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# Primavera P6 R8.3

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## **Instructions for running Primavera P6 Professional on a Microsoft SQL Express Database**

Revision 1.0 – 2014 Edition

# Setting Up a P6 Professional Standalone Client using SQL Server

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If you've been having issues trying to run Primavera P6 Professional on the Oracle XE database, or you simply want to run standalone when not on the company network; you can switch to using a Microsoft SQL Server Express database instead.

This article looks at the process for setting up Primavera P6 Professional R8.3 to use the Microsoft SQL Server database, rather than with Oracle XE.

Primavera P6 R8.3 installs a copy of the free Oracle XE database on your computer when you choose the standalone installation option. However, this doesn't always go smoothly and we've received numerous enquiries for help getting P6 to connect to that XE database once the installation completes: it's evidently a common problem.

On a side note: with the recent release of Primavera P6 Professional R8.4, Oracle themselves have abandoned the Oracle XE database for P6 in favor of SQLite, a popular, open source database that installs quickly and easily as part of the standalone installation options: a smart move indeed. See our blog about installation of the Primavera P6 Professional R8.4 release. [\[link to Steve's blog here\]](#)

In fact, unlike the Oracle XE install, which can take upwards of 20 minutes to install on your machine, you will not even be aware that SQLite got installed. Very slick. Oracle clearly recognizes that consumers of Primavera P6 Professional aren't necessarily Oracle database experts, and thus removed that need for standalone users; making everything very simple.

That said, for those P6 R8.3 users wishing to move off the Oracle XE and on to something simpler, there's still the Microsoft SQL Express database option. Being somewhat simpler to install, configure and backup, SQL Server is a good alternative. Here's a summary of the steps.

- 1. Install a copy of MS SQL Express on your computer.**
- 2. Download and run the appropriate version of the Database Setup tool.**
- 3. Connect the database setup tool to your SQL Express database instance.**
- 4. Create a PPMDB database.**
- 5. Connect your P6 Professional Client to that database.**

Sound reasonably simple right? Well as always, the devil is in the details. This blog covers a couple of key show-stoppers that you must know about before attempting this operation: nothing too serious, but frustrating if you have to figure them all out for yourself.

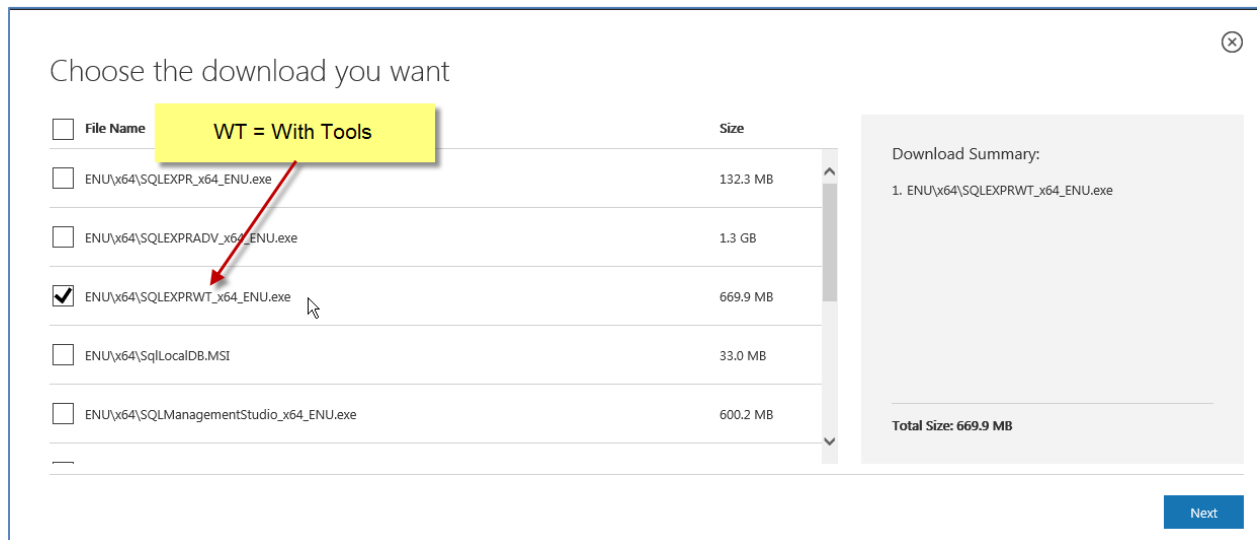
# Setting Up a P6 Professional Standalone Client using SQL Server

## The Details:

### Install Microsoft SQL Server Express

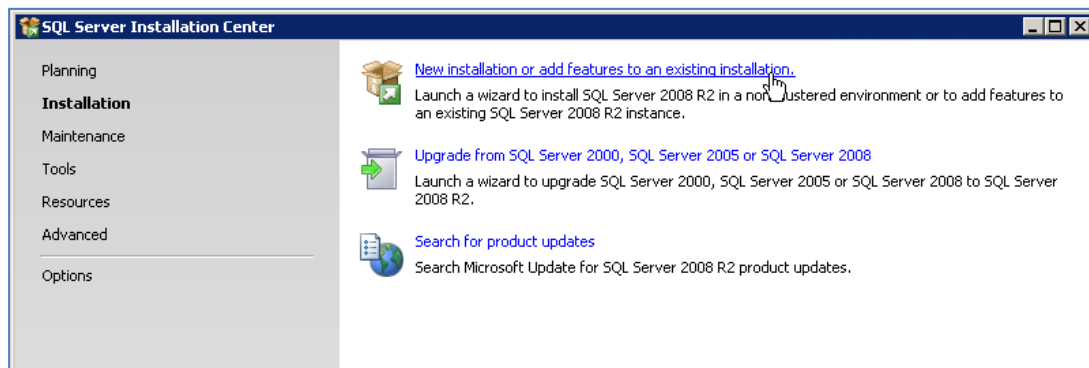
This can be any version. We've tested it on SQL 2005, 2008, 2008 R2 & 2012 without issues and in all likelihood you'll be fine with 2014 too. When you download an SQL Server install package, just make sure you get the 'With Tools' version. You will need the Management Studio Express tool to administer the database and the SQL Server Configuration Manager to solve the first of our show-stopper items: and these are included in any executable that contains the letters WT in the file name. For example:

SQLEXPRTWT\_x64\_ENU.exe



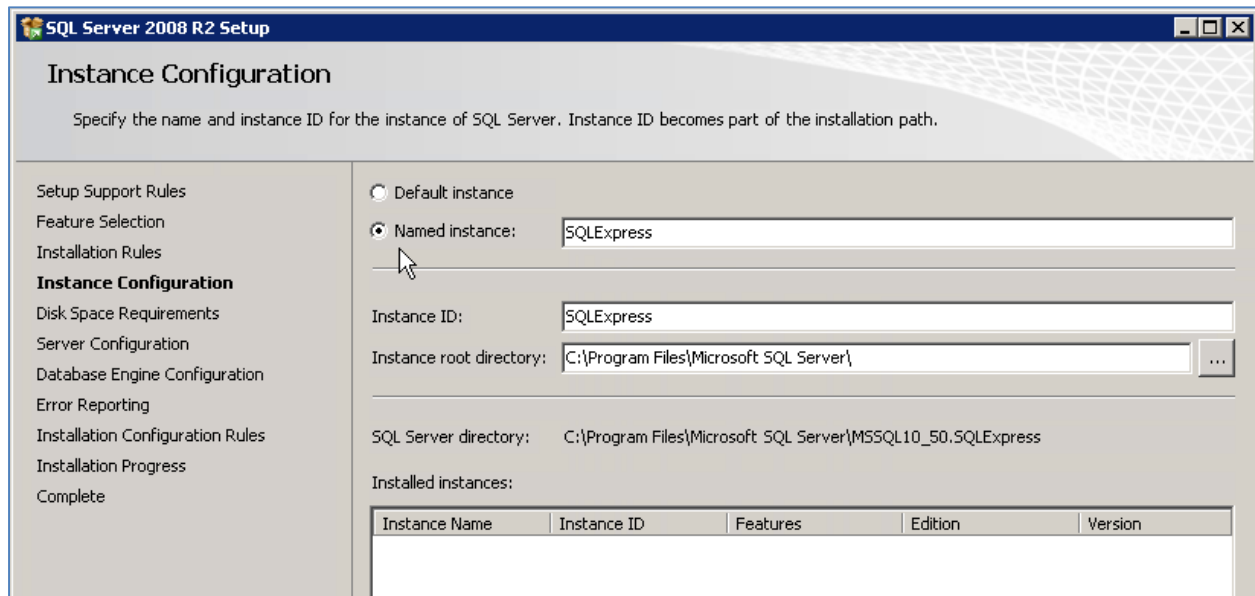
Download and run the .exe file to install the MS SQL Server using default settings except on the dialogs pointed out in the following:

1. Assuming you don't already have it installed, choose the **'New installation or add features to an existing installation'** option on the first dialog of the SQL Express installer tool.

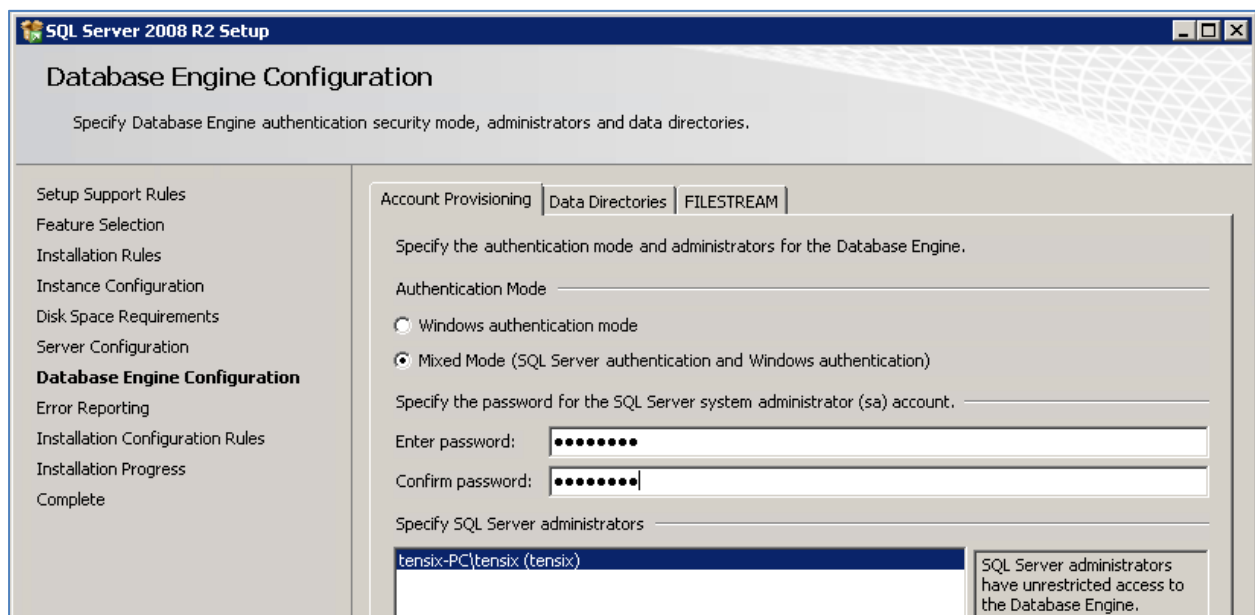


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2. **Instance Configuration** – suggest going with the **Named Instance** default in this installation dialog: the instance will be called **SQLExpress**.



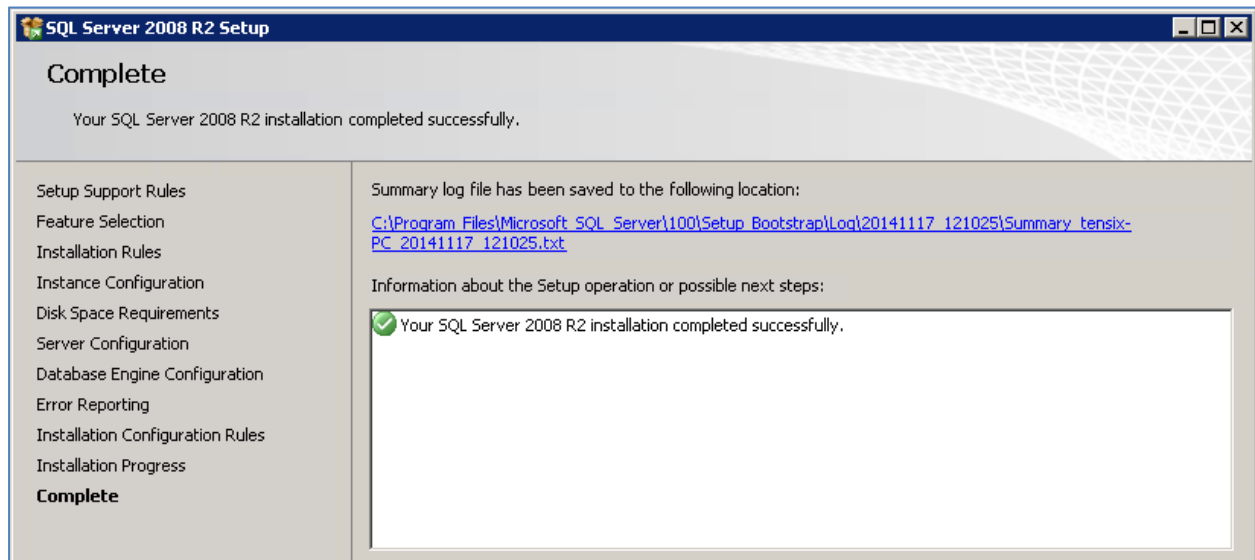
3. When you get to the **Database Engine Configuration** dialog, select **Mixed Mode** authentication and enter a password for the database administrator. Make a note of this password, you will need it whenever you need to add database to the instance you are installing.



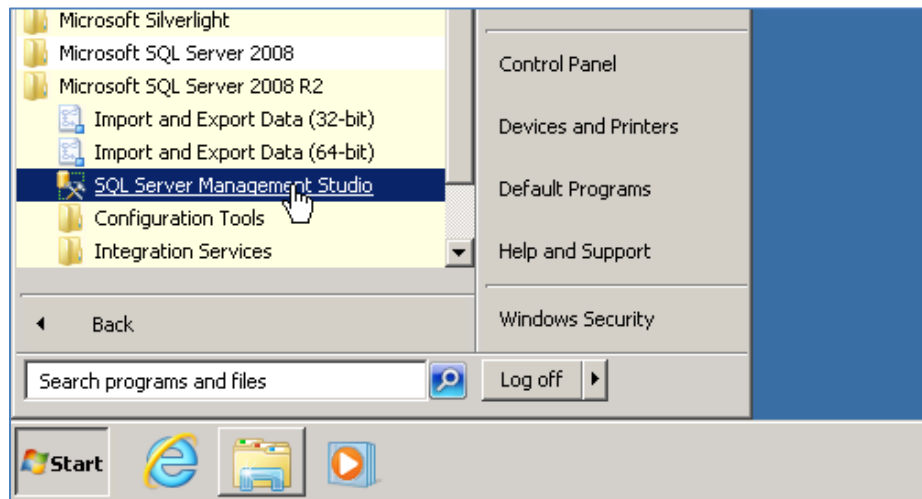
4. Continue with default settings to the end and go ahead with installation.

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All being well, you should see the following success dialog.



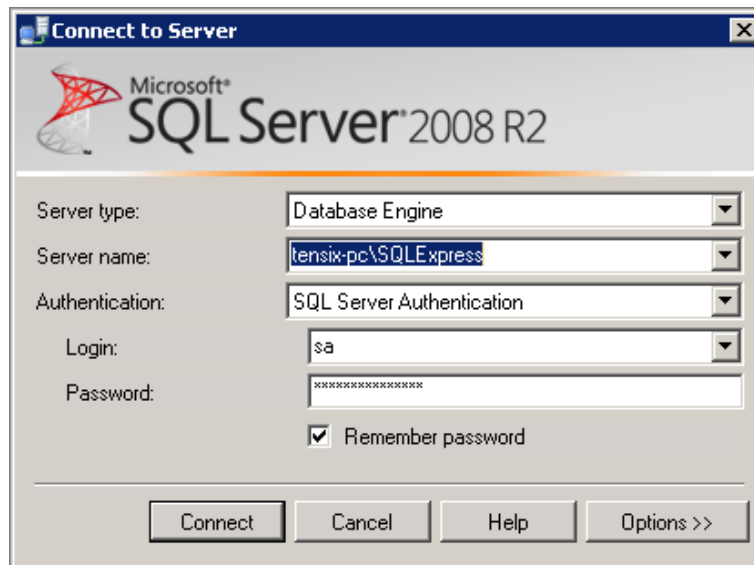
Once the installation is complete, test that everything is working OK by logging in using the SQL Server Management Studio tool.



You can login with either Windows Authentication or SQL Server Authentication. In either case you will need to enter the Server Name when you first login. This will be a combination of the computer name \ instance name.

# Setting Up a P6 Professional Standalone Client using SQL Server

For example: tensix-pc\SQLEXPRESS



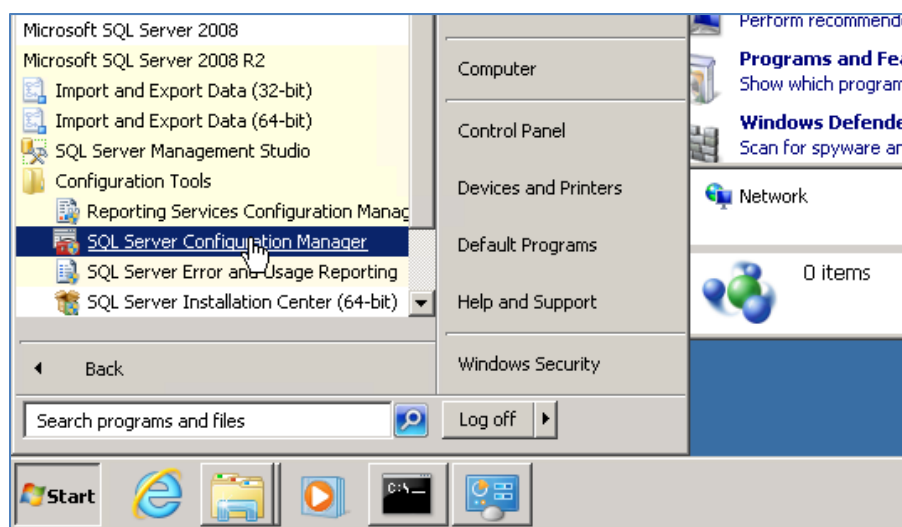
A successful login of the Management Studio proves you now have a working SQL Server Express instance on your machine.

## Show-stopper # 1 – Setup the TCP/IP port on your SQL Express instance.

Don't skip this step or you will not be able to proceed any further. When you install SQL Express, it doesn't set your TCP/IP port, so you'll have to do that using the **SQL Server Configuration Manager**.

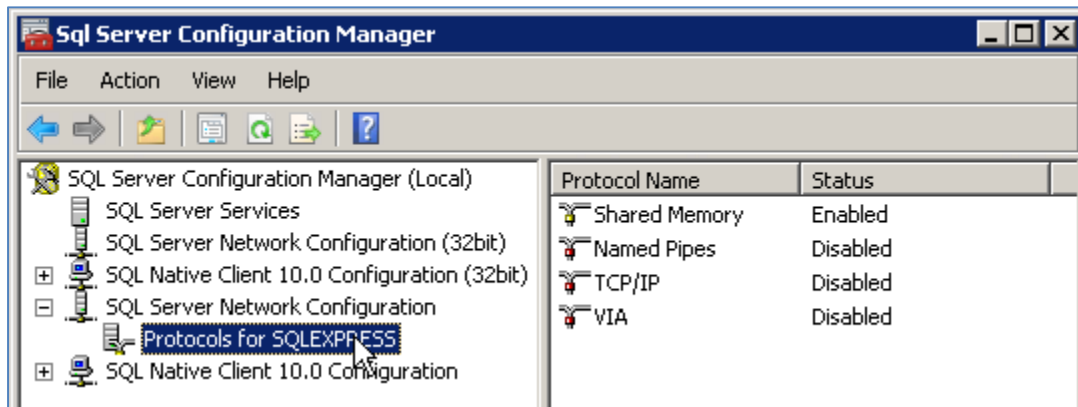
Here's how to set the TCP/IP port in your new SQL Express instance:

1. In the Windows Start menu, go to the **Microsoft SQL Server (version number) | Configuration Tools** menu area and choose the **SQL Server Configuration Manager** option.

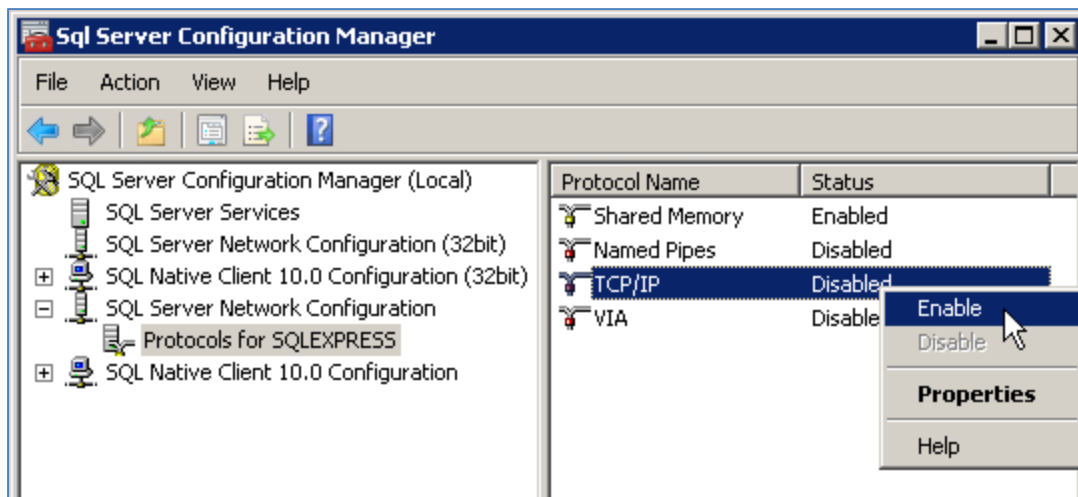


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2. In the Configuration Manager, select the **SQL Server Network Configuration | Protocols for SQLEXPRESS** option.

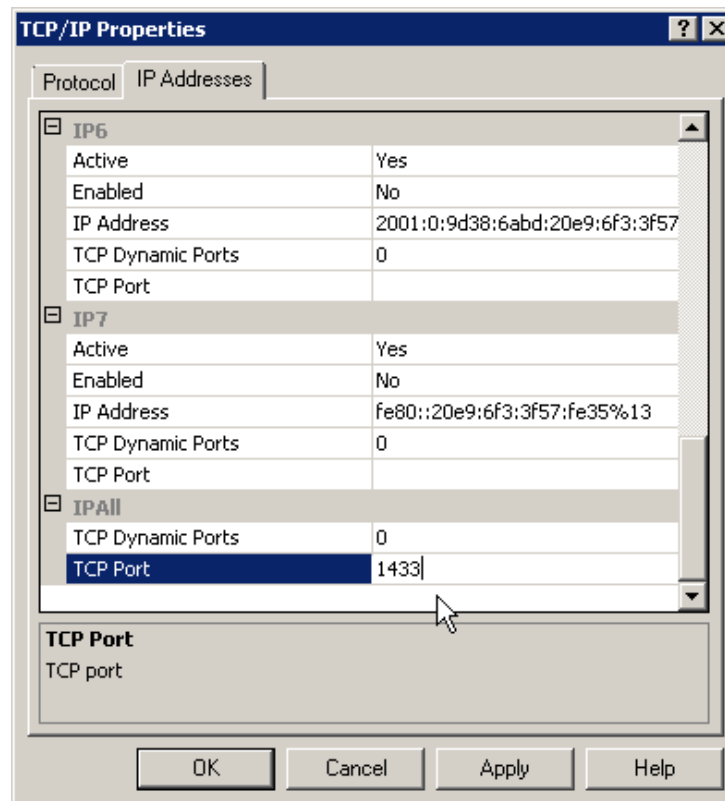


3. Right-click on **TCP/IP** and choose **Enable**. Click **OK** to the resulting prompt – you will restart the service after the next steps.

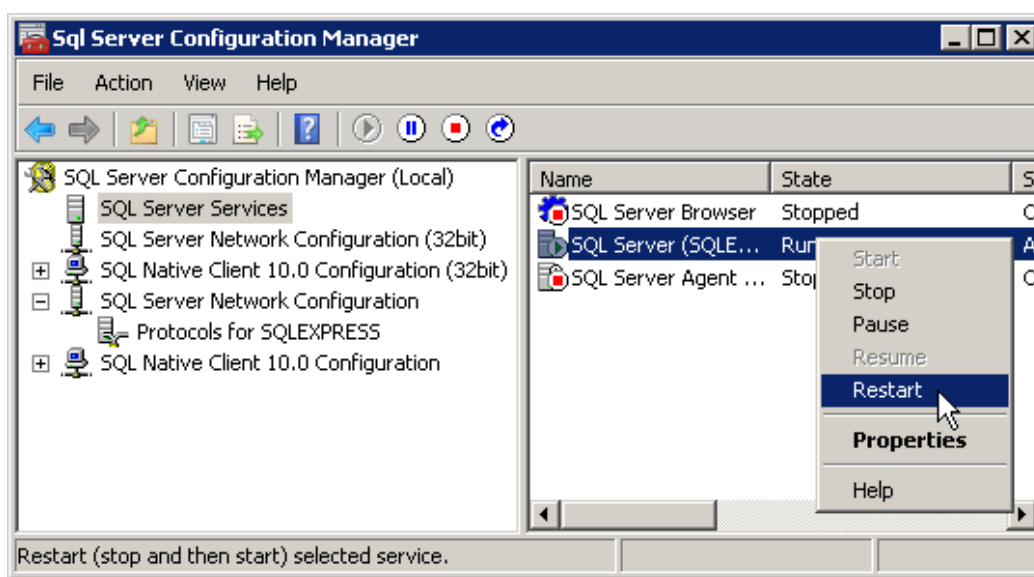


4. Right-click again on **TCP/IP** and choose **Properties**.
5. In the **TCP/IP Properties** dialog, click on the **IP Addresses** tab, scroll to the bottom of the dialog and then enter **1433** in the last field at the bottom of the dialog labelled **TCP Port**.

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6. Click **OK** and again click **OK** to the prompt.
7. Now restart the **SQL Server Service** to have your changes take effect. You can do this from inside the **Configuration Manager** by selecting the **SQL Server Services** option and then right-clicking on the **SQL Server (SQL Express)** option. Choose **Restart** from the menu.





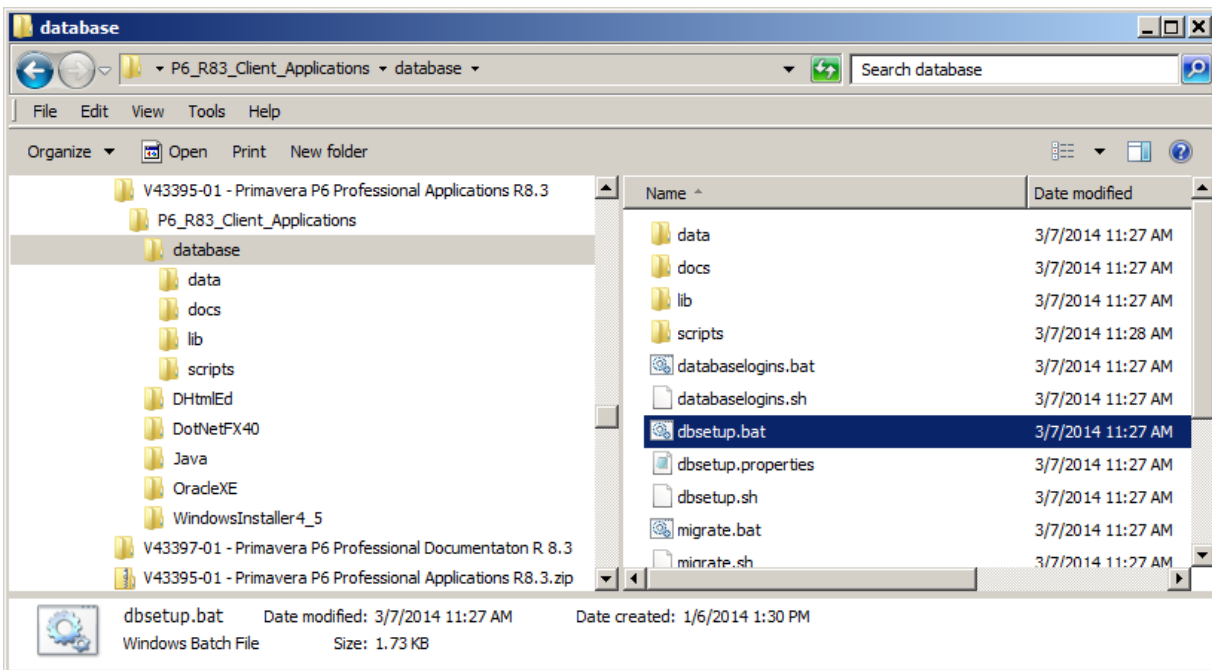
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8. Once the SQL Service has restarted you can close the **Configuration Manager** dialog. The next step is to use the Primavera P6 Database setup tool to build a database for your Primavera P6 Professional client to login to.

### Download and run the appropriate version of the Database Setup tool.

The database setup tool comes as part of the Primavera P6 Professional Applications media package located below the **P6\_R83\_Client\_Applications | Database** folder.

You need to run the **dbsetup.bat** file. This kicks off a java application that is used to create the PMDB database in your SQL Server instance. Thus you'll need a version of Java installed on your machine for this to work. If you don't have Java on your machine, you can install the one that is provided in the P6 media pack under the **P6\_R83\_Client\_Applications | Java** folder.



If you don't have Java, install it NOW. The dbsetup.bat tool won't work without it.

# Setting Up a P6 Professional Standalone Client using SQL Server

## Show-stopper # 2 – The JAVA\_HOME environment variable

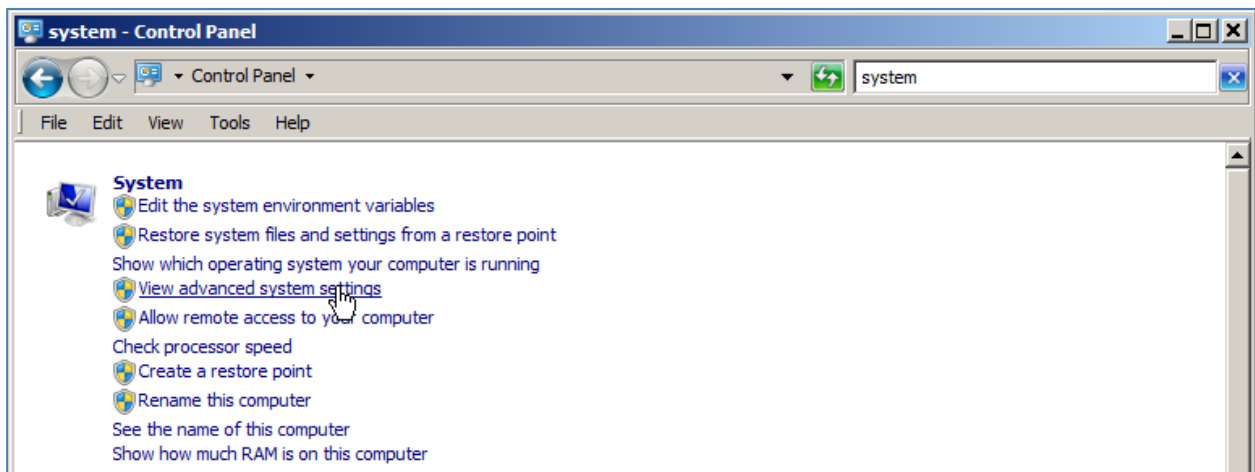
Whether you already have Java installed, or you just installed it using the version provided in the media pack, you'll probably encounter the next show-stopper. Even with Java, the dbsetup.bat tool fails to run and you'll see the following message.



As the message points out, it failed because no JAVA\_HOME environment variable has not been defined in your windows system. And if you do 'press any key', you'll simply continue to wonder why the dbsetup.bat tool hasn't appeared on your screen yet.

Here's how to setup your JAVA\_HOME environment variable:

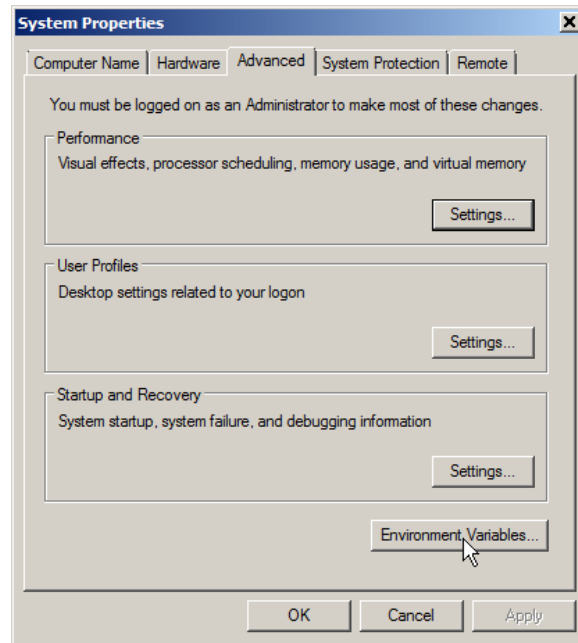
1. Open the **Windows Control Panel**.
2. Type '**system**' in the search field.
3. In the resulting list, select '**View advanced system settings**'.



4. In the **Advanced** tab of the **System Properties** dialog, click on **Environment Variables...**

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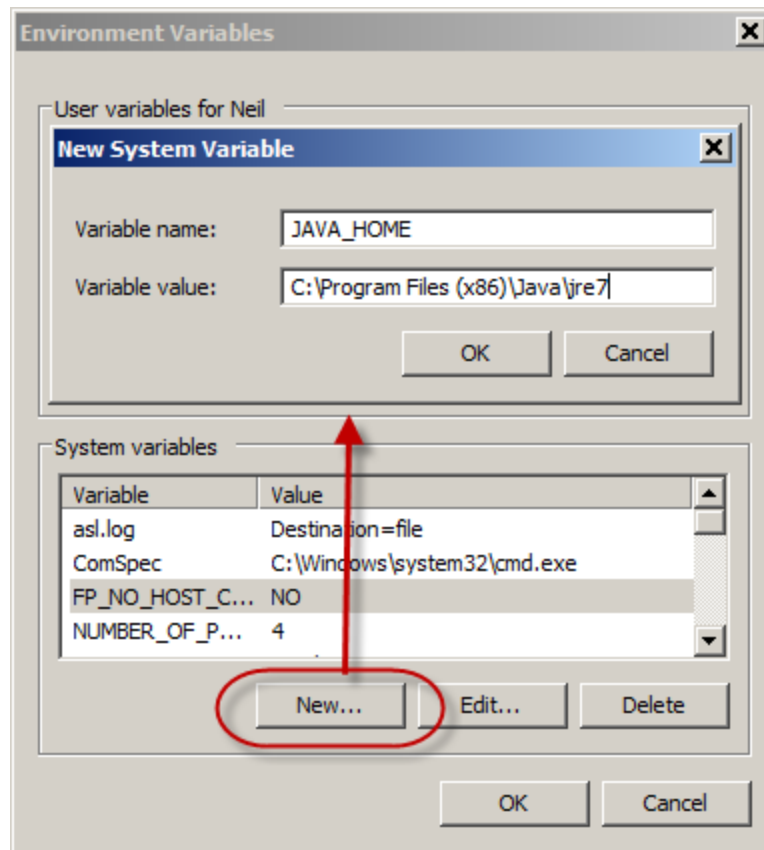
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5. In the **Environment** variables dialog, click the lower **New...** button to add a new **System Variable**.
6. In the **Variable name:** field, enter **JAVA\_HOME**.
7. In the **Variable value:** field enter the full path to the Java folder location. For example:

**C:\Program Files (x86)\Java\jre7**

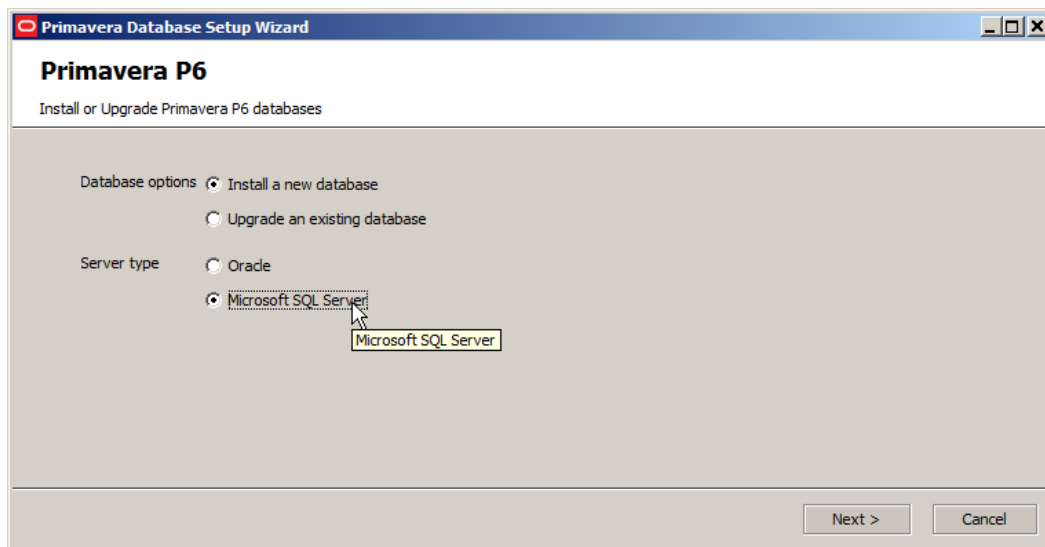
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8. Click **OK** to save your new variable and then close all the Control Panel dialogs.

### Running the dbsetup.bat tool

Now you can run the dbsetup.bat file simply by double clicking on it in the Windows explorer. After a few seconds the following dialog should appear.



## Setting Up a P6 Professional Standalone Client using SQL Server

1. Select the '**Install a new database**' and '**Microsoft SQL Server**' options and then click **Next >**.
2. In the **Connection Information** dialog, enter the DBA user name and password that you specified in during the setup of your SQL Express database.
3. Also be sure to enter the full host name for your SQL Express instance, in this example **tensix\sqlexpress**; where **sqlexpress** is the name of the instance defined during the installation of SQL Server.

The screenshot shows the 'Primavera Database Setup Wizard' window with the 'Connection Information' tab selected. The window title is 'Primavera Database Setup Wizard'. Below the title bar, the text 'Connection Information' is displayed, followed by the instruction 'Enter the information required to connect to the database server'. The form contains four input fields: 'DBA user name' with the value 'sa', 'DBA password' with the value '\*\*', 'Database host address' with the value 'tensix\sqlexpress', and 'Database host port' with the value '1433'. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'. A mouse cursor is pointing at the 'Next >' button.

4. Click **Next >**.
5. In the **Configure Microsoft SQL Server** dialog, enter a name for your database. We recommend **PPMDB** (to identify this as a Professional Project Manager Database).

The screenshot shows the 'Primavera Database Setup Wizard' window with the 'Configure Microsoft SQL Server' tab selected. The window title is 'Primavera Database Setup Wizard'. Below the title bar, the text 'Configure Microsoft SQL Server' is displayed, followed by the instruction 'Enter the name of the database and the location where the data and log files will be stored.'. The form contains four input fields: 'Database name' with the value 'PPMDB', 'Data file' with the value 'C:\Program Files (x86)\Microsoft SQL Server\MSSQL.1\MSSQL\DATA\PPMDB\_DAT.MDF', 'Log file' with the value 'C:\Program Files (x86)\Microsoft SQL Server\MSSQL.1\MSSQL\DATA\PPMDB\_LOG.LDF', and 'Database code page' with the value 'Database default'. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

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6. Click **Next >**.
7. In the **Create SQL Server Users** dialog, go with default **privuser** and **pubuser** options. These are used by the P6 client to connect to the database. **MAKE A NOTE** of your passwords for these two. If you forget them or lose them, you will not be able to connect P6 to your new database.

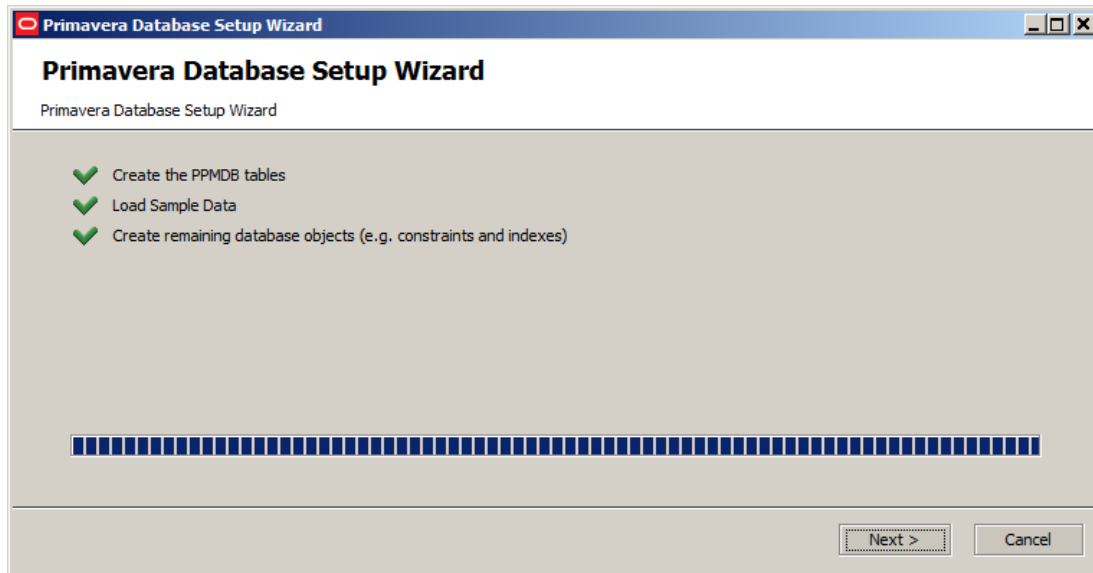
The screenshot shows the 'Create SQL Server Users' dialog box within the Primavera Database Setup Wizard. The title bar reads 'Primavera Database Setup Wizard'. The main title is 'Create SQL Server Users' with a subtitle 'Enter privileged and public user name.'. There are two columns of input fields. The left column is for the privileged user, and the right column is for the public user. Each column has fields for 'Use existing' (unchecked), 'User name', 'Password', and 'Confirm password'. The privileged user name is 'privuser' and the public user name is 'pubuser'. All password fields are masked with asterisks. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

8. Click **Next >**.
9. In the **Configuration Options** dialog, enter a password for your P6 administrator login. Again, make a note of this; if you lose or forget it, you will not be able to login to P6. You may also want to load the sample data, particularly if you are new to P6. This contains some useful sample projects and global objects that can be helpful in learning P6.

The screenshot shows the 'Configuration Options' dialog box within the Primavera Database Setup Wizard. The title bar reads 'Primavera Database Setup Wizard'. The main title is 'Configuration Options' with a subtitle 'Configuration Options'. There is a section for 'Application User' with fields for 'Administrative user name' (set to 'admin') and 'Administrative user password' (masked with asterisks). Below this, there is a checkbox for 'Load sample data' which is checked. At the bottom, there is a 'Currency' dropdown menu set to 'USD - Dollar'. At the bottom right, there are two buttons: 'Install' and 'Cancel'.

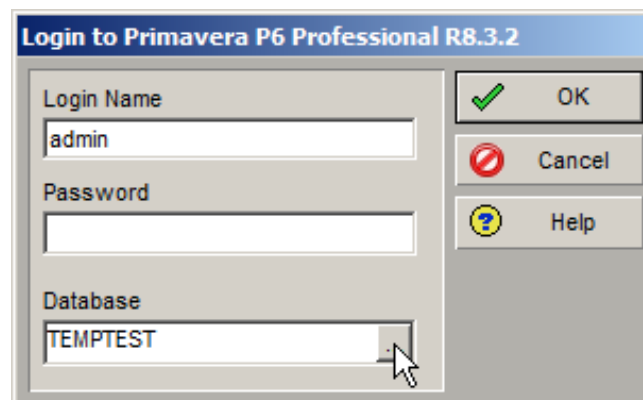
## Setting Up a P6 Professional Standalone Client using SQL Server

10. To build your database, click **Install**. This may take several minutes, particularly if you selected to load sample data.
11. Once completed click the **Next >** button, then click **Finish** in the last dialog to close the setup tool.



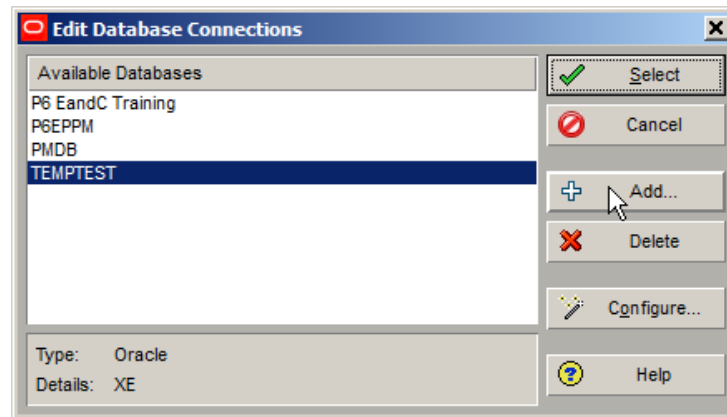
Now it's time to connect P6 to the new SQL Database. Follow these next steps:

1. Run **P6 Professional** and in the Login dialog, click on the ellipse button

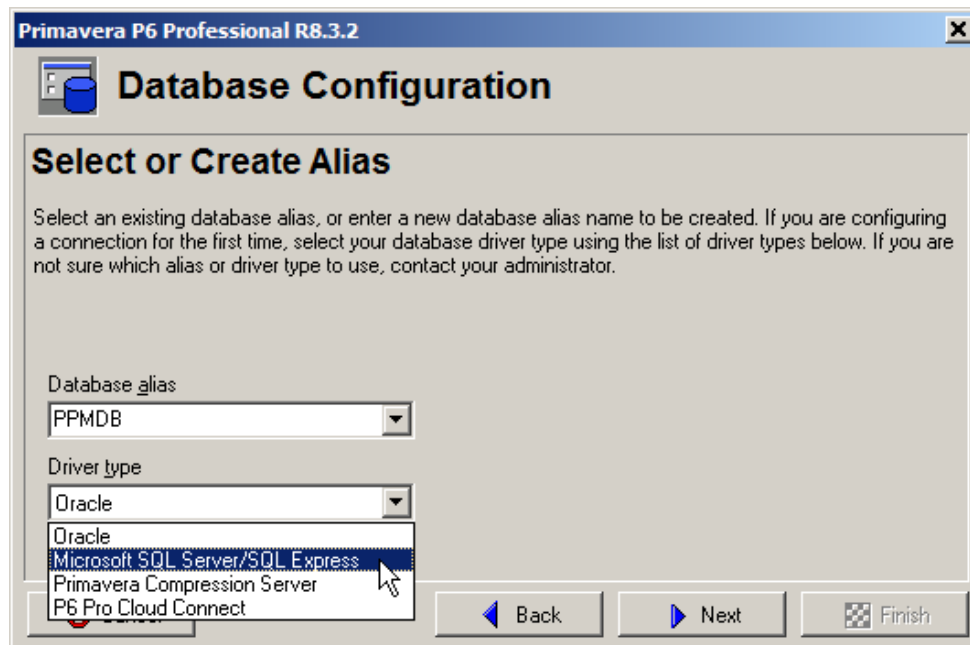


2. In the **Edit Database Connections** dialog, click **Add...**

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3. In the **Select or Create Alias** dialog, select **Microsoft SQL Server/SQL Express** in the **Driver type** field.



4. In the **Configure SQL Server Connection** dialog, enter the host name and database name for your SQL Server database.
5. Click **Next**.



## Setting Up a P6 Professional Standalone Client using SQL Server

The screenshot shows the 'Database Configuration' window for Primavera P6 Professional R8.3.2. The title bar includes the application name and a close button. The main heading is 'Database Configuration' with a database icon. Below it, the sub-heading is 'Configure SQL Server Connection'. A text prompt says 'Enter the SQL Server connection information below.' There are two text input fields: 'Host Name' containing 'TENSIX\SQLEXPRESS' and 'Database name' containing 'PPMDB'. At the bottom, there are four buttons: 'Cancel' (with a red circle and slash icon), 'Back' (with a left arrow icon), 'Next' (with a right arrow icon), and 'Finish' (with a checkmark icon).

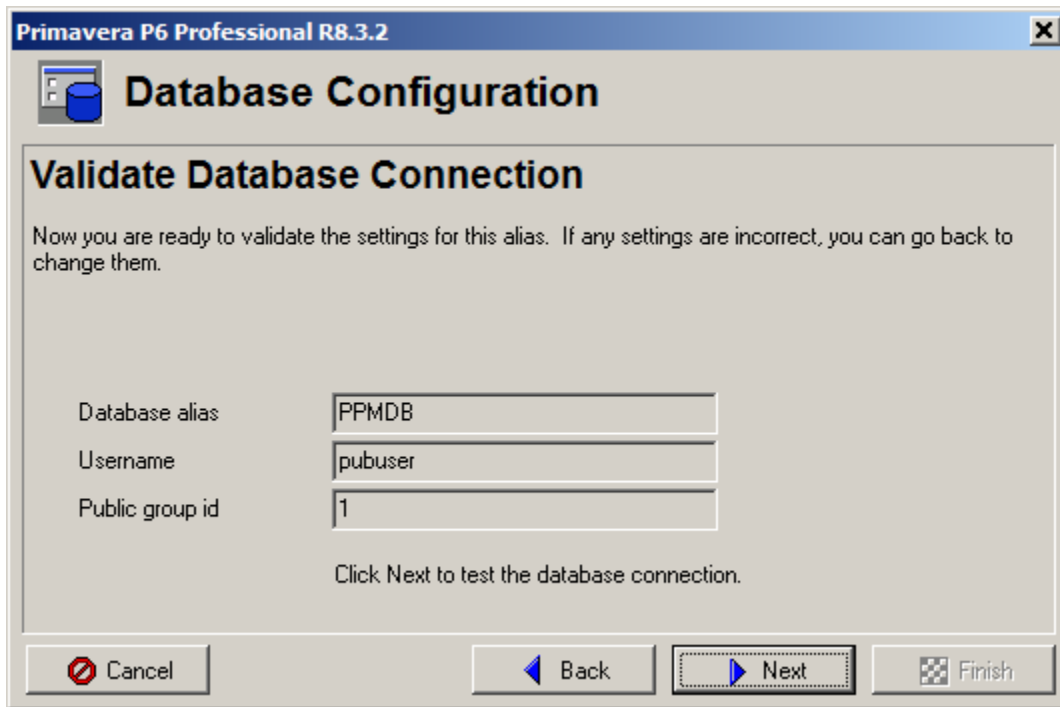
6. Click **Next**.
7. In the **Enter Public Login Information** dialog, enter the **pubuser** name and password you defined during the database setup process.

The screenshot shows the 'Database Configuration' window for Primavera P6 Professional R8.3.2. The title bar includes the application name and a close button. The main heading is 'Database Configuration' with a database icon. Below it, the sub-heading is 'Enter Public Login Information'. A text prompt says 'Enter the public username and password to use for connecting to this database. The public login is used to establish the initial connection to the application's database. It should be given to you by your administrator.' Below this, another text prompt says 'Also, specify which public group id you have been assigned. If you are not sure which public login or group id to use, please contact your administrator.' There are three input fields: 'Database Alias' containing 'PPMDB', 'Username' containing 'pubuser', and 'Password' containing 'xxxxxxx'. To the right of the password field is a 'Public group ID' dropdown menu showing '1'. At the bottom, there are four buttons: 'Cancel' (with a red circle and slash icon), 'Back' (with a left arrow icon), 'Next' (with a right arrow icon), and 'Finish' (with a checkmark icon).

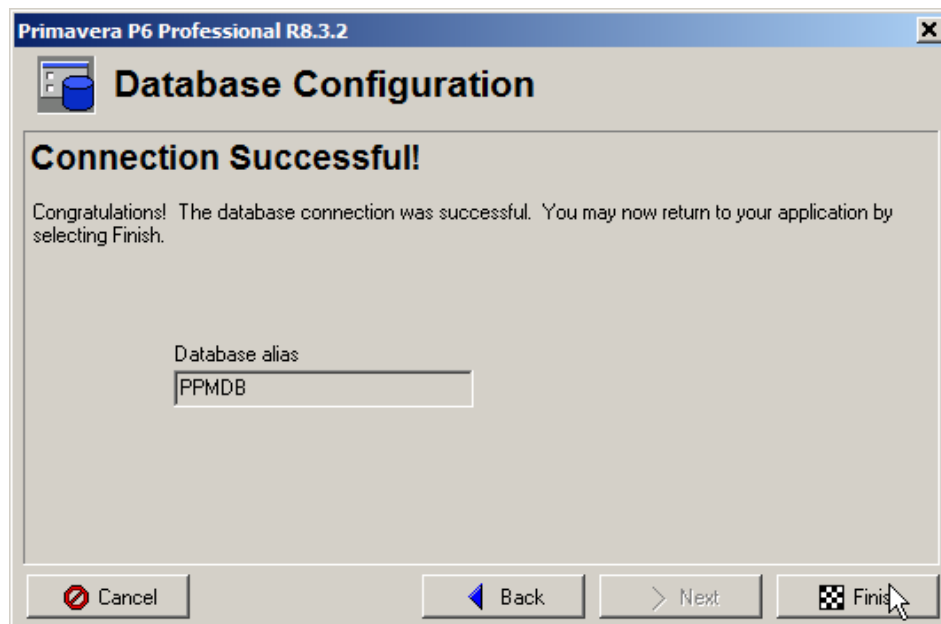
8. Click **Next**.

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9. In the **Validate Database Connection** dialog, click **Next**. This will cause it to test your connection settings.



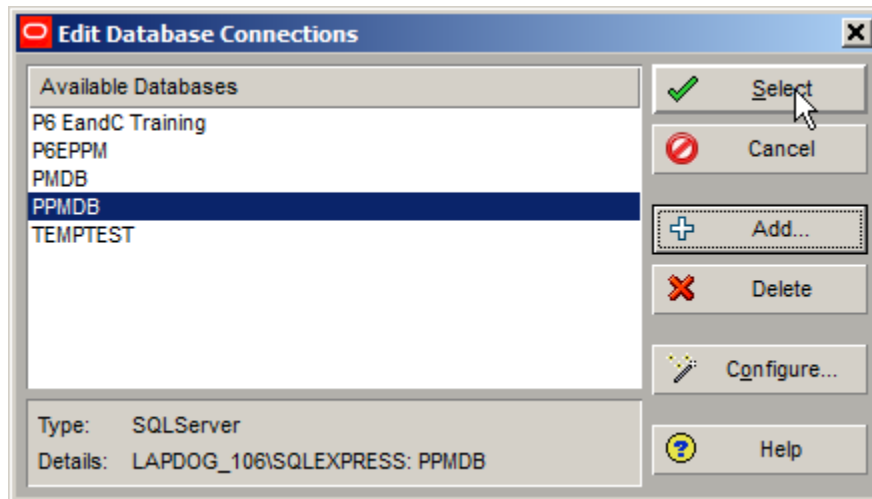
10. If the test is successful, you will see the following message in the following dialog.



If this is not successful, click the **Back** button and verify your settings.

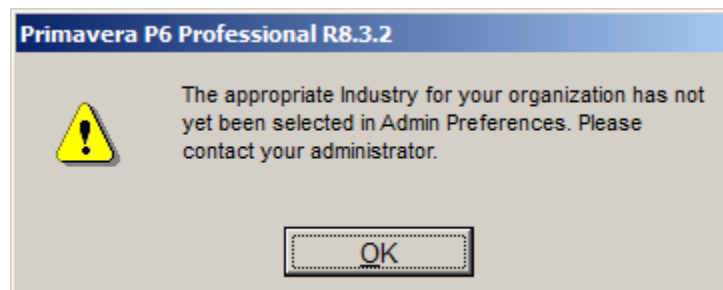
With a successful connection, you are now ready to login to your new SQL Server Express database. Click on your new Alias from the list of Available Databases and then choose Select.

## Setting Up a P6 Professional Standalone Client using SQL Server

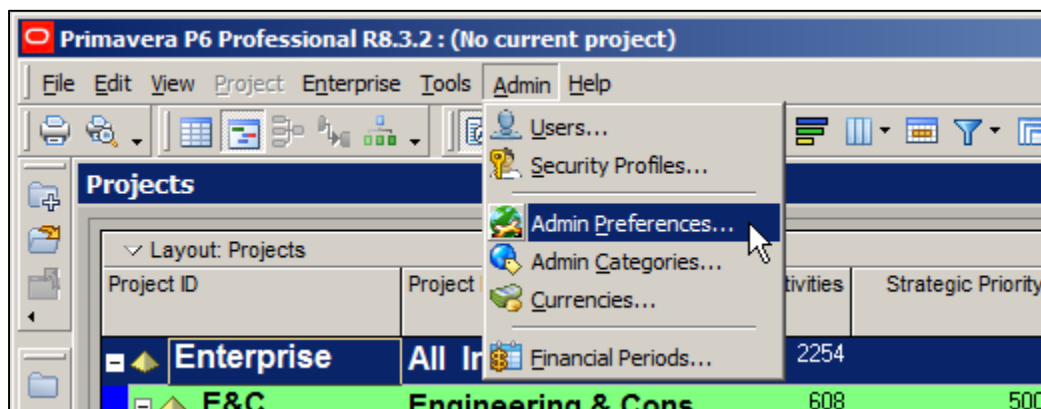


Login to P6 with your admin password entered during the database setup.

The first time you login to P6 you will see this warning.

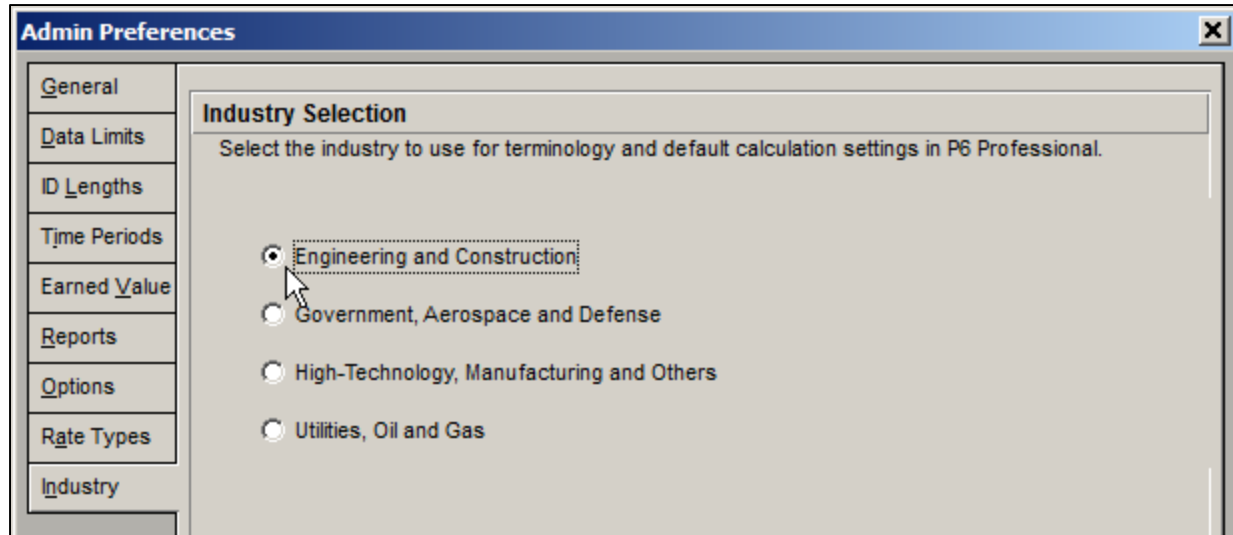


Go to **Admin | Admin Preferences** menu.



Select your industry from the list of choices in the Industry tab of the **Admin Preferences** dialog.

## Setting Up a P6 Professional Standalone Client using SQL Server



### Summary

You are now running P6 on a standalone database using SQL Server. At any time you can choose to connect to a production database or run P6 as a standalone client when you are on the road or otherwise unable to connect to your production system on the company network. You cannot synchronize with other databases, so any projects you wish to work on should be exported or better still, checked out and exported as an XER file and then imported into your standalone database via the P6 client. When you're done with your changes, the process can be reversed.