

Passport
Business
Solutions™

PBS v1203 SQL Edition

▶ Installation Guide



Passport Business Solutions

PBS 12.03 SQL Edition

Installation Guide

Updated 05/14/2015

If you have any comments or suggestions about this guide, please send your feedback to:
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II. Introduction

Your systems and Passport Business Solutions software are a critical part of your successful business operation. Passport Software, Inc. continues to improve and enhance the PBS software to help make using the software more enjoyable and productive.

SQL makes all your data accessible with a wide variety of tools, many of which are probably already in use in your environment today. Tools such as Microsoft Access, Word, Excel allow you to easily access and use the data for custom reporting and applications. You can use Crystal Reports or hundreds of other programs designed to filter and slice your data any way required by your organization. Almost any programming language can access SQL, including Visual Basic.

PBS SQL currently relies on Microsoft SQL server like many other SQL-based products. This will allow you to integrate and communicate easily between PBS and other SQL server based applications. Instead of manually entering data in multiple locations, or importing and exporting, or Excel spreadsheets, small programs can allow these applications to talk to each other. This reduces data entry errors, improves efficiency, and allows for improved report content.

A more recent version of this documentation may be available. Download the [1203 PBSSQL Install.pdf](#) and compare the date at the top of the second page with this version. Use the most recent.

III. Checklist for Installing PBS SQL

This is a checklist for setting up PBS with Microsoft SQL. This checklist is used for a PBS SQL install and a PBS SQL install with CashPoint.

Tip: After you click on a link for more information, to go back to the check list, select Alt+left arrow and the focus will go back to the previous location.

A. Prerequisites, Installing and Configuring SQL Server

- Information Needed and Prerequisites
 - You must be logged onto the SQL Server as part of the administrator's group. Do you have a login and password? If PBS and the database for PBS are on different servers, do you have logins and passwords for both systems?
 - If SQL is already installed, do you have the sa password?
 - You must have the credentials and permission to restart the SQL server, change the fire wall, and restart the SQL service. Do you have permission to make changes to any of these?
 - What kind of network is being used: Domain, Workgroup or Homegroup?
 - If the server is being used for other applications, when can you make changes to the server without disturbing the use of the other applications?
 - If you are not the system administrator, this person must be available when making system changes.
 - Do not install PBS SQL where an Oracle database is installed.
- Install 2008 SQL Server or 2012 SQL Server with or without an instance. See [Setting up a new server with SQL Server Express and PBS SQL](#)

B. Configuring the SQL Server before the Install of PBS

For an example with screen shots see [Configuring the SQL Server - TCP/IP and Named Pipes Protocol](#)

1. SQL Protocols

On the SQL Server, select the *SQL Server Configuration Manager*.

- Expand *SQL Server Network Configuration*
- Click on the instance, Example: *Protocols for (Instance Name)*
- Enable* the *Named Pipes* and *TCP/IP* protocols. *Shared memory* does not have be on.
- Close the *SQL Server Configuration Manager*

2. Restart the SQL service

On the SQL Server do the following:

- Locate *Computer* on the start menu, right click and select *Manage*
- Select *Services* from *Configuration*
- Find the *SQL Server (Instance name)*, right click and select *Restart*
- Close it

C. Preparing for the PBS Installation

- Download the **wininstall1203.exe**, **pbsinstallforsql1203.exe** and the **RW.LIC** from the [PBS FMS site](#). On the SQL Server, create a folder for PBS 12.03. Copy in **wininstall1203.exe**, **pbsinstallforsql1203.exe** and the **RW.LIC** SQL license. You should also download and note the file names of the latest updates and hot fixes. See [Preparing for the Installation](#).

D. Starting the Installation

Details about these steps are found in the section called [PBS SQL Install with New Database](#).

- Run **wininstall1203.exe**.
- Run **pbsinstallforsql1203.exe**.
- Install the script:
 1. In the top-level PBS folder find the SQL script called **ms_inst.sql**.
 2. Double clicking this file will open *SQL Server Management Studio*. Log in using Windows authentication. Verify that you opened the correct server and instance.
 3. Press the **!Execute** button on the tool bar (or select <F5>). This will create a database called *pbsmaster* and two tables. Select <F5> again to refresh and you will see *pbsmaster*.
 4. Close *SQL Server Management Studio*.
- Export data from the old PBS system:
 1. This step can be run earlier and make take hours. After running the exports users may no longer enter new data in the old system.
 2. Export your data from the old PBS system. The utilities for exporting include **EXFUTL.BAT** and **CTLUTIL.BAT**. If you have never read the EZ Convert instructions or you have manufacturing data, see the EZ Convert documentation (*PBS_EZ_Convert.pdf*). There may be special circumstances that you must comply with.
 3. Copy the exported files to the new PBS folder into a sub folder called EZEXP.
- In the new PBS folder run **PBSINSTALL.BAT** to install the software and to initialize the database and supporting data files. Select Option **2** for the *SQL installation*.
- Select either *First Time Install of PBS MSSQL* or *Upgrade from all prior versions of PBS to 12.03 MSSQL using Ezconvert*. Note: Both will get the same results.
- Enter the name of the server plus the named instance where PBS is intended to be installed. (servername\instance). If there is no instance enter the server name only.
- Click on OK and the *PBS Add Companies and SQL databases* screen displays as seen in the window title bar.

Note: If the *PBS Add Companies and SQL Databases* screen does not display it is not finding the database because you do not have administrator rights on this server. You must modify your login to have administrator rights, delete *pbsmaster* and go back to the [Preparing for the PBS Installation](#) step in a new folder.

E. Generating the PBS Database(s)

Using the *PBS Add Companies and SQL Databases* screen you create the databases for [one](#) or [multiple companies](#). No tables are generated in these steps.

1. One company

- ❑ For one company (00), select the *New* button
Enter the Company ID, Company Name and use the <TAB> key to move to the *Database Name* field.
Select the *Save* button.
Select the *Create Database <F7>* button. The message *Database is active* displays.

Details about these steps are found in the 1203_PBSSQL_Install.pdf section also called *Installing Once Company*.

2. Multiple Companies

- ❑ For Multiple companies, select the *Restore .exp* button to restore the MLTCMP.EXP file. There are a couple additional questions with a result that creates databases for each company. They display in listbox. The databases are activated during the restore.
Details about these steps are found in the 1203_PBSSQL_Install.pdf section also called *Installing Multiple Companies*.

3. Exit

- ❑ Click on *Exit* and the *PBS Installation* screen displays next.

F. Finishing the Install

Details about these steps are found in the 1203_PBSSQL_Install.pdf section also called *Finishing the Install*.

- ❑ The *PBS Installation* screen is used to install the programs, paths, menus and generate tables for company 00. It has preselected the *Click check box if this is a SQL install* question and indicates that the database is *pbsdata00*, for company 00. Company 00 is required for both single company installs and multi company installs.
- ❑ Find the RW.LIC license. If the license has been copied to the top-level PBS folder as instructed earlier, the program finds it automatically. If not, enter the location or browse to the license and hit **Enter**.
- ❑ Select the *Continue with installation* button.
- ❑ Next the installation program installs the PBS programs, establishes the paths and menus for the licensed applications and initialize tables and files for Company 00.
After the process completes, open *Microsoft SQL Server Management Studio* to verify that the **pbsdata00** tables were created. Tables are created for companies other than 00 when you run PBS EZ Convert. You may also view the PBSINSTALL.LOG.
- ❑ Install the latest updates and hot fixes which were downloaded earlier.

G. EZ Convert

If needed, see the [PBS EZ Convert.pdf](#) document for details. If you are already familiar with EZ Convert these are the general steps you may run:

- ❑ Use the extended utilities and the control file utilities to export the data for all companies from the previous version. Copy all the exports from the old version, for all companies, to the new version EZEXP folder.

- Run EZ convert – **EZCONVERT.BAT**. This step can take less than an hour or up to several hours. It depends on the number of modules, volume of history, speed of the server, number of companies, and other factors.
- Verify that the data is converted by logging into each company and running open item and master data reports. View the EZCONV01.LOG to verify that all files were converted.

H. Creating an Inbound Firewall Rule

When using Windows Firewall you must go through these steps logged into the SQL Server as part of the administrator group. For screen shots and more information see [Creating an Inbound Firewall Rule](#).

- Turn off Windows Firewall. From the *Control panel*, select *Windows Firewall*. Select *Turn Windows firewall on or off*. Turn off all three. Close Windows Firewall.
- Create an Inbound Rule:
 1. Go to *Start* and select *Run*. Type “WF.msc”. Select *OK*.
 2. Select *Inbound Rules*. Click on *New Rule*. Select *Program*. Click on *Next*.
 3. Select *This program path*. Click *Browse*, and navigate to the instance of SQL Server that you want to access through the firewall and then click *Open*. By default, SQL Server is at ‘C:\Program Files\Microsoft SQL Server\MSSQL10_50.PBSSQL1203\MSSQL\Binn\sqlservr.exe’. Click *Next*.
 4. Select *Allow the connection* and click *Next*.
 5. In the *Profile* dialog box select any profiles that describe the computer connection environment when you want to connect to the Database Engine and click *Next*.
 6. In the *Name* dialog box, type a name and description for this rule and click *Finish*.
 7. Your new Rule will appear in the list of Inbound Rules. Close Windows Firewall.

Testing the Connection

- Verify that the person logging into the workstation has administrator rights on the workstation. The password for logging onto the workstation must match the password to log onto the server. The user must have full rights to the mapped drive where PBS is installed.
- Test the connection from a mapped network drive on a user’s computer.
- On the SQL Server turn on Windows Firewall.
- Install the start menu access on each user’s computer and test the connection on each by having the user log into PBS using their login to the computer. See [Connecting Workstations to PBS SQL](#)

I. Install and Configure CashPoint

- If you have the CashPoint installation executable it is now time to install and configure it. See the CashPoint-CP_interface.pdf document.

IV. Setting up a new server with SQL Server Express and PBS SQL

If you have an existing SQL installation that you want to use you may skip this step and go to the [Installing PBS SQL](#) section. If you are upgrading from PBS SQL v12.02 to PBS SQL 12.03 and you want to do a database in place install you may also skip to the same section.

PBS will not install on a system that has an Oracle database.

For PBS 12.03 we are supporting SQL Server 2008 and SQL Server 2012 on Windows Server 2008 and Windows Server 2012. We tested the PBS install successfully on the following builds:

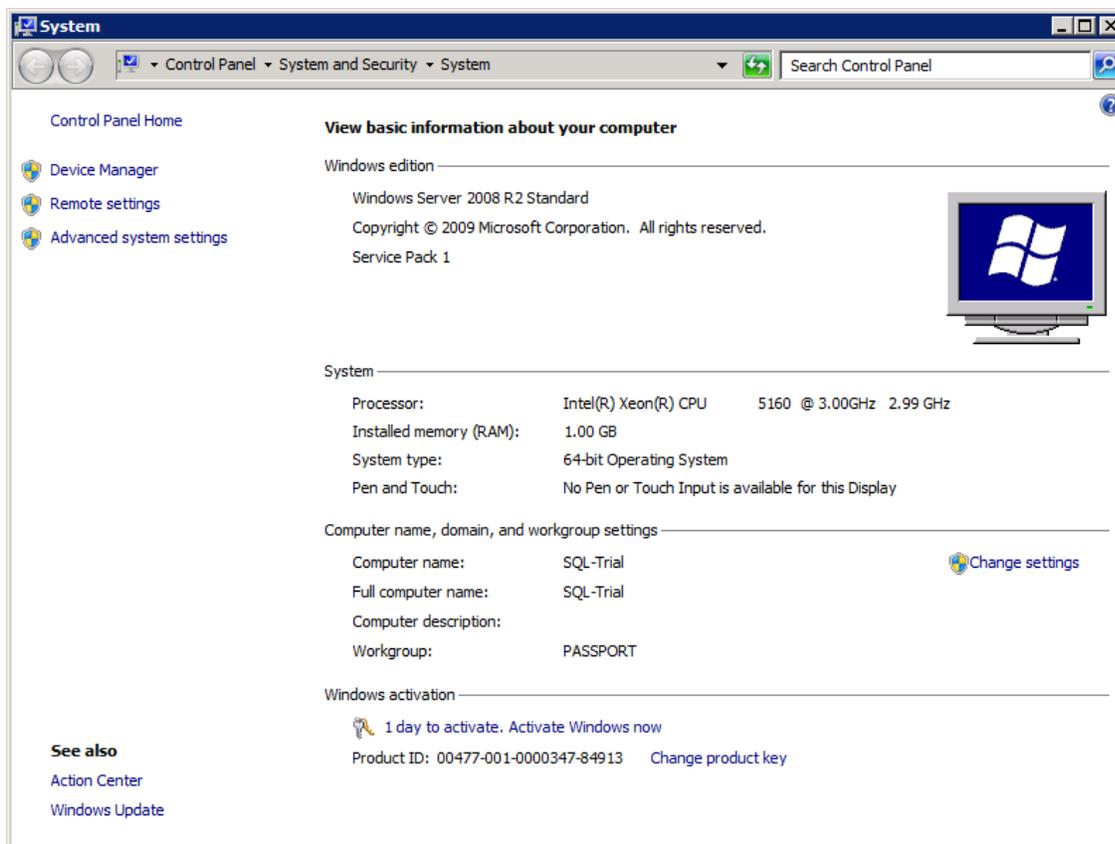
SQL Version	Build	Windows Server Version
SQL Server 2012 SP2	11.00.5058	2008, 2012
SQL Server 2012	11.00.2100.60	2008, 2012
SQL Server 2008 R2	10.50.1600.1	2008, 2012
SQL Server 2008 R2 SP1	10.50.2500	2012
SQL Server 2008 R2 SP2	10.50.4000	2012
SQL Server 2008 SP1	10.00.2531	2012
SQL Server 2008 SP2	10.00.4000	2012
SQL Server 2008 SP3	10.00.5500	2012

Running PBS on SQL Server 2005 may also be possible. We have not tried it.

A. Installation Example

We are starting with a clean OS install. This happens to be a virtual server running in a VMware ESXi 4 test platform. The machine physically has 4 processors and 16 GB of RAM but SQL Server Express can only deal with a single processor and will only address 1 GB of RAM, although the machine can have more.

Note: PBS will run with the PBS programs installed on one server and the PBS SQL databases on another server. Our example does not document this.



We have only made a few small configuration changes to the server. We changed the Computer name, added it to a workgroup so it could access other network resources and set it up to allow for Remote Desktop Access. We will be adding users and a user group specifically for PBS access later.

First thing we need to do after installing the OS and verifying network access is to download and install Microsoft SQL Server Express 2008 R2. It is our understanding that the ACU4GL® will work with older versions but we have decided to set the current version as our default test and deployment platform. We will not have test platforms of older versions available and will be limited in the amount of support we can provide for installations that do not utilize the recommended platform.

Download SQL Server. We are using the download called Database with Management Tools. If you want to start developing customer reports with the data out of the box you can select the version that includes the SQL Reporting Services. This guide is intended just to demonstrate a basic SQL install for PBS and will not go into Reporting Services in detail.

B. Installing Microsoft SQL Server Express 2008R2

In order to install Microsoft SQL you must be an administrator on the server or a user with administrator rights.

This is a default installation of SQL Server Express. It will be important that we note a few items during the install for use later on while we configure PBS/SQL.

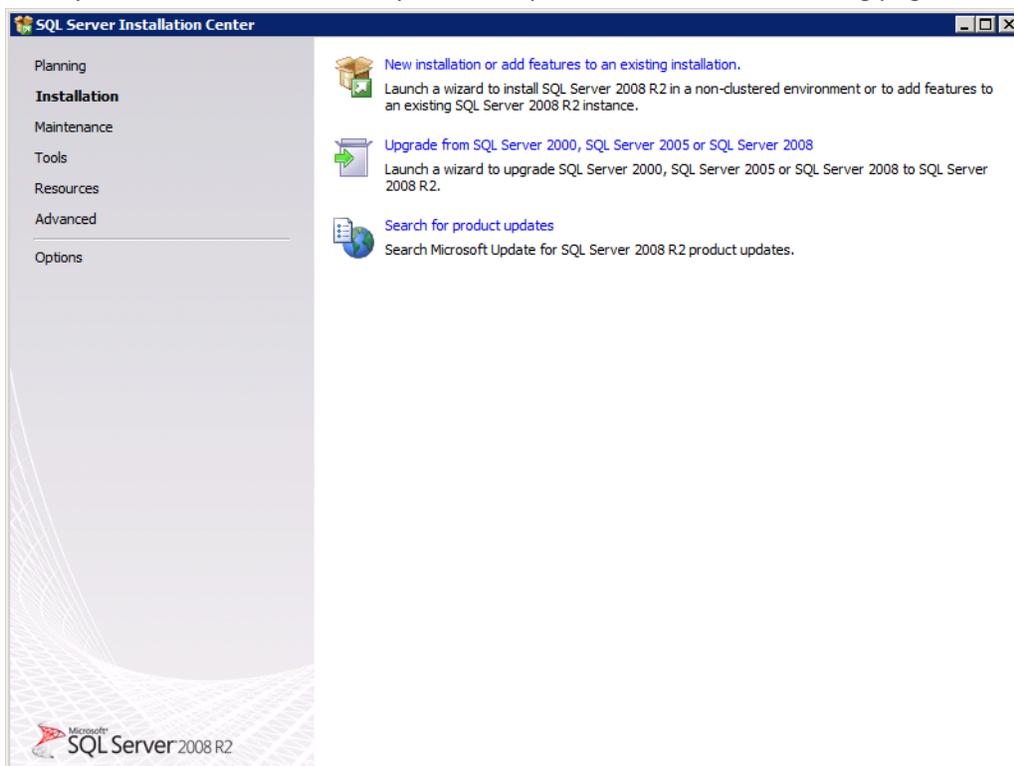
1. Prerequisites

SQL Server Express requires the .Net Framework and the Windows Installer to be at a certain level. If they are not you will get a message similar to this:



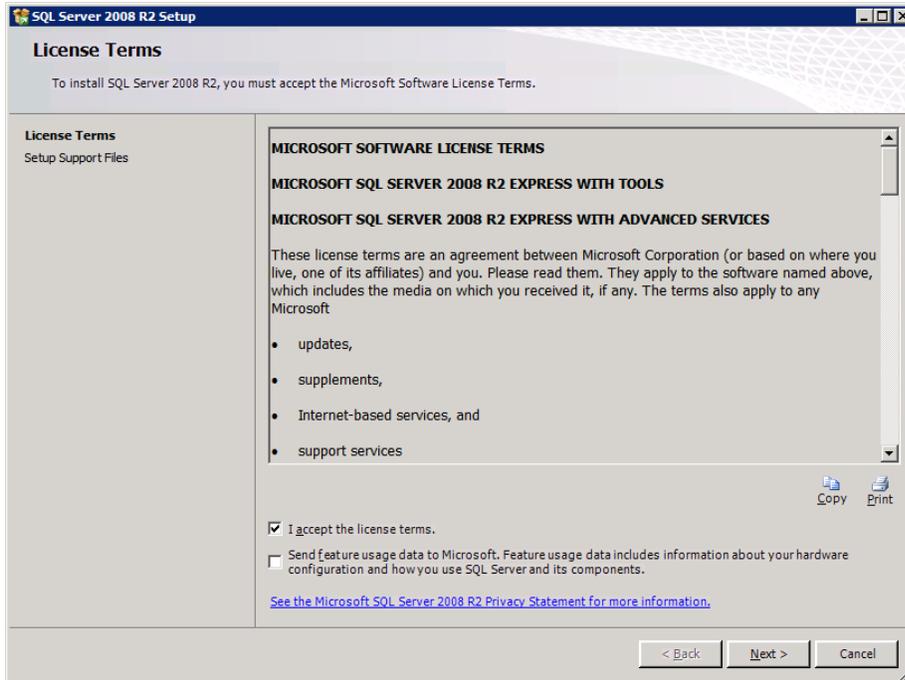
2. Microsoft SQL Installation Steps

After clicking OK the required packages will be enabled and you will be able to restart the installation. Once you restart the installation you will be presented with the following page:



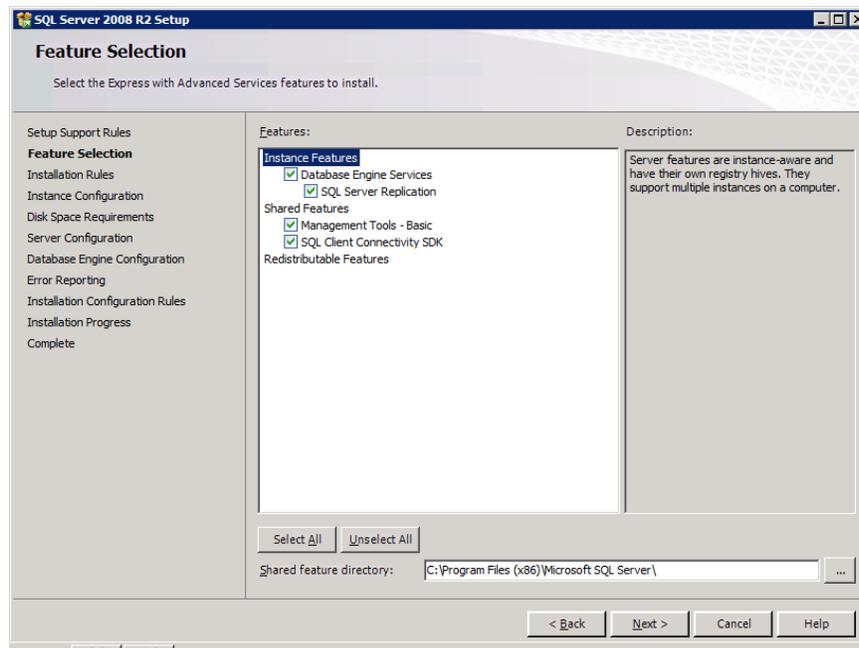
We are Installing a new instance of SQL Server so we will select the top item in the body of the page "New Installation or add features to an existing installation."

You will be asked to accept the terms of the MS license agreement:

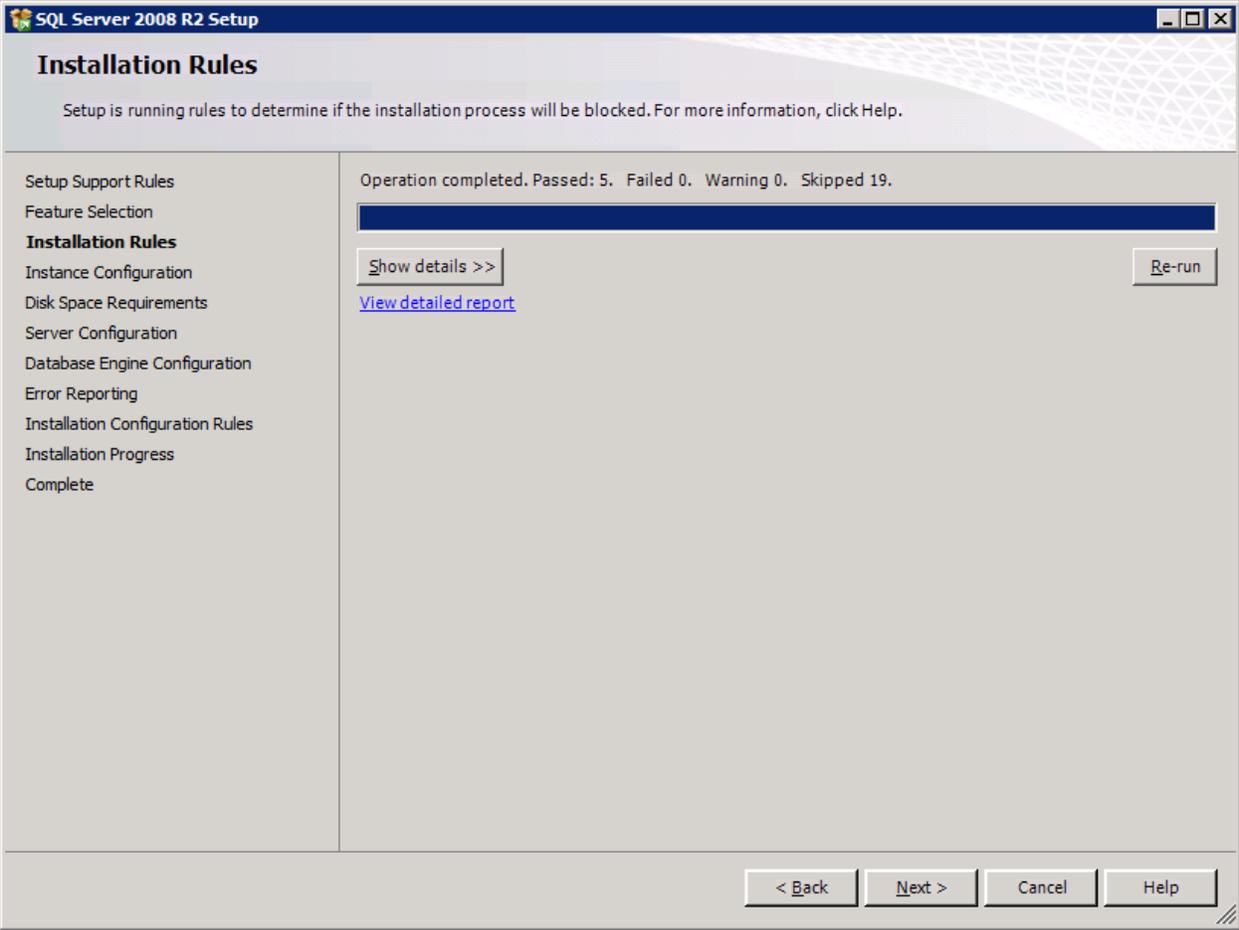


The second check box is optional. In our example we left it unchecked.

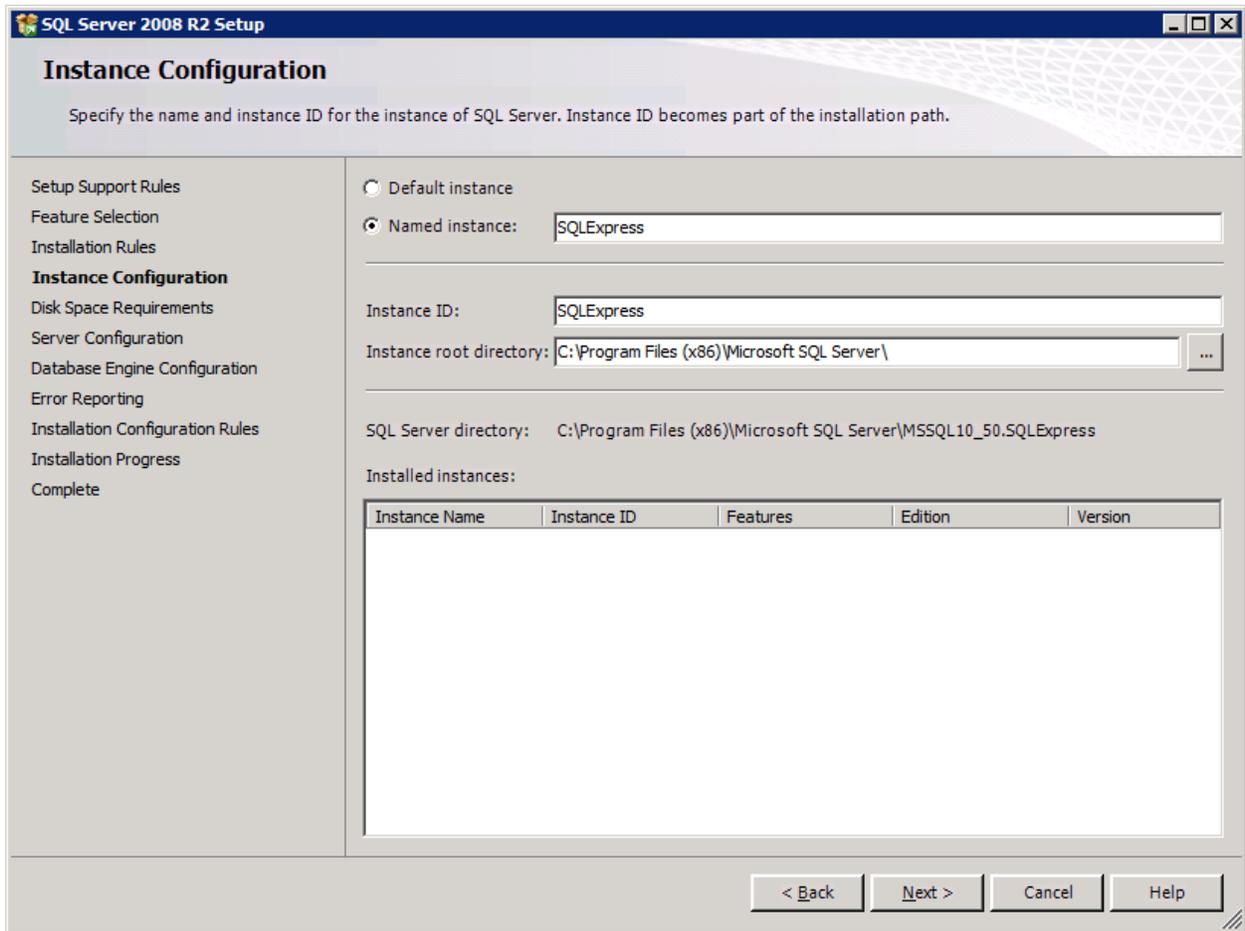
The install routine will install some basic items for the installation and check the Setup Support Rules. If all of those are satisfied you will be presented with a screen to select Features:



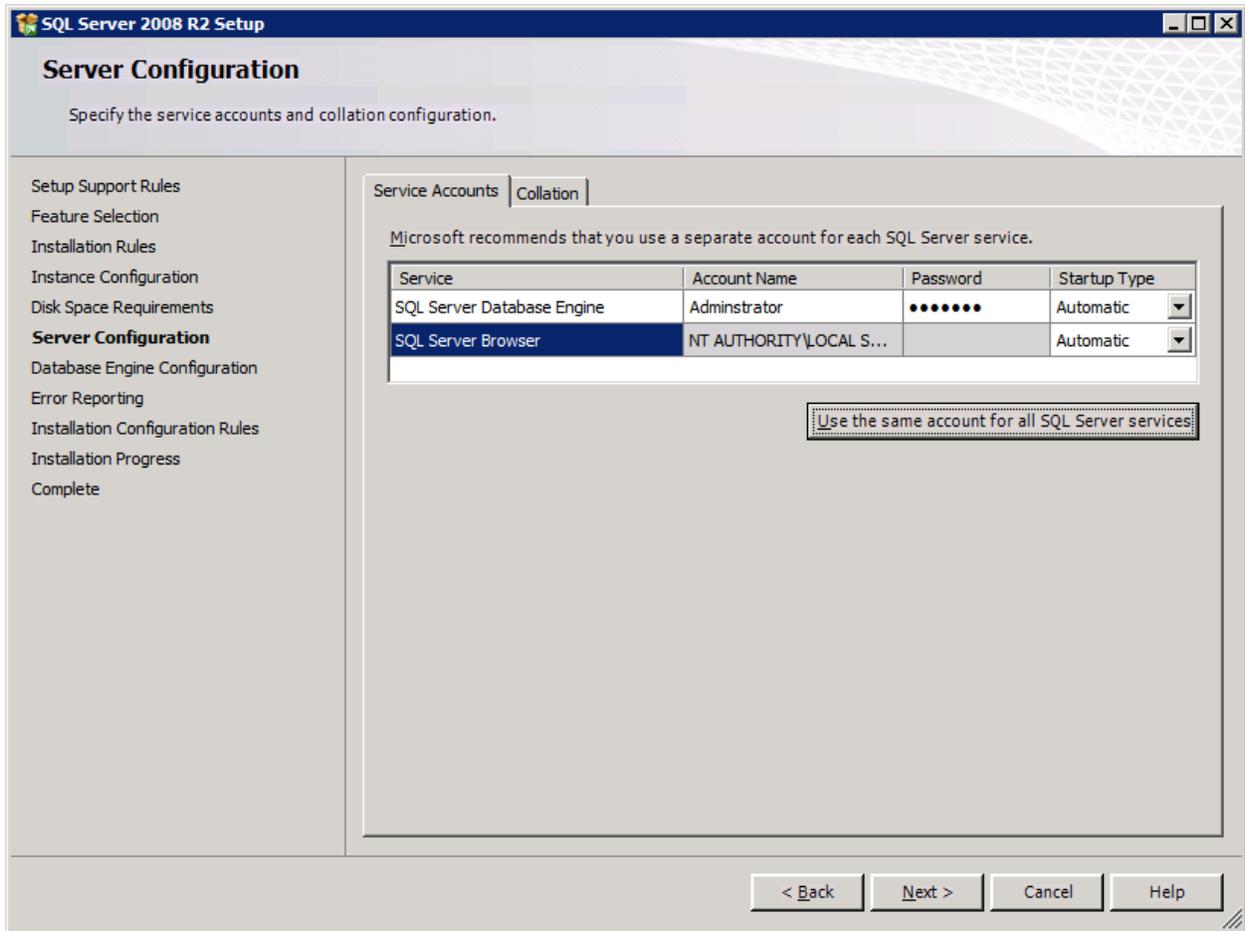
As we are doing a default install we will leave all of the boxes checked as it was presented to us. We are also letting it take the default directory, but you can of course change this if needed. If your box passed all of the installation rules you will not see the following screen. I have moved back to look at it for reference. You can see we passed all the rules required and that the install is skipping a large number of rules for reasons unknown (we could go look at the detail if it were needed):



The next screen presented is the Instance Configuration and is the first item that we need to pay specific attention to. The instance name specified here will be used later when we configure PBS/SQL. In this case the install has pre-selected a Named Instance and has chosen the value **SQLExpress** which will work fine for our test installation. If you were planning on having more than one instance of SQL Server you might want something more unique, but the default will work just fine here:



Server Configuration gives you the opportunity to identify accounts used to manage the services required for SQL Server. Microsoft recommends that you set up a specific account for each of these. For our demonstration we are going to use Administrator. This should not be done for a production environment as using the default administrator account is a poor practice in general. I am also having the service for SQL Server Browser start automatically so that the server can be easily identified by network resources; this is not a requirement for all deployments but makes it easier to set up items like Data Sources, etc.

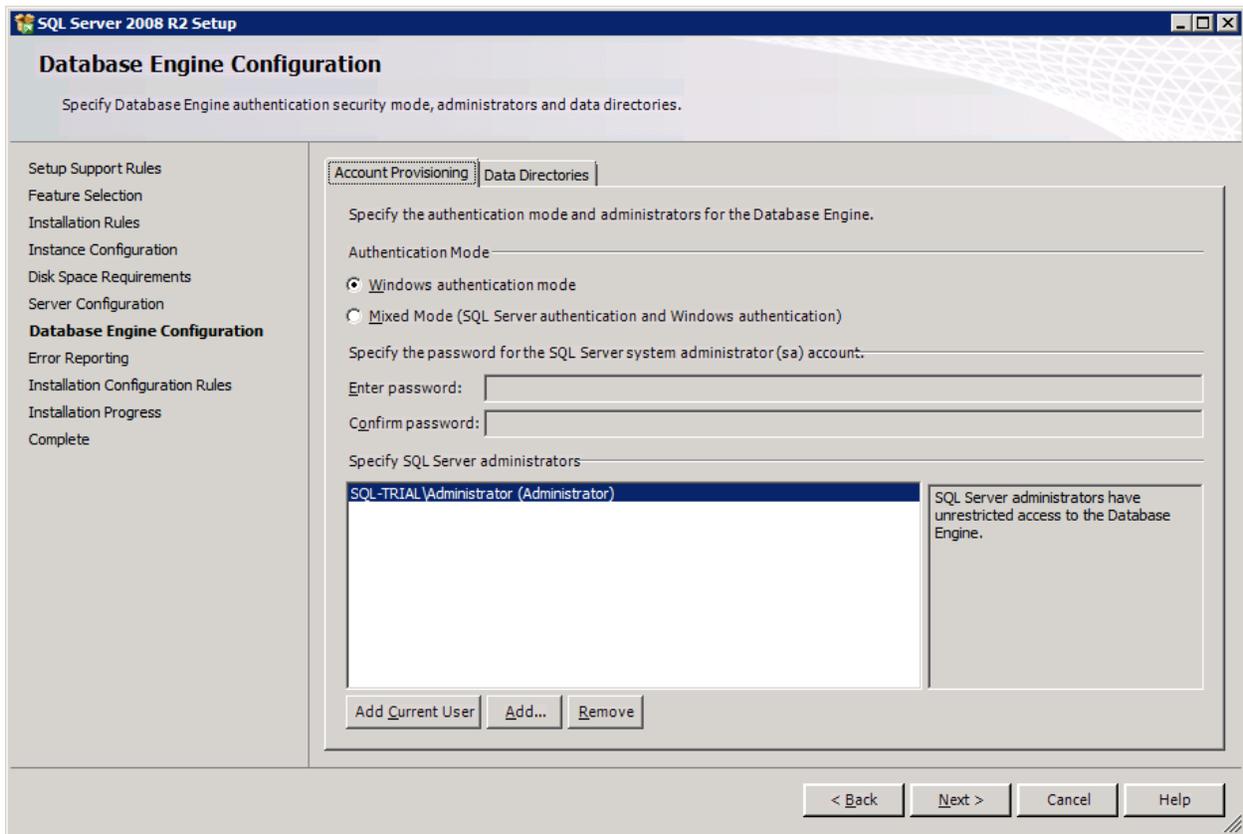


Database Engine Configuration allows you to decide how you are going to handle authentication to the database.

There are advantages and disadvantages to the authentication modes – see [http://msdn.microsoft.com/en-us/library/ms144284\(v=sql.110\).aspx](http://msdn.microsoft.com/en-us/library/ms144284(v=sql.110).aspx)

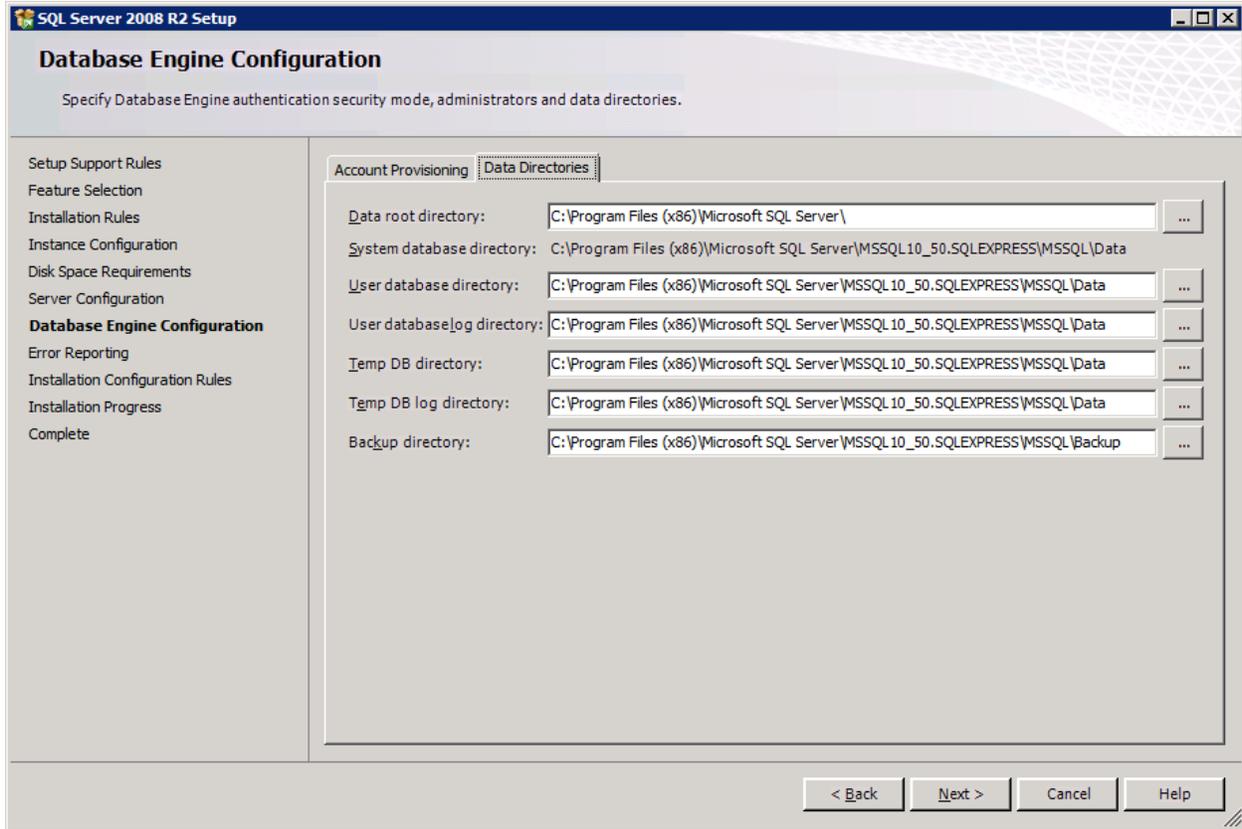
You may choose Windows authentication and set up other users later.

Mixed mode provides a separate SQL Administration (sa) login. If you select Mixed Mode you must enter the sa login here.

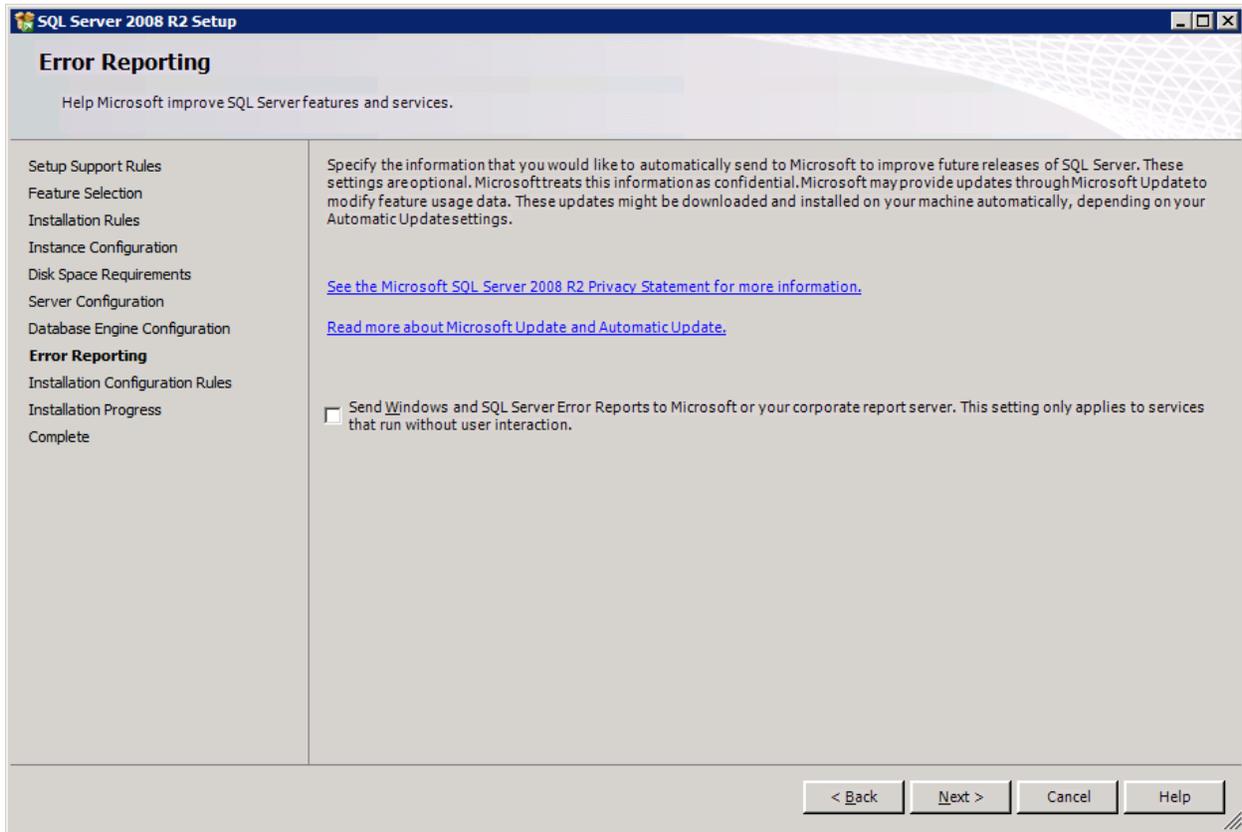


Alternative: It is possible to use *Mixed mode* and embed a single user login in the cblconfi that has access to the databases required to run PBS. The downside of this is that the SQL user id and password are available for viewing by editing the cblconfi file which is just a simple text document.

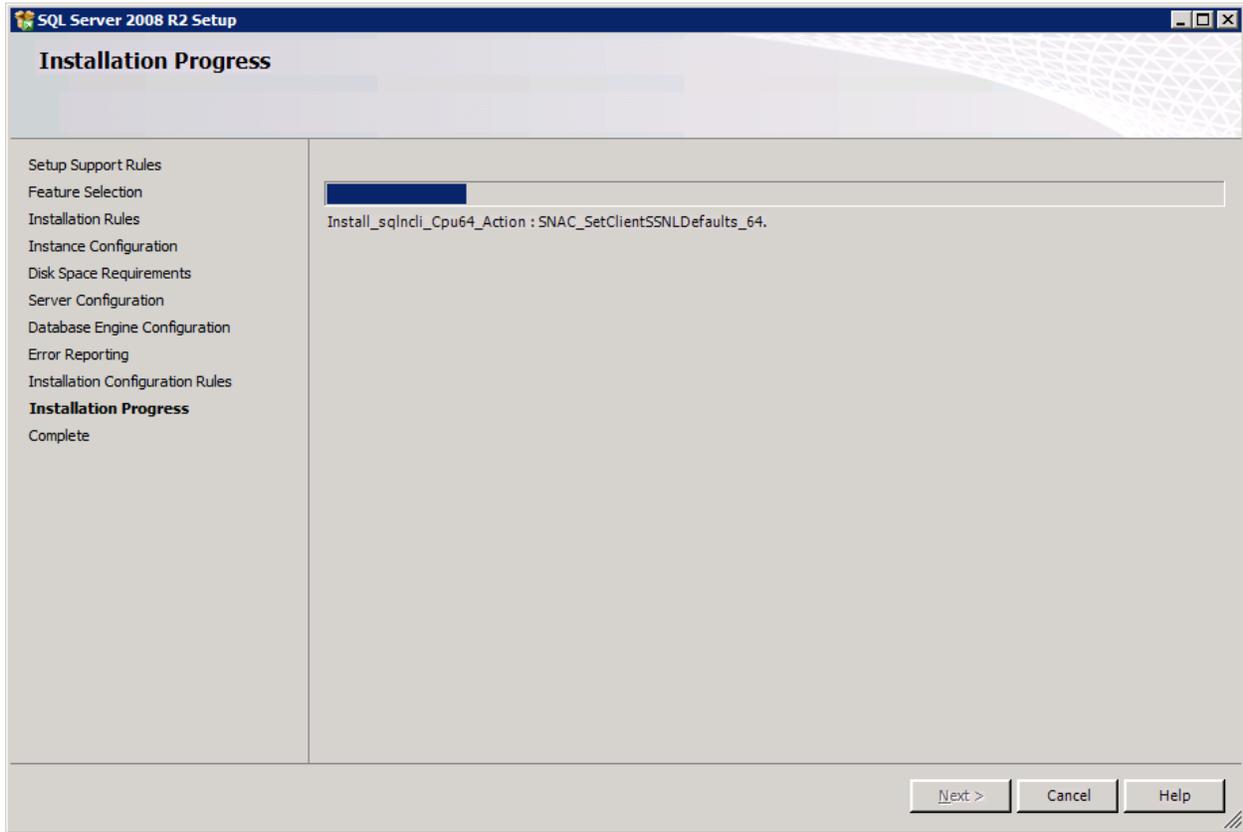
On the back tab you can define locations for the data. If you have a separate logical or physical drive set up to facilitate easier tape/offsite backups, this is your chance to separate the data files from the installation of SQL Server. For this example we only have a single drive defined on this machine so I will leave the defaults:



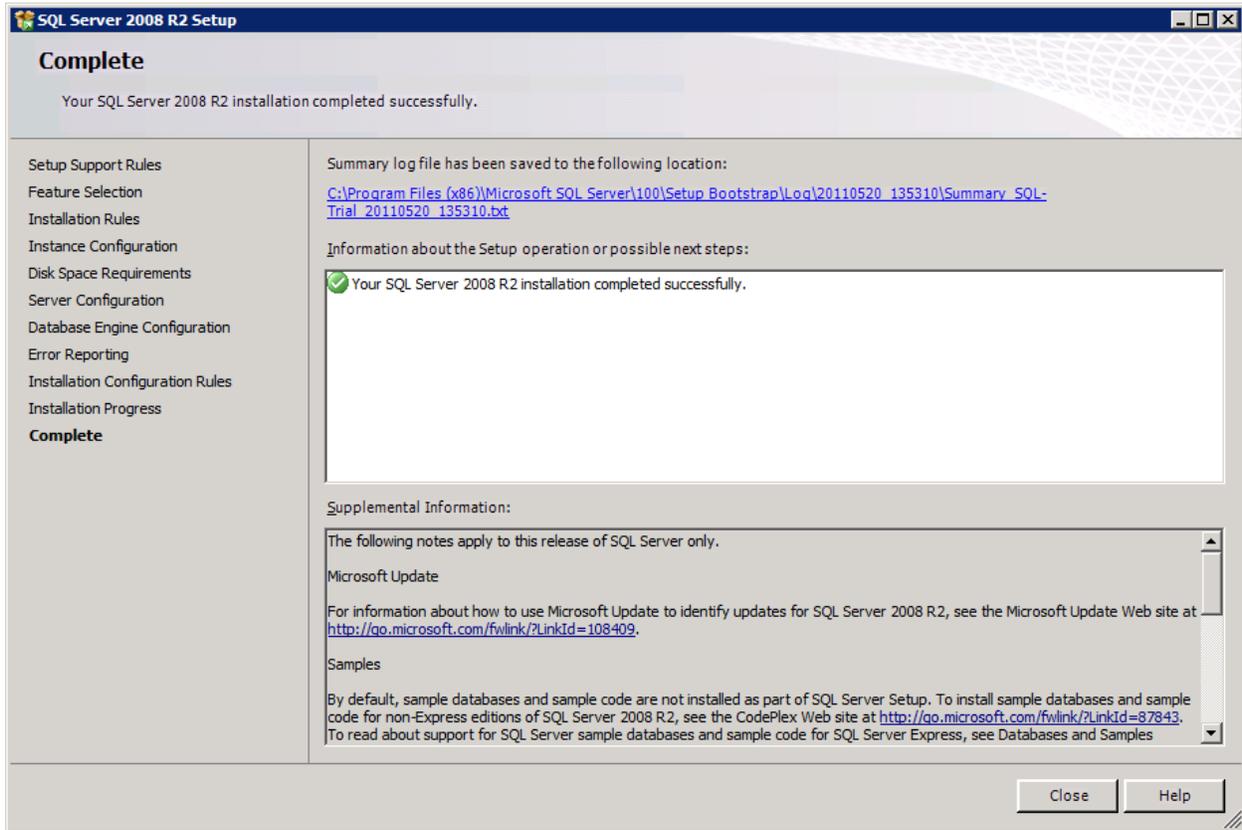
Error Reporting: This is optional. In our example we are not sending reports to Microsoft.



Installation Progress: This is an indicator that something is happening. When it completes you should have a clean install that is ready for a PBS installation.

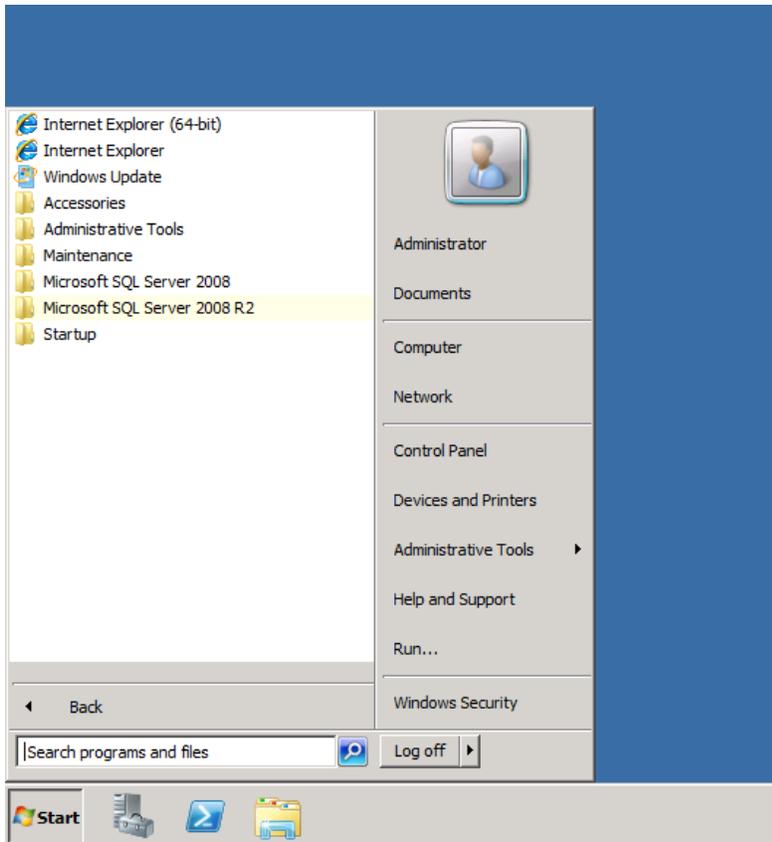


When you see this *Complete* screen you are finished. Looking at the Summary Log or Supplemental Information is optional and may not be necessary.



3. Accessing Microsoft SQL Server 2008 R2

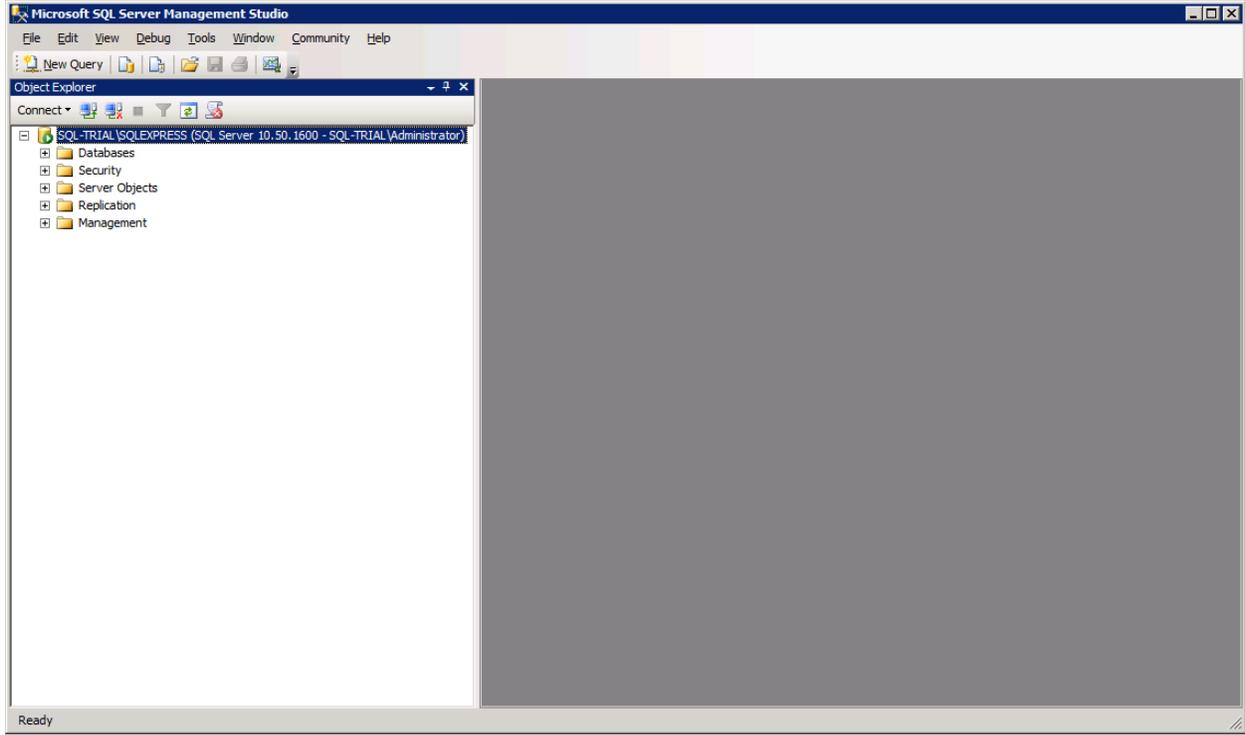
When you are done you will have two new main menus in your program selection. The one we will be using now is **Microsoft SQL Server 2008 R2**.



The other, **Microsoft SQL Server 2008**, has various other installation and maintenance tools that are not needed at this time.

We are now going to open *SQL Server Management Studio*. It will select the default instance and login without credentials. In the left hand column we will see the instance and, as you can see, it is running. For the screenshot example below, the machine is named SQL-TRIAL and the instance of SQL Server is SQLEXPRESS. These two values are required for the PBS SQL install to find the database server.

SQL-TRIAL\SQLEXPRESS



You can close SQL Server Management Studio and proceed with the next section.

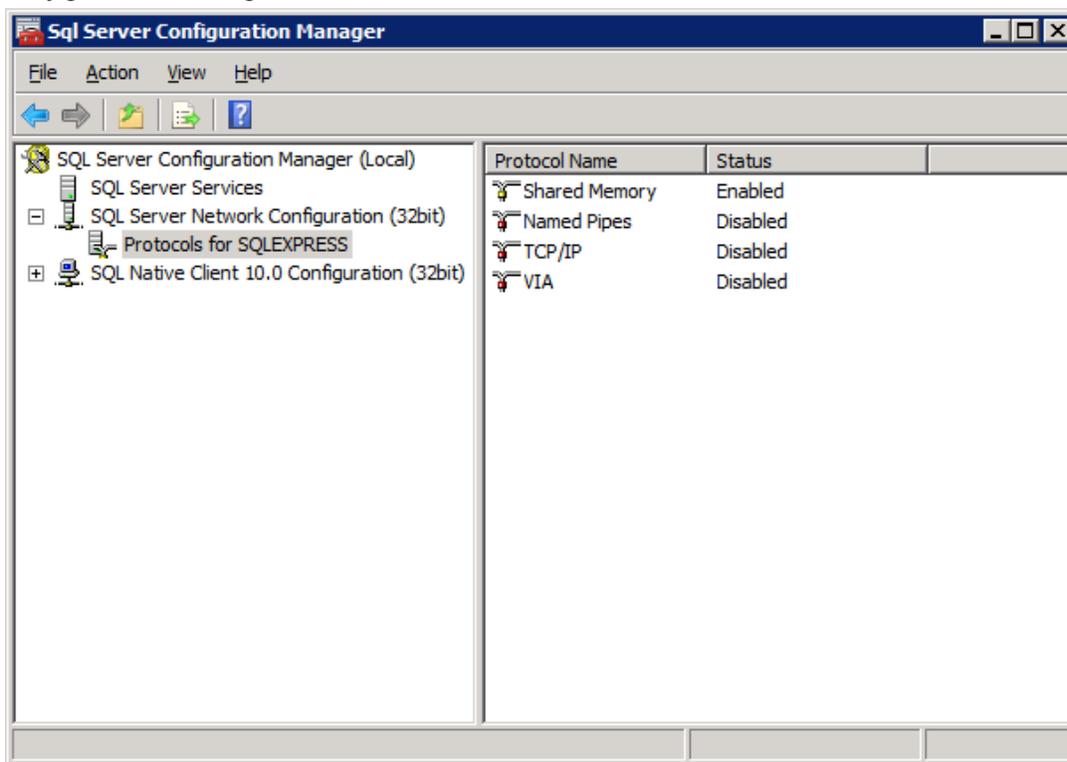
V. PBS SQL Configuration and Installation

This is a basic PBS install procedure that assumes you do have SQL server installed. To verify any existing SQL installations open a command prompt and type “sqlcmd -L”. A list of existing databases display. If the instance that you are using does not display in the list a problem exists with the services.

A. Configuring the SQL Server - TCP/IP and Named Pipes Protocol

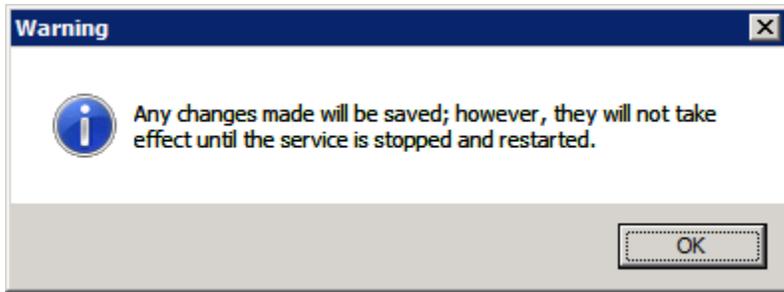
You will need to configure SQL Server to use the TCP/IP and Named Pipes protocols.

This is done using the *SQL Server Configuration Manager* which is accessible through the SQL server start menu. Select *Microsoft Server SQL Server (Version)*. Select *Configuration Tools* and then *SQL Server Configuration Manager*:

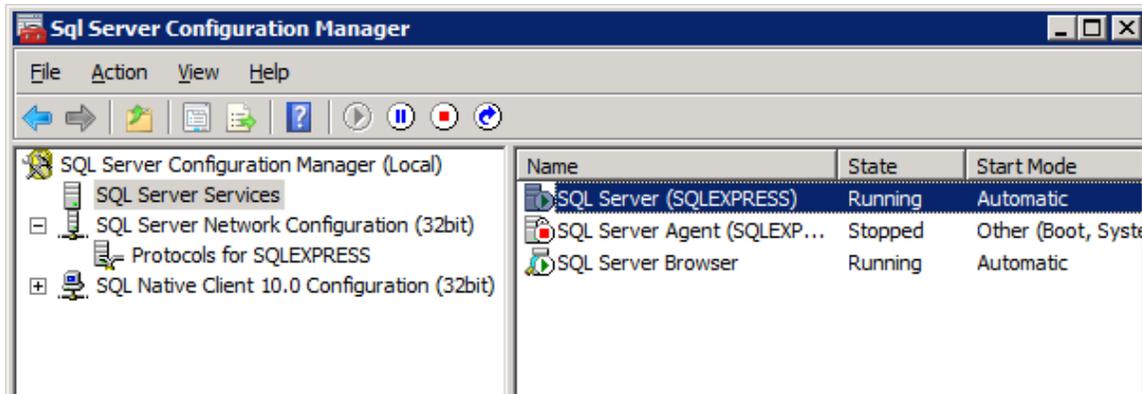


- Expand *SQL Server Network Configuration*
- Click on the instance, Example: *Protocols for (Instance Name)*
- Enable the *Named Pipes* and *TCP/IP* protocols by right clicking on each and select *Enable*. *Shared Memory* does not have to be enabled. 2008 SQL Server has a *VIA* protocol. Do not enable this. 2012 does not have the *VIA protocol*.
- Close the *SQL Server Configuration Manager*

You will be prompted with a message to restart the SQL Server service:



This may also be done using the SQL Server Configuration Manager:



Right click SQL Server Services, and select Restart from the menu.

B. Installing PBS SQL

You must be logged into the Server as a member of the Administrator's group. In SQL Server Management Studio you must have set up the same user for which you logged into the server. If you are using a domain the administrator/user must be part of the domain group.

If you are upgrading from PBS v12.02 Vision or any earlier version of PBS, you must use the [PBS SQL Install with New Database](#). If you are on v12.02 SQL you have a choice as seen here:

1. PBS 12.02 SQL Upgrade Options

You have the *Database In-place* and *New Database installation* options when upgrading from PBS 12.02 SQL to PBS 12.03 SQL.

a) Option 1 - SQL Database In-place Installation

The SQL Database In-place Installation is new for 12.03. You may only use this process to upgrade from PBS 12.02 SQL. The primary benefit of this installation is the speed. It can reduce the time from hours down to minutes. With this type of install:

- In order for the database in-place conversion to work properly and you have Accounts Payable or Payroll, you must be at PBS version 12.02.03.xx. For all other modules you could upgrade from 12.02.0x.xx.
- The installation of PBS and the conversion all happen as one sequence of steps.

- The PBS v12.03 programs are installed in a new folder; however it uses the same database as 12.02.
- You may optionally back up the v12.02 databases as part of the process. It is recommended that you backup the 12.02 SQL databases. Following the install, you will not be able to access PBS 12.02.

Note: There are steps to restore the v12.02 database from backup and revert back to v12.02. See the [Move Back to v12.02 after Database In-place Install](#).

- A PBS SQL installation has most of your data in SQL tables; however some of the data is in vision files. Both vision files and SQL tables must be upgraded. The vision files must be exported separately with a new VS (vision) utility. When the install is run, EZ Convert also runs to convert the vision files to v12.03.

Note: if you converted an SQL table to a vision file in 12.02, it will be converted back to an SQL table in 12.03.

b) Option 2 - Installation with New Database

You may use this process to upgrade any version of PBS including PBS SQL 12.02.0x.

IMPORTANT: When upgrading from PBS SQL version 12.01 or 12.02 do NOT install PBS 12.03 in the same instance as the older version. Create a new instance before you start the process.

It requires that do the process in several independent steps. Some of the steps are covered in this document. Many of the steps are covered in detail in the EZ Convert documentation. This is a brief synopsis:

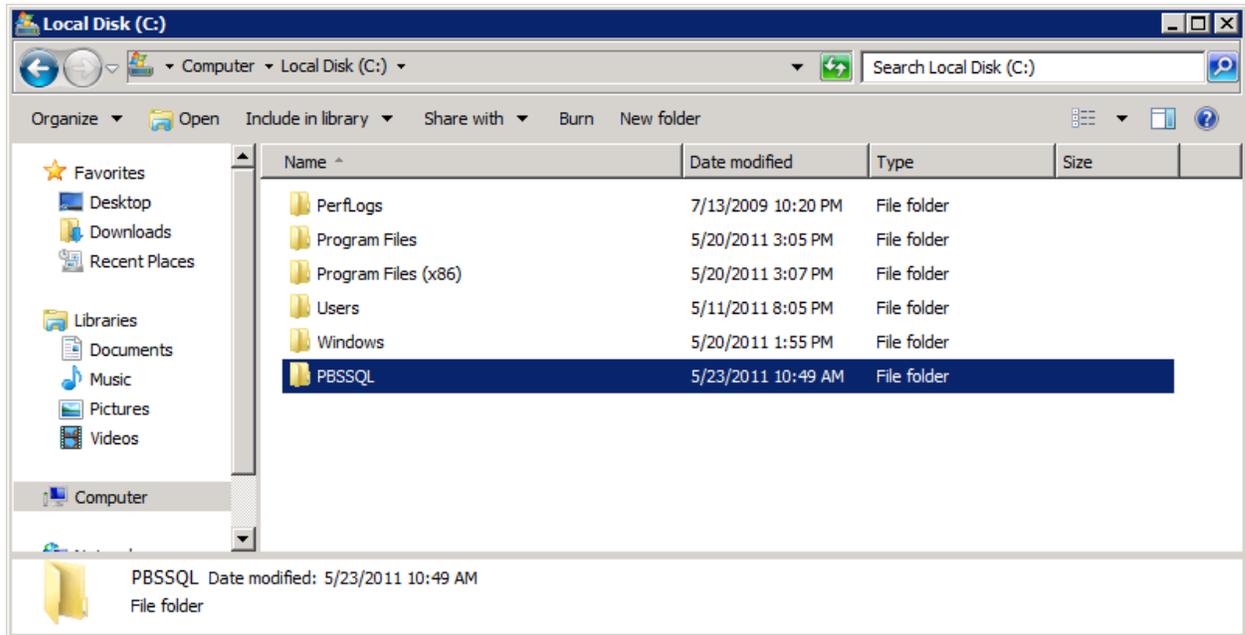
- Export the data from 12.02 or other version using the Extended file utilities and Control file utilities.
- Install PBS 12.03 SQL.
- Restore the data into 12.03 using EZ Convert.

C. Preparing for the Installation

These steps are done for both the *Database In-place* install and the *Installation with New Database*.

- Create a directory for installing PBS, but do not place this in the Program Files directory for Windows 7, Windows 8, Windows Server 2008 or Windows Server 2012. An example would be a directory

called PBSSQL at the root level of a drive or network share: C:\PBSSQL\



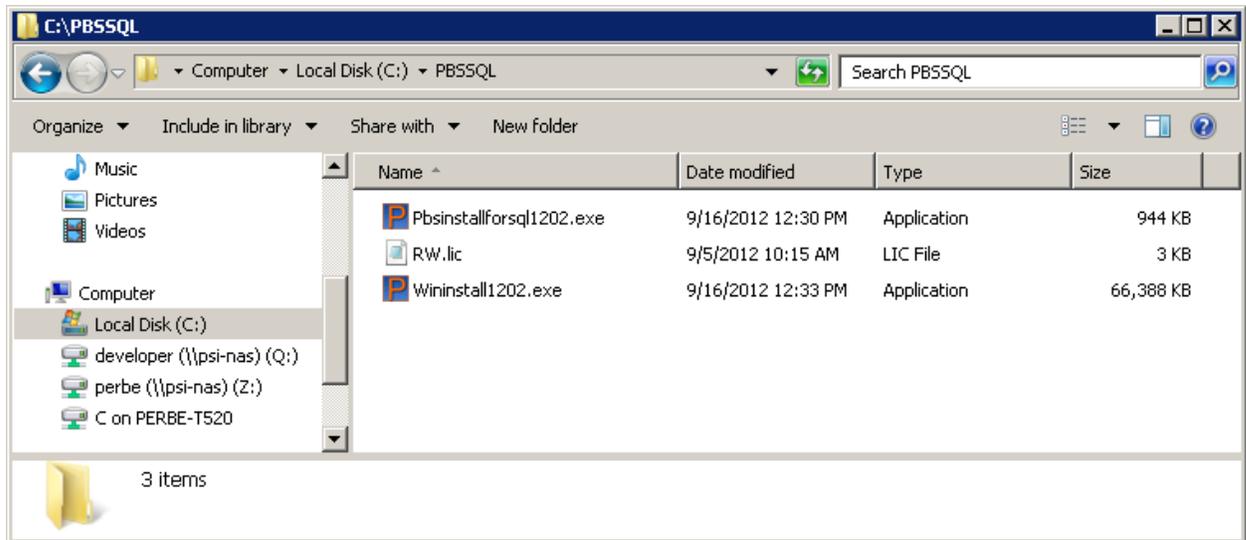
- ❑ Copy your RW.LIC to the directory created in the previous step. If the license file has a name like *RW – XYZ Company – ABC Associates-EXP12-31-14.LIC*, you MUST RENAME it to *RW.LIC* before you run the install.

You are required to have a RW.LIC file for the version 12.03 installation that has a Passport Update Program (PUP) date of 02/16/14 or later. If you attempt an install with a license that has a PUP date of 02/15/14 or earlier, you will see a message like this:



If you get this message, contact Passport support reception for details.

- ❑ Copy **wininstall1203.exe** and **pbsinstallforsql1203.exe** to the directory you created above. These are self-extracting zip files that contain our basic install and some additional components required for SQL server integration.



If you are using the Database In-place install, then continue below. For a new database install skip to the [PBS SQL Install with New Database](#) section.

D. Install PBS SQL – Database In-place

It is highly recommended that you back up your databases before you start. You may do this before you install PBS or you may use the option of backing up the databases during the install. The server must have the 4.0 version of .NET framework installed.

1. PBS V12.02 Vision File Exports

You must run a utility in PBS v12.02 to extract the vision files. Download the *1202Utility-DatabaseInplaceto1203.exe* file from the FMS site.

Extract *1202Utility-DatabaseInplaceto1203.exe* in the top-level PBS **v12.02** folder.

Run the following utilities:

- VSFUTL.bat for accounting and distribution modules. You must run this.
- CTLUTVS.bat for control data for accounting and distribution modules. You only need to run this if you converted a control file from a SQL table to a vision file.
- VSMUTL.bat for manufacturing modules. Run this if you have manufacturing.
- CTMUTVS.bat for the manufacturing control data. You only need to run this if you converted a control file from a SQL table to vision file.

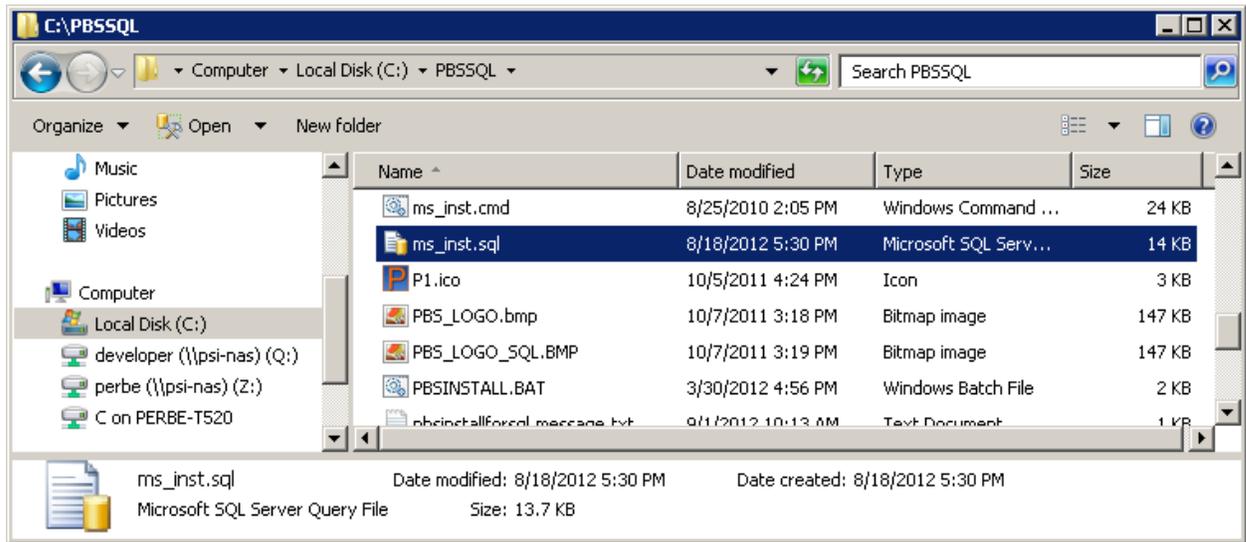
These utilities export the vision file data into a 12.02 folder called VSUTIL*(today's date)*.

2. Starting the V12.03 Installation

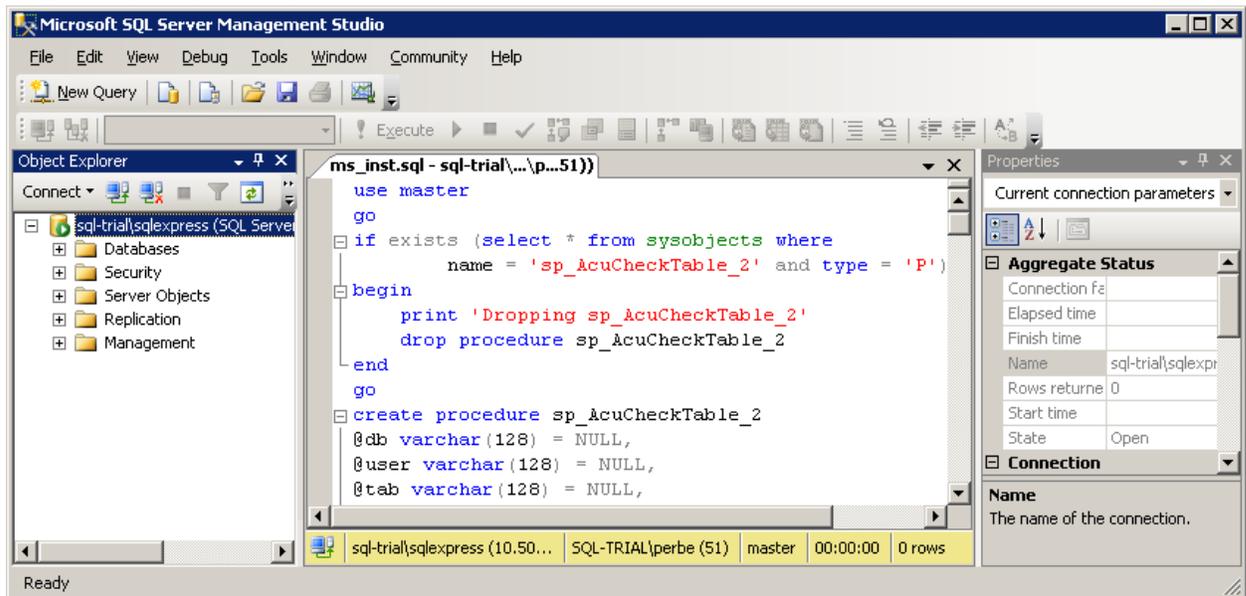
In the PBS 12.03 folder do the following:

- Run **wininstall1203.exe**.
- Run **pbsinstallforsql1203.exe**.

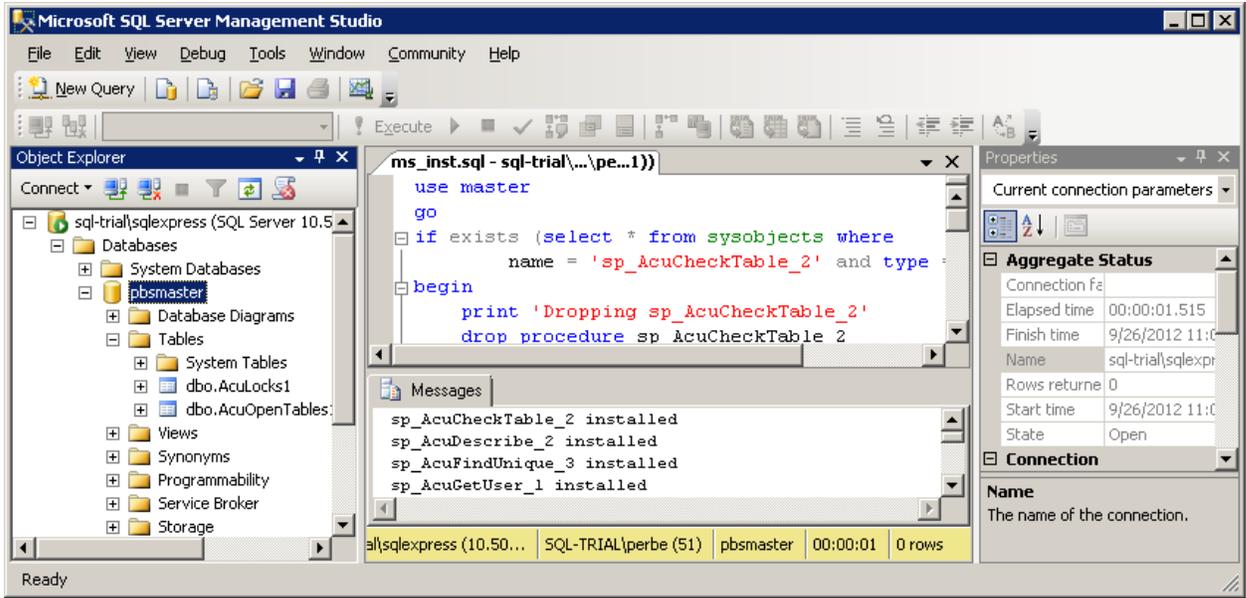
- Find the SQL script file called **ms_inst.sql**. Due to the updated runtime there are more stored procedures than there were for PBS 12.02, so this must be run.



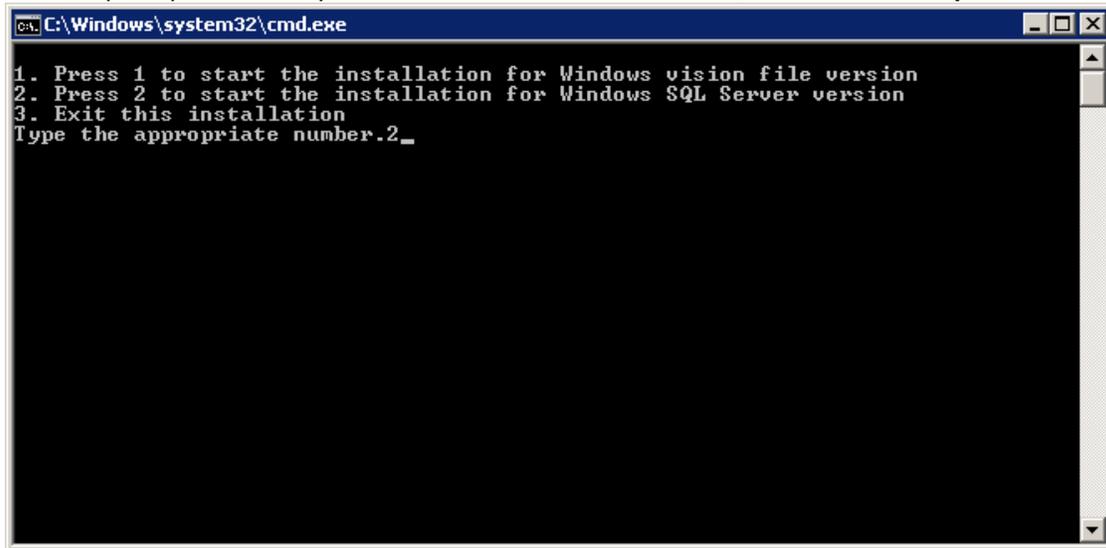
- Launch SQL Server Management Studio using Windows authentication. Log into the instance where you want PBS installed or where 12.02 SQL is installed. Select File > Open > File. Browse to the **ms_inst.sql** script and open.



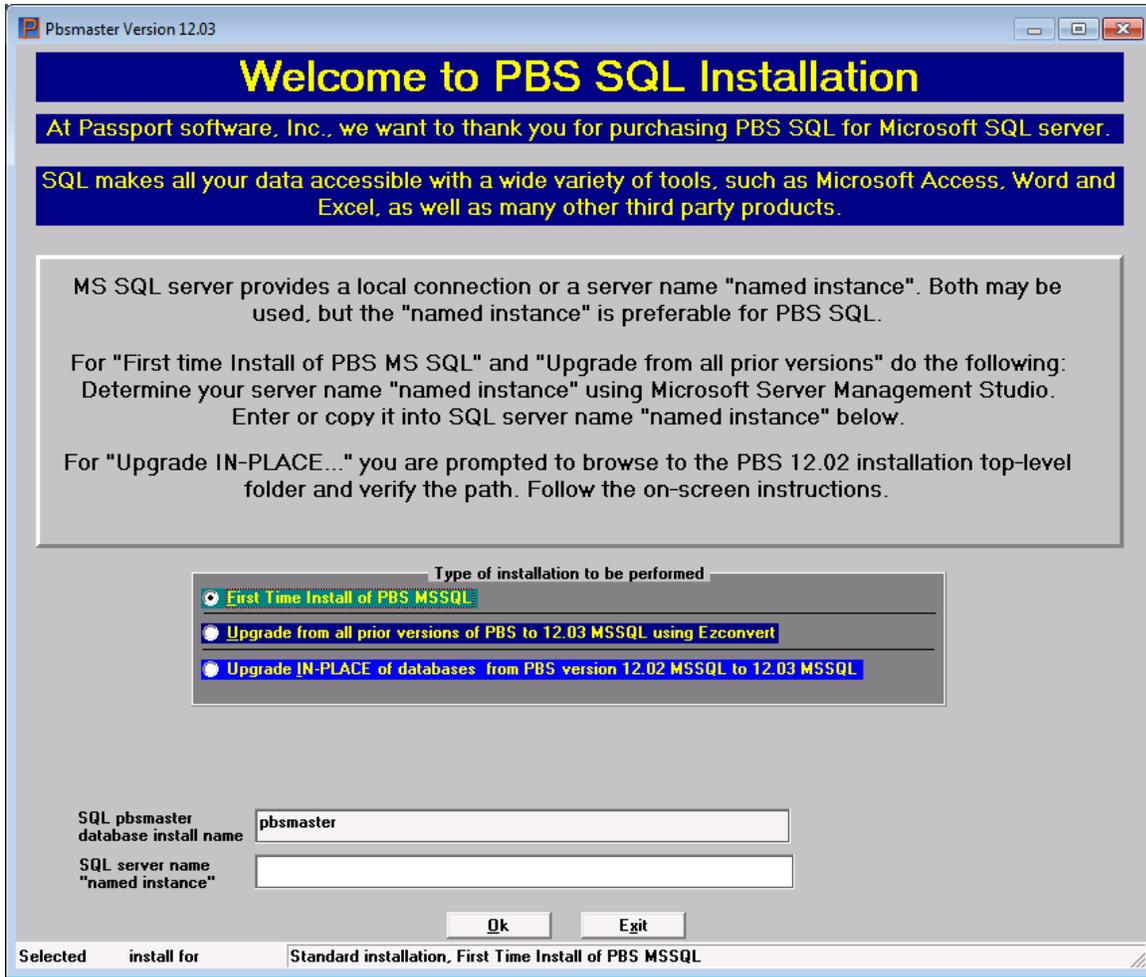
- Press the **!Execute** button on the tool bar. This will create a database called **pbmaster** and two tables required by AcuCOBOL to control record and table locking in the database.



- Run **PBSINSTALL.BAT** to start the main installation.
- The first prompt will ask if you want to install Vision files or SQL Server. Select **Option 2** for SQL.

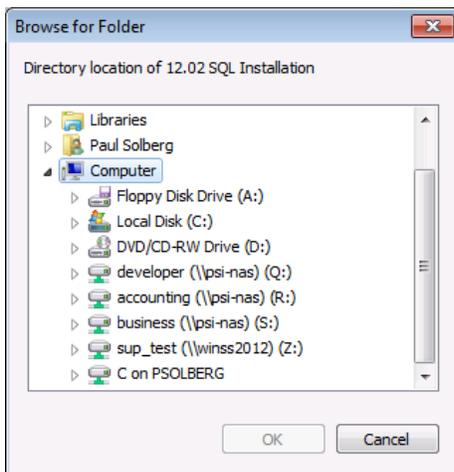


This screen displays:



For the type of installation, select *Upgrade IN-PLACE of databases from PBS version 12.02 MSSQL to 12.03 MSSQL*.

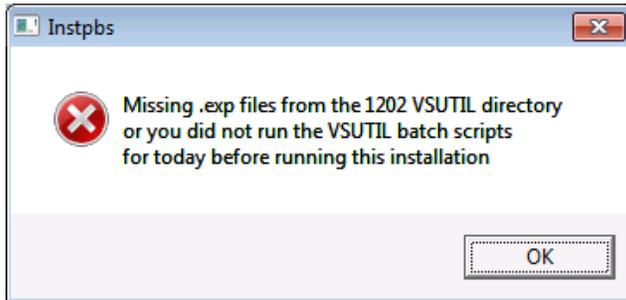
This browse screen displays:



Browse to the location of PBS v12.02. Select the top-level folder and click on *OK*.

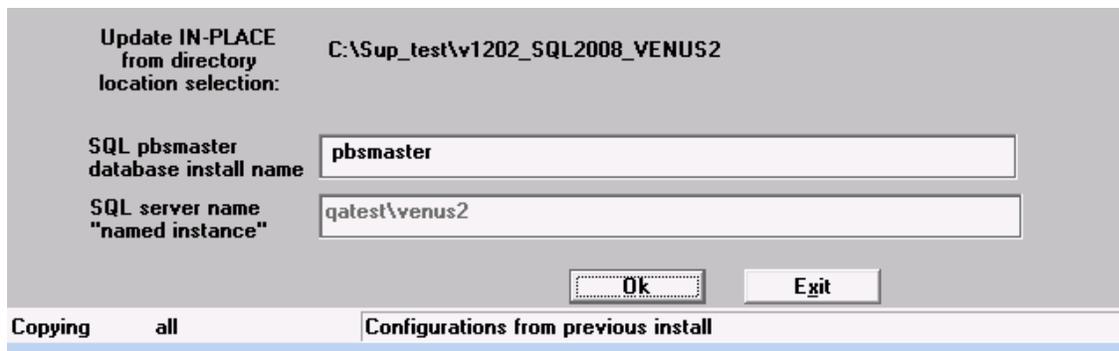
Verify that the folder is correct and select the Yes button on the confirmation window.

If the VSUTIL was not run previously or the folder does not match the system date, you will see this message:



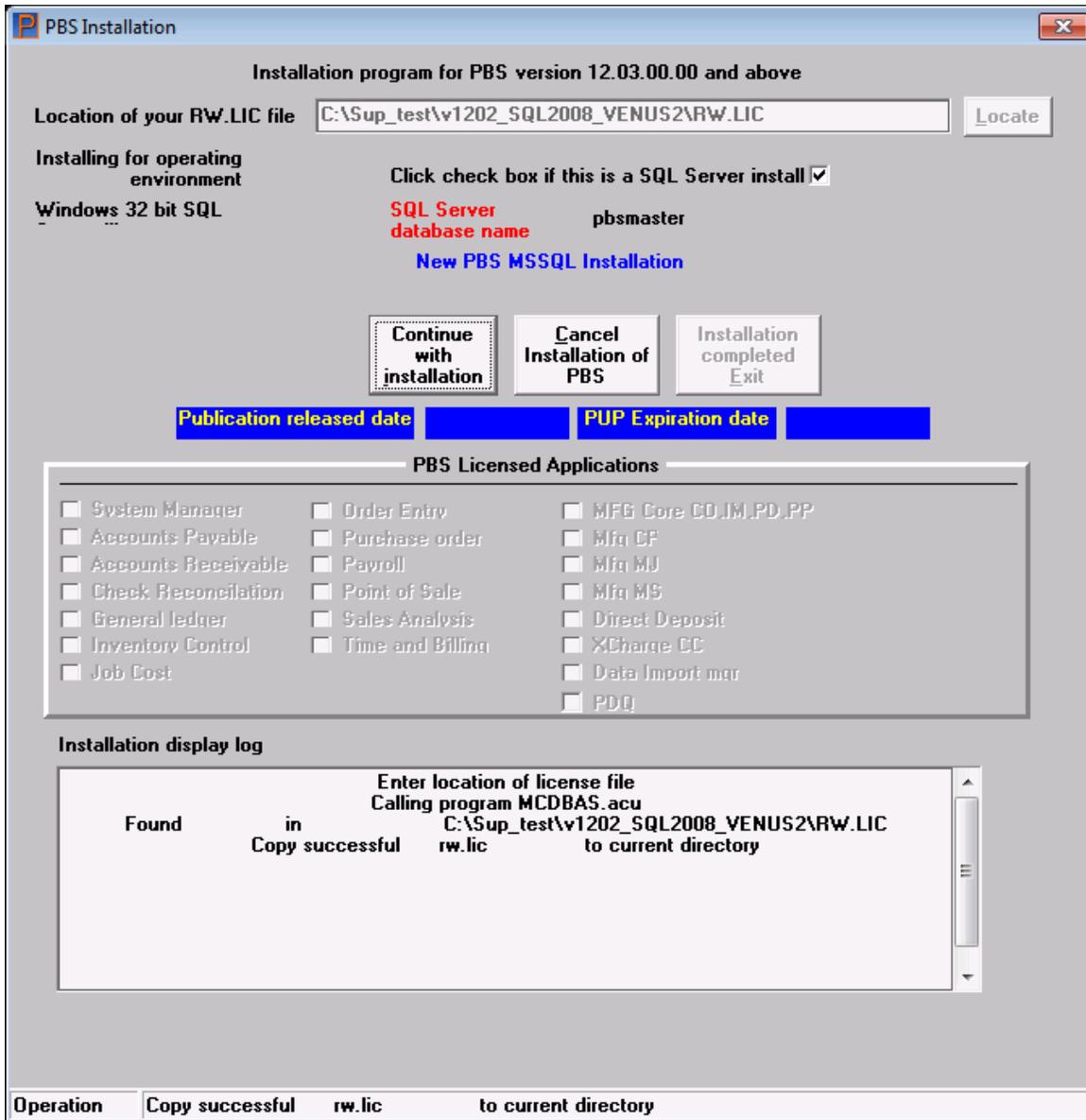
After you run VSUTIL start the PBSINSTALL.BAT again.

After it finds the exported data, click on the OK button as seen below:



The cblconfi.* files are moved to the (PBS1202)\VSUTIL\ folder which makes V12.02xx inaccessible.

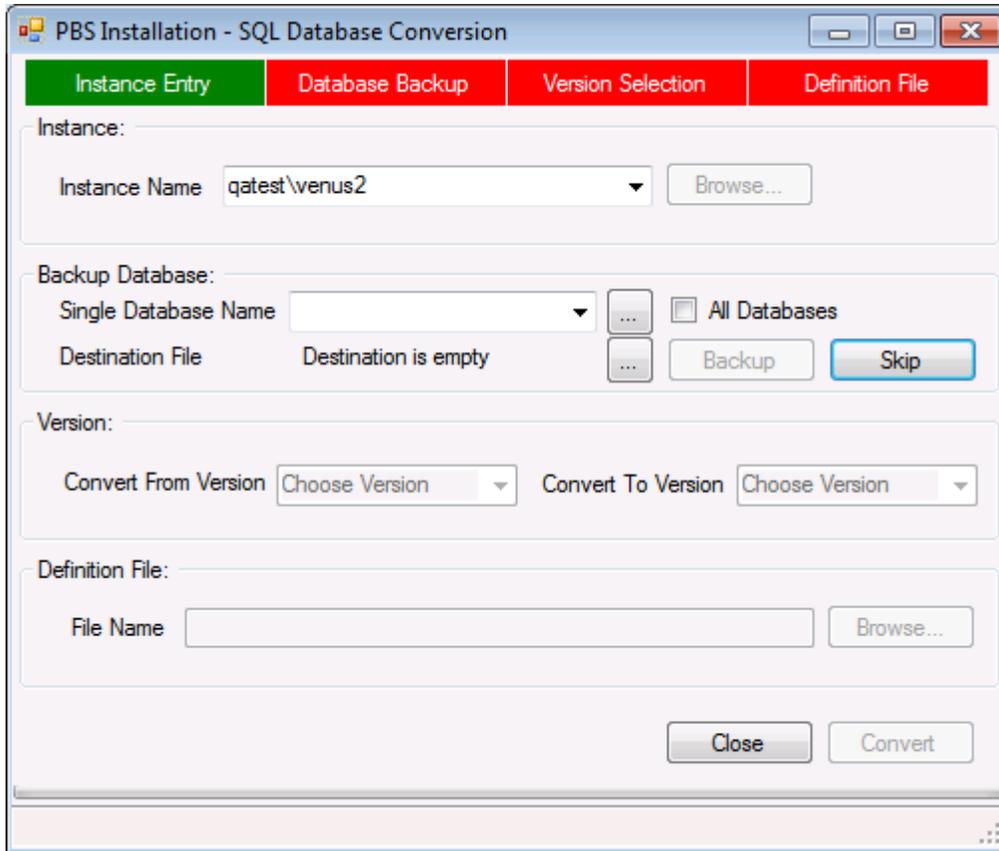
This screen displays next:



Select the *Continue with installation* button. The installation extracts the programs and other components for PBS v12.03.

3. SQL Database In-place Conversion

The following SQL Database Conversion screen displays:



There are four main steps on this screen: Instance Entry, Database Backup, Version Selection and Definition File.

Instance Entry

Selecting the instance name is automatic.

Database Backup

You may select to backup the database now. If you have already done this, you may skip this step.

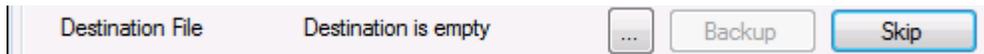
If you decide to backup now, you must backup to a local drive accessible from the server. It will not backup to a network drive.

Click on the browse button to the right of the drop down as seen below:

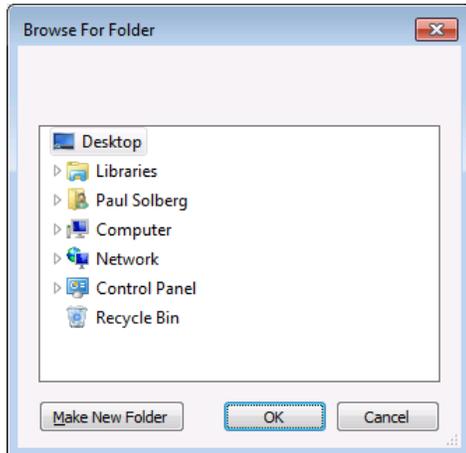


It automatically locates the databases within that instance. You may backup one at a time or you may click on *All databases*.

Browse to a destination backup folder:



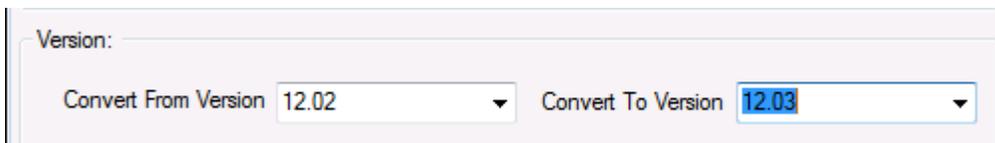
The browse window displays:



Click to a local drive. When you do the backup button becomes available. Select it.

Version Selection

Select *Convert From Version* and *Convert To Version* as seen here:

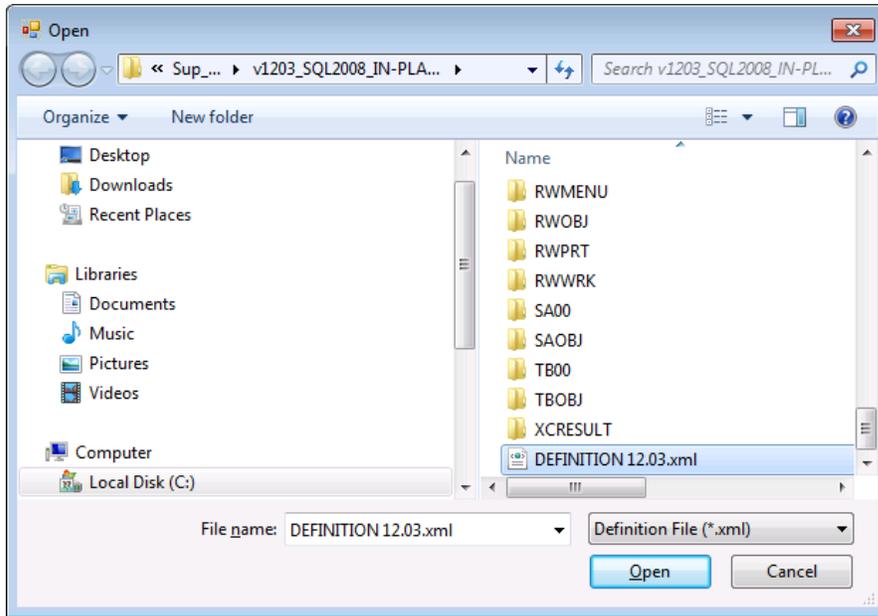


Definition File

Select the *Browse* button to locate and open the definition file. This file is used to alter the table columns to match the v12.03 specifications. The file name is DEFINITION.1203.XML.

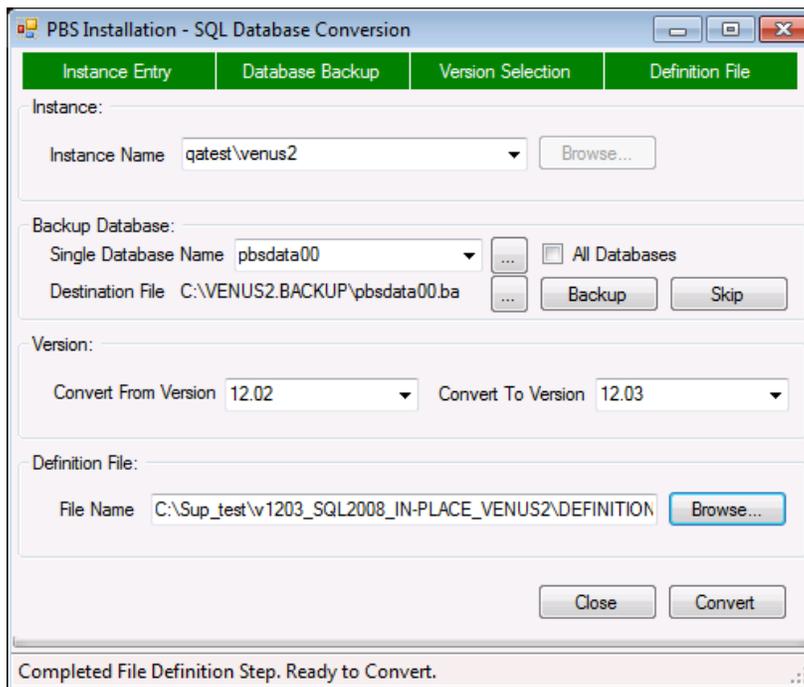
The v12.03 EZ Convert documentation has a list of changed tables.

This is the browse window:



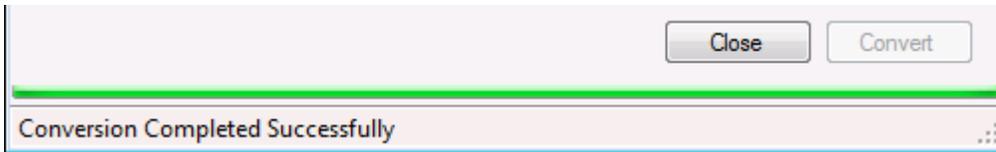
Select *Open*.

Select the *Convert* button as seen in the lower right corner of this window:



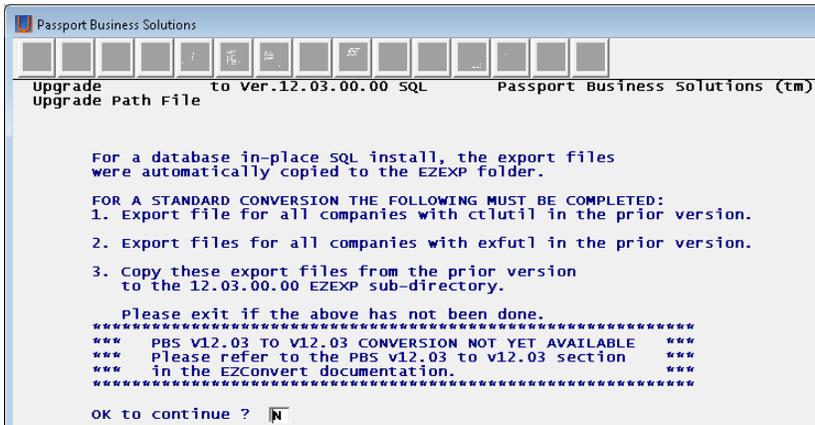
Once you select Convert, the PBS 12.02 database will be converted to PBS 12.03.

A green bar indicates the progress. Once finished, a message on the screen indicates that the *Conversion Completed Successfully*. Click on *Close* as seen below:

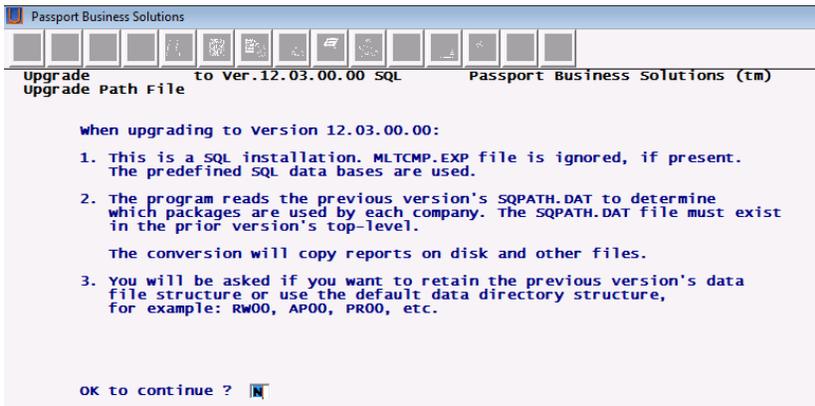


4. EZ Convert Conversion of Vision Files

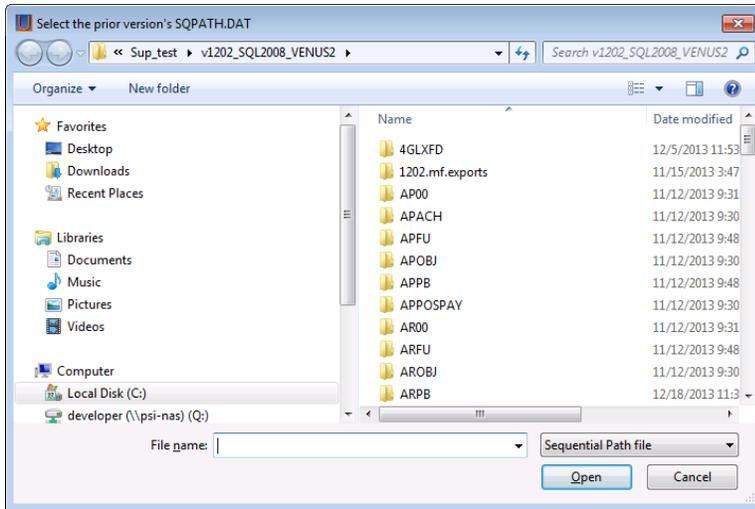
EZConvert starts automatically with a screen similar to this:



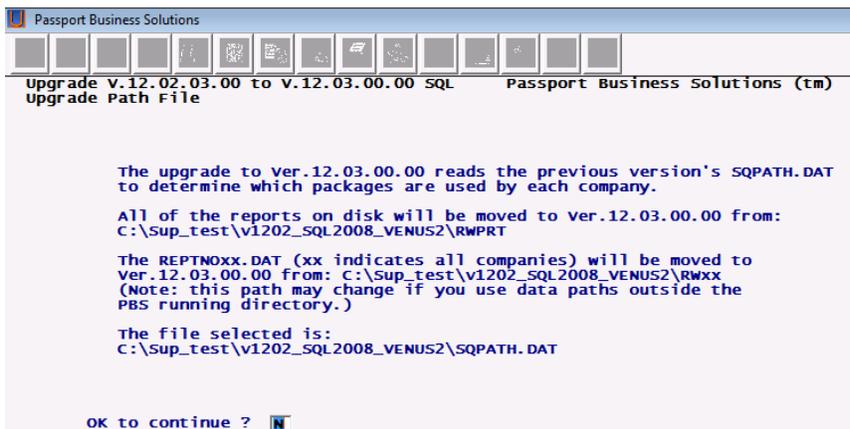
Select Y to continue:



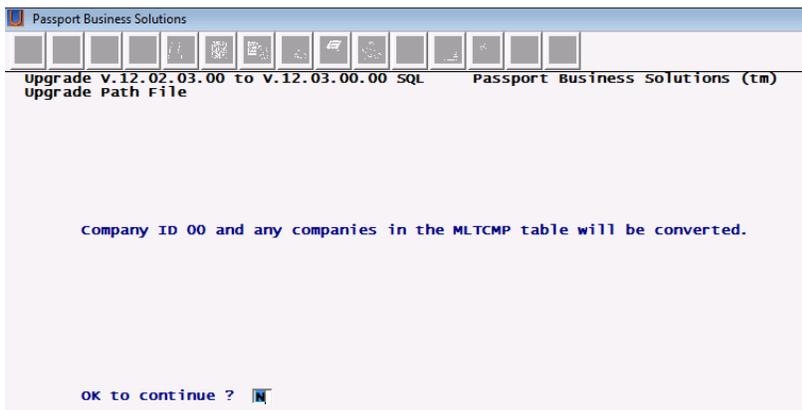
Select Y to continue. A browse window displays, like below, where you select the PBS 12.02 SQPATH.DAT file.



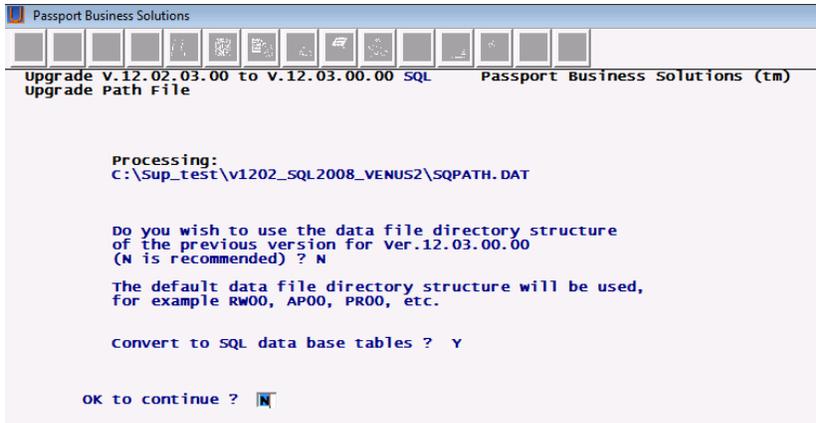
Once you have found the SQPATH.DAT file select *Open*.



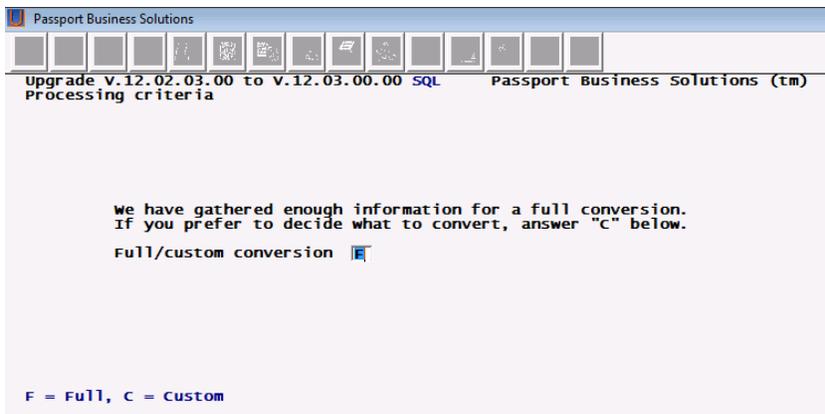
Enter Y to continue.



Select Y to continue.



Select Y to continue.



Use the default of 'F' for full conversion. If you want to use the custom conversion, see the EZ Convert documentation for the complete instructions.

The conversion starts. It converts your vision data, copies the RWPRT, PDFFIL, IMAGES folder contents and other files. A progress bar displays for each step. See the EZCONVERT01.LOG for the detailed results.

5. Completing the Installation

Click on this button to finish.



That completes the installation and conversion.

6. Initializing a System Table

Following the 12.02 to 12.03 database in-place install you must initialize the Contact CNTCTF table using SYINIT. Select 28. *MULTI contact file*. Do this for all companies.

7. Manufacturing Install Instructions

There are two additional steps if you are running the database in-place conversion on a manufacturing system.

1. If using Master Scheduling & MRP or Capacity Planning, please re-enter the Scheduling, and Forecast periods.
2. If using Capacity Requirements Planning, you must re-enter the Rough Plan and Detail Plan Periods.

8. Report Number

The report number was expanded to 7 digits in PBS 12.03. Following the running of EZ convert the report number starts at 100000.

9. Server Configuration

Skip to the [Additional Server Configuration](#) section.

E. PBS SQL Install with New Database

This section explains an install using a new database.

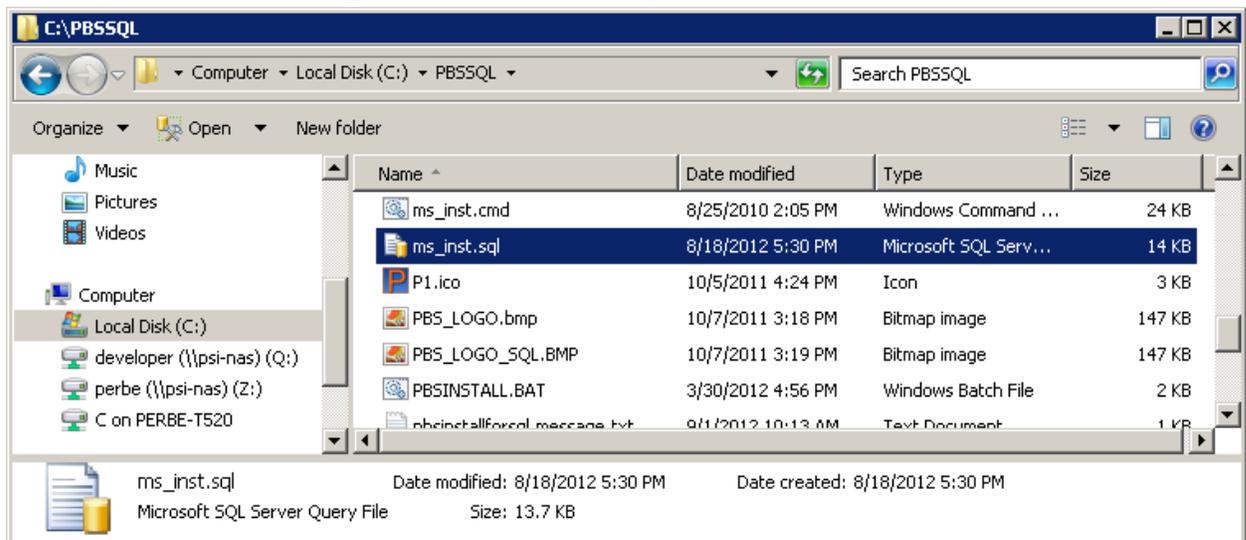
The first section is *Starting the New Database Installation*. The next section you must follow is either *Installing Multiple Companies* or *Installing One Company*.

- Installing Multiple Companies – This means the installation installs company 00 with the tables and the databases are generated for the other companies from the multi-company export from the old version. Later you run EZ Convert to install the tables for other companies as it converts the data
- Installing One Company – You run the install to produce the tables for company 00. When EZ Convert is run to convert data from a vision system, the tables are already in place

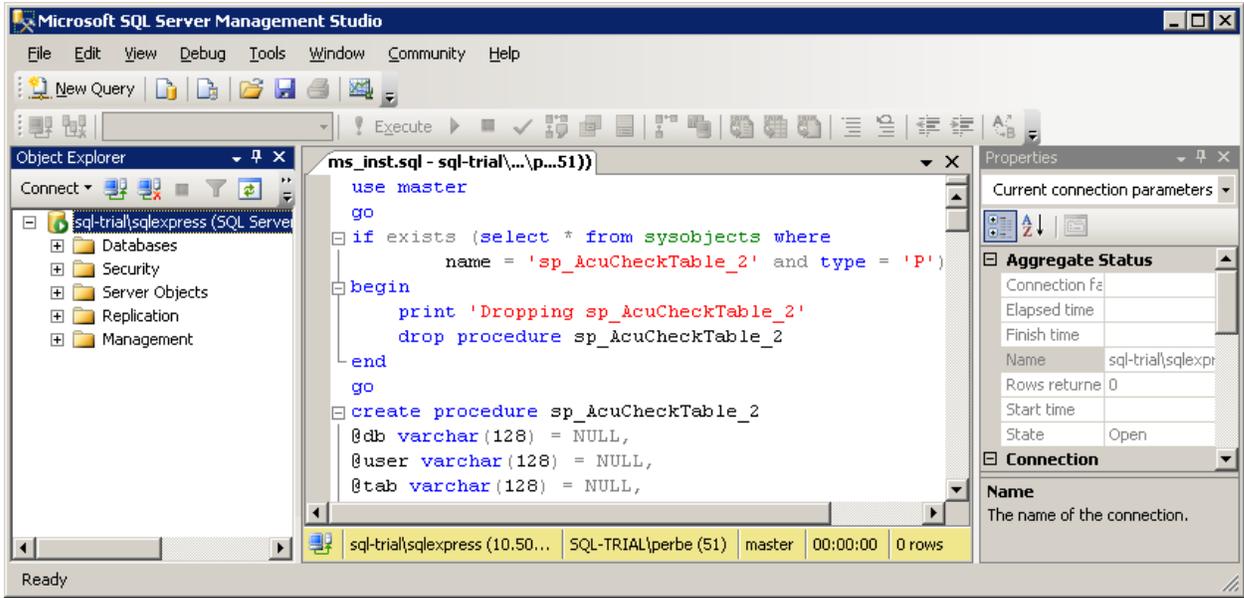
1. Starting the New Database Installation

When you are finished with the install, you may use the EZ Convert utility to convert your data.

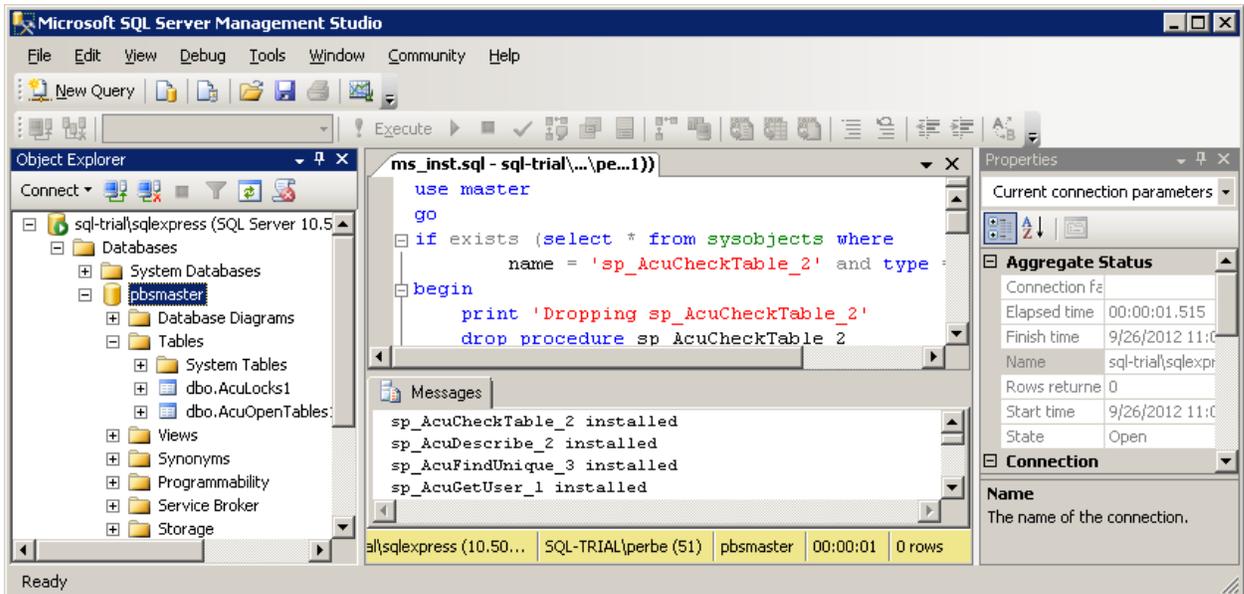
- Run **wininstall1203.exe**.
- Run **pbsinstallforsql1203.exe**.
- Find the SQL script called **ms_inst.sql**. Do the following:



- Double clicking this file should open **SQL Server Management Studio**. Login using **Windows Authentication**. Verify that you have opened the correct server and instance.

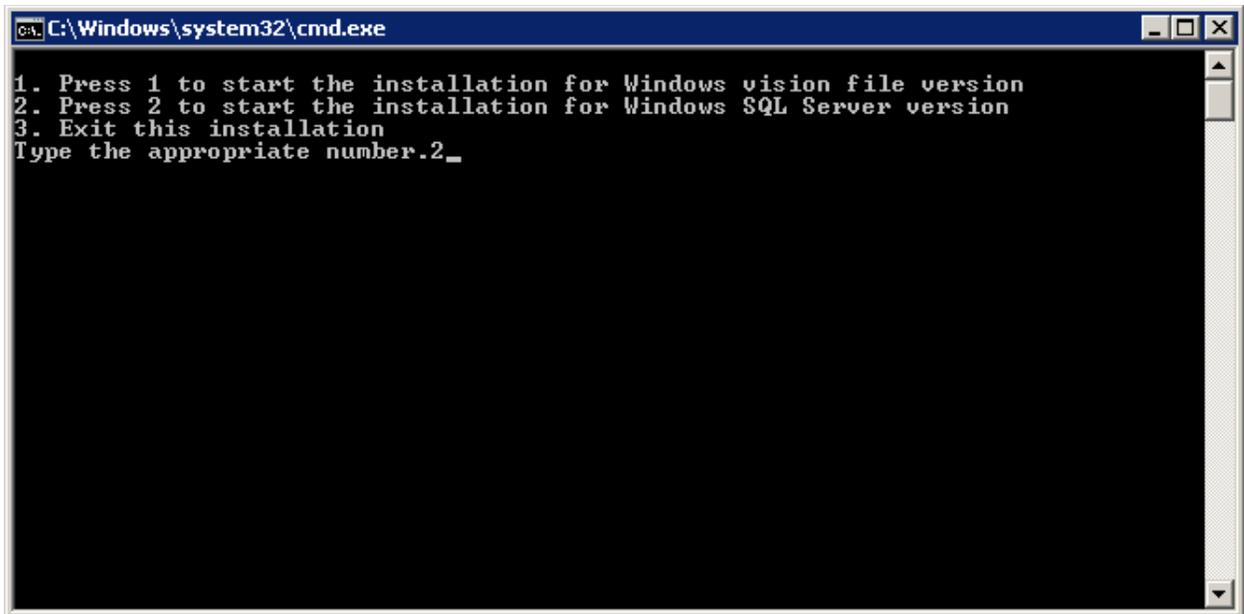


- Press the **!Execute** button on the tool bar. This will create a database called **pbsmaster** and two tables required by AcuCOBOL to control record and table locking in the database.



You can close Microsoft SQL Server Management Studio.

- As you are going to convert data from the old system, no users can enter new data in that system any longer. You will need to export files from the old system. See the EZ Convert documentation for how to export the files. Copy the exported files to the new PBS folder in a sub folder called EZEXP.
- Run **PBSINSTALL.BAT** to install the software and to initialize the database and supporting data files.
- The first prompt will ask if you want to install Vision files or SQL Server. Select **Option 2 for SQL**.



The following screen displays:



- You will be asked to select the type of install. Select either *First Time Install of PBS MSSQL* or *Upgrade from all prior versions of PBS to 12.03 MSSQL using Ezconvert*. Note: Both will get the same results.
- Enter the name of the server plus the named instance. For example, we will enter SQL-Trial\SQLExpress to match the instance we created while installing SQL Server earlier in this document. This will automatically create the appropriate server and instance information in the configuration (cblconfi) files for running PBS.

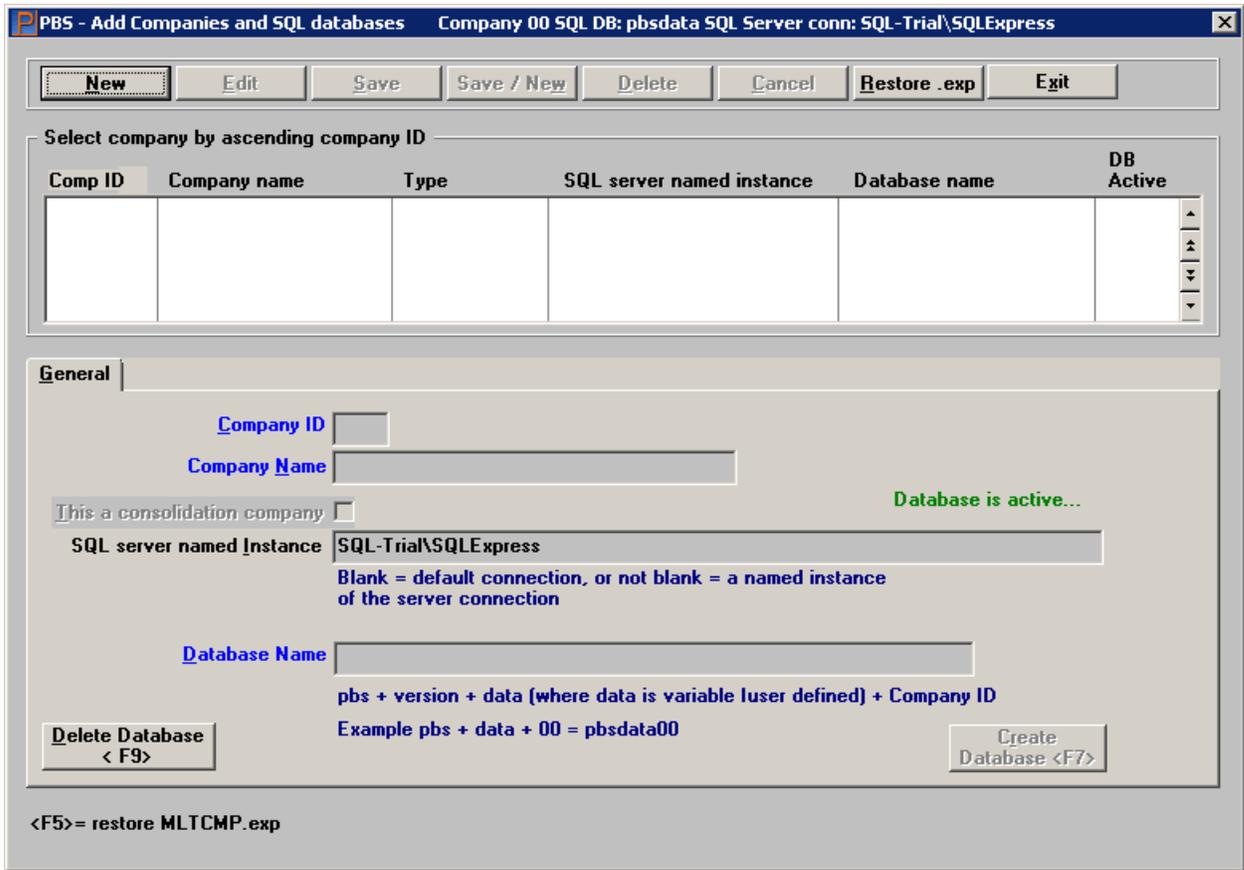
If you are upgrading data for one company (company 00) from a Vision system with no multi-company file, skip to [Installing One Company](#). If you are upgrading data for multiple companies continue below.

2. Installing Multiple Companies

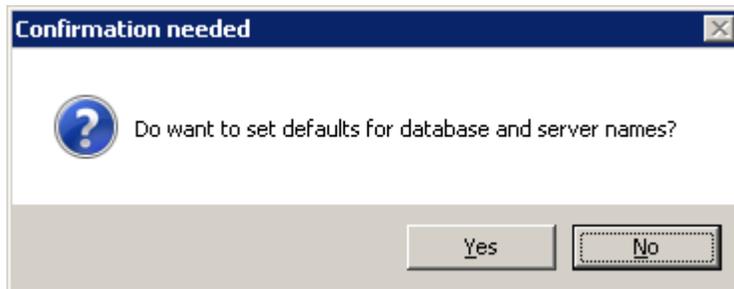
This documentation provides the initial install of multiple companies using data the previous version of PBS. If you want to add a new additional company with no previous data, following the SQL install, see the *Defining Multiple Companies* chapter from the PBS Administration documentation.

- The *Add Companies and SQL Databases* screen displays. Next you initialize a database for each company. We are upgrading data from a PBS system with multiple companies so we will use the Restore Export function to process the old version Multi Company export file (MLTCMP.EXP) that was copied into the EZEXP folder. Select the button labeled *Restore .exp*.

Note: If the screen below does not display, it means that you do not have full rights to install the databases. You must modify your login to have administrator rights, delete pbsmaster and go back to the [Preparing for the PBS Installation](#) step in a new folder.



- You will be asked “Do you want to set defaults for the database and server names?”. Select Yes.

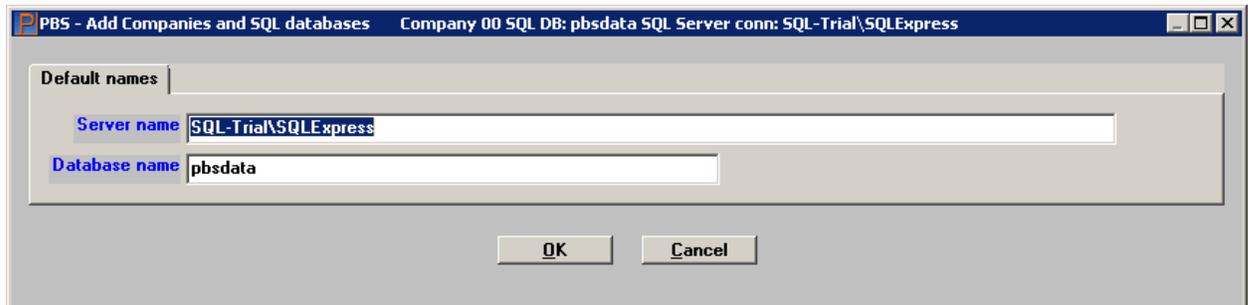


- You are prompted for those default values. Select the values displayed. The Instance shown is the one entered when we started the install and *pbsdata* is the root default for each company's database. Each company id is appended to this value for creating each database name. So company 00 will have a database called *pbsdata00*, the company 01 database is *pbsdata01* and so on.

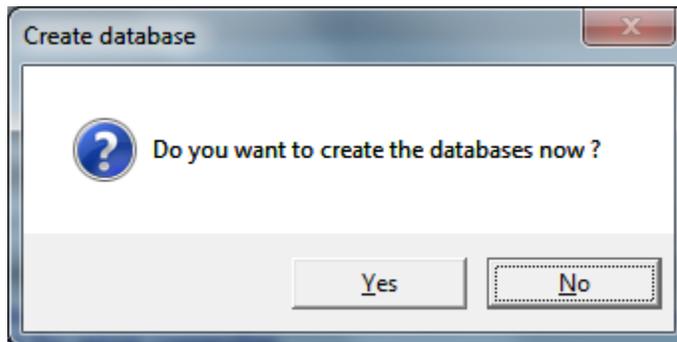
We highly recommend that you use the default database name, but if you change the name from *pbsdata* to something different, DO NOT START THE DATABASE NAME WITH A NUMERIC VALUE and DO NOT PUT SPACES IN THE NAME. Do NOT enter a dash or any other non-alphabetic character in the name either.

If you are using CashPoint you must use the default database names like *pbsdata00*.

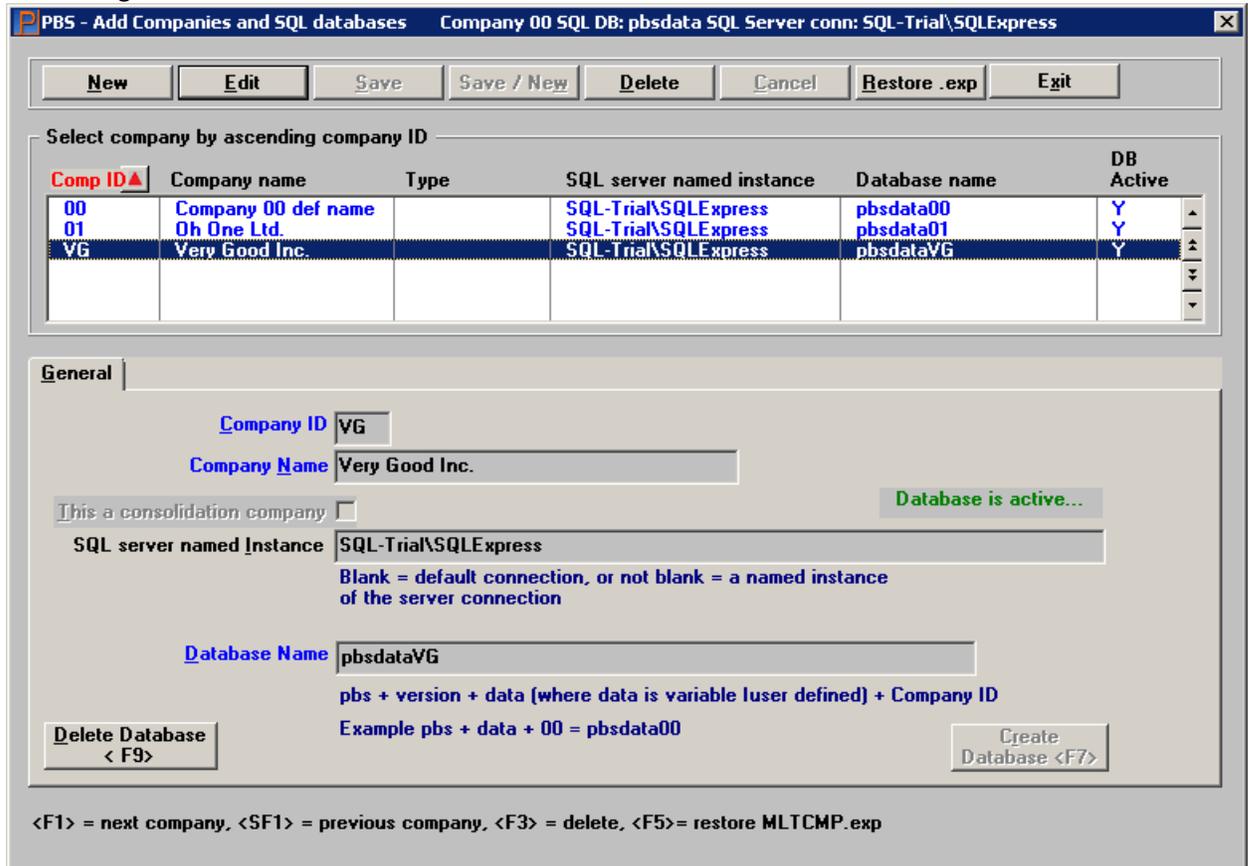
Select OK.



- You will be asked if you want to create the database(s). Select Yes



- Entries are made into the new multi company table and the databases are created. In the example there was no entry for Company 00 from the exported MLTCMP file, so the system created one automatically. The System requires company 00 to act as a base for certain functions. The result is something like this:



Click on Exit to display the install program.

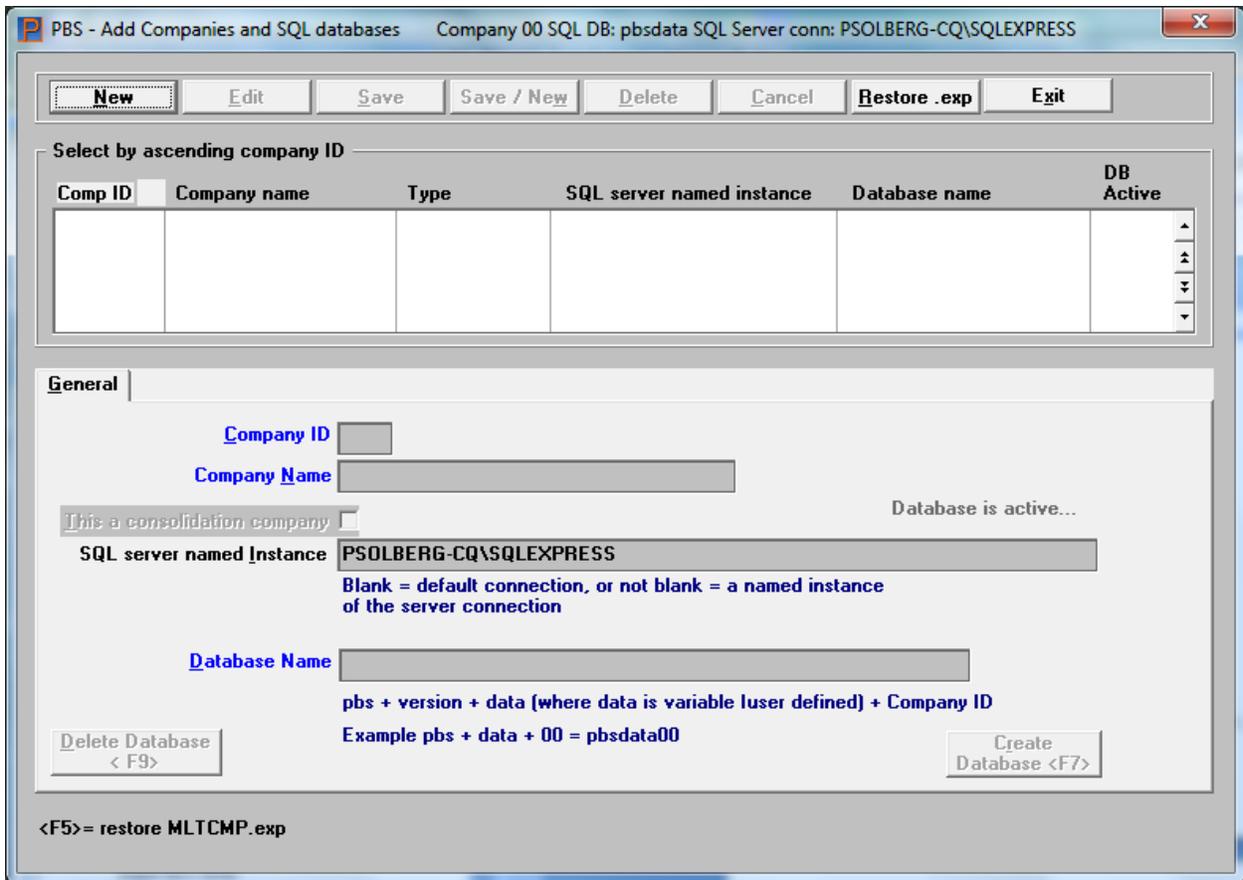
Skip to the section called [Finishing the Install](#).

3. Installing One Company

The *Add Companies and SQL Databases* screen displays next.

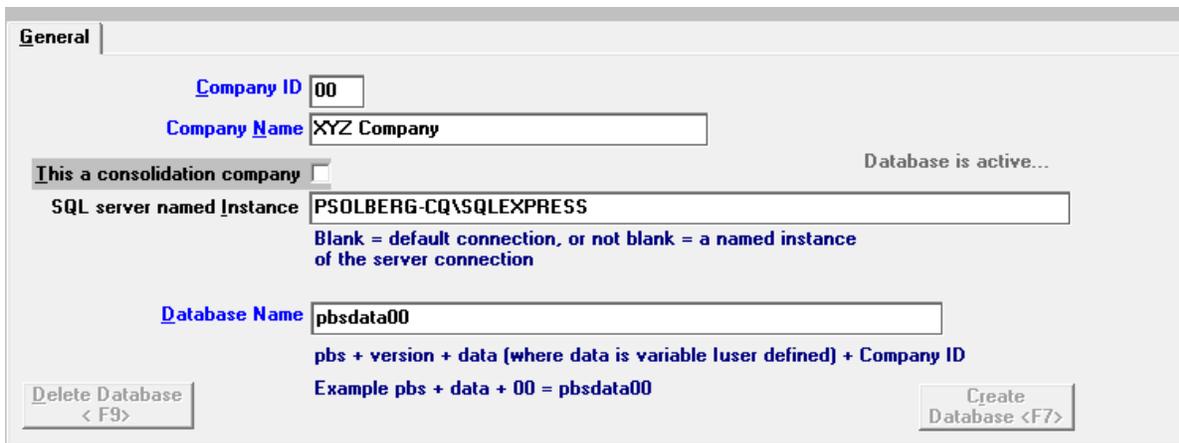
Note: If the screen below does not display, it means that you do not have full rights to install the databases. You must modify your server login to have administrator rights, delete pbsmaster and go back to the [Preparing for the PBS Installation](#) step in a new folder.

Select the New button on the *Add Companies and SQL databases* screen below:



Enter the *Company ID*, *Company Name* and use the <TAB> key to move to the *Database Name* field.

When finished the General tab looks something like this:



Select the *Save* button.

Select the *Create Database <F7>* button.



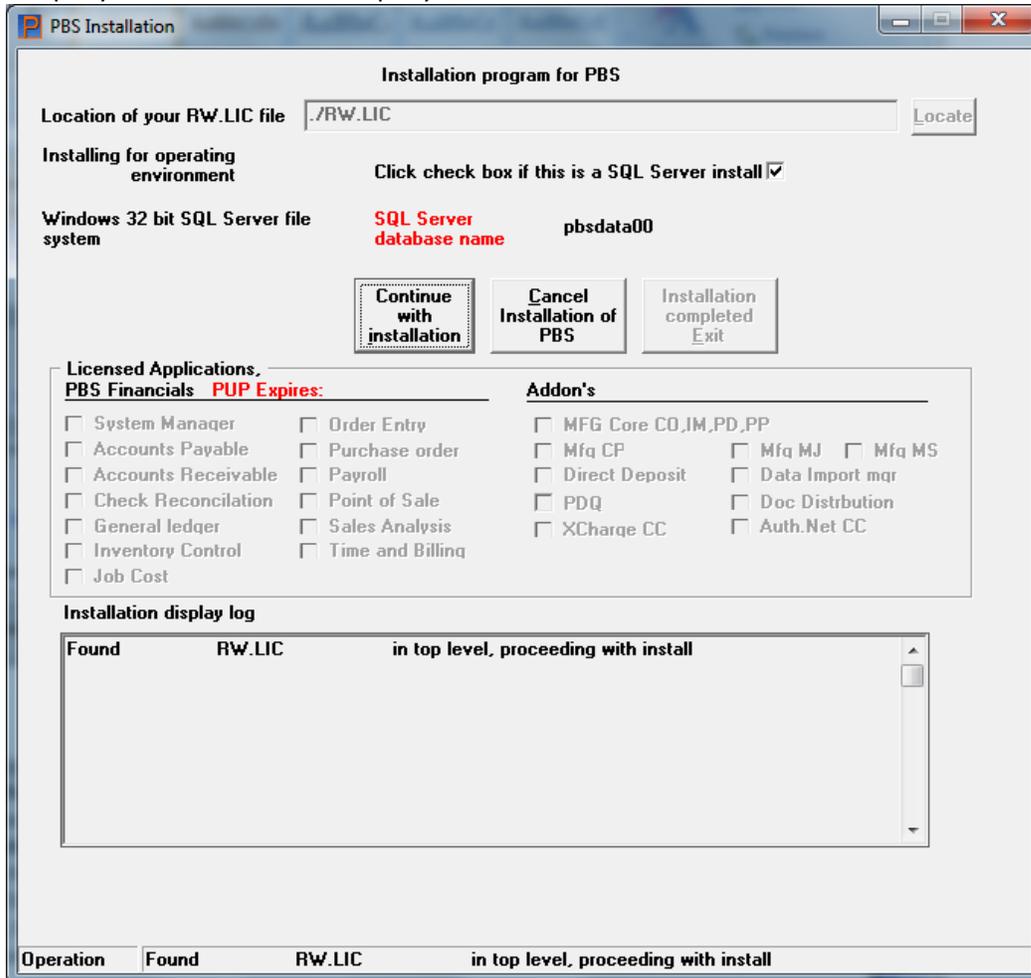
Database is active...

The message *Database is active* displays.

Click on *Exit* and continue with the next section.

4. Finishing the Install

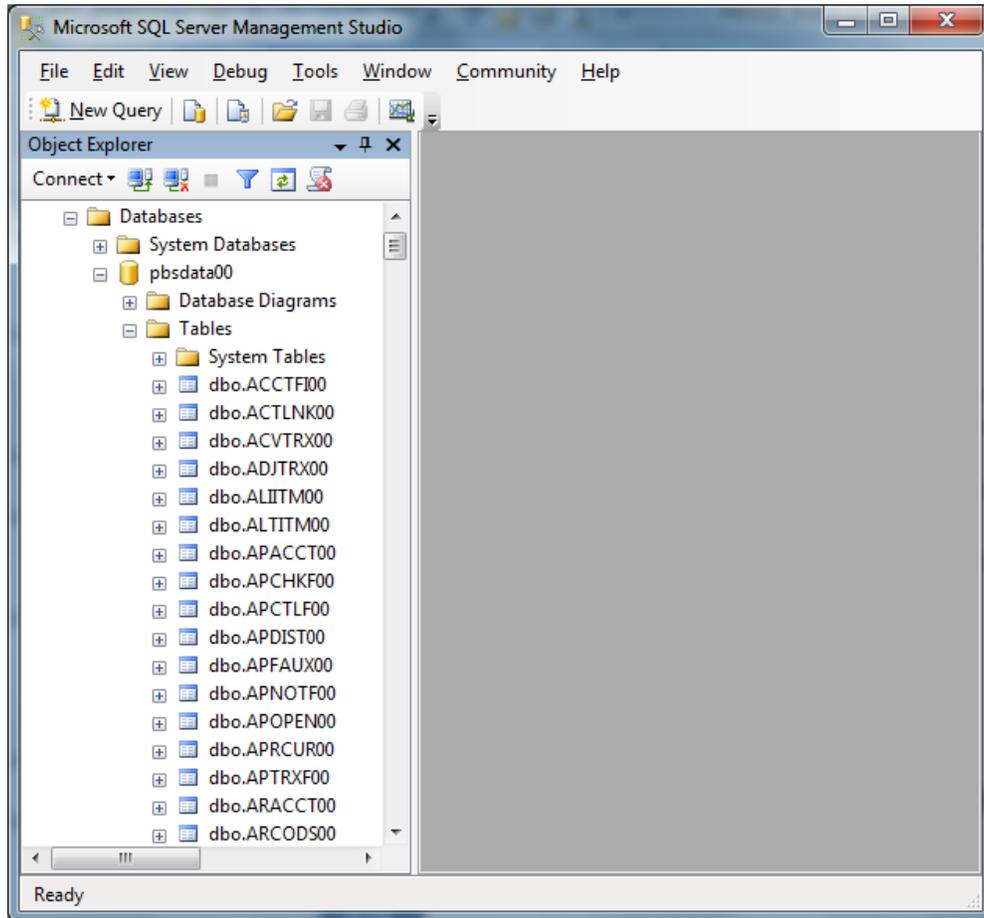
- The *PBS Installation* screen displays next. This program installs the programs, paths, menus and tables for company 00. It has preselected the *Click check box if this is a SQL install* question and indicates that the database is pbsdata00, for company 00, as company 00 is required for both single company installs and multi company installs:



- After entering the location or browsing to the license (if not already found), hit **enter** and select the *Continue with installation* button.

- After selecting *Continue with installation* the install program installs the PBS programs, establishes the paths and menus for the licensed applications and initialize tables and files for Company 00. After the process completes, you can open *Microsoft SQL Server Management Studio* to verify that the **pbsdata00** tables are created.

Tables were NOT generated for any companies other than 00 as those are created when you run PBS EZ Convert.



- If you are using Customer Orders with the E.D.I functions, you must run COUTIL.BAT and initialize all the E.D.I. files for company 00.
- Install the latest updates and hot fixes. Do this **BEFORE** you run EZ Convert.
Very important: Only install an update or hot fix that is intended for the version of PBS that you are currently running.
- See [Other Procedures and Documentation](#) for the post installation steps. One of these procedures is to run EZ Convert.
- Also see [Connecting Workstations to PBS SQL](#)

5. Report Number

The report number was expanded for PBS 12.03. Following the running of EZ convert the report number starts at 100000.

VI. Additional Server Configuration

Finish the install by configuring the server.

A. Setting up User Access to PBS Databases

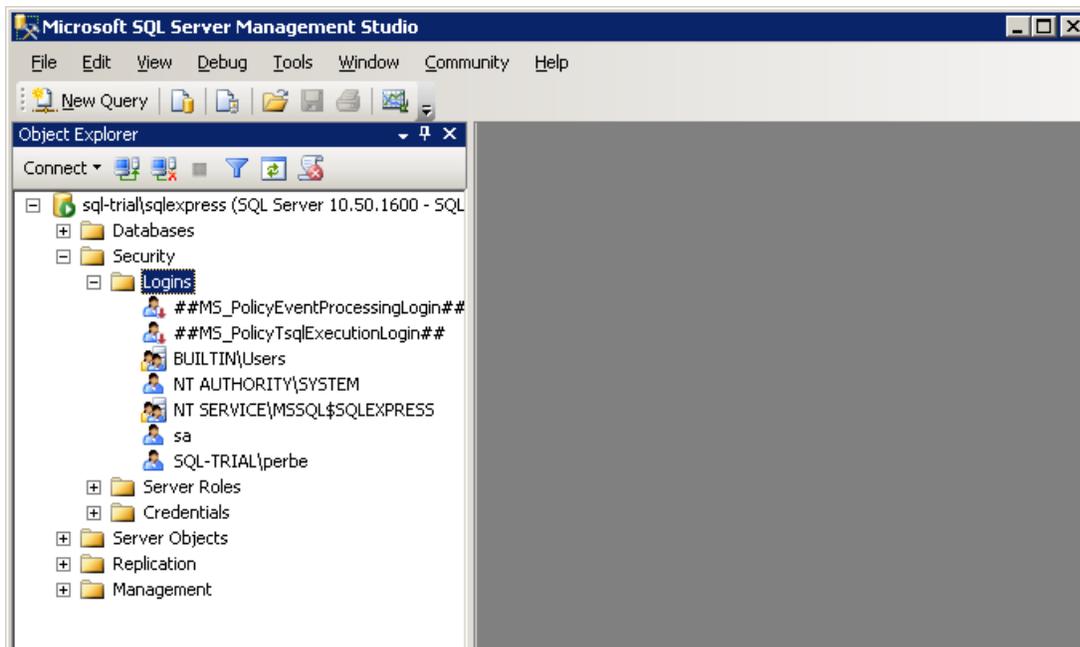
There are two methods to setting up SQL Logins to access the PBS databases.

- The most secure method involves setting up a domain group or a separate Login for each user and providing the correct mapping to the roles required to access and update the database. This method works when SQL server is configured for either Windows Authentication or configured for Mixed Mode.
- The second method uses a single login to grant access for any user that is able to run the PBS program. This is done by adding a login/password into the cblconfi file. This can save some time in initial setup but requires that you leave a login and password combination exposed in what is essentially a text file.

Both methods are covered in detail below:

1. Method One – Windows Authenticated or Mixed Mode Logins

After establishing the pbsmaster and pbsdata00 and other company databases, you must add user logins or a domain group using *SQL Server Management Studio*. Open the instance of SQL server that contains your databases and go to Security/Logins:



Right click on Logins and select *New Login*:

Login - New

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name: Search...

Windows authentication

SQL Server authentication

Password:

Confirm password:

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential Add...

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database:

Default language:

OK Cancel

Connection

Server: sql-trial\sqlexpress

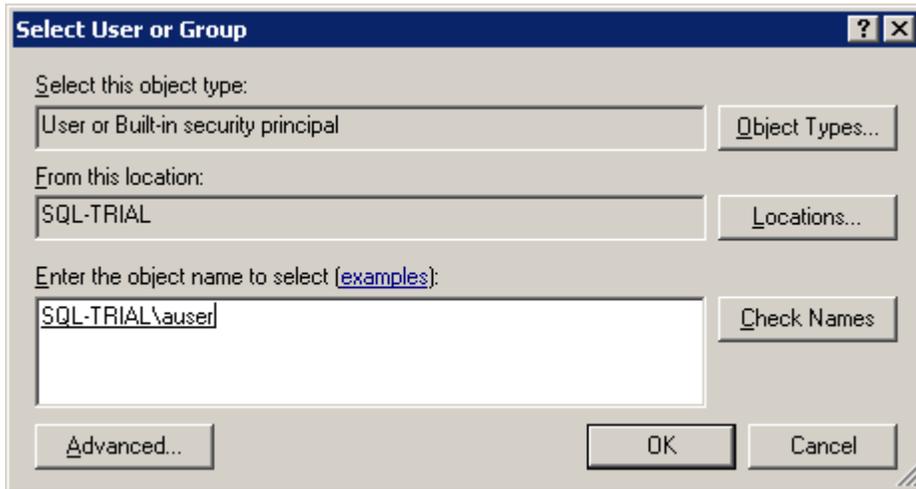
Connection: SQL-TRIAL\perbe

[View connection properties](#)

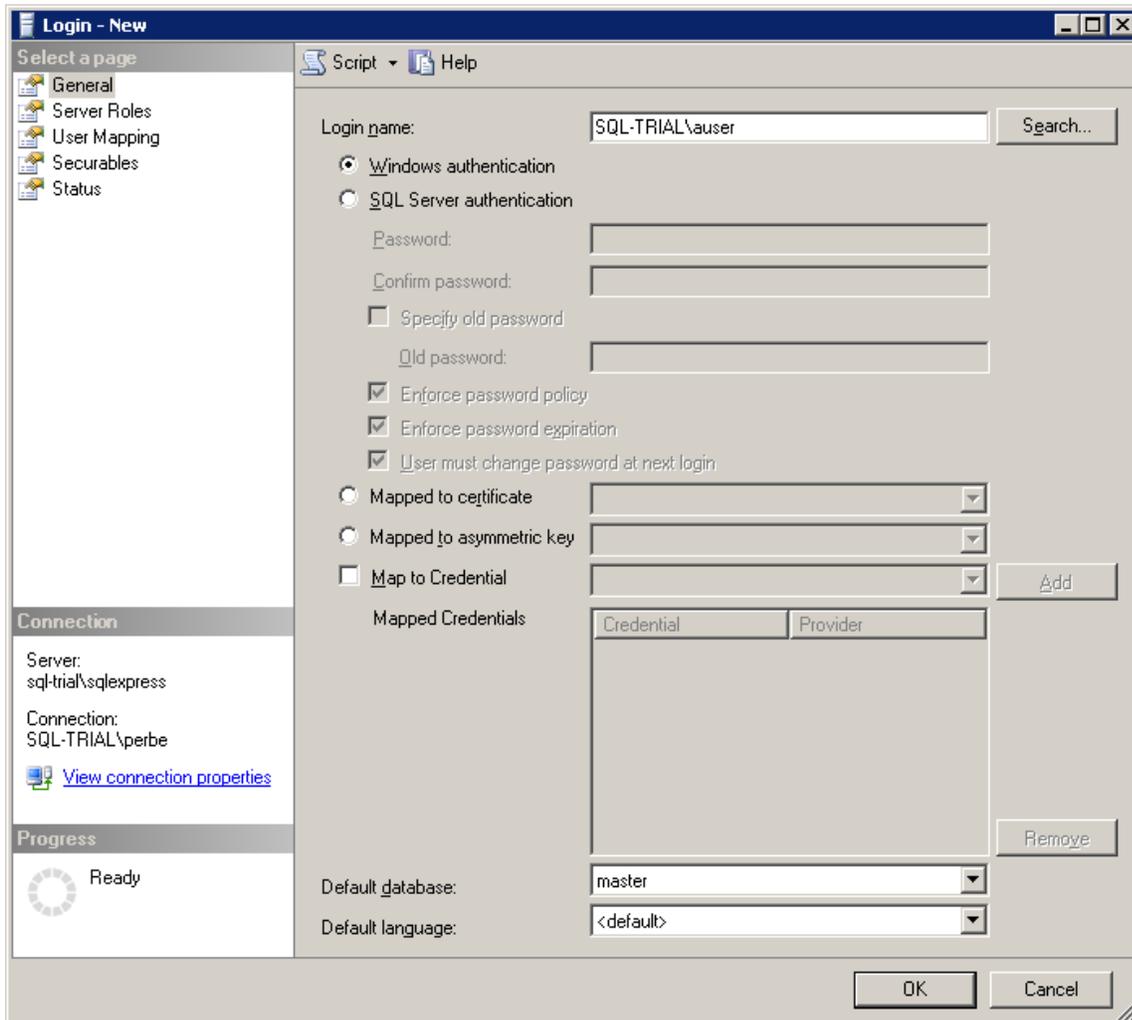
Progress

Ready

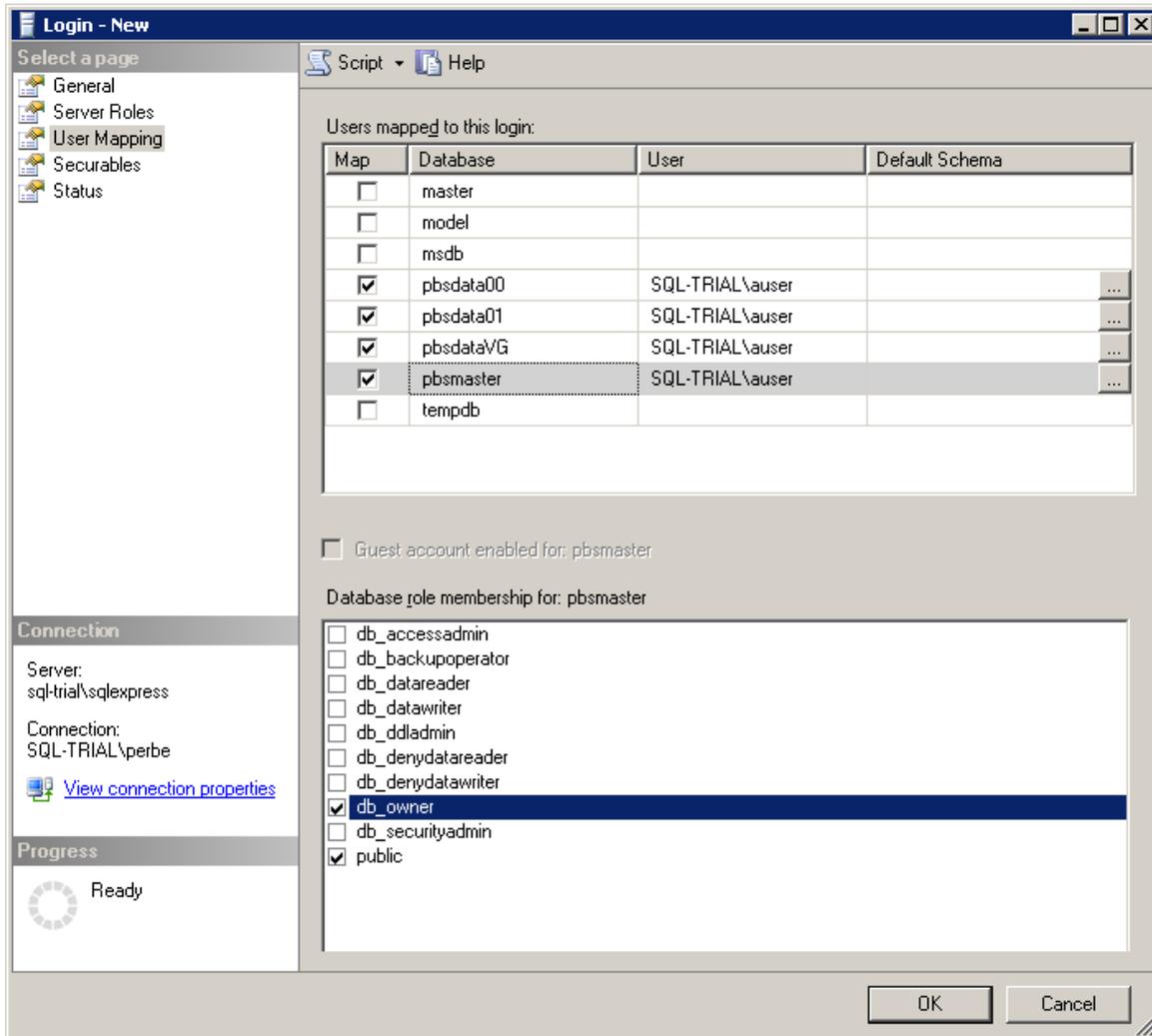
Using the search button, locate the Windows user account or domain group you would like to add:



Hit OK and your user id will be added to the Login properties page:

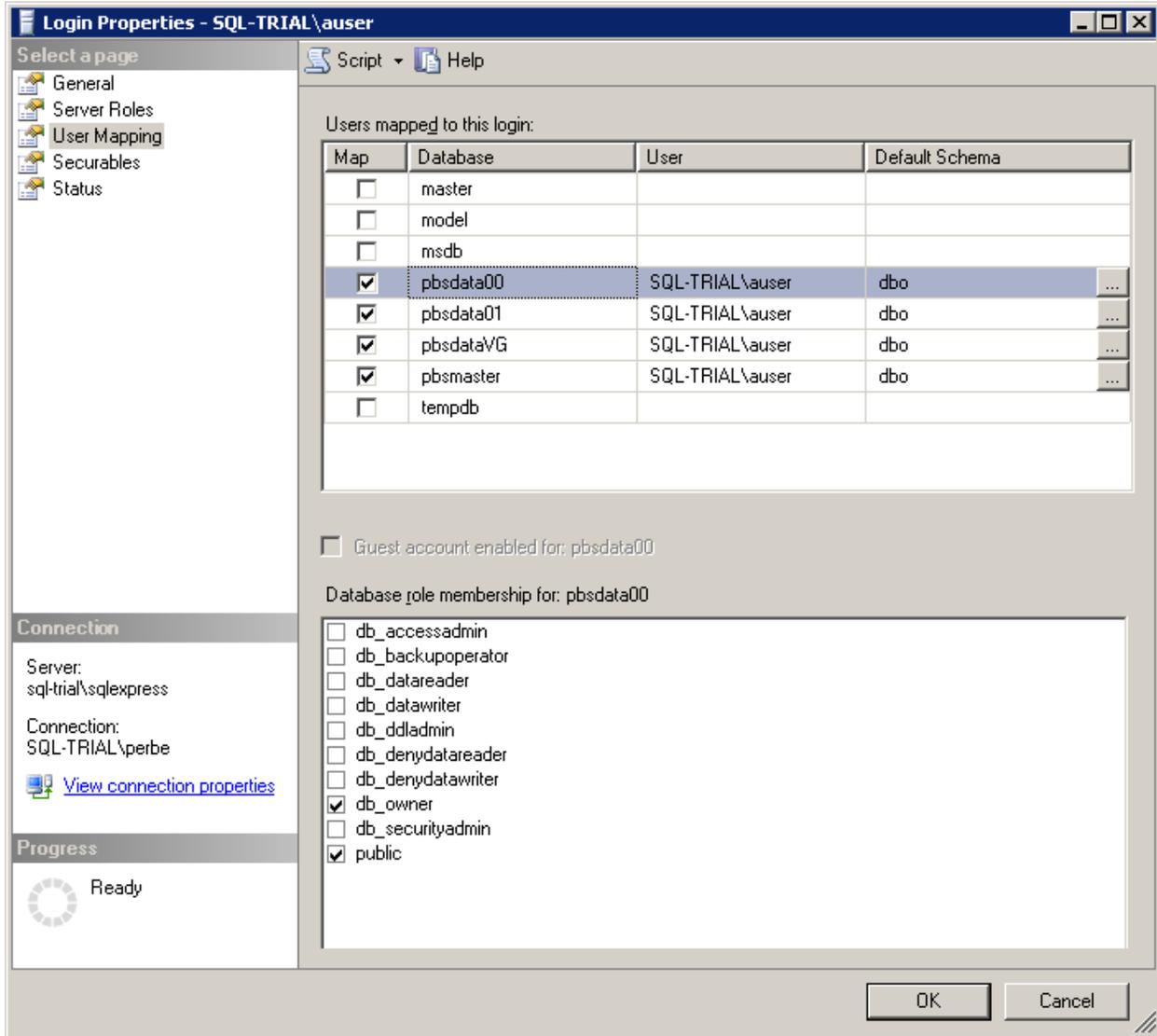


Select User mapping to assign roles and schema to the Login for each database:



For each database selected assign the role membership of db_owner.

When you select OK it will add the default Schema of dbo to each database you selected. Once this is done that user will be able to access the PBS databases:

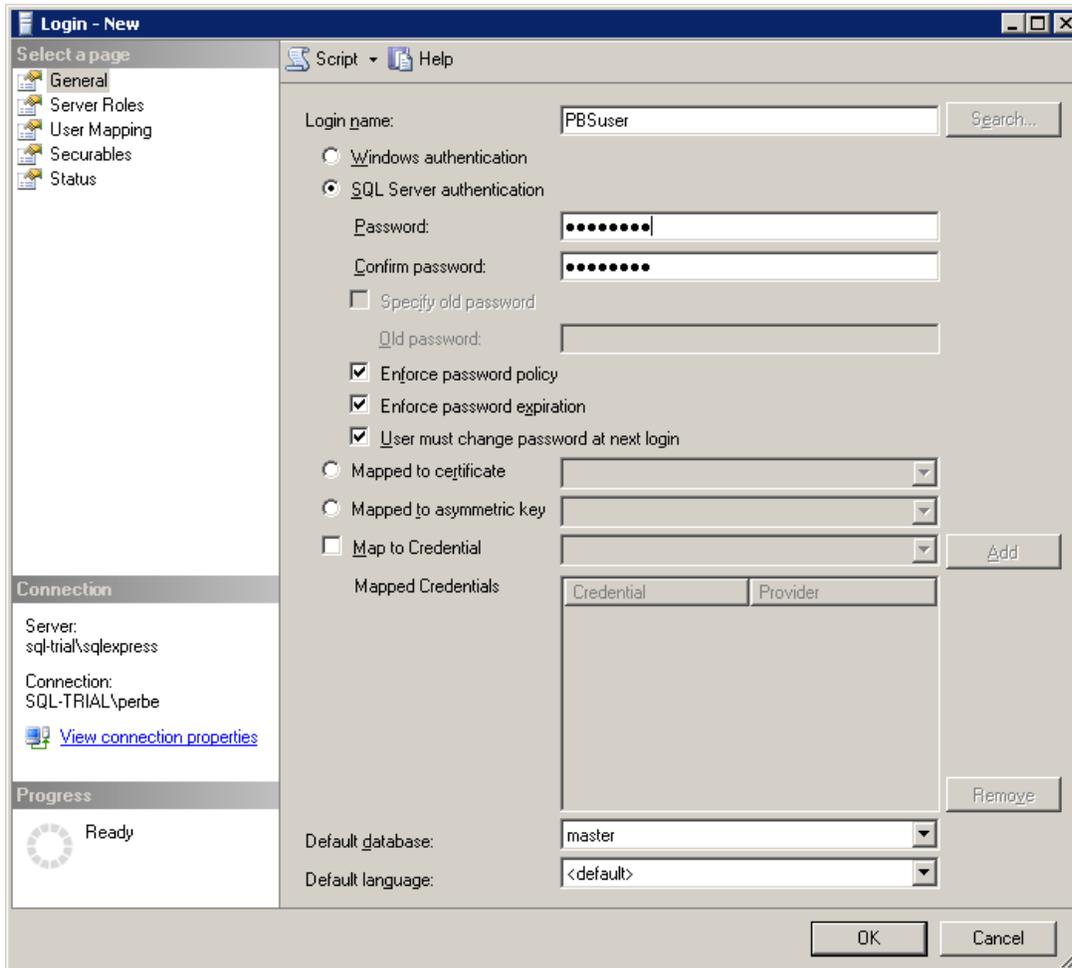


The Schema of 'dbo' is required to handle tables properly between PBS and the Database. Details of the errors caused when this is not set up correctly are in the Appendix on trouble shooting and error messages.

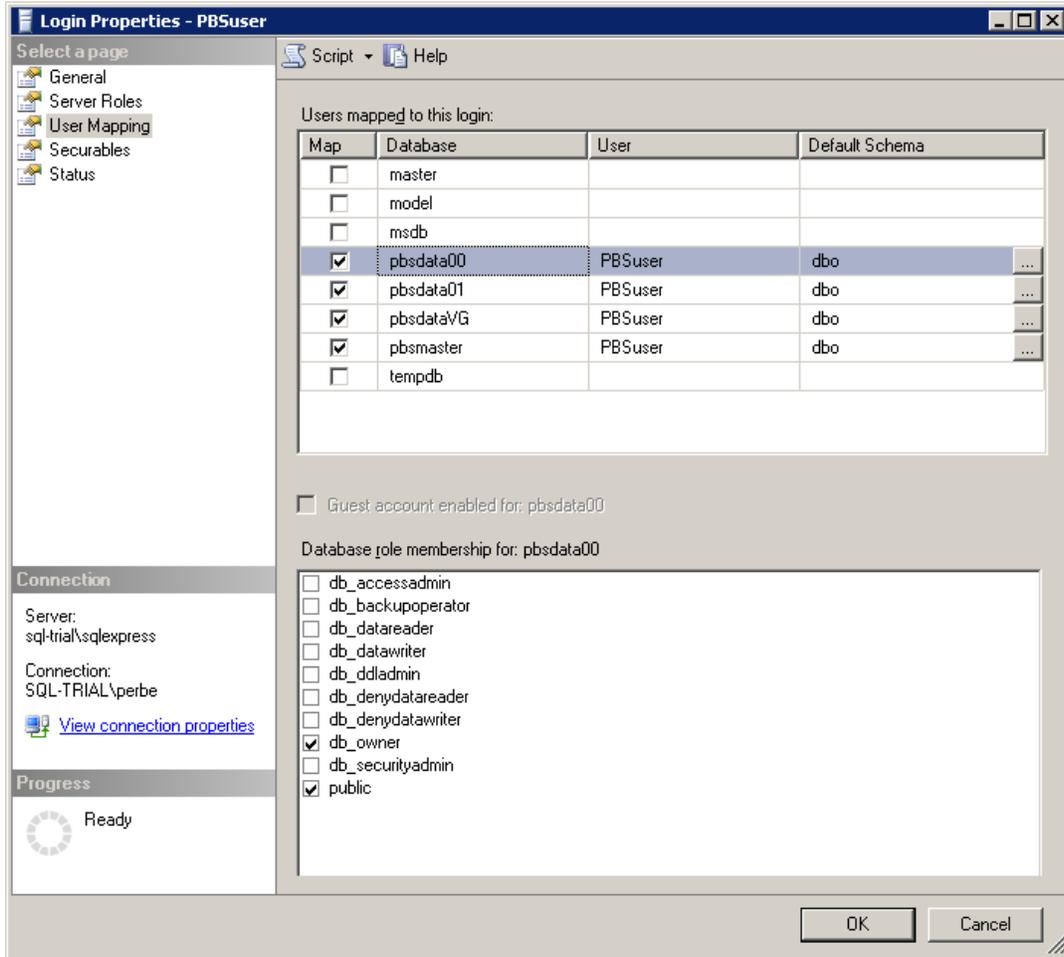
2. Method Two – Single SQL Authenticated login

With this method we will create a single SQL Login to provide access to all users of PBS SQL. The basic setup of the SQL login is very similar to Method One except we will only need one account and it will use SQL authentication rather than Windows Authentication.

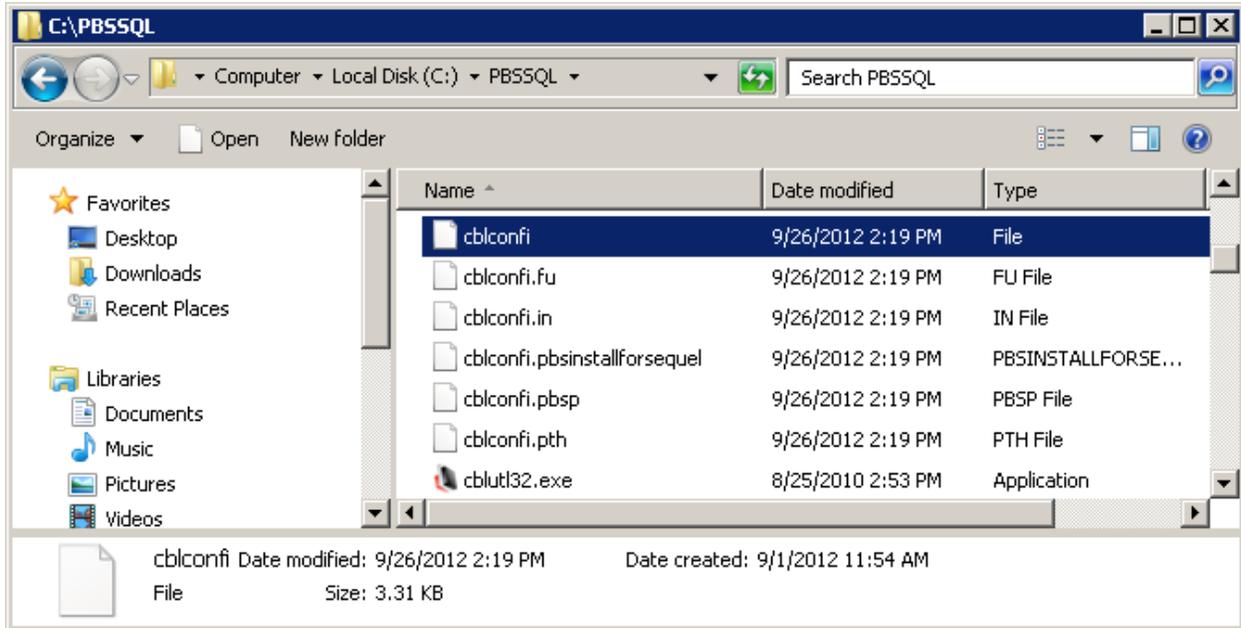
Open *SQL Server Management Studio* and select Security/Logins. Right Click Logins and choose *New login*. In this example we will set up a Login PBSuser with SQL authentication which will require you to setup a password for the account. The password complexity may be controlled by the operating system if those options are turned on.



Again, this login is mapped to the proper membership role and schema of 'db_owner' and 'dbo' respectively.



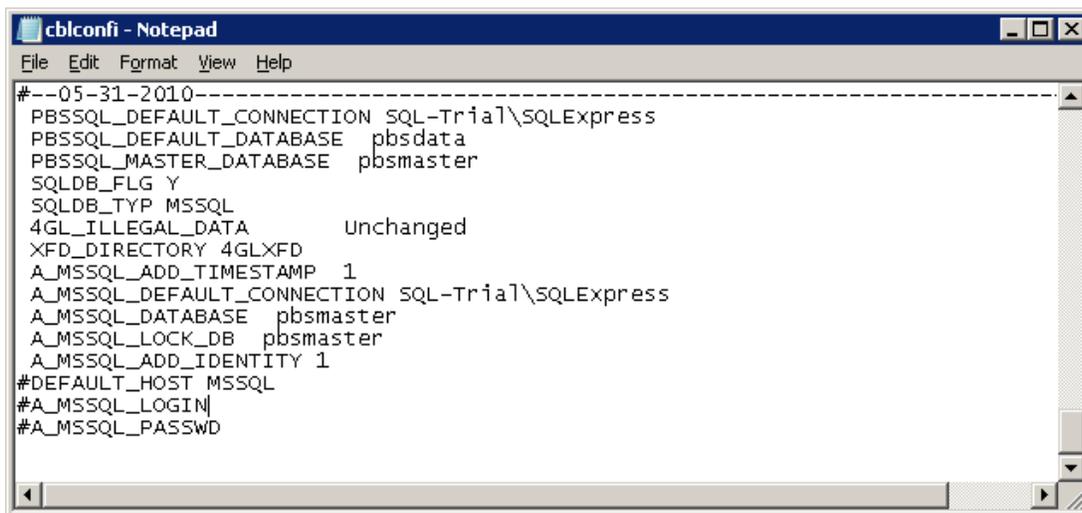
In order for PBS to utilize this SQL login we will need to add these credentials to the 'cblconfi' files. There are six of these that are used for various functions and they are located in the top level of the install directory:



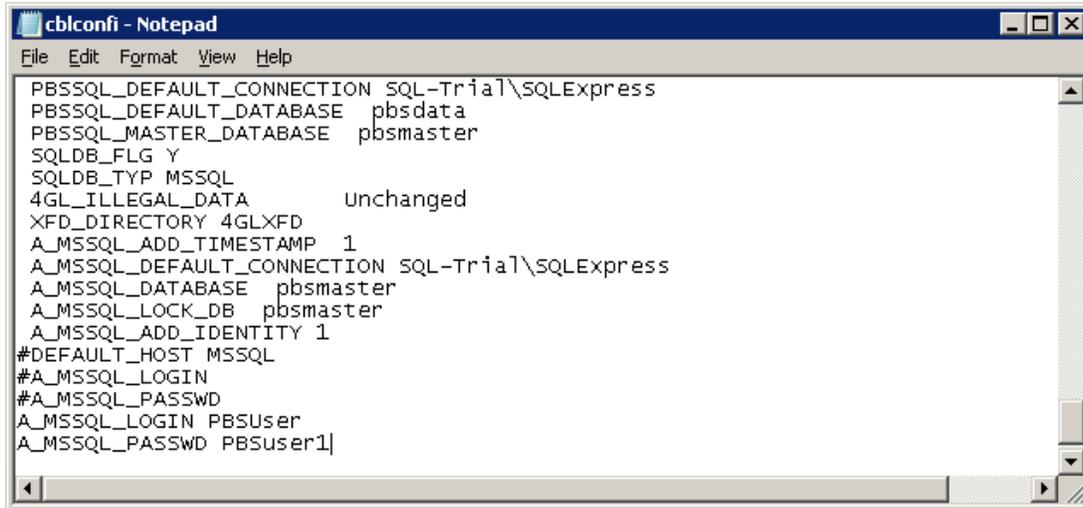
I will be editing the top one *cblconfi* which is the primary file used when you run PBS. The other *cblconfi.xxx* files are used during various utility functions. Open the file and page down to the end of the text. Two variables are commented out that are used to provide credentials to SQL Server, SQL server must be configured to Mixed Mode for this to work. The variables are:

#A_MSSQL_LOGIN

#A_MSSQL_PASSWD



Copy and paste these just below the current entries and remove the hash tag(#) from the first position of the line. This will make the lines available to the runtime and document what was originally in the file. Just after each variable label, add a space and the SQL Login and password we just created.



```
File Edit Format View Help
PBSSQL_DEFAULT_CONNECTION SQL-Trial\SQLExpress
PBSSQL_DEFAULT_DATABASE pbsdata
PBSSQL_MASTER_DATABASE pbsmaster
SQLDB_FLG Y
SQLDB_TYP MSSQL
4GL_ILLEGAL_DATA Unchanged
XFD_DIRECTORY 4GLXFD
A_MSSQL_ADD_TIMESTAMP 1
A_MSSQL_DEFAULT_CONNECTION SQL-Trial\SQLExpress
A_MSSQL_DATABASE pbsmaster
A_MSSQL_LOCK_DB pbsmaster
A_MSSQL_ADD_IDENTITY 1
#DEFAULT_HOST MSSQL
#A_MSSQL_LOGIN
#A_MSSQL_PASSWD
A_MSSQL_LOGIN PBSuser
A_MSSQL_PASSWD PBSuser1|
```

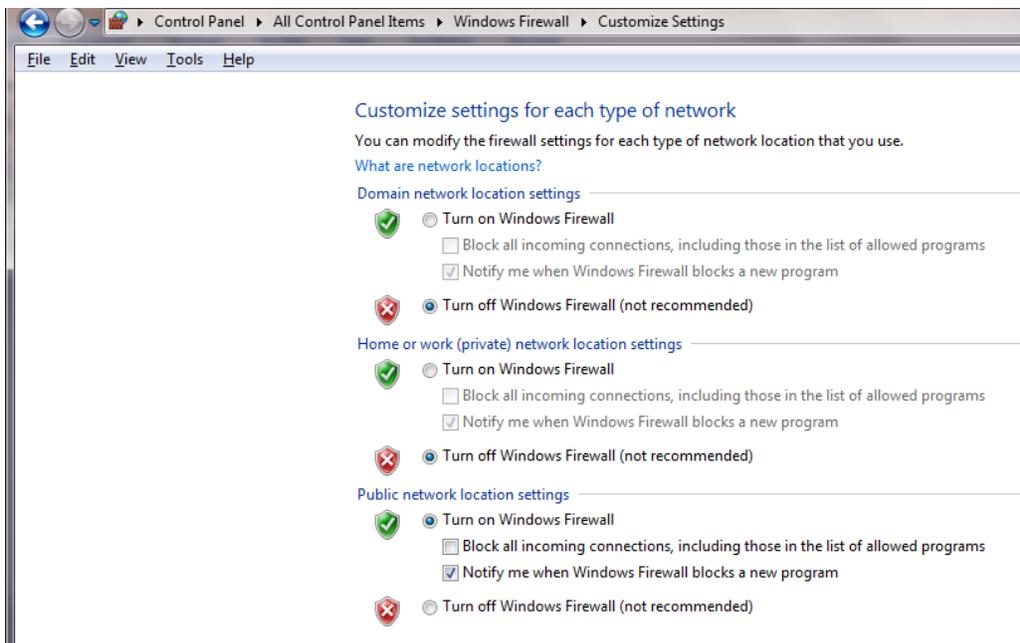
Now any user with rights to execute the PBS.BAT startup script can access the database through the application.

B. Creating an Inbound Firewall Rule

On the SQL Server you have to Turn OFF Windows Firewall.

From the *Control panel*, select *Windows Firewall*.

Select *Turn Windows firewall on or off*. This screen displays:

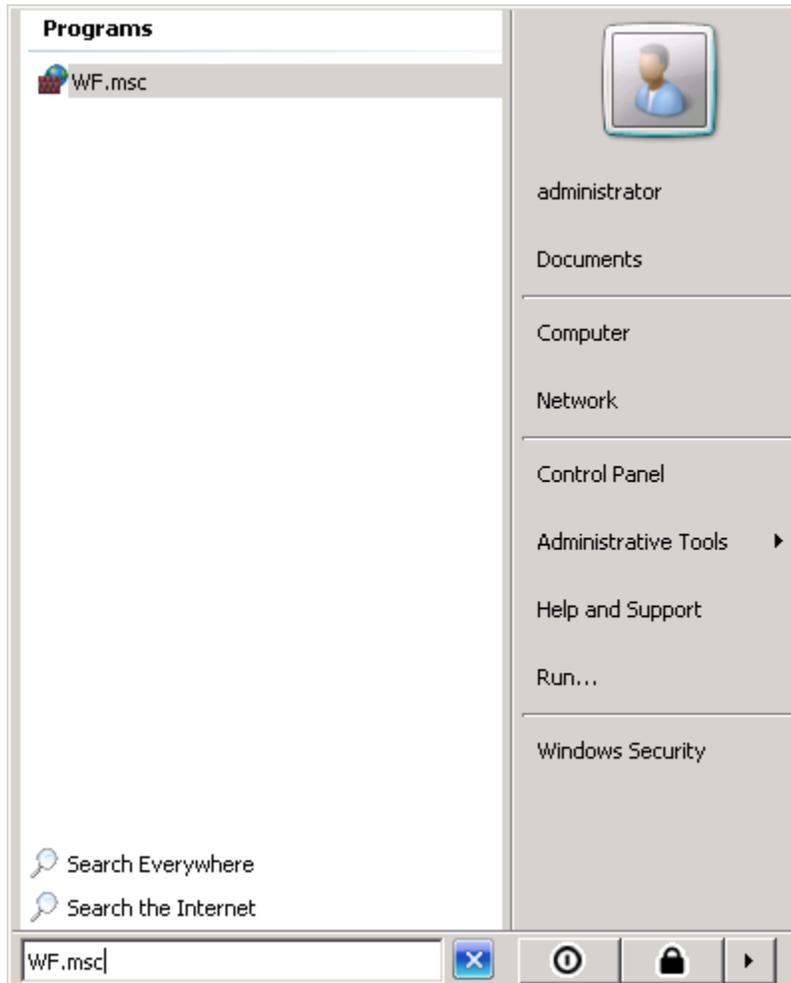


Turn off all three.

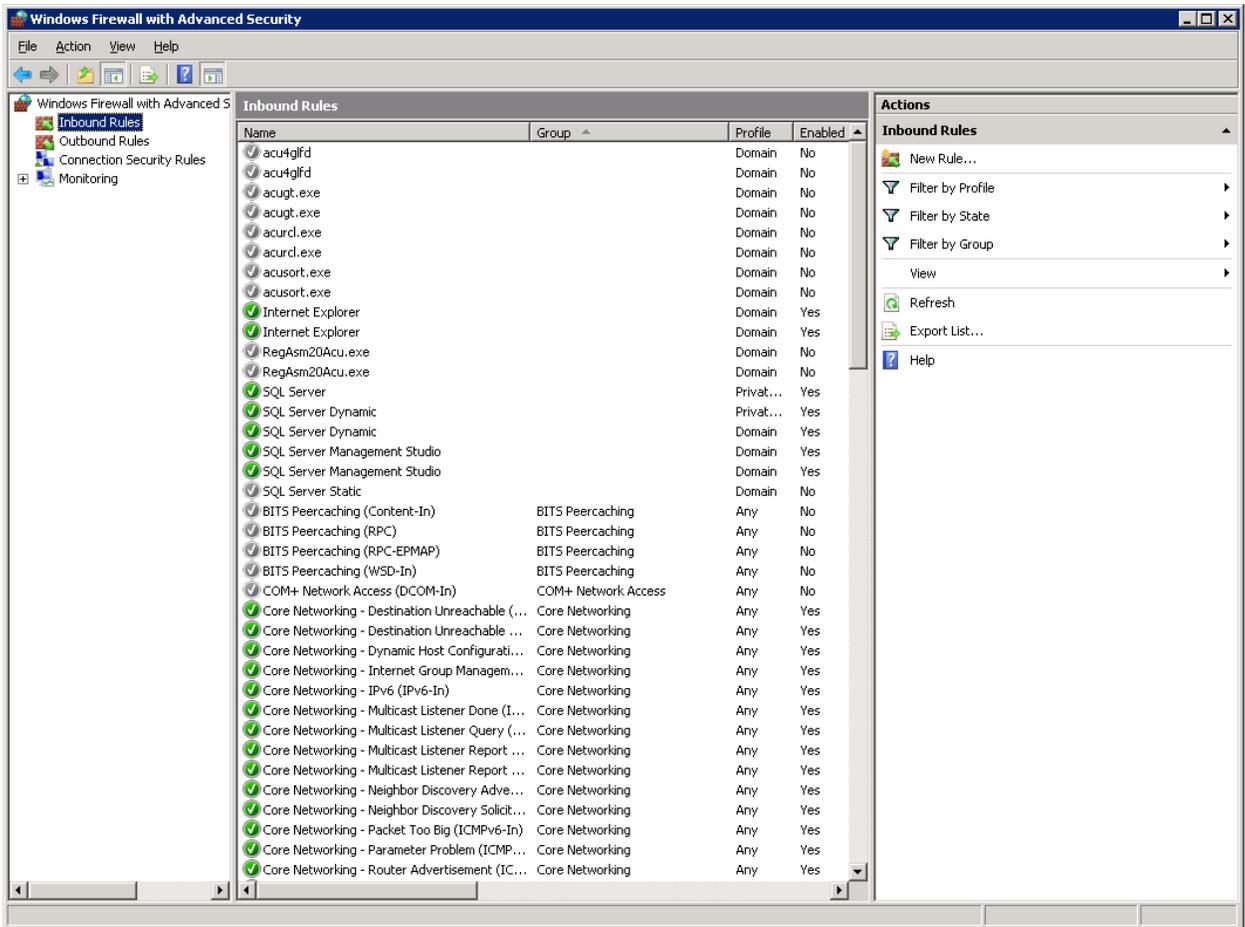
Close it.

Follow the instructions below to create a New Inbound Rule where PBS and SQL are installed.

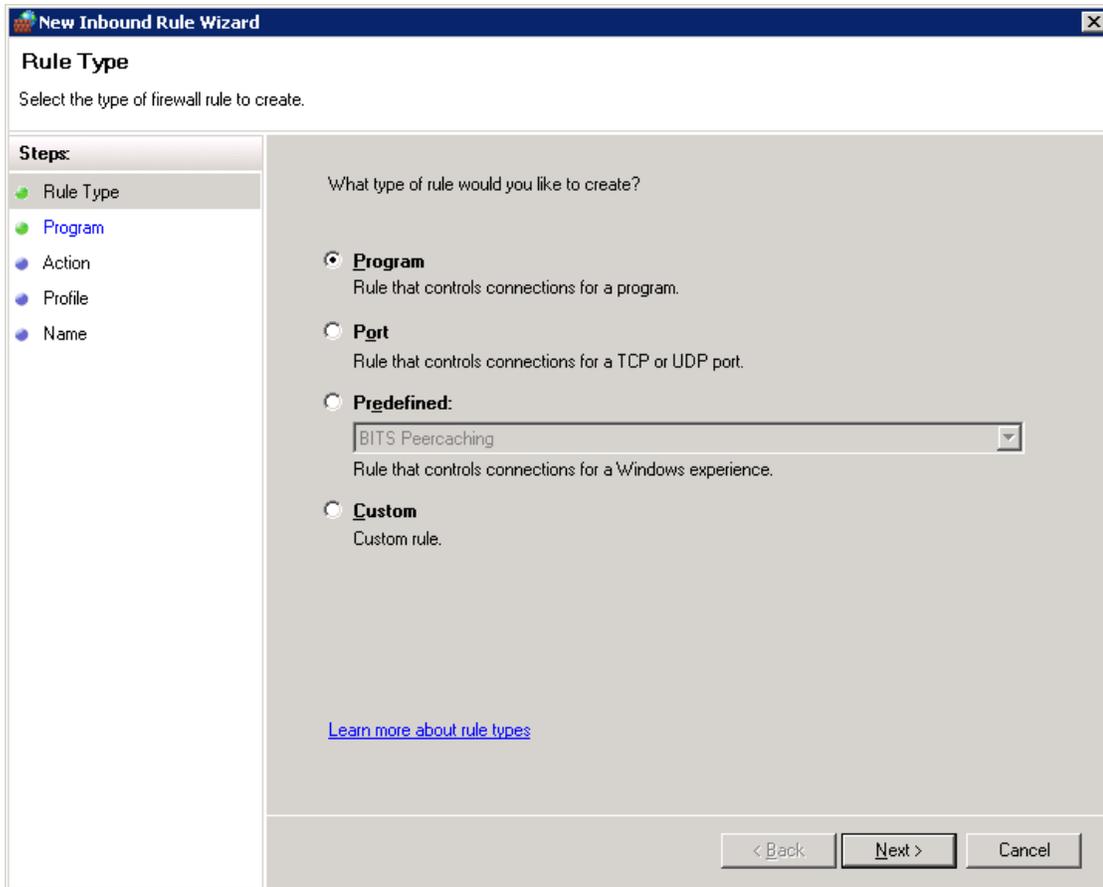
1. Login into the SQL Server as administrator
2. Click the *Start* button and select -> *Run*, type this command *WF.msc*



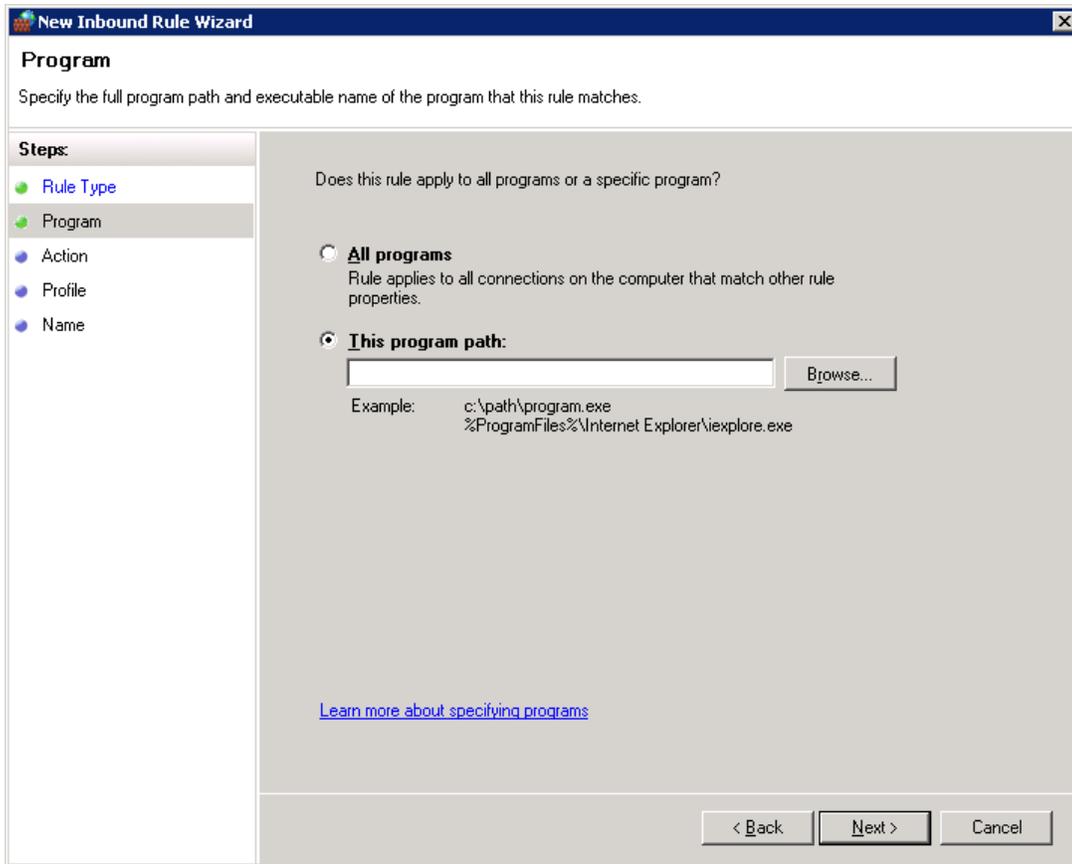
3. Click *Enter*.



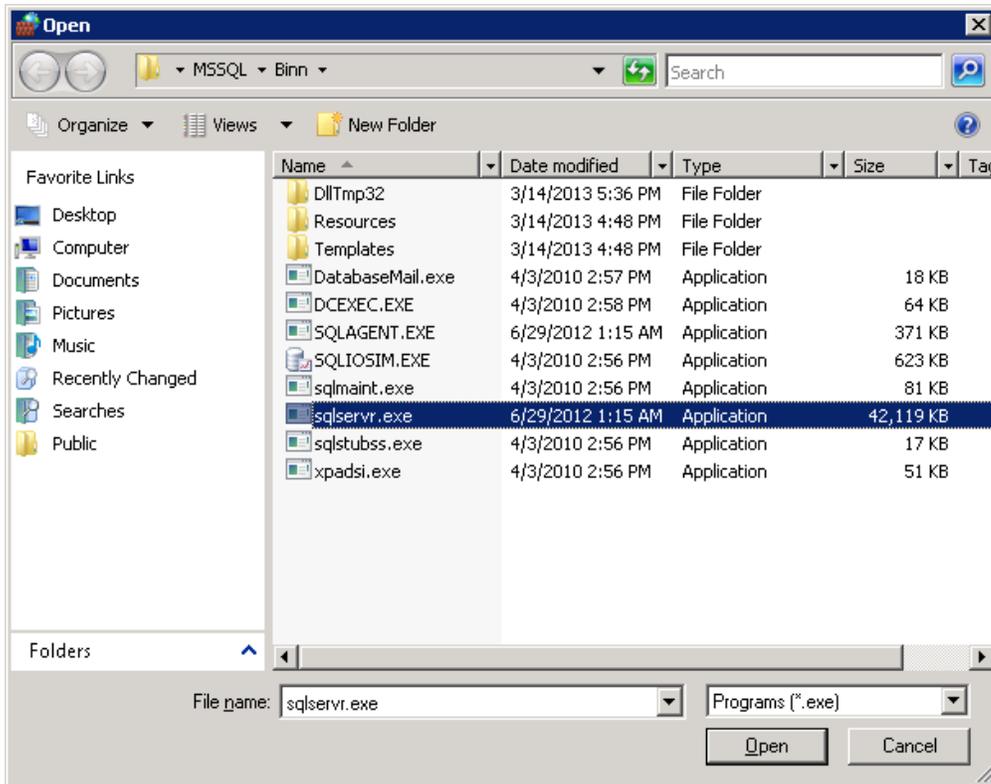
4. Select *Inbound Rules*.
5. On the right panel click on *New Rule*.



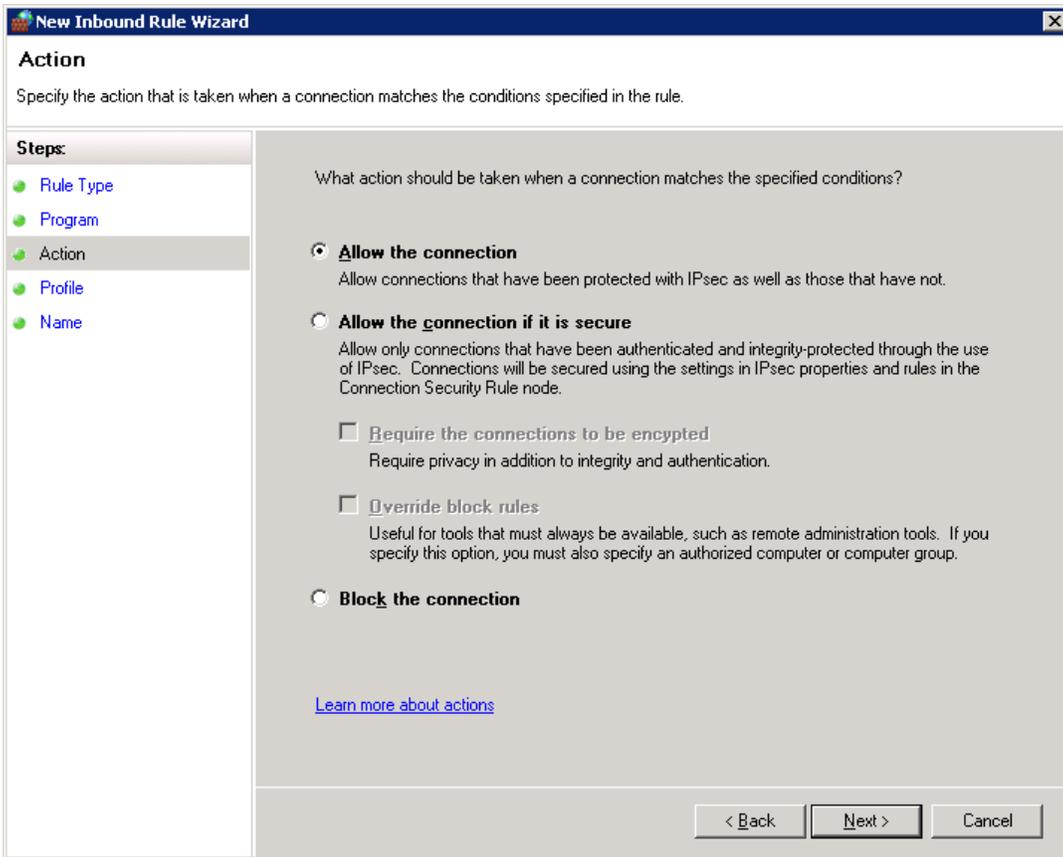
6. Make sure *Program* option is selected and click *Next*.



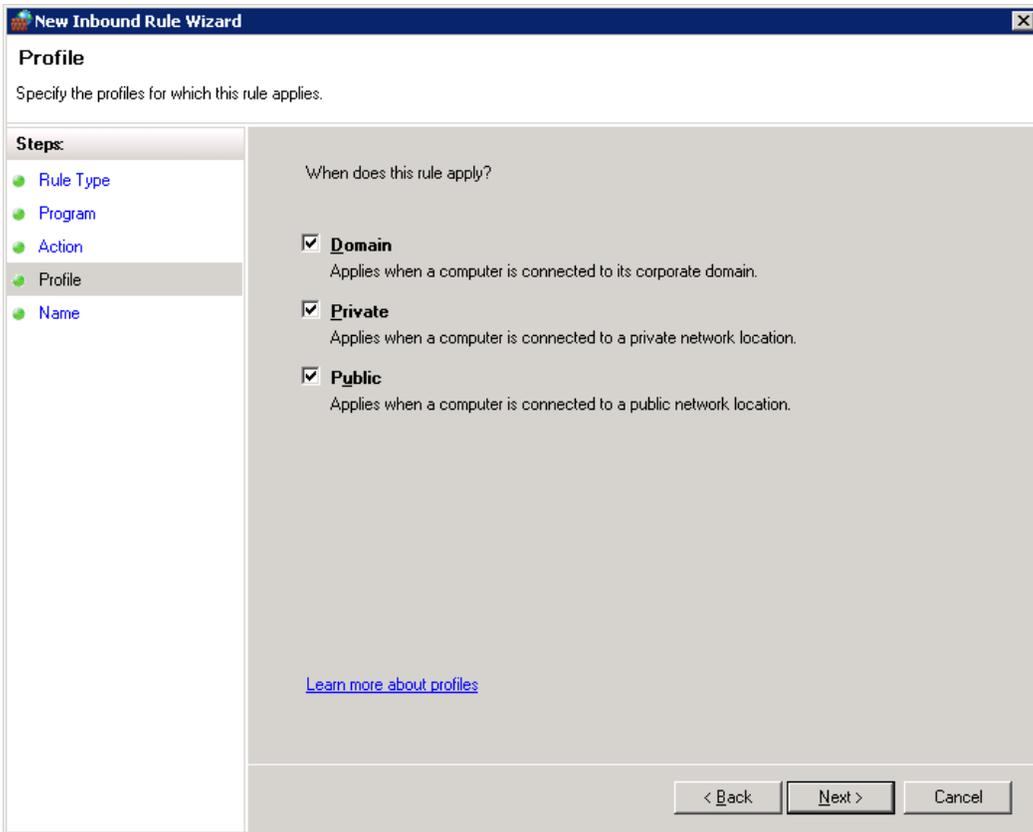
7. Select *This program path*. Click *Browse*, and navigate to the instance of SQL Server that you want to access through the firewall, and then click 'Open'. By default, SQL Server is at 'C:\Program Files\Microsoft SQL Server\MSSQL10_50.PBSSQL1202\MSSQL\Binn\sqlservr.exe'. Click 'Next'



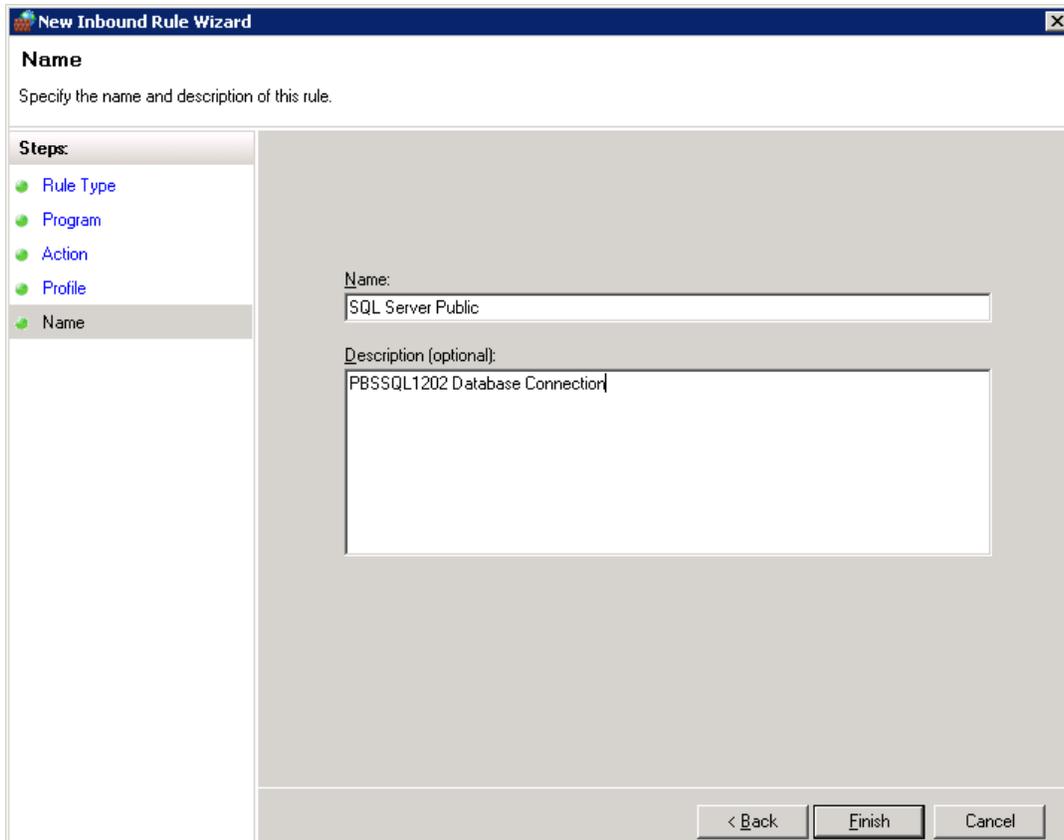
8. In the *Action* dialog box, as seen below, select *Allow the connection*, and click *Next*.



9. In the *Profile* dialog box select any profiles that describe the computer connection environment when you want to connect to the Database Engine, and click *Next*.



10. In the *Name* dialog box, type a name and description for this rule, and click *Finish*.



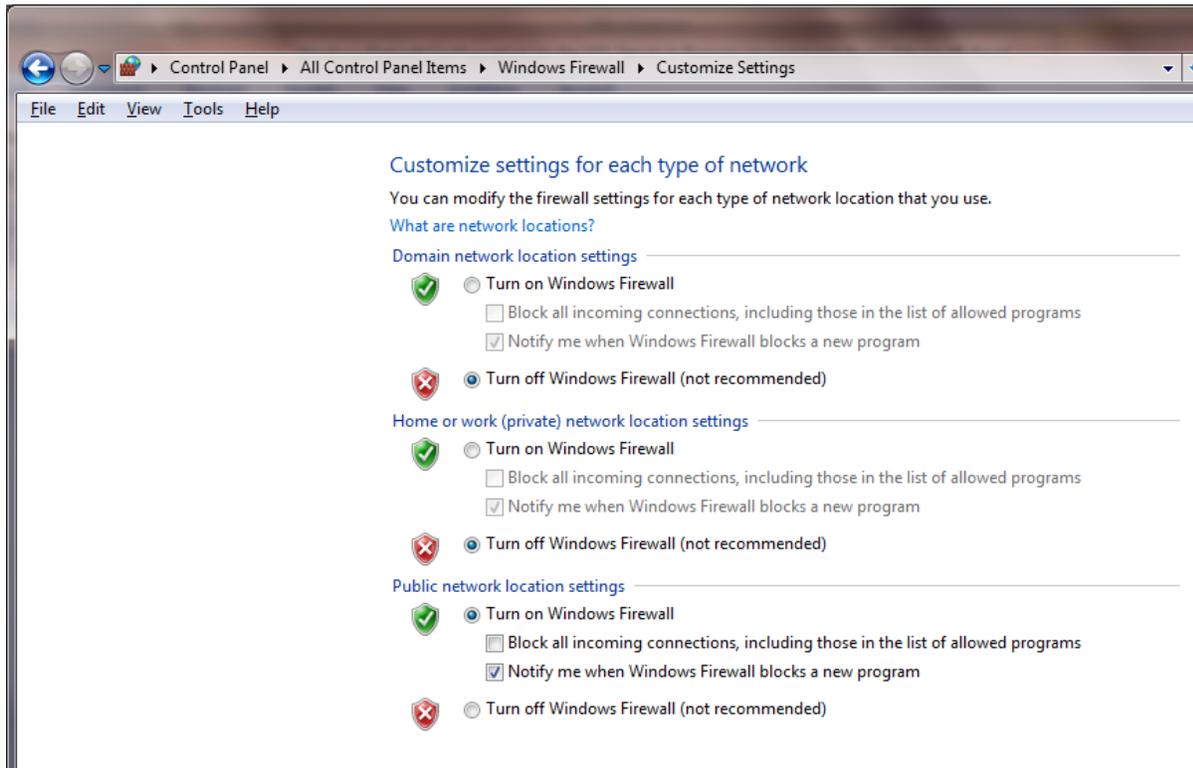
Your new Rule will appear in the list of Inbound Rules.

C. Testing the Connection on the Workstation

Go to the user's desktop or laptop. Run PBS from a mapped drive. Log into PBS to verify that it is running. One way to do this is by running PBS.BAT located in the top-level PBS folder.

D. Back to the SQL Server

Go back to the SQL server and turn ON Windows Firewall.

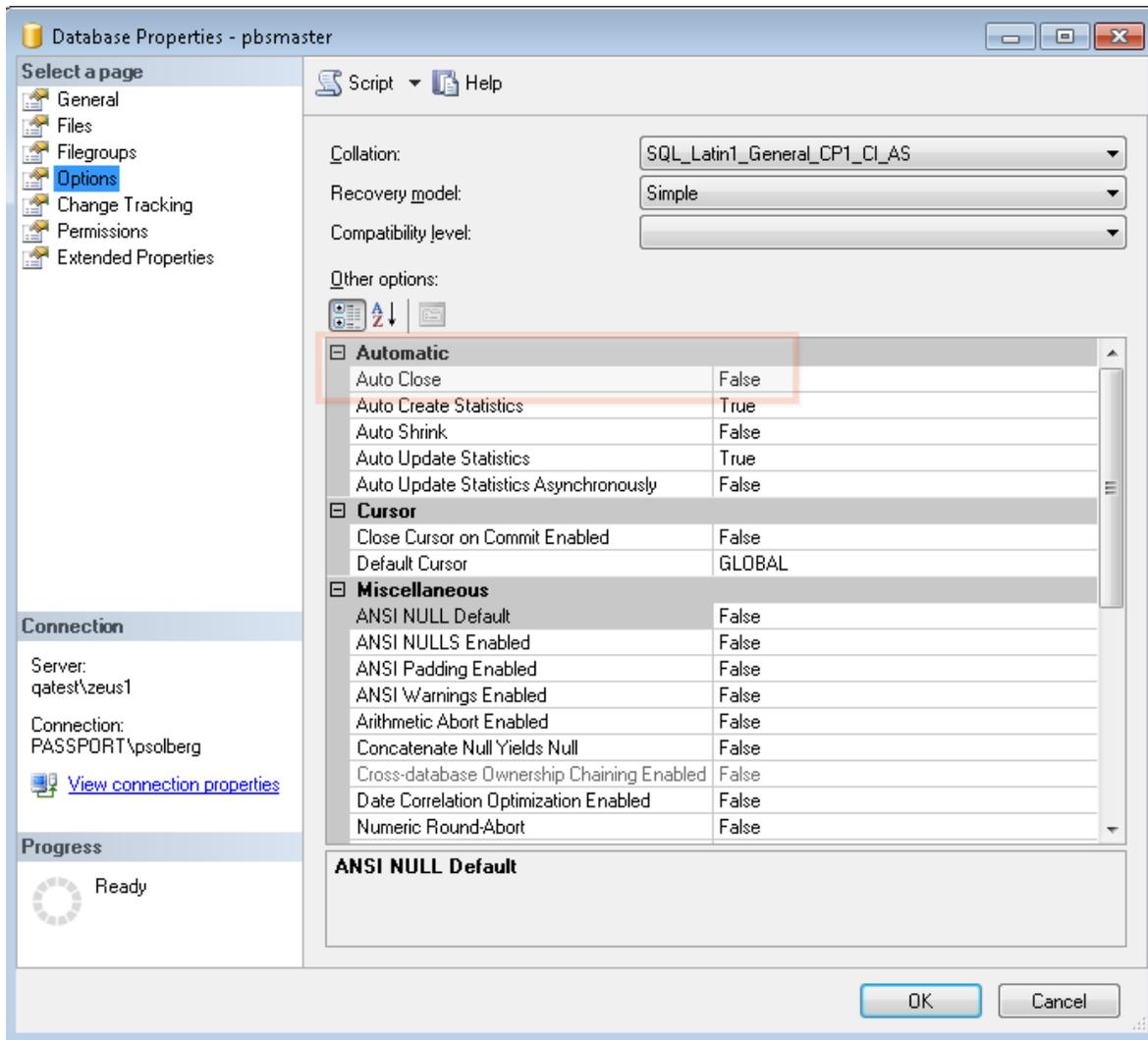


E. Auto Close Setting and Performance

This setting will increase PBS performance by as much as 5 times. To do this set Auto Close to False for pbsmaster, pbsdata00 and any other company that is installed. The steps are:

- If users are in PBS, ask them to exit.
- Open Microsoft SQL Server Management Studio.
- Find pbsmaster or the appropriate company database.
- Right click and select *Properties*.
- On the left side select the *Options* page.

You will see a screen similar to this:



- Auto Close is the first setting under *Automatic*. Set it like above to *False*.
- Set Auto Close to False for all PBS Companies.
- Exit Microsoft SQL Server Management Studio.
- Users may log back into PBS.
- That is the end of the Auto Close steps.

F. Client Install

You should un-install the previous PBS client install, if they exist, and install the new client shortcuts for PBS 12.03.

Install the Windows startup on the workstation. Run PBS from the workstation again to confirm that it is still running.

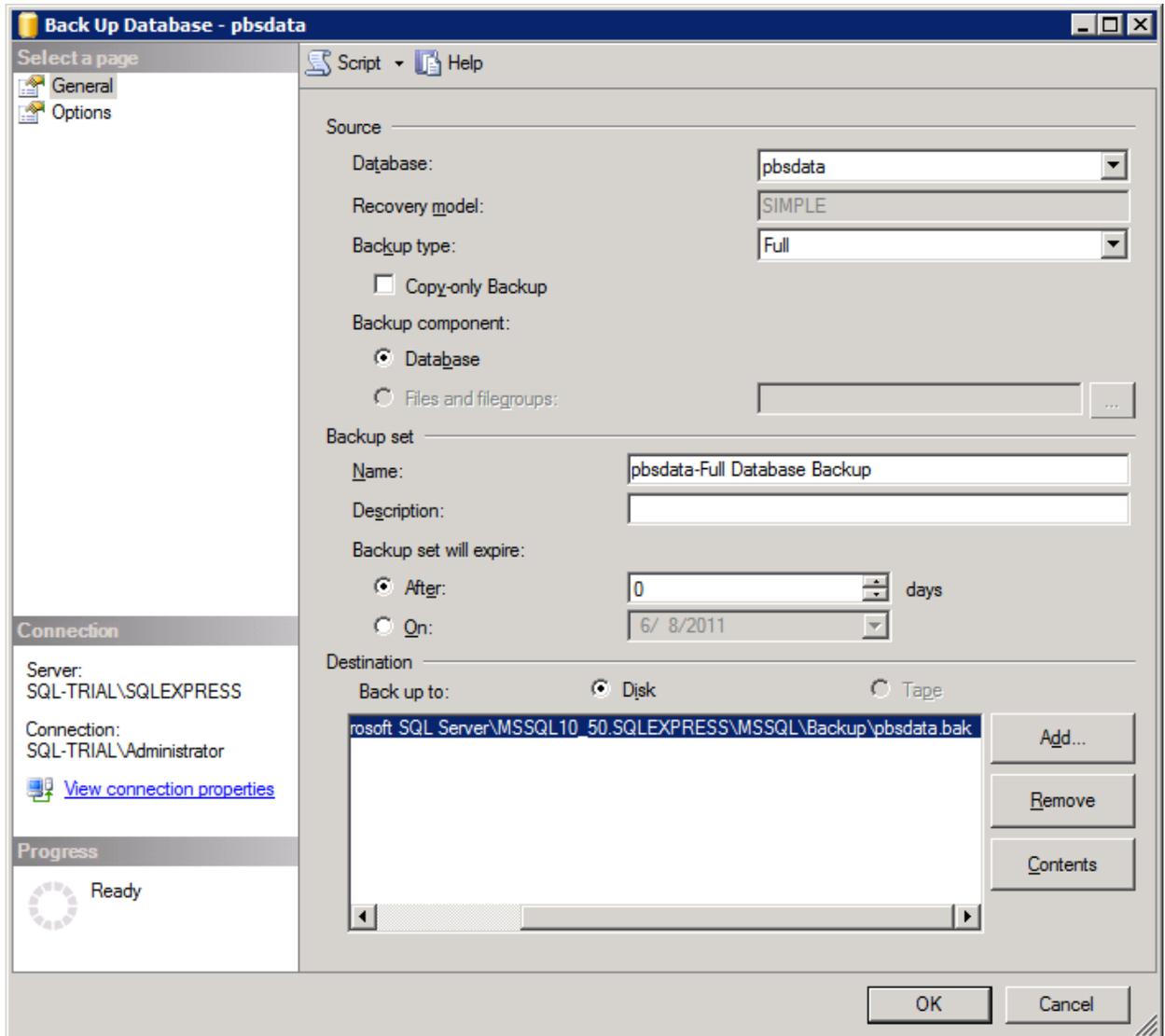
See [Connecting Workstations to PBS SQL](#)

VII. Backing up PBS in a SQL Server Environment

Traditional Vision file installation of PBS could be backed up simply by copying the entire Top Level Directory and all Sub Level directories to another location on network or written out to tape or a removable storage device. This could be done with a simple script or two and the Scheduled task facility built into Windows. We can do much the same in SQL but we'll need to use the SQL server management tools to help us generate the script for the backup of the database. We will also need to set up a task to back up the installed program separately. In our example we have installed SQL Server Express w/Tools so these are already installed for us. With SQL Server Standard or Enterprise you will have access to Maintenance Plans which can handle this task setup through a scripted interface.

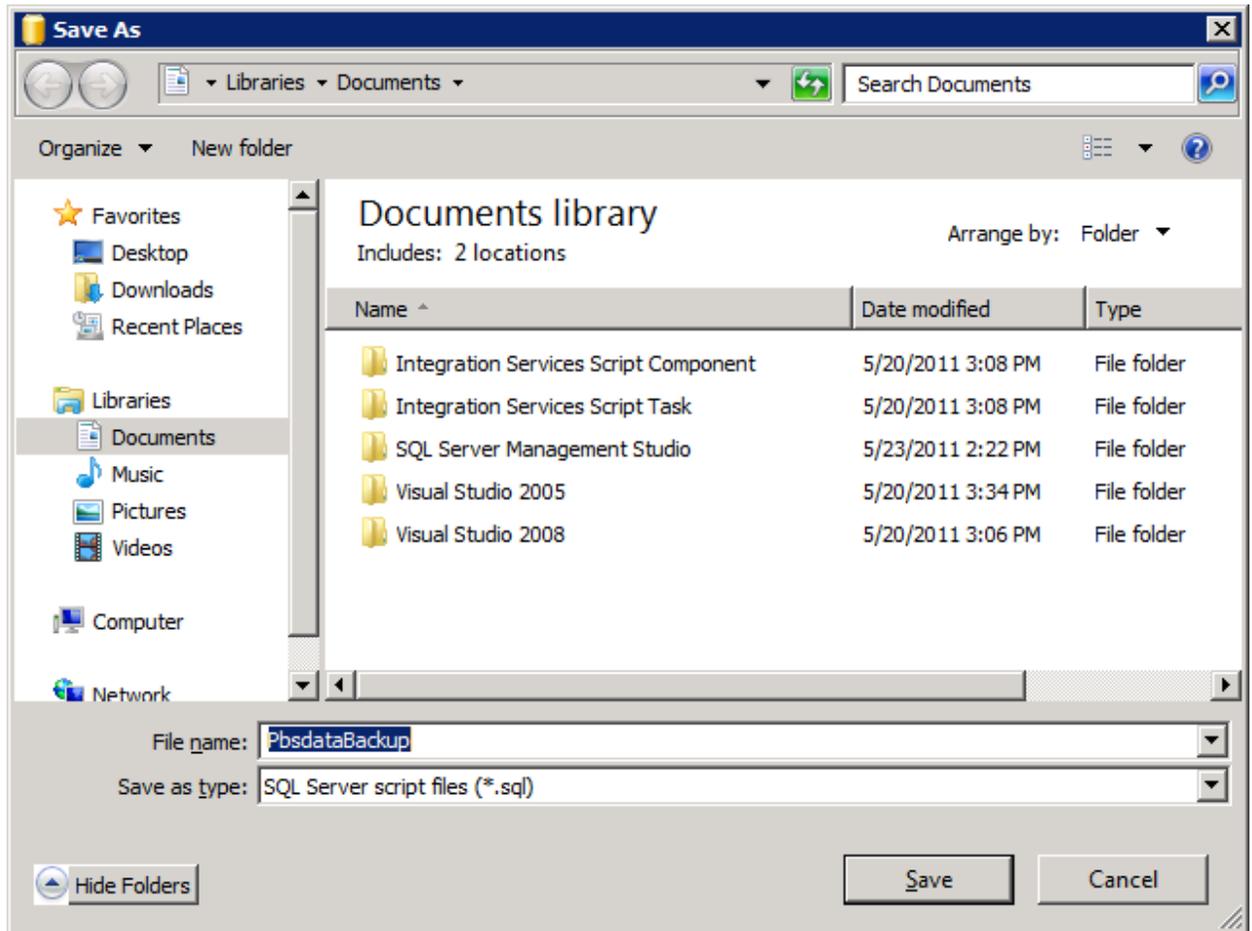
A. Create SQL backup script- this creates a script for each individual database

1. Open **SQL Server Management Studio** and expand the database folder to expose the databases on the server. Right click the **pbsdata** database and select **Tasks | Back Up**.

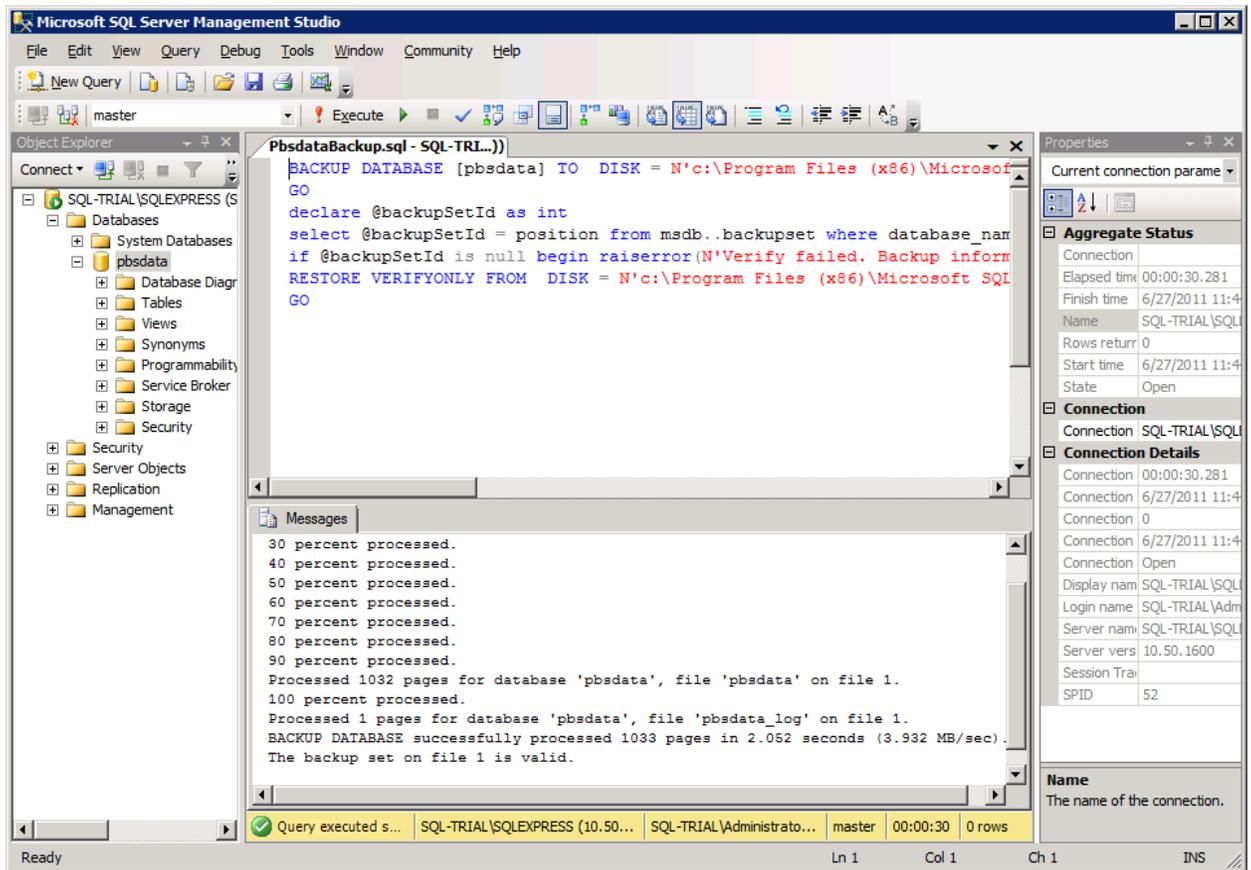


By default the tool selects a disk location within the SQL Server Install directory structure. You could direct it to a different location that falls within the scope of an existing off-site backup solution. I am going to leave it here and then use a scheduled task to make a copy to the spot so I have an instantly available backup on the SQL server box and in an alternate location. I am not going to discuss all of the backup options here as I assume you can get that information from Microsoft.

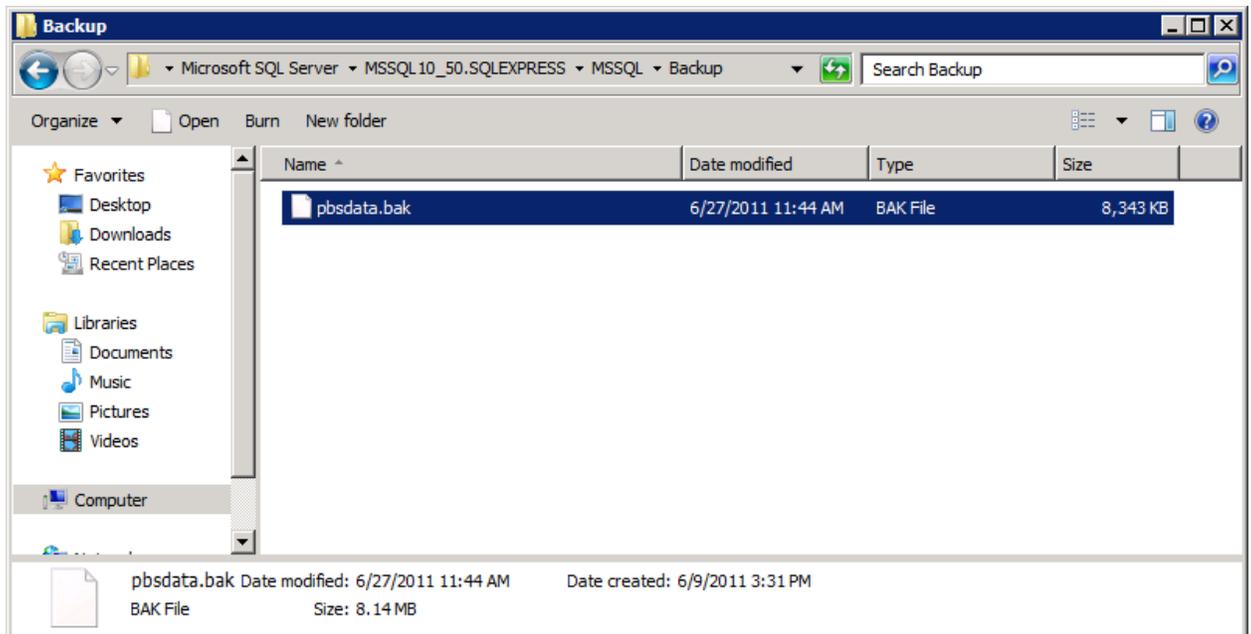
2. Once all desired options are set, select **Script | Actions to File** and enter a desired file name, for example, *PbsdataBackup*, and specify the location where to save the file.



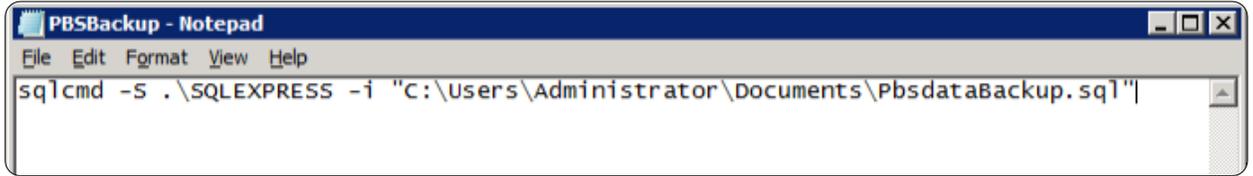
- After saving the script file it would be a good idea to open it and run it to create a backup. You can do this in SQL Server Management Studio or from the command line using SQLCMD.exe. Here is a result using SQL Server Management Studio:



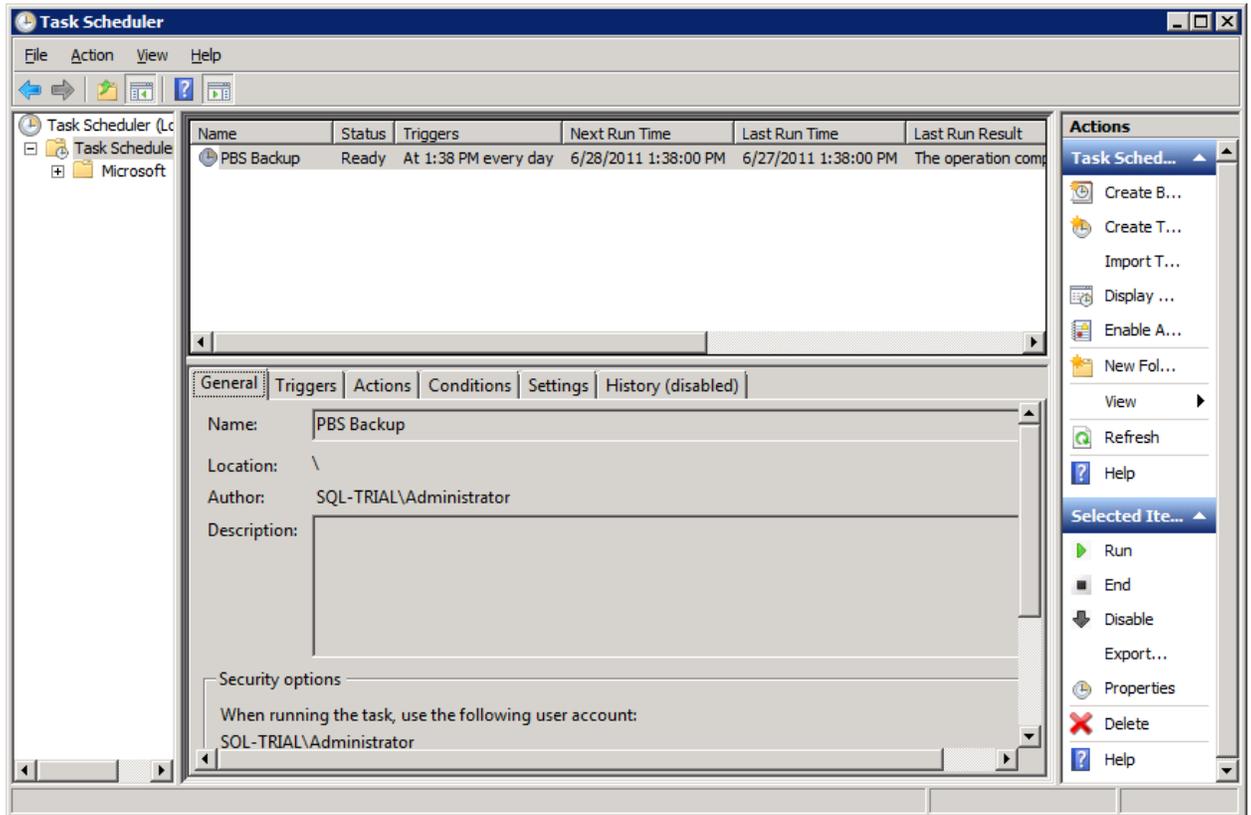
- The file is located in the place specified when setting up the script, which in this case is the default Backup folder for the SQLEXPRESS installation:



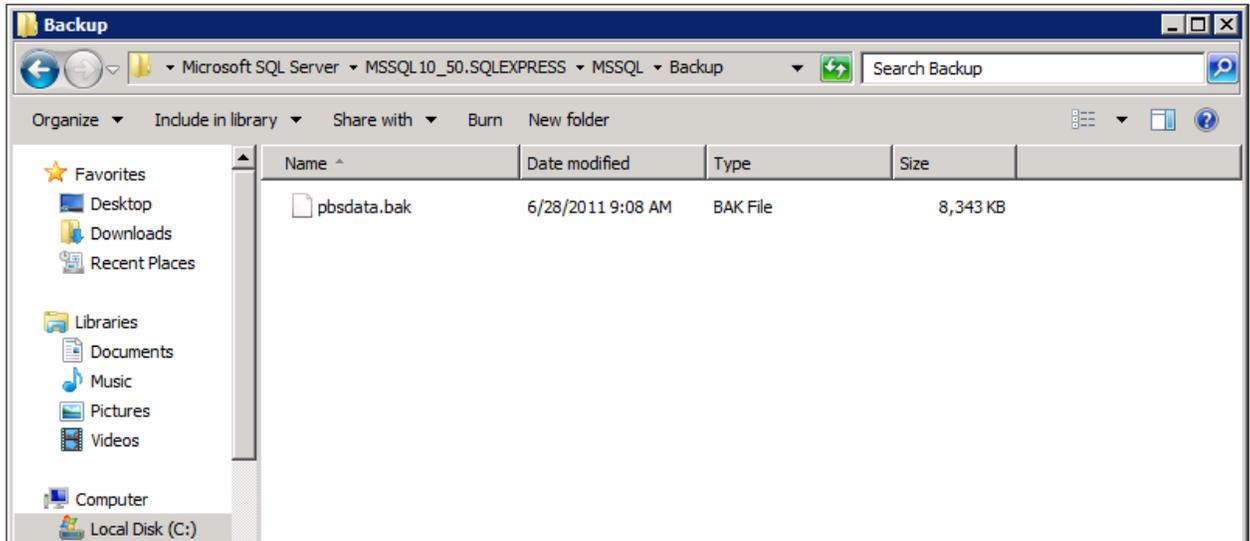
- In order to schedule this backup, we will create a simple batch file that will execute SQLCMD and call the script we just created.



- Save this script to a location accessible by the user account that has access to the data and who will set up Scheduled Tasks.
- Set up a scheduled task to run the batch script:



8. Run it manually to verify that the scheduled task will provide the results expected:



9. This has created a backup file located within the directory structure provided by the default SQL Server Express Install. You can either include this location in the scope of your normal backup or create another batch file and scheduled task to copy the contents of this folder to a location on another device that gets backed up regularly. In this case we chose the latter approach as it creates a readily available backup that can be accessed without the need to go back to removable media.

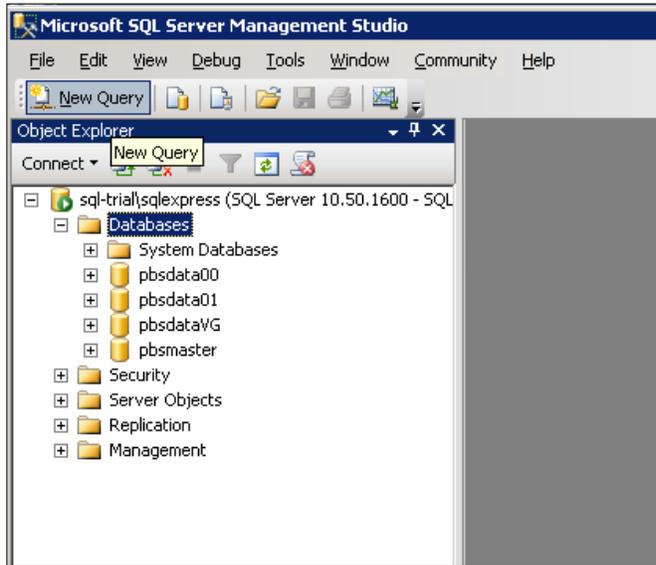
1. Important Note:

This routine creates a backup of the data in the database. You still need to create a backup of the Directory structure that contains the PBS installation, as this area includes reports printed to disk, PDF documents, a few Vision files and other data that will be required to fully recover your system in the event of a server failure.

B. Backing up multiple databases

In the previous example we created and scheduled a script to backup an individual database. Here is an example of a script that can be used to backup multiple databases with date stamped backup files.

Open SQL Server Management studio and connect to the database that contains your PBS databases.



Click the button New Query:

Copy and paste the following block of text into the blank query window:

```
DECLARE @name VARCHAR(50) -- database name
DECLARE @path VARCHAR(256) -- path for backup files
DECLARE @fileName VARCHAR(256) -- filename for backup
DECLARE @fileDate VARCHAR(20) -- used for file name

SET @path = 'C:\Backup\'

SELECT @fileDate = CONVERT(VARCHAR(20), GETDATE(), 112)

DECLARE db_cursor CURSOR FOR
SELECT name
FROM master.dbo.sysdatabases
WHERE name NOT IN ('master', 'model', 'msdb', 'tempdb')

OPEN db_cursor
FETCH NEXT FROM db_cursor INTO @name

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @fileName = @path + @name + '_' + @fileDate + '.BAK'
    BACKUP DATABASE @name TO DISK = @fileName

    FETCH NEXT FROM db_cursor INTO @name
END

CLOSE db_cursor
DEALLOCATE db_cursor
```

The above script is set up to backup all databases except for some system databases that are installed when you installed SQL Server and are used for the internal operation of SQL Server. You will need to back these up but not with the same frequency of your production accounting databases.

In the example above you will need to change the `C:\Backup\` to a location that you use for your organizations backup procedures and routines. Once you make this change, save the file with a name that describes the script and a location that will be available to a scheduled task to run the script.

Create a batch file similar to the one you made above in the individual database backup and setup a scheduled task to fire off the batch script at a time when you will not interfere with normal operations.

SQL Server backups are very fast. You could set up one of these to run daily to do a full backup and one to run every few hours if you have transaction volume that indicates that kind of highly available backup.

C. Move Back to PBS v12.02 after Database In-Place Install

If you upgraded using the Database in-place installation and you need to move back to PBS 12.02, do these steps:

1. Make a backup of the 12.03 SQL databases.
2. Restore the 12.02 SQL databases from backup.
3. Move the cblconfi.* files from the PBS1202\VSUTIL folder back to the top-level PBS.
4. You should move or rename the cblconfi.* files in the PBS 12.03 installation so that no one accidentally runs that version.

You are now ready to run 12.02.

If you later restore the 12.03 database you **MUST** remove the cbconfi.* files from the 12.02 install so that no user accidentally enters or posts data with the 12.02 programs. A system crash could occur.

VIII. Connecting Workstations to PBS SQL

Three methods are available for configuring a workstation to access your installation of PBS SQL:

A. Thin Client

The PBS Thin Client is a small footprint application that essentially represents PBS as a local application to the workstation but utilizes the Server to do all the heavy lifting. This greatly enhances the performance of PBS and reduces network traffic significantly. This feature also enables delivery of the application over the internet through a secure proprietary encryption protocol -- ideal for large installations and any installation with remote users whether there be one or many.

This product is licensed separately from the PBS SQL option. To activate Thin client on the server you need an AcuConnect 9.1.x product code and key. Activation instructions are in the Thin client documentation downloadable from the FMS site as stated in the next paragraph.

You need the workstation Thin client startup install. For Thin client installation instructions see *PBS_ThinClient_Configuration.pdf*. The install and documentation are downloadable from the Passport's FMS site. Use the <http://fms.pass-port.com/> address. For access you will need a login and password. The documentation is found in *updates/PBS_1203/doc*. Go to the *updates/CommonUtil/1203Startup* folder and download the *pbs1203tc910.exe* executable.

Run the executable from the workstation. You must have the correct ip address and port number to complete the install.

B. Terminal Services

Terminal Services can be set up using a number of tools, most notably Microsoft Terminal Services/Remote Desktop Connection and Citrix XenServer/XenDesktop. The primary advantage of these solutions is the use of the server horsepower for processing and reduced load on the network. We will defer to those companies and your network administrator for setup of these types of services. Keep in mind that PBS uses PCL printing with laser printers when printing forms. Making this work properly using Terminal Services can produce issues.

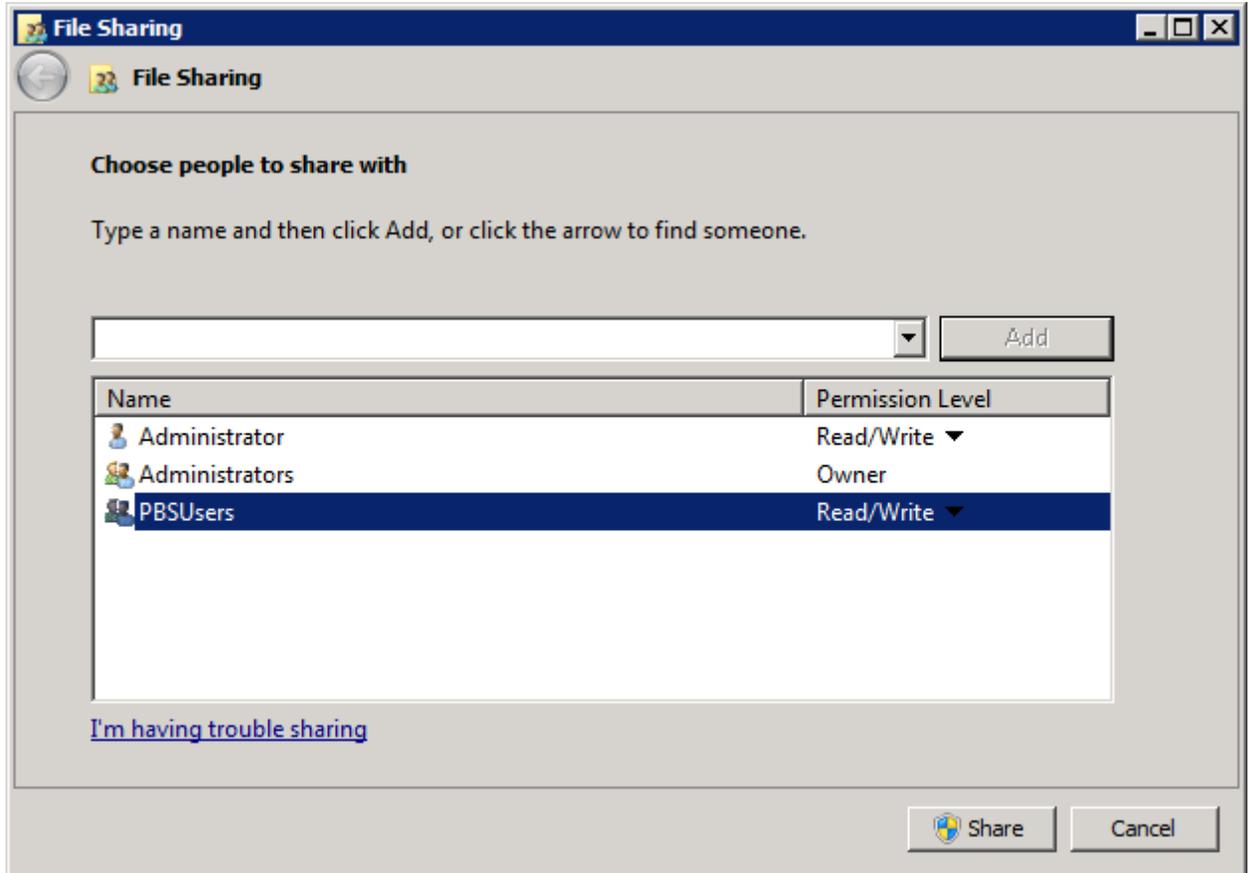
Be sure to install the PBS fonts on the server. They are located in the fonts folder under the top-level PBS folder. This will need to be done for each user login.

C. Network File Share

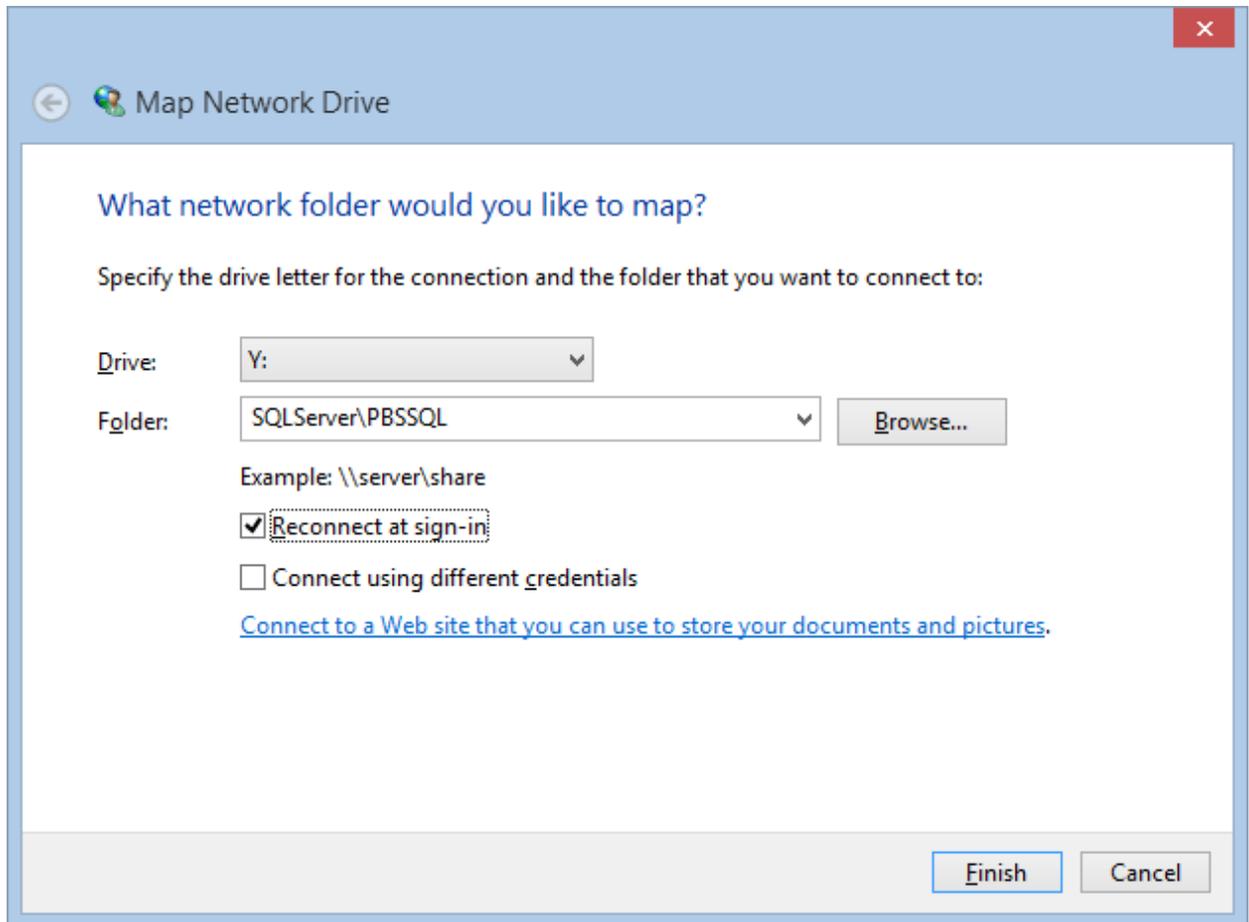
Probably the most common way to run the PBS application on a network is through the use of a file share and the installation of the Client Workstation setup available from our download site. The workstation setup creates menu items and installs the fonts required to run PBS. When configuring to run this way you are going to be running the application on the workstation so the programs and data will be sent over the network to the workstation for processing. Obviously this puts a bigger burden on network performance. If the site has slower-performing and dated workstations, network cards and switches, this type of implementation is not recommended.

The following is a short guide to setting up a simple network share and running the application through a shortcut.

1. Add user to the share who are being given access to PBS



2. These are the same users will need access to the database. There are two methods documented earlier. One in which individual users are setup to access the database and the second which grants access to all users through a single SQL authenticated login.
3. Map the network drive onto the workstation:



4. Click on Finish to open the mapped drive.
5. To test PBS, double click **PBS.BAT**

You may also install the PBS startup on the workstation. It includes start menu selections and fonts needed to run PBS. These instructions are in the next section.

If you prefer to run PBS from the batch, you should install the fonts on the workstation. The fonts provide the proper boxes when using character mode. These are located in the top-level PBS fonts folder. Copy the fonts to temporary folder on the workstation, highlight, right click and selection *Install*.

Testing TCP/IP Connectivity

Connecting to SQL Server by using TCP/IP requires that Windows can establish the connection. If there is a problem you may run the following processes to test the connection.

1. On the Start menu, click **Run**. In the **Run** window type **cmd**, and then click **OK**.
2. In the command prompt window, type ping and then the IP Address of the computer that is running SQL Server. For example, **ping 192.168.1.101** using an IPv4 address,

or **ping fe80::d51d:5ab5:6f09:8f48%11** using an IPv6 address. (You must replace the numbers after ping with the ip addresses on your computer.)

3. If your network is properly configured you will receive a response such as **Reply from <IP address>**. If you receive an error such as "**Destination host unreachable.**" or "**Request timed out.**" then TCP/IP is not correctly configured. (Check that the IP address was correct and was correctly typed.) Errors at this point could indicate a problem with the client computer, the server computer, or something about the network such as a router.
4. Next, if the ping test succeeded using the IP address, test that the computer name can be resolved to the TCP/IP address. On the client computer, in the command prompt window, type **ping** and then the computer name of the computer that is running SQL Server. For example, **ping pbserver**.
5. If you receive an error such as "**Destination host unreachable.**" or "**Request timed out.**" you might have old (stale) name resolution information cached on the client computer. Type **ipconfig /flushdns** to clear the DNS (Dynamic Name Resolution) cache. Then ping the computer by name again. With the DNS cache empty, the client computer will check for the newest information about the IP address for the server computer.
6. If your network is properly configured you will receive a response such as **Reply from <IP address>**. If you can successfully ping the server computer by IP address but receive an error such as "**Destination host unreachable.**" or "**Request timed out.**" when pinging by computer name, then name resolution is not correctly configured.

Also, if you are unable to connect you could verify access to an existing MS SQL server and instance. You must have MS SQL installed on the workstation in order to run this test. Keep in mind that having SQL installed on the workstation is not required for running PBS. You would only need it to test the connection. Once a connection is established you may uninstall it. With MS SQL installed, open a command prompt and type "sqlcmd -L". A list of the available servers and instances should display. If not, there is a problem with the connection. Go to the server and check your settings.

1. Install the Local Network Share Access

For network sharing, install the pbs startup. This installs the start menu selections and fonts needed for PBS. This install is downloadable from the FMS site and if you received the PBS via a disk, it is available from the disk in the pbs_startup folder.

Note: If you are upgrading from a previous version of PBS and you installed the older start menu selections, to avoid having two sets of start menu selections uninstall the older version before you install the new version. You may do this in *Programs and Features* found under *Control Panel*. Look for *Passport Software Start Menu Items*.

Download the start menu installation from the <http://fms.pass-port.com/> address. You will need a login and password. Go to the *updates/CommonUtil/PBS1203Start* folder. Create a temporary folder on the workstation, copy the *PBSStartIconInstall.exe* file to that folder and run the executable from the workstation.

Note: Verify that the fonts install. It has been found that the install program is not working consistently on Windows 8. As a backup we recommend that you copy the fonts from the top-level PBS fonts folder to the workstation. Highlight the fonts, right click and select Install. *If they are already installed a message will indicate this. Otherwise it will install the fonts.*

The required version of .Net Framework for installing the start menu selections is 4.030319 or higher.

For information on modifying the shortcuts, using the original colors, uninstalling the shortcuts and more, see the *Workstation Install/Configure* chapter in the PBS Administration documentation.

2. Uninstall Old Startup

This is regarding the old startup intended for 12.02 and earlier. The uninstall is done from the workstation Control panel > Programs and features. Look for Passport Business Solutions. The uninstall removes a file called Uninst.isu from the top-level PBS. This file is needed for each short cut uninstall for each workstation. Save a copy of this file before you do the first uninstall. If you have already removed the file, there is a zipped copy of this file on the FMS site in the CommonUtil folder. Extract it into the top-level PBS.

D. Windows 8 and PDF Reader

Windows 8 is installed with a default PDF reader. It uses this symbol:



It will allow you to view PDF files that are generated from PBS, but it displays them in a separate window which makes it difficult to get back to PBS. For optimum viewing of PDF files download and install Adobe Reader or Adobe Pro.

IX. Other Procedures and Documentation

Below are links to the online documentation.

After PBS is installed, the User and Administrative documentation is also accessible via `PBS_Full_HTMLDoc.htm`, located in the top-level PBS.

A. Upgrading from 12.01

When upgrading from 12.01 SQL or 12.01 Vision to 12.03 SQL, the SQL install is a standard upgrade that requires you to install PBS 12.03 as a new system. Then you follow the EZ convert instructions for upgrading your data.

B. Increasing User count for PBS SQL

PBS installs as a one user SQL system. You must have a *product code* and *product key* to increase the user count. To see your current user count, in top-level PBS open the `wrun32.mlc` file with a text file viewer. Do NOT edit the file or the PBS SQL will stop operating.

The product code and key may be delivered in an email, via a PDF file downloaded from the FMS site or received it in a shipment. Check your emails from Passport for delivery method. The file has a line that starts with: *Product Detail: The Acu4GL for MS SQL*. The product code and product key are a few lines below that. The file name will be something like: `Acu4GL 3 user-EndUserName –ResellerName.pdf` The license content is similar to this:

```
End User : End User Name
Licence Type: NEW PRODUCT
Users/Devs: 7
Serial: 9999999
x86 running Win XP, Vista, Windows 7, Server 2003, Server 2008 32/64 Bit
Acu4GL for MS SQL      Product Code: 3XXX999111BBBASQW12
                        Product Key: XXX6666ZZZZ
```

Make a backup of the existing `wrun32.mlc` license file which is located in the `bin` folder. Copy the `pbsactivator.bat` from the top-level PBS to the `bin` folder.

In the PBS `bin` folder run `pbsactivator` and enter the product code and key and it will create a new `wrun32.mlc` file in the `bin` folder. It is a text file. You may open it to view and verify the new user count. Do NOT alter the file or it will not work.

C. EZ Convert

If you are converting data from an earlier version of RealWorld, RW32 or PBS, use EZ convert to move your data to PBS SQL.

Download [PBS EZ Convert.pdf](#) for the latest instructions.

D. License Information

When working with Acu4gl, we are actually using two separate products, the runtime itself and the Acu4gl interface; in this case we need two different licenses, one for the runtime, (wrun32.alc) and another for Acu4GL-MSSQL (wrun32.mlc).

Now, for each runtime (wrun32-acu4gl) launched it counts against the number of users in both licenses; wrun32.alc and wrun32.mlc. If there are users which don't access SQL server, those users count exclusively against the wrun32.alc license and in this case the number of users for each license could be lower in the Acu4GL one; but if all users access SQL server, the number of users for each license must be the same.

Three users launching three runtimes each will use 9 users from the total of users that they have on each license.

E. Field Definition Guides

Use the field definition guides to obtain a description of the PBS files, field names and the SQL column names.

Doc name	Document description	Download version link
PBS_fdg.pdf	PBS Field Definition Guide for Accounting and Distribution	PBS FDG
Pbsmfg_fdg.pdf	Manufacturing Field Definition Guide	PBS Mfg FDG

F. User and Administrative Documentation

PBS documentation links are available below. However these links below do NOT replace the PBS documentation installation. There are 2 versions of the documentation: one for local help and the other for Internet help. Download and install the documentation installations separately.

This is a full set of documentation for each PBS application. Select from the links below:

Accounting	Distribution
System Accounts Payable Accounts Receivable Check Reconciliation General Ledger Payroll	Inventory Control Job Cost Order Entry Purchase Order Point of Sale Sales Analysis
Manufacturing	Manufacturing
Customer Orders Capacity Requirements Planning Inventory Management Manufacturing Job Costing	Master Scheduling & MRP Product Definition & Costing Product Purchasing Shop Floor Control
Administration	Administration
Administration	Data Import

Other Documentation:

Doc name	Document description	Download version link
CashPoint-CP_interface.pdf	CashPoint – PBS Interface to NCR Counterpoint	CashPoint
Syn_int.pdf	CounterPoint 7 Interface	CP 7 Interface

G. Access PBS SQL Tables Via Excel

What steps may vary depending on the version of Office you are using. This procedure accesses one table only.

1. Open Excel
2. Select *Data*
3. Select *From other sources*
4. Then select *From SQL server*

5. In the *Server name* field, enter the SQL server name. You may have to connect via Data Sources (ODBC) by setting up a SQL Server DSN
6. For the Log on credentials field, select *Windows Authentication*
7. It should immediately connect to the master database. The name master is the default. Be sure to select the one that has PBS data. PBSdata00 is data in company 00.
8. Select a table and location on the spreadsheet for the table.

For a list of tables with names and columns, see the [Field definition guides](#).

H. Changing Databases

It may become necessary to change databases. Here are some examples of why:

- Moving from Microsoft SQLExpress to the full version of SQL Server.
- Moving to a new more robust server.
- Upgrading from Microsoft SQL Server 2008 to Microsoft SQL Server 2012.

The procedure is the same for each:

- Back up the existing database using SQL Server Management Studio. Right click on the database and Select *Tasks*. Then select *Backup*. Include all the company databases and the pbsmaster database.
- Install an instance of the new SQL Server software.
- Do the following: [Configuring the SQL Server before the Install of PBS](#)
- Restore your PBS databases. This includes pbsmaster and all the company databases. From the SQL Server Management Studio of the new version of SQL or on the new server, on *Databases* select *Restore Database*.
- Install the **ms_inst.sql** script using Microsoft SQL Server Management Studio. This is installed with the instance and not exported and restored with the backup.
- On the old system check the security setup for users in SQL Server Management Studio. Re-create these settings in the new SQL instance. See [Setting up User Access to PBS Databases](#)
- Set up an inbound and outbound firewall rule. See [Creating an Inbound Firewall Rule](#)
- You may un-install the old instance if you like. It is not a required step, however it does take up resources if your new database is on the same server. The main point is that you do not want users updating the old instance anymore. If you do not want to uninstall the old instance you may also stop the service of the old instance so that your users do not accidentally enter data into the old system.

You may copy the top-level PBS to the new server, if you are moving to a new server, or use an existing top-level PBS on the old server. In either case, in order to utilize the PBS SQL data in the new instance you must also:

- Point PBS to the new database by modifying the cblconfi* files. In each file, look for these settings: PBSSQL_DEFAULT_CONNECTION and A_MSSQL_DEFAULT_CONNECTION. Change them to match the new server and instance.

- Using Microsoft SQL Server Management Studio, modify the multi-company table, found under pbsmaster, to point to the new database. The table is MLTCMP and the column is svr_nam.

Configure and test the access to the new instance from each user's system:

If you make the access to new system the same drive letter and path as the old system, the workstation shortcuts to PBS will work as is.

Alternatively, you may manually modify the start menu selections to point to the new system, if it is on a different drive letter or path. For Windows 8, right click and select *Open file location*. For Windows 7 and Windows 8 right click on each and select properties. On the *Shortcut* tab change the path for the *Target:* and *Start in:*.

X. Glossary

Many of the terms below are used when talking about SQL. Not all of them are used in this document. However, they may come up when developing your own custom reports and reviewing PBS data using the SQL Server Management Studio.

Column

Database tables are made of different columns (fields) corresponding to the attributes of the object described by the table.

Data

Piece of information collected and formatted in a specific way. The term data is frequently used to describe binary (machine-readable) information.

Database

A database is a collection of information organized into related tables of data and definitions of data objects. The data within a database can be easily accessed and manipulated through computer programs like found in PBS.

Field

See Column definition above.

Lock

Locks are used by Database management systems to facilitate concurrency control. Locks enable different users to access different records/tables within the same database without interfering with one another. Locking mechanisms can be enforced at the record or table levels.

NULL

The NULL SQL keyword is used to represent a missing value. When viewing data in a column, you may see the word NULL when data is missing from a field.

Query

Queries are the main way to make a request for information from a database. Queries consist of questions presented to the database in a predefined format, in most cases SQL (Structured Query Language) format.

Record

A record is a complete set of information presented within a database system. Records are composed of different fields (columns) in a table and each record is represented with a separate row in this table.

RDBMS

An RDBMS (**R**elational **D**atabase **M**anagement **S**ystem) is essentially a database management system that is designed to store data which can later be used for a specific application. RDBMS is the basis for SQL.

Row

See Record definition

SQL

SQL is short for Structured Query Language and is an industry standard language used for manipulation of data in a RDBMS. There are several different dialects of SQL like, ANSI SQL, T-SQL, etc.

SELECT

The SELECT is a SQL command, which is the primary means for retrieving data from a database system.

Stored Procedure

Stored Procedure is a set of SQL statements stored within a database server and is executed as single entity. Using stored procedures has several advantages over using inline SQL statements, like improved performance and separation of the application logic layer from database layer in n-tier applications.

Table

A Table refers to data arranged in rows and columns, which defines a database entity.

Trigger

Triggers are special type of stored procedures executed automatically when certain events take place. There are different types of triggers – for update, for insert and for delete. Each trigger is associated with a single database table. PBS does not use triggers at this time.

XI. Appendix A – Error Messages

The following link contains a list of SQL errors and a description of each:

[http://technet.microsoft.com/en-us/library/aa258719\(v=sql.80\).aspx](http://technet.microsoft.com/en-us/library/aa258719(v=sql.80).aspx)

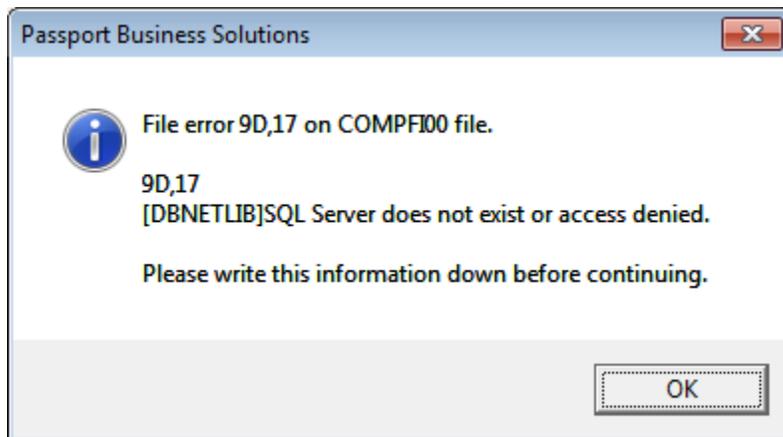
The descriptions do not relate directly to PBS, however they may be useful in resolving data and connection issues.

A. AllSqlMessages.csv

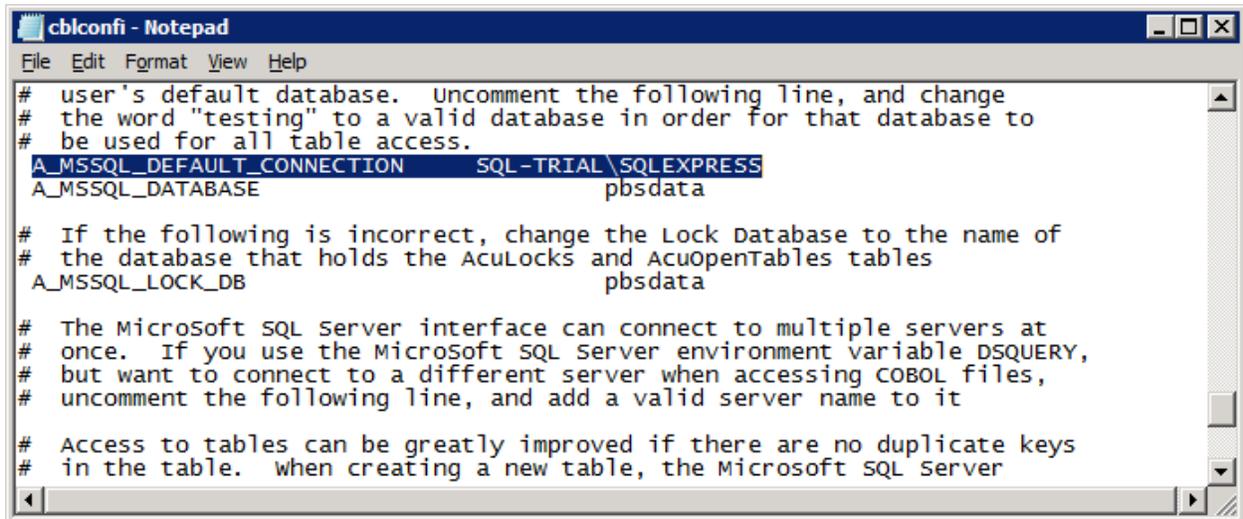
Many of SQL error messages are in a file called *AllSqlMessages.csv* found in the top-level PBS. If you don't find the error in that file or if you need more information about the error, you may also search for it on the Internet. For example search for SQL Server 22007.

The following has some common examples of error messages that could occur after installing PBS SQL and when attempting to start PBS.

B. File error 9D,17 - SQL Server does not exist or access denied.



Potential issue #1:



```
File Edit Format View Help
# user's default database. Uncomment the following line, and change
# the word "testing" to a valid database in order for that database to
# be used for all table access.
A_MSSQL_DEFAULT_CONNECTION SQL-TRIAL\SQLEXPRESS
A_MSSQL_DATABASE pbsdata

# If the following is incorrect, change the Lock Database to the name of
# the database that holds the AcuLocks and AcuOpenTables tables
A_MSSQL_LOCK_DB pbsdata

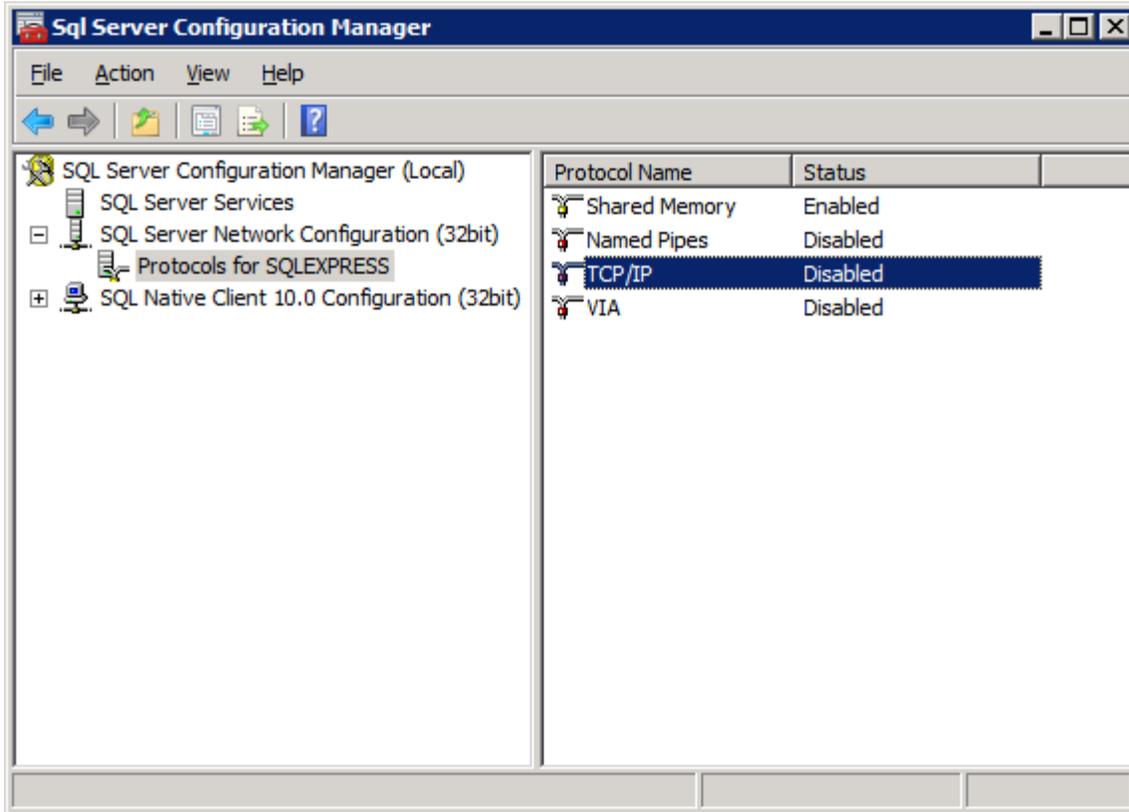
# The Microsoft SQL Server interface can connect to multiple servers at
# once. If you use the Microsoft SQL Server environment variable DSQUERY,
# but want to connect to a different server when accessing COBOL files,
# uncomment the following line, and add a valid server name to it

# Access to tables can be greatly improved if there are no duplicate keys
# in the table. when creating a new table, the Microsoft SQL server
```

Accurately identifies the SQL server that is hosting the **pbsdata** database. In the example above **SQL-TRIAL** represents the machine name and **SQLEXPRESS** is the instance name.

Potential Issue #2

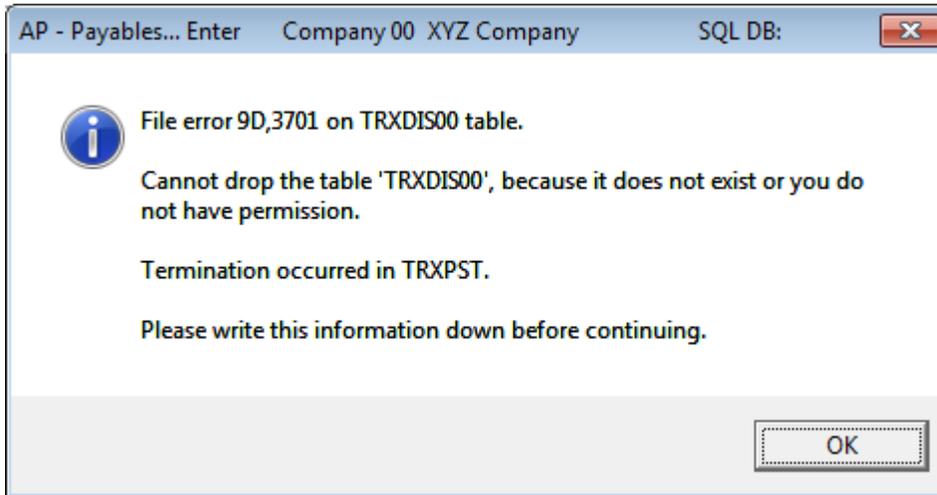
The protocol for **TCP/IP** is not enabled on the SQL Server. Using the **SQL Server Configuration Manager**.



Check to see if **TCP/IP** has been enabled; if it is not, right click the item and choose **Enable**. You will need to restart the **SQL Server Services** for this change to take effect. This can be done in the **SQL Server Configuration Manager** as well.

Refer to [SQL Named Pipes](#) and [Restart the SQL service](#).

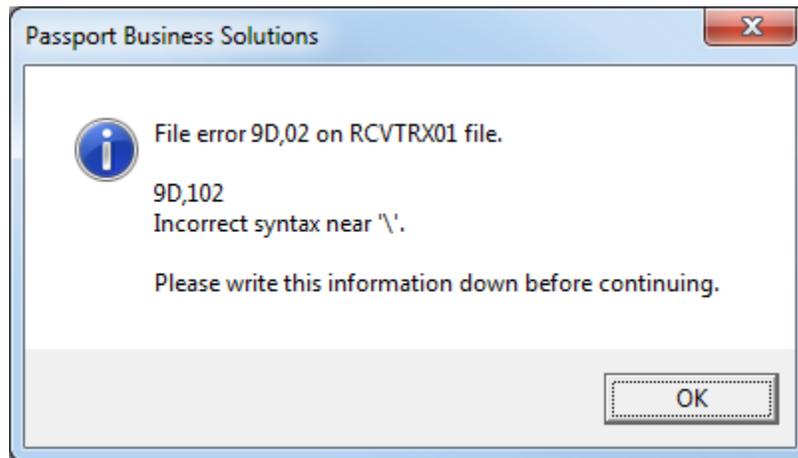
C. File error 9D,3701 - Cannot drop the table



This issue is caused when the user has been granted the default Schema of 'dbo' but does not have the role membership of 'db_owner.'

Refer to the section [Setting up User Access to PBS Databases](#).

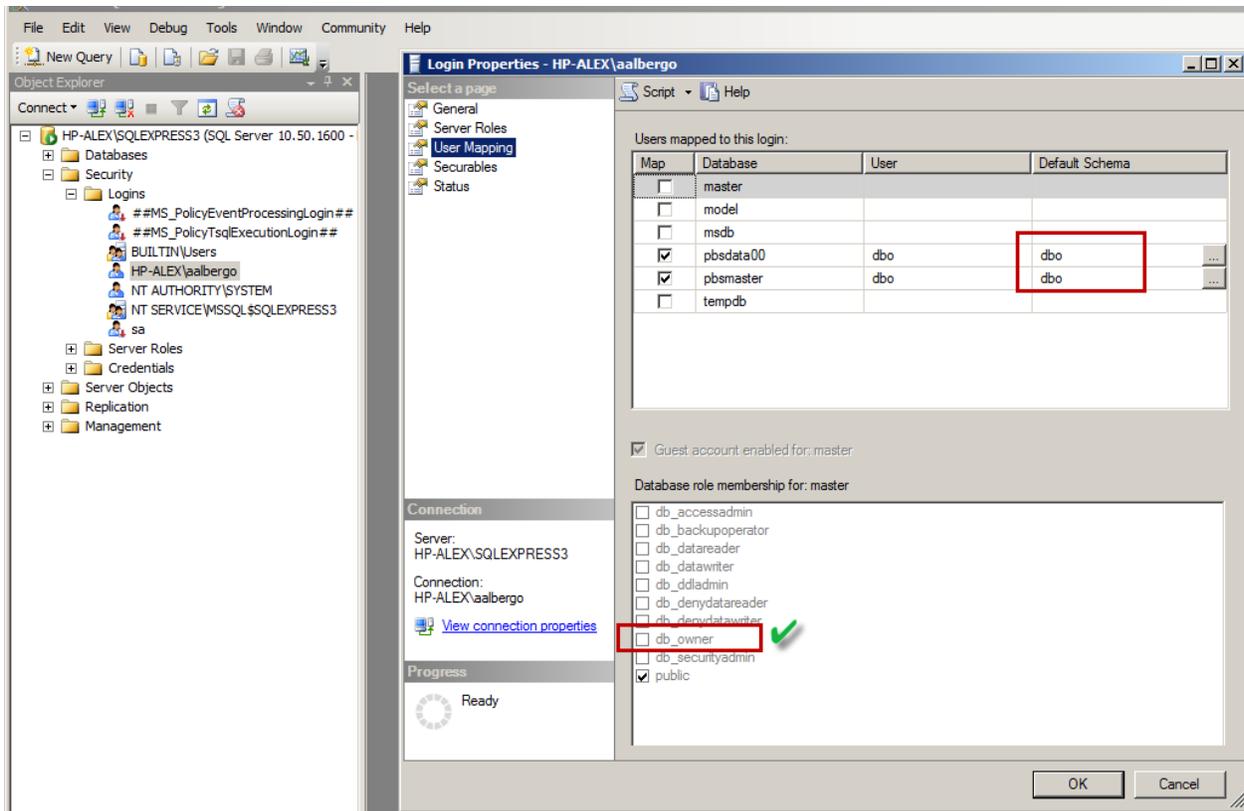
D. File error 9D,102 – Table created with incorrect permissions



This is a SQL Server permissions issue. Make sure the users default schema for the pbsdata database is dbo. If it is not, the tables are created with the user as the owner. When you look at the table in SQL Management Studio it should be dbo.RCVTRX01.

All of the tables must start with the letters *dbo*. There are two issues you can look into to fix this:

Issue 1. The table must be dropped (removed). Using SQL Management Studio apply the changes below to your users. Initialize the table and it will then be created as "dbo".

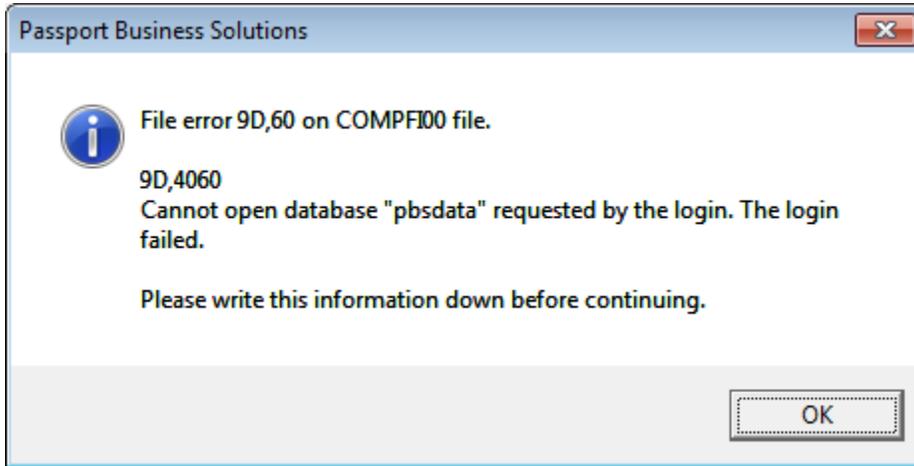


If you are unable to update the user, delete the user and add the user using the correct Schema.

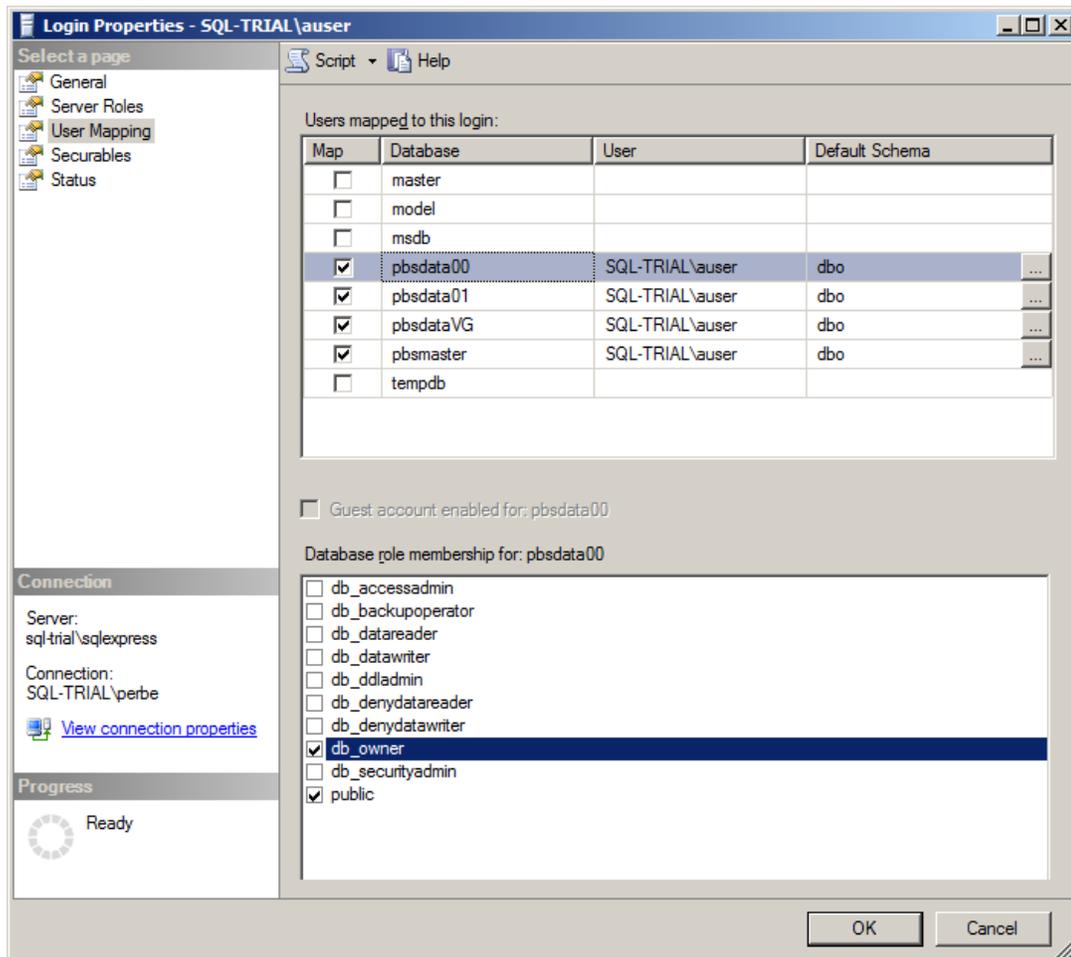
Issue 2. Under Security *Logins*, select the user. Select the *Server Roles* page verify that the user is set up to as sysadmin.

E. File error 9D,60 - Cannot open database “pbsdata” requested by the login

There are 2 issues that could cause this error.

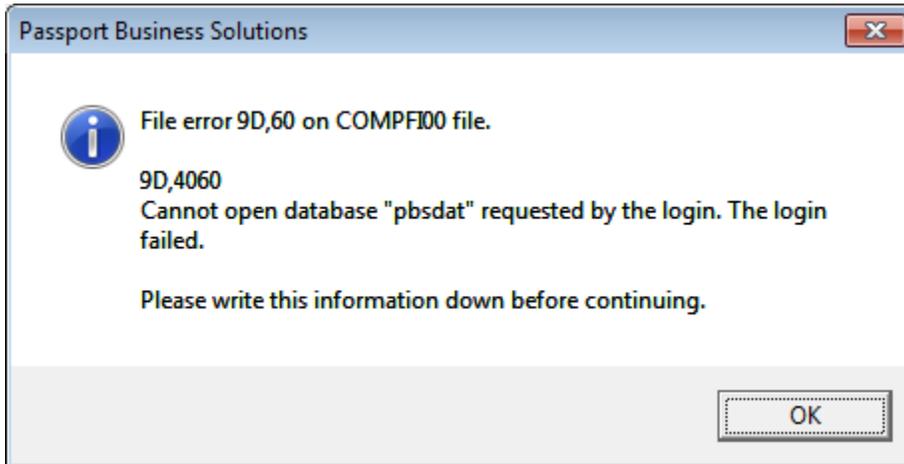


Issue #1 The user has not been mapped to the database with default schema ‘dbo’ and role membership of ‘db_owner’

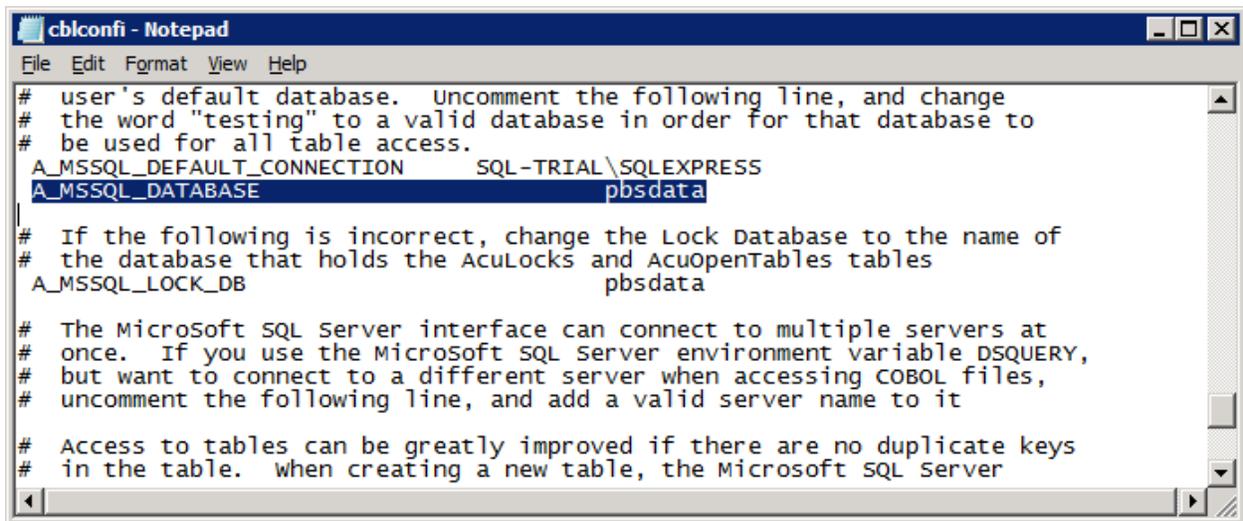


Issue #2

The name of the database is defined incorrectly in the **cblconfi** file. In this example we have purposefully misspelled the database name to force the error:



The data base is misnamed above. The correct name for this example is “pbsdata”. So we will correct the file to look like this:



```
File Edit Format View Help
# user's default database. Uncomment the following line, and change
# the word "testing" to a valid database in order for that database to
# be used for all table access.
A_MSSQL_DEFAULT_CONNECTION SQL-TRIAL\SQLEXPRESS
A_MSSQL_DATABASE pbsdata
# If the following is incorrect, change the Lock Database to the name of
# the database that holds the AcuLocks and AcuOpenTables tables
A_MSSQL_LOCK_DB pbsdata
# The Microsoft SQL Server interface can connect to multiple servers at
# once. If you use the Microsoft SQL Server environment variable DSQUERY,
# but want to connect to a different server when accessing COBOL files,
# uncomment the following line, and add a valid server name to it
# Access to tables can be greatly improved if there are no duplicate keys
# in the table. When creating a new table, the Microsoft SQL Server
```

Be sure to check the name in **all** the cblconfi configuration files and rename where needed.

F. Error 9D, 22007

The program is attempting to write non-numeric data to a numeric field.

This could happen in several situations:

1. You are importing data.

2. You are upgrading data from a previous non-SQL system and some of the old data has corrupted non-numeric data being written to a numeric field.

The solution is to locate the bad non-numeric data and fix it.

G. Could not Find PBS Database Master

This could mean that the Firewall is blocking the port. Turn off the Firewall. Launch PBS and if you can now connect, you know the port was blocked.

Refer to the section [Creating an Inbound Firewall Rule](#).

H. Error 9D,00 on SYSINI00

1. This could be the firewall or user permissions. Verify the setup for both.
2. The SQL Server Browser may have been turned off. That is normally enabled following an install of SQL Server. If this is the case you must turn it back on.

For the SQL Standard Edition open the *SQL Server Configuration Manager* and select *SQL Server Services*. If it is off, turn it back on.

When using SQL Express the SQL Server Browser has to be accessed via *Services* from *Administrative Tools*. The status should be Started, if not turn it on. It should be set to start automatically.

XII. Appendix B – Initializing PBS Tables

There are 2 methods available for initializing PBS tables.

A. Initialize Individual Tables

It is not required after the install or before running EZ Convert, but it may become necessary at some time to initialize a PBS table. An SQL table should never be added via the SQL Server Management Studio.

Use the appropriate initialization utility to create a table when needed. For information on running these utilities, see the *Initializing Data* chapter in the PBS Administration documentation

B. Initialize Multiple Tables

There is a utility that allows initializing multiple tables. To run this utility selected select INITPB.BAT.

It can initialize tables for individual modules, multiple modules, for one company or all companies.

CAUTION: This utility will remove ALL of your existing data. So be certain that you want to run it. If you are uncertain, backup your PBS databases and top-level PBS before you run it.

The screen looks similar to this:

```
PBS          Initialize files
Passport Business Solutions (tm)

Company to process  | 

SY                Mfg C/O
A/R               Mfg C/P
I/C               Mfg I/M
O/E               Mfg J/C
A/P               Mfg M/S
P/R               Mfg P/D
G/L               Mfg P/P
J/C               Mfg S/F
P/O
C/R
S/A
T/B
POS

<F5> = "All"
```

XIII. Appendix C - Troubleshooting

Debug Log File

Running PBS in debug mode to generate a log file may help you identify a problem. You may create a log by running PBS in debug. Review the log after running PBS to where the problem occurs. If looking at the log does not help you, it may help Passport support to identify the problem. To run in debug and generate a log, see the *Running in Debug* section of the PBS Administration appendix *Error Messages*.

Connection Checks

Here are some things to check if you cannot connect:

Is the user setup to be part of the domain?

If no, set it up.

Did the user log in on the workstation using the domain?

If not, log in to the workstation using the proper domain.

If you are not using a Domain, the users and passwords on the workstation and server must match. Each user has to have administrator rights on both the server and workstation.

If the PBS application is installed on one server and the databases on a separate SQL server, the permissions must be the same for both servers. The workgroup or domain must be the same on both.

You moved the PBS databases to a new server and PBS is not running correctly. When you move a PBS database(s) to a new server you must:

- Re-install the `ms_inst.sql` stored procedure on the new server.
- Set up the SQL named pipes, users and permissions as they were on the old server.
- Modify SQL settings in the `cblconfi.*` files as needed.
- The server name (`svr_nam`) is stored in each row in the `MLTCMP` table found in the `pbsmaster` database. Modify as needed.

XIV. Appendix D - What's New in PBS 12.03

Compared to PBS 12.02, here is a list by module of what is new in PBS 12.03:

1. System

a) *SQL Conversion*

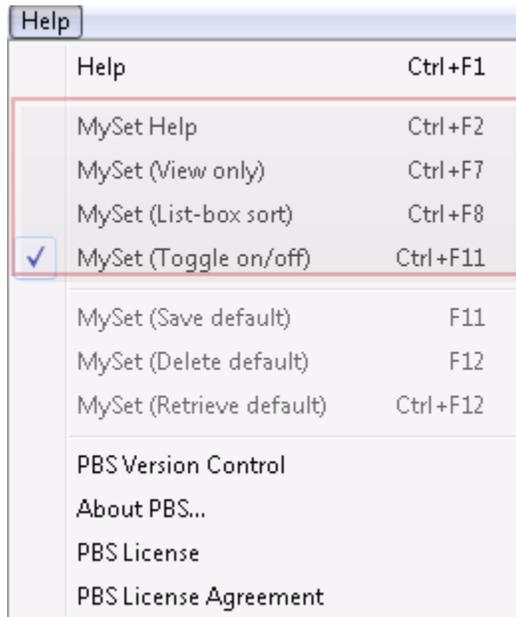
When upgrading from 12.02.03 to 12.03 a new upgrade database in place conversion is now provided.

b) *MySet™*

MySet is a new system-wide tool that provides the following features:

- Each PBS user may set their default sorting option for any list box used in graphical mode and the graphical lookups accessible in character mode.
- A PBS Administrative user may designate any graphical mode screen as view-only, by company, for any General user.
- Each PBS user may create default field settings for any graphical mode report by company.

The MySet selections are accessible from the Help menu on any graphical mode screen or graphical lookup in character mode. Here is an example of a Help menu with a box around the first four MySet functions:



This is a brief description of each and when needed, a link for more detailed information:

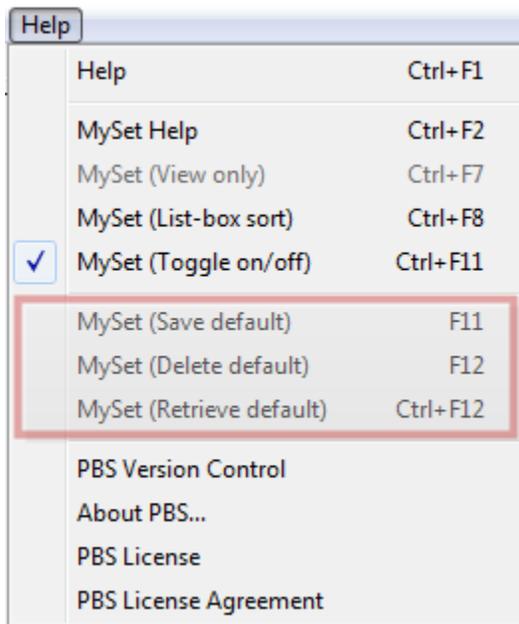
Menu	Keyboard Access	Description
MySet Help	Ctrl+F2	This accesses the MySet help in the PBS System documentation which also provides more details on MySet functions.

Menu	Keyboard Access	Description
MySet (View only)	Ctrl+F7	This allows a PBS administrative user to set up a view only screen for any general user. This selection is grayed-out and inaccessible for all general users. View only screens can only be accessed in graphical mode.
MySet (List-box sort)	Ctrl+F8	This allows both administrative and general users to select a custom sort column for the list box on the screen.
MySet (Toggle on/off)	Ctrl+F11	This turns MySet on or off globally for the user you are logged in as. You must turn MySet on before you can set up a default sort and to set up a general user with a read-only screen.

MySet Field Defaults

For any user, default values for fields may be assigned to any *report* screens that can be run in graphical mode. Set the values for fields and the next time you access the screen, the default values display.

There are three selections on the Help menu that you may use for this function, as seen in the red box below:



On screens, other than reports, these selections will be grayed out and inaccessible. Here is a description of each function:

Menu	Keyboard Access	Description
MySet (Save default)	F11	This sets the current selected field to the default value that is entered in that field. The field will flash yellow to indicate that the value is being saved.

MySet (Delete default)	F12	This removes any default value for the currently selected field. The field will flash red to indicate that the value is being removed.
MySet (Retrieve default)	Ctrl+F12	This allows you to retrieve a value for a selected field. This is useful in case you changed the value to something other than the MySet default and you want the MySet default back.

c) Windows 8, Windows Server 2012 and SQL 2012 Now Supported

An updated runtime is part of the PBS 12.03 install that provides support for Windows 8, Windows Server 2012 and Microsoft SQL Server 2012.

d) Expanded Print Reports from Disk Number

To allow for more reports printed to disk, the Print Reports from disk number has been expanded from 4 digits to 7 digits. This affects any posting or regular reports generated on the system.

Pre-existing report numbers are not affected. If they were 4 digits they will remain that way. Following the install the next report number is 100001. All numbers between the current next number and 100000 are skipped.

e) Banks

When modifying a bank routing number a new warning message is displayed. If the change is accepted, the vendor and employee bank accounts are updated.

f) User List and Users Menu List

This feature is available in graphical mode only.

There are two new reports available from the Setup > User maintenance. From the *Options* menu you may select either of the following:

- User List
This report provides a list of users that can access the system. It includes the address, type of user, the menus assigned to the user and more
- Users Menu List
This report shows every user that is assigned to a menu from *Menu maintenance*. There is an option to print the menu details.

2. Accounts Payable

a) Check Reconciliation Interface

When interfaced to Check Reconciliation you have the option to automatically post payments to the C/R Checkbook. See the C/R *Control information* setting of [Post PBS Accounts Payable checks automatically](#).

b) Year end 2013

There are two new fields available for reporting 1099 forms and magnetic media. These include *Foreign tax paid* and *Foreign country or U.S. possession*.

The *Foreign country or U.S. possession* entry field is forty characters. However it will print only twelve characters on the 1099 form. The *Foreign country or U.S. possession* field does not get written to the 1099 magnetic media file.

You may enter these fields using A/P -> Year-end -> 1099-MISC reporting info.

3. Accounts Receivable

a) Check Reconciliation Interface

When interfaced to Check Reconciliation you have the option to automatically post deposits to the C/R Checkbook. See the C/R Control information setting of Post PBS Accounts Receivable deposits automatically.

b) New Invoice History Purge Option

A new Purge orphan secondary records field is available.

This field cannot be entered unless the Purge this history field is checked.

The primary record is the invoice history header. Secondary records are the invoice history lines, auxiliary and serial numbers. Secondary records cannot be accessed when printing this report when the primary record is missing.

Check this field if you suspect that you have orphan secondary records. Under normal operation this will not happen. A good time to select this option is after you have upgraded from an older version, or if you have had to recover invoice history data.

Secondary records print on the report when they are purged.

c) Graphical Screens

Graphical mode screens have been added to the following Accounts Receivable menu selections:

Deposits > Prepare deposits

Deposits > Deposit slips

Deposits > Deposit summary

4. Check Reconciliation

a) Checkbook Transfers

A transfer type has been added to *Checkbook entries*. It transfers funds between accounts and updates General Ledger accounts appropriately.

b) Automatic Transfer from Accounts Payable, Accounts Receivable and Payroll

You now have the option to automatically get deposits, checks and ACH payments to the Check Reconciliation Checkbook when posting in the Accounts Receivable, Accounts Payable, and Payroll modules. When selected, they bypass the *Transfer checks/deposits* function.

New options have been added to the *C/R Control information* to allow these functions:

Post PBS Accounts Payable checks automatically

When this field is selected, Accounts Payable checks, direct deposit payments and voids are posted automatically to Check Reconciliation. The following functions are affected:

Main menu	Sub menu	Function	Comment
Payables	Post	Immediate checks (void)	When voiding an immediate check, the voided check is transferred to C/R. A separate transfer register is printed.
Payables	Post	Immediate checks	When posting an immediate check, the check is transferred to C/R. A note is added on the register.
Payables	Post	Non A/P checks	A note is added on the register and it is transferred. Non A/P checks do not get transferred during check printing or when running the <i>Non-A/P/Manual Check Register</i> .
Open items	Post	Manual payments	Manual payments are transferred to C/R. A note is added on the register.
Print checks and post	Checks and ACH payments		Checks and ACH payments are transferred to C/R. A note is added to the check register legend. Non-A/P checks are transferred when posting payables.
Print checks and post	Voids (all or a range of checks.)		Checks and ACH transaction numbers that are voided when skipping numbers by entering the next number manually, are transferred to C/R. Checks that are voided after printing and before posting are also transferred to C/R. A note is added to the check register legend in all cases.
Void checks	Post		Voided checks are transferred to C/R. A note is added to the register.

Post PBS Payroll checks automatically

When this field is selected you may post PBS Payroll checks and void checks automatically.

When this field is selected the following menu selections are posted automatically:

Main menu	Sub menu	Function	Comment
Checks		Checks	Individual checks are posted to C/R
Checks		ACH direct deposit	Individual ACH payments are posted to C/R.

Checks		Void	Checks and direct deposit pay voided through this function is posted automatically to C/R. A note is written to the register.
Void checks	Post		Entries generated through <i>Select individual checks</i> and <i>Select a range of checks</i> are posted. Transfers are indicated on the posting register.

Post PBS Accounts Receivable deposits automatically

When this field is selected you may post PBS Accounts Receivable deposits and returned checks automatically.

When this field is selected the following Accounts Receivable menu selections are posted automatically:

Main menu	Sub menu	Function	Comment
Deposits	Deposit slips		The accumulated deposit is posted as one amount. A posting register is printed. The <i>Show deposit details</i> field (below) determines what is printed on the register.
Returned checks	Post		Individual payments may be returned.

Show deposit details

You may check the box if you want to print the deposit details when the *Checkbook Transfer Register* prints. If you prefer just the total of the register, leave the box unchecked.

c) Graphical Screens

Graphical mode screens have been added to the following Check Reconciliation menu selections:

- Transfer checks/deposits
- View checking information
- Reports > Account activity
- Reports > Checkbook
- Reports > Checkbook list
- Reports > Distributions to G/L
- Reports > Reconciliation

d) New Start-up Mode Option

Start-up mode is used when you are adding Check Reconciliation to your PBS system or a new checking account to C/R. If you have pre-existing Accounts Payable checks, Payroll checks or Accounts Receivable deposits, the first time you run *Transfer checks/deposits*, it may pull in hundreds or even thousands of 'historical' records into the checkbook. All these records must be cleared manually before you can move out of start-up mode.

Now there is a new *Transfer checks/deposits* option to avoid pulling in the historical checks and deposits and mark them as transferred in the A/P, A/R or PR module. As a result, the implementation of Check Reconciliation is then much faster.

5. General Ledger

a) Adjusting Fiscal Years

This is a new utility that allows you to adjust your non-calendar fiscal year to a calendar fiscal year. As part of the process it backs up your older G/L data to another company.

b) Graphical Screen

The *Make SAF layouts* selection, found under *Financial statement layouts*, is now available in graphical mode.

6. Order Entry

a) Immediate Invoice Printing in Select for Billing

Immediate printing has been available through Order Entry *Orders (Enter)* for many years. With PBS 12.03 you can now immediately print the invoice after selecting an order for billing. After you finish entering the totals screen, a message displays asking if you want to “Print invoice?”. Select *Yes* to print the invoice or *No* to not print. In character mode enter *I* to print or use the (Enter) key to not print.

The *Default invoice form ID* field in Order Entry *Control information* which sets the *Orders (Enter)* immediate printing form, also sets the immediate printing form for *Select for billing*.

b) Limit Users from Deleting Orders

To provide additional security, there is now an option to limit certain users from deleting orders in *Orders (Enter)* and *Billing (Select for billing)*. There are two new fields in Order Entry *Control information* that implement this feature:

Require Admin login to delete orders

When checked, only an Administrative user may delete an order. A General user may not delete an order. This field may be used with the next field, *Admin ID*, which creates an additional restriction.

In the *Control Information* chapter of the Order Entry user documentation there is additional information about the restrictions.

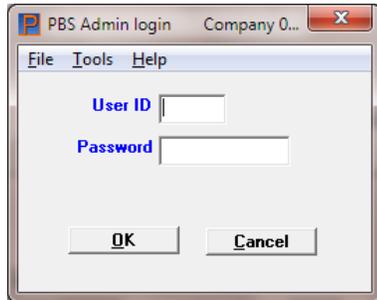
Admin ID

If you checked the *Require Admin login to delete orders* field, you have the option to enter a *User ID* in this field. You may only enter an Administrative user ID.

If you leave this field blank any Administrative user can delete orders. No General users may delete orders.

When you enter an Administrator user ID in this field:

- When selecting to delete an order in Orders (Enter) and Billing (Select for billing), you will be prompted to enter the matching *User ID* and password for that user in order to complete the deletion. This is the window:



- Only the person logged in with that *User ID* may edit this field. For example, if the entry in this field is PSI, the only user that can edit this field is the one that logs in with the PSI User ID.

c) Access the Accounts Receivable View Invoice History from Order Entry View Invoice Screens

On the graphical mode screens for the *View* menu selections *Invoice history by customer*, *Invoice history by invoice* and *Invoice history by item*, a new menu selection is provided to access Accounts Receivable *View Invoice history*. When accessed it will locate and display the matching invoice.

d) Print Extended Weight on Forms

When designing a form there is now an option to include the extended weight. The extended weight is the weight for one item times the number of items shipping.

e) Ship in Full

In a shipping and receiving environment you may have a full quantity available for an item but the receiving has not been entered in Inventory Control or Purchase Order. The lines on an order indicate the item is backordered.

In order to save time, a new "F7" = Ship in Full" function key option has been added to the *Select for Billing* line item selection window. Hitting F7 selects the line even when the item is backordered. When the item is backordered the backorder quantity is changed to zero and the quantity to ship is changed to match the order quantity. You do not have to go through the entire *Edit, click on the field, enter the quantity, Save* cycle when you know that the full quantity is actually available.

If you decide to use this feature, keep in mind that when the items are eventually received in inventory, the costs could be different than what is used when you post the invoice. This could result in less profit on the invoice line. If the full quantity is not available for a serialized or lot control item it cannot be selected in full.

7. Payroll

a) *Direct Interface to Check Reconciliation*

When interfaced to Check Reconciliation you have the option to automatically post payments to the C/R Checkbook. For the Check Reconciliation *Control information* setting see [Post PBS Payroll checks automatically](#).

b) *Windows Printer Checks and Direct Deposit Mailer Formats*

A new, more modern looking check and direct deposit mailer format is provided for PBS 12.03. It prints the check at the bottom of the page and the remaining upper third of the page is the stub. The stub format provides additional space for printing more deduction information in a clearer, easier to read manner. This new format requires using *Windows printer* only. This new form type is available from [Trainer Printing and Promotions](#) at 847-296-2900.

You must use a *Company information* laser printer or dot matrix printer for the other older check and mailer form types.

c) *IDES State of Illinois Reporting*

A new report is provided to comply with the Illinois Department of Employment Security. This is a modified version of the Payroll Employee history report.

d) *Positive Pay*

To make positive pay more flexible and to comply with requirements for more banks, we now allow the employee name to be formatted in different configurations for the positive pay file.

e) *Employee Insurance Premium Field Expanded*

To comply with larger insurance premiums, the *Employees W-2 ins premium* field was expanded from a maximum of \$9,999 to \$999,999. This same expanded field is used for year-end reporting.

f) *Year end 2013*

There are two new fields available for reporting 1099 forms and magnetic media. These include *Foreign tax paid* and *Foreign country or U.S. possession*.

The *Foreign country or U.S. possession* entry field is forty characters. However it will print only twelve characters on the 1099 form. The *Foreign country or U.S. possession* field does not get written to the 1099 magnetic media file.

You may enter these fields using PR -> Year-end -> Enter 1099 information.

8. Point of Sale

a) *Sales Rep Number on Transaction Lookup*

We have added the sales rep # as the column heading to the transactions lookup.

9. **PBS Manufacturing: Inventory Management**

a) Physical Inventory Freeze

We have added the physical inventory function of "freezing" the inventory when it's time to take a physical inventory. This will allow you more time to reconcile your inventory while not holding up daily transactions.

b) Costed Inventory Status

We have added an option to the *Costed inventory status* report to net negative values against the positive values to show a more accurate number when comparing to the General Ledger at month's end.

c) Shop Order Traveler

This is an enhanced version of the Shop Order Pick List which is a list of items required to manufacture the product being made on a shop order. The information provided on the Pick List includes basic Shop Order information, a list of components and the total quantities required, as well as shop order comments. This report is also available in Shop Floor Control (S/F).

d) Post Stockroom Counts

There is often a delay between the time that inventory is counted and when the results are posted. The *Post stockroom counts* allows posting in the correct period.

A question was added to the entry screen "4. Use today's date or count date for transactions?" with the entry of either C= Count or T = Today's date.

XV. Appendix E – Document Changes

- 03/11/15 Changes were made to the setup of protocols.
- 05/06/15 Entered additional restrictions on page 48 about the PBS database name.
- 05/14/15 Add more information to the [Prerequisites, Installing and Configuring SQL Server](#) section

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