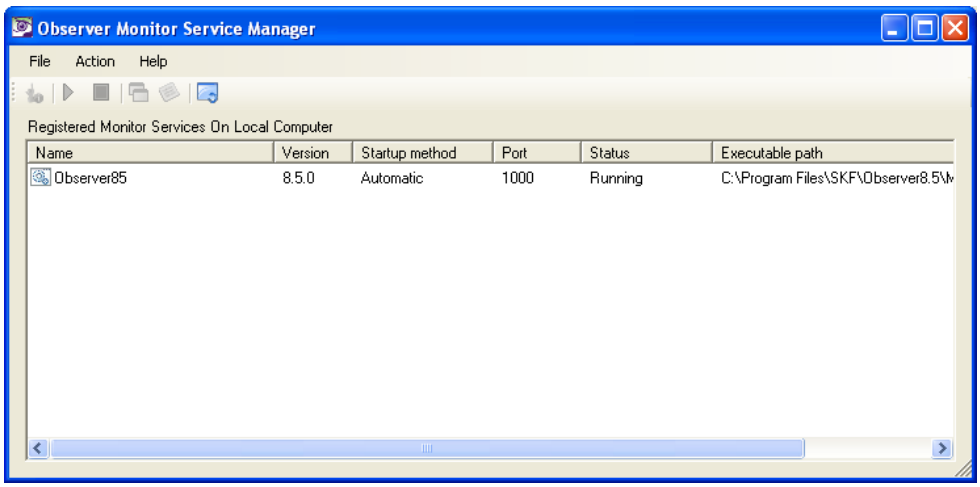

Figure 7-40: Example of @ptitude Observer Monitor Server Manager

Observer Monitor Service Manager screen lists all the registered monitor services on the local computer.

Action allows the following interfaces;

- **New** allows to add new monitor services on the local computer.
- **Properties** allows to edit the properties of the already registered services through Connection interface.
- **Delete** deletes the selected registered service.
- **Start** starts the selected monitor service.
- **Stop** stops the selected monitor service.
- **Monitor Service Viewer** displays events, connections and status of the selected monitor service.
- **View Log File** allows to review a log file of the selected monitor service.
- **Refresh** updates the list with most current information.

2. To register a new monitor service, click a menu option **Action**, then **New**.

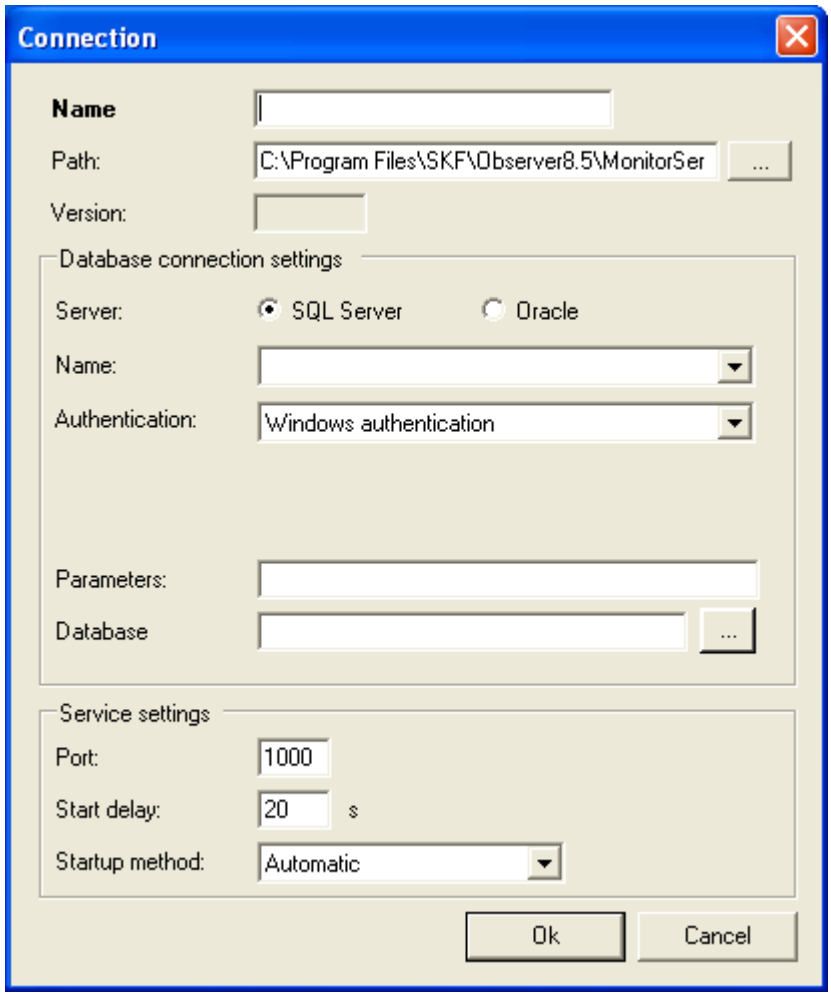

Figure 7-41: Example of @ptitude Observer Monitor Service - connection

- **Name** is a unique name which has to be given to the service. It will be used to identify the registered database connection on local computer. Once a new service is registered, the name cannot be changed.
- **Path** defines the location of the executable file to be used as the service. The default path is C:\Program Files\SKF\Observer X.Y.
- **Version** displays the version of @ptitude Observer in use currently.

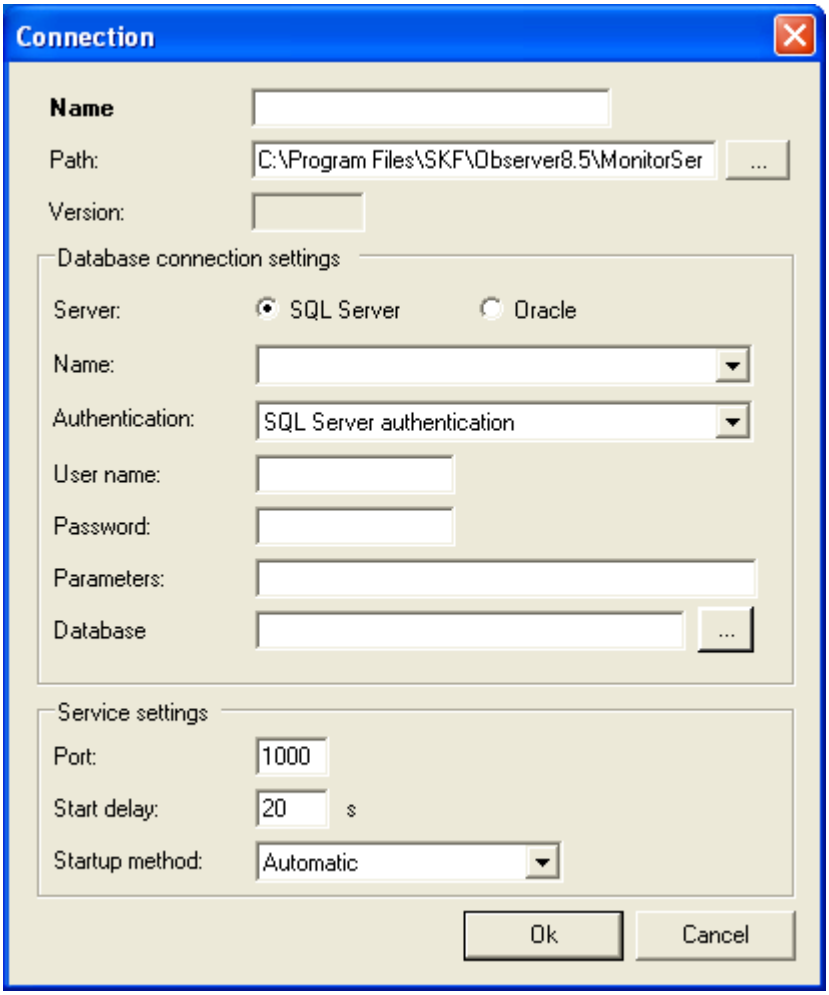

Figure 7-42: Example of @ptitude Observer Monitor - database connection settings

Database connection settings

- **Server** is the type of database server such as SQL Server or Oracle. The Monitor Service settings vary depending on the server type.
- **Name** allows to select a server from the list of databases. *(local)* means that the database is on the same PC.
- **Authentication** defines whether to use *Windows authentication* or *SQL Server authentication* for SQL Server. This Authentication selection corresponds to the selection you have made when installing SQL Server Express at Database Engine Configuration screen.
- **User name** is the database user name.
- **Password** is the password for the user.
- **Parameters** allows to enter additional parameters for the connection. For example, if you want to force TCP/IP protocol, enter "*Network=DBMSSOCN;*" in this text box.
- **Database** is the selected database from a list of available databases on the database server.

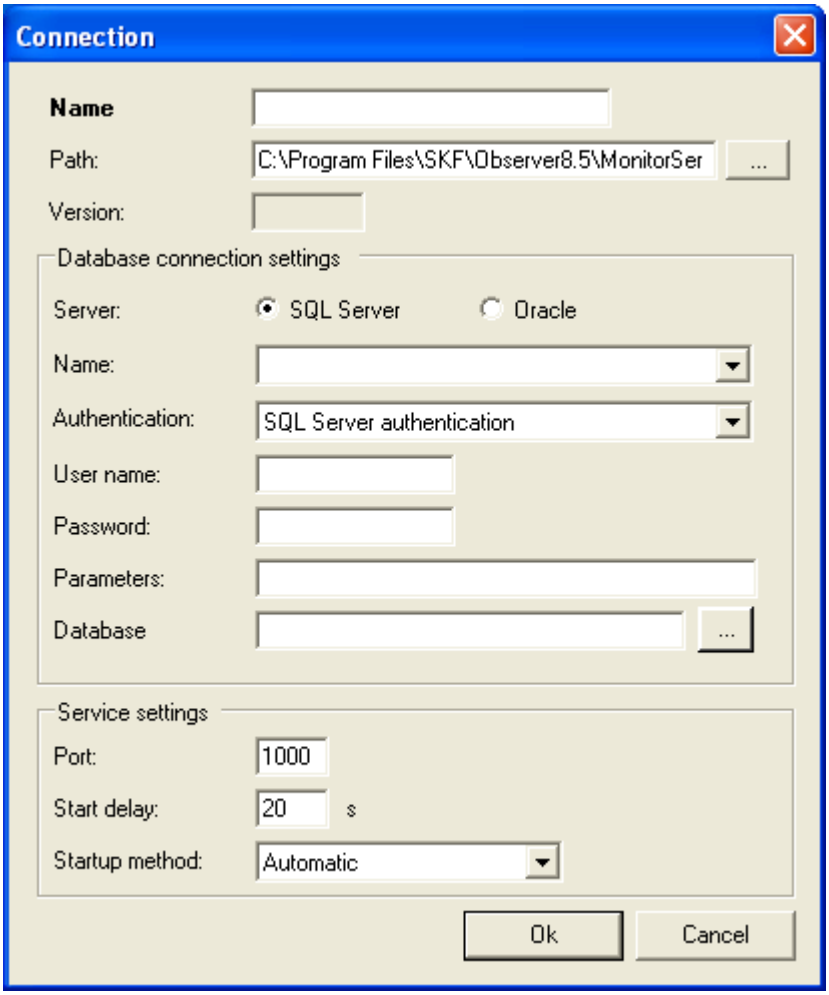

Figure 7-43: Example of @ptitude Observer Monitor - service settings

Service settings

- **Port** is used to assign which port the @ptitude Observer Monitor Service should use to communicate with @ptitude Observer and IMx devices. The default value is 1000.
- **Start delay** is used to give the database server some time (in seconds) to start before @ptitude Observer monitor tries to open the connection. It is recommended to set this field to 20 for the startup method *Automatic*. Whereas, it is recommended to set this field to 0 for the startup method *Manual*.
- **Startup method** sets the startup method of the service to either Automatic, Manual or Disabled.
  - **Automatic** means that the service starts when the operating system boots up.
  - **Manual** means that the service has to be started by the user either through @ptitude Observer Monitor Manager or through the services interface in windows.
  - **Disabled** means that the service is completely disabled.

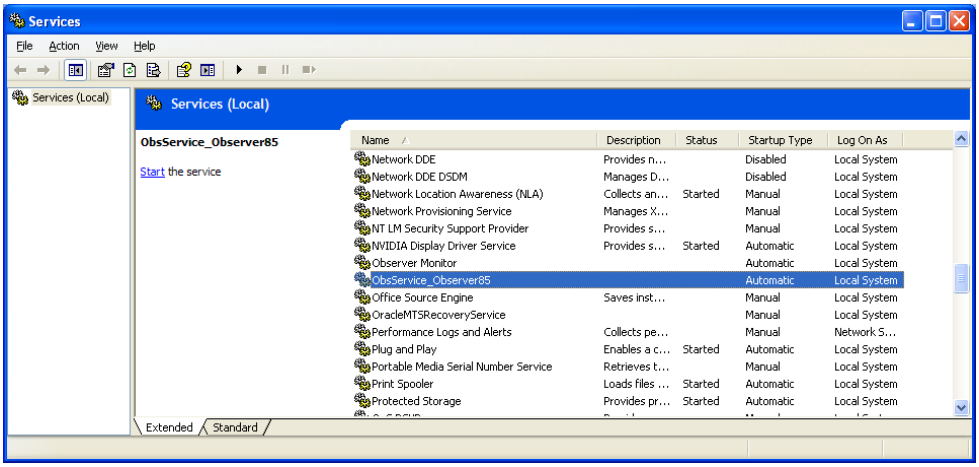

Figure 7-44: Example of Window's interface Services

3. A recovery plan, in case of a unrecoverable error, of registered monitor services resides within Windows' interface **Services (Local)** which is located under Administrative Tools in Control Panel.

   @ptitude monitor services start with the text "ObsService_".

   Select a @ptitude monitor service, then select **Properties** under Action. Or right-click on a @ptitude monitor service and select **Properties**. Select **Recovery** tab

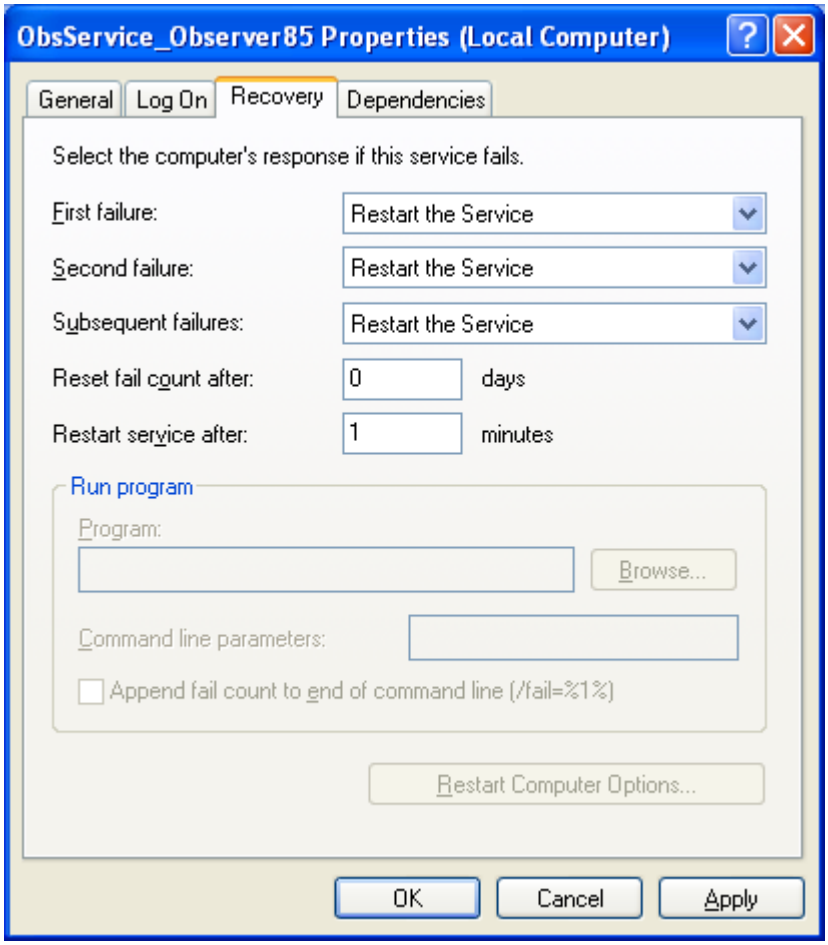

Figure 7-45: Example of Recovery setting

4. It is recommended to set the First, Second and Subsequent failures of the Recovery setting to "Restart the Service".

8
Edit Observer Settings

Language and License Key

When installing @ptitude Observer, a setting file called @ptitude Observer.ini is installed in C:\Users\[User name]\AppData\Roaming\SKF\Observer X.Y\Observer.ini. This section describes the different settings in that file.

The following is an example of the contents of a @ptitude Observer.ini file:

```
[System]
Language=English
RegKey=X53BB8-91JJ45-XY13GH-PC333L-9XMCV6-PP
```

- **Language** specifies which language to use.
- **Regkey** is the license key entered when installing the product.

You may edit the language and license key in this file.

Application Data Folder

With @ptitude Observer you can specify which folder to use as the application data folder (default is the user's own application data folder which is usually located in C:\Users\[Username]). The application data folder is used to store user specific data for the @ptitude Observer application such as connection files and .ini files.

You can do this in one of two ways:

Using the USE_APP_PATH Keyword on the @ptitude Observer Properties Shortcut

Using this USE_APP_PATH keyword will cause the @ptitude Observer system to use the same folder as the executable file which resides in for its application data.

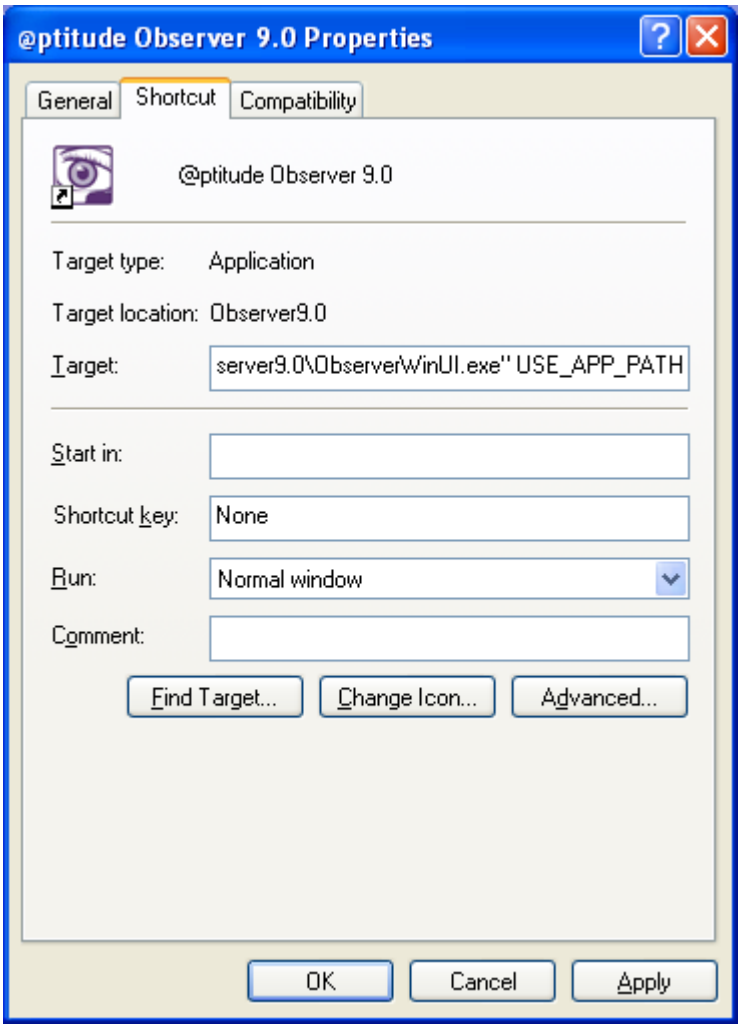

Figure 8-46: Assigning the executable file as an application folder

Create a new shortcut to the ObserverWinUI.exe file by editing the @ptitude Observer X.Y Properties Shortcut.

Add the text USE_APP_PATH in the target field as shown in the screen shot, above.

Using a Custom Folder on the @ptitude Observer Properties Shortcut

Instead of using the USE_APP_PATH keyword, it is also possible to specify a custom folder as an application data folder, for example “C:\myfolder”.

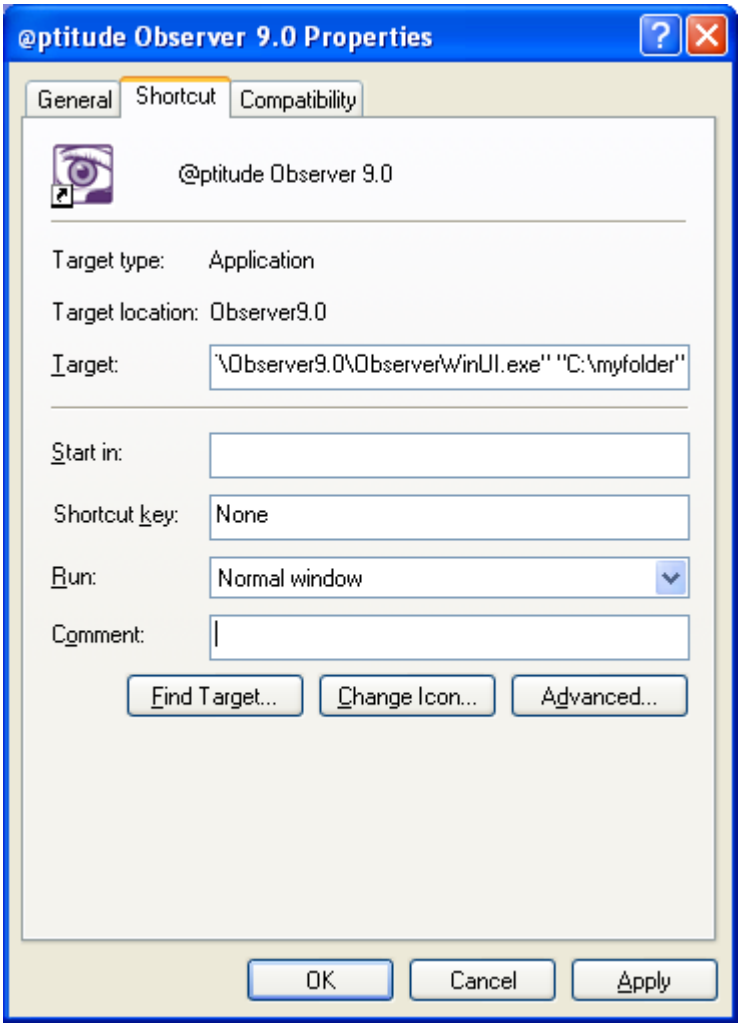

Figure 8-47: Assigning a custom folder as an application data folder

Note: if it’s hard to locate the Observer.ini file, you can always click on the shortcut “User Application data” folder on Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y.

9

MasCon/IMx Network Settings

This step is only needed if the computer is to be used as the @ptitude Observer Monitor computer.

MasCon/IMx units use the TCP/IP protocol to communicate with @ptitude Observer Monitor. By default, the network setting for MasCon/IMx uses IP address of 10.0.0.1 and net mask of 255.255.255.0. If you want to use different IP address, you will need to configure the settings in MasCon/IMx units. MasCon48 is configured using the digital display on the front panel, and MasCon16 and IMx units are configured by creating and sending a configuration file to the unit via @ptitude Observer On-line device configurator software.

For further information, refer to the corresponding IMx unit's User Manual, and **@ptitude Observer On-line Device Configurator User Manual**.

10
Time Synchronization

This step is only needed if you use the PC as the @ptitude Observer monitor computer.

IMx, MasCon16, and MasCon48 use a built-in function in Windows for time synchronization. @ptitude Observer monitor's watch is used as the reference for time in the MasCon/IMx system. In order to activate time synchronization, please follow the procedure below.

1. Open port 123 in the firewall. This is done a bit differently depending on your operating system and eventually external firewall.
2. Go to services and check that “Windows Time” service start-up method is set to “Automatic” and is started.
3. Double click on the file EnableTimeSync.reg in the Extra\TimeSync folder on the Observer DVD. This will enter information in the registry to enable the time synchronization service on the computer.
4. Stop and start "Windows Time" service to make this change take effect.

11
Software Upgrade

Important - It is strongly recommended that you create a backup of the database before you start the upgrade procedure.

This section of the installation manual describes how to upgrade @ptitude Observer. Note that different versions require different procedures.

- For versions ProCon 6.4 or earlier, follow the procedures from 1 to 4.
- For versions @ptitude Observer 7 or ProCon 6.5, follow the procedures 3 and 4.
- For version @ptitude Observer 8 and 9, proceed directly to the procedure 4.

1. Preparing for Database Conversion of ProCon 6.4 or Earlier Version

In order for @ptitude Observer database administrator to be able to read and convert databases, databases first need to be upgraded to @ptitude Observer 7.

1) On the @ptitude Observer installation DVD, allocate a folder in the location, [DVD]\Extra\Pre ProCon6.5 Upgrade\, which contains two files called DbAdmin.exe and DEF700.txt.
2) Double click on the DbAdmin.exe file and login with the **username** and **password**.
3) Select the database from the list and click **Update db from definition file** button and browse the **DEF700.txt** file and press **Update**.
4) After the upgrade has been completed, close @ptitude Observer database administrator software and continue with the conversion procedure 2, below.

2. Conversion Procedure for ProCon 6.4 or Earlier Version

1) Make sure ProCon, MasCon server or database tool is not running.
2) Uninstall database tool.
3) Uninstall ProCon.
4) Uninstall MasCon server.
5) If the installation of the latest @ptitude Observer has not been done yet, insert the @ptitude Observer DVD and follow the @ptitude Observer Suite Installation procedure.
6) Start @ptitude Observer database administrator and select the database you wish to convert.
7) Click on menu option **Database/Convert Observer7/ProCon 6.5 database**.
8) Select a new desired database name and click **Start** button.

Converting the database can take a long time. The more data in the database, the longer it takes. Therefore, it is strongly recommended to delete unnecessary data in the database before converting the database.

The conversion of the database keeps the original database intact. After the conversion, there will be two databases, one of the old version and the other of the new.

3. Converting from @ptitude Observer 7 or ProCon 6.5

1) Make sure that @ptitude Observer, @ptitide Observer Monitor or @ptitude Observer database administrator is not running.
2) Uninstall @ptitude Observer by using the add/remove interface in the control panel.
3) If the installation of the latest @ptitude Observer has not been done yet, insert the @ptitude Observer DVD and follow the @ptitude Observer Suite Installation procedure.
4) Start @ptitude Observer database administrator to do the database conversion.
5) Select the database that you wish to upgrade.
6) Click on menu option **Database/Convert Observer7/ProCon 6.5 database**.
7) Select a new desired database name and click **Start** button.

Converting the database can take a long time. The more data in the database, the longer it takes. Therefore, it is strongly recommended to delete unnecessary data in the database before converting a database.

The conversion of the database keeps the original database intact. After the conversion, there will be two databases, one of the old version and the other of the new.

4. Upgrading Procedure

1) Start @ptitude Observer database administrator.
2) Select the menu option **Database**, then **Upgrade selected database**.
3) Select definition file which should be located in the same folder as @ptitude Observer or in the folder '[DVD]:\NewVer\Database administrator\' and has a file extension of .DEF. Click **Ok** to proceed.
4) Start @ptitude Observer.
5) Press the menu item **On-line** then select **MasCon/IMx** units.
6) Press the button **Firmware**.
7) Browse the folder for the firmware of the MasCon/IMx types you are using. The files are located in the '[DVD]:\NewVer' folder.

Note that you do not have to uninstall the database manager such as SQL Server or Oracle in order to upgrade the system.

Important - After a database conversion, all diagnosis in the database need to be recalculated in the Observer software. Until this is done all diagnosis will display the value 0. The recalculation can be done at Observer Hierarchy view, by right clicking on a node and selecting Configure\Recalculate diagnoses.