

Installing Stocker WMS

Introduction

This document explains how to install the Stocker Warehouse Management System when using the Stocker WMS installer which incorporates the option to install Microsoft's SQL Server 2005 Express edition.

If you already have Stocker WMS you must ensure all users are logged out of Stocker before using the installer/setup program. This includes all SQL Server Management Studio connections to any of Stocker's databases.

Note SQL Server must be installed under an administrator account. That is, the user installing SQL Server must be logged into the computer as an administrator. This installer also asks to install the SQL Server service to run under an administrator account – and suggests the account of the user running this setup. The reason for this is there have been some problems on Windows 7 systems where the service has not been able to create the physical files to hold the database, due to the service not having sufficient privileges under the default network account.

SQL Express Operating System & Hardware Requirements

This installer has the option to install the following components of SQL Server 2005 Express.

- SQL Server database engine

The following table provides an overview of the operating system and hardware requirements for SQL Server 2005 Express. Note this information is provided for information only in case of the unlikely event Stocker fails to install. The specification of modern computers far exceeds these requirements.

Operating System	Windows 2000 Service Pack 4, Windows 7, Windows Server 2003, Windows Server 2005, Windows Server 2005 R2, Windows Vista, XP
Processor	Computer with Intel or compatible Pentium III 500 MHz or faster processor (1 GHz or faster is recommended.)
RAM	Minimum of 192 MB of RAM (512 MB or more is recommended.)
Hard Disk Space	600 MB of available hard disk space for a full install. Considerably less as the Stocker setup only installs a database engine – no management tools

Table 1 – Requirements

Software Prerequisites

There are some software prerequisites for SQL Server Express. This is software which must be installed on the computer before you can successfully install SQL

Server Express. You need to install these components manually **before** you can successfully run this installation program.

For Windows 7 computers and later it is unlikely any of the software listed here will not already be installed. Older XP computers may have some components missing. The information is provided for completeness.

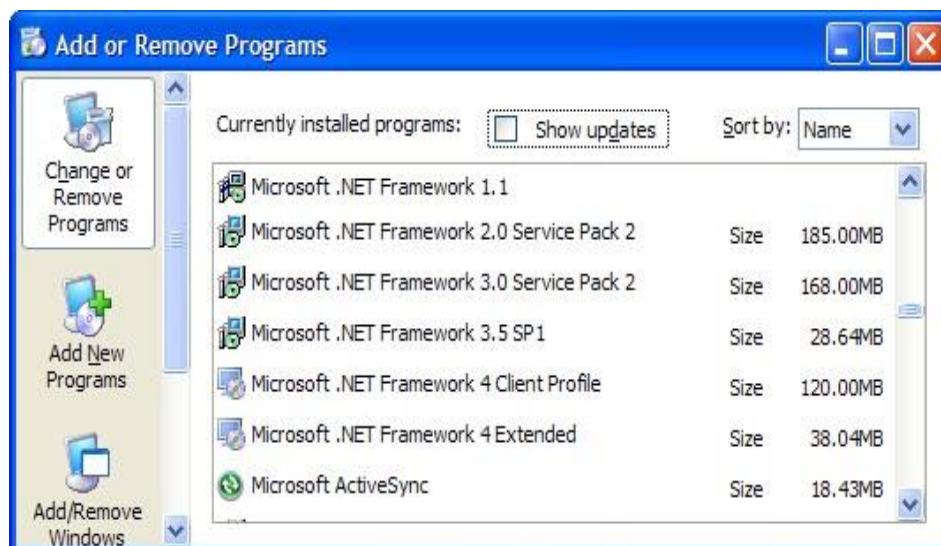
The prerequisites are listed in table 2.

Edition	Prerequisites	Web Link
SQL Server Express with Management Tools (SSMS)	Microsoft .NET Framework 2.0 or later	Get form Web

Table 2 – Prerequisites

.NET Framework 2 – This is the minimum version of the .Net Framework which must be present in the vast majority of cases will already be installed. To see if you have the .Net Framework go to Control Panel->Add Remove Programs and see if it is listed.

Please note the Stocker WMS installer does not check for the existence of this software. You must do this yourself manually as outlined below.



Installing SQL Server 2005 and Stocker WMS

This installation program has been designed for simplicity and flexibility. The installer provides default values for all but one entry. The only entry you must provide is the password for the currently logged in user on screen 5. All other entries can be left as provided. The installer can be used to:

- Install SQL Server 2005 Express and Stocker WMS
- Install Stocker WMS only
- Install/restore new (virgin) databases.
- Restore your own backups of Stocker databases.

Before running this installer you must:

- Run this installer on the computer you want to install SQL Server Express
- Log into that computer using an administrator account.

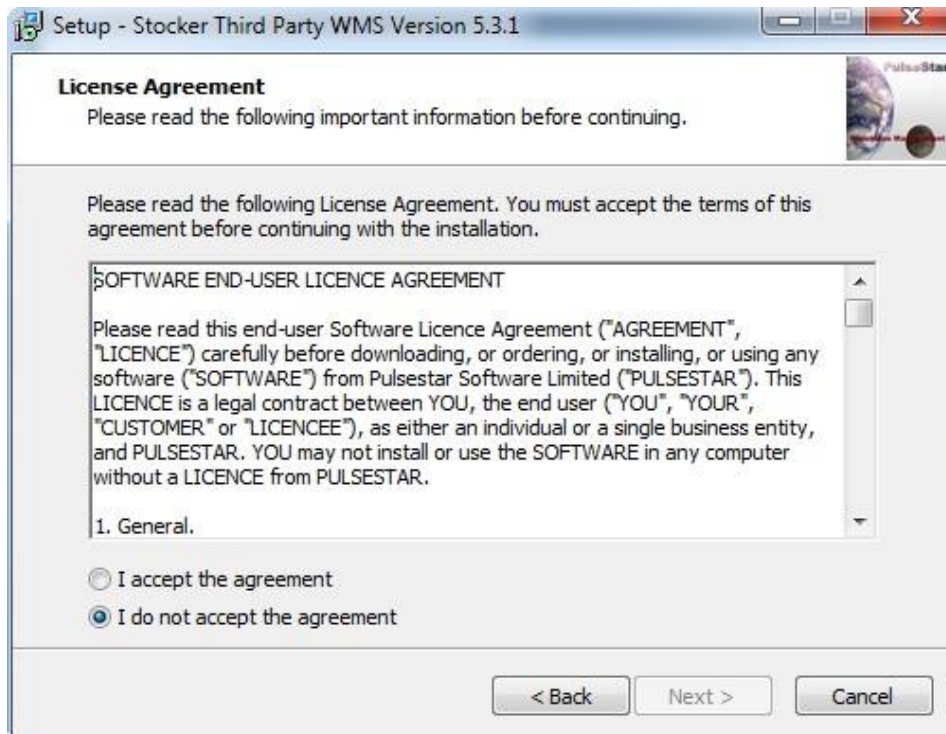
Running The Installer

Launch the setup program. There may be a small delay after you launch the program and before the initial screen is displayed. This is not a problem. The delay is because the first thing the installer does is extract the compressed SQL Server Express package from the installer and into a temporary folder. Once the SQL Server Express package is extracted the first screen is displayed.



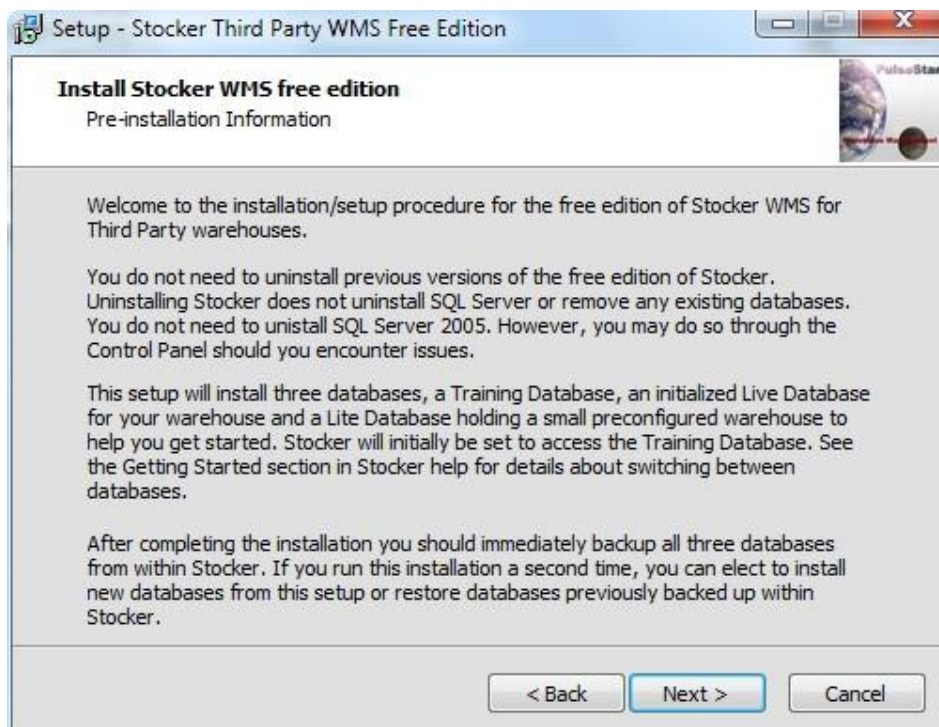
Page 1 – Opening Introduction Window

Press the next button and the Stocker WMS licence window is displayed.



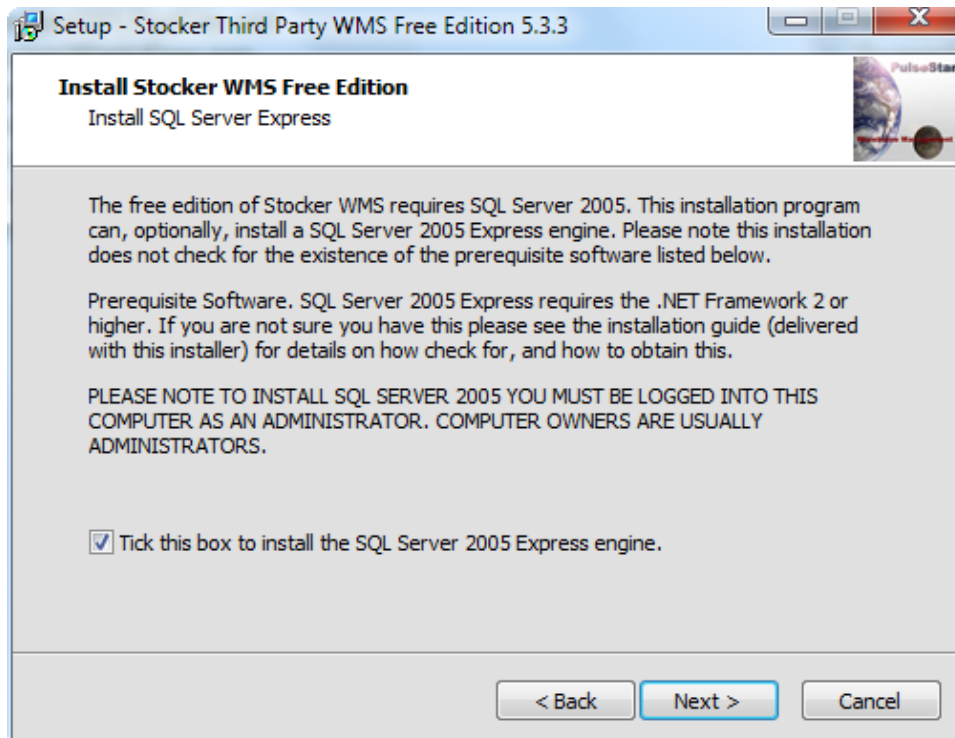
Page 2 – Stocker WMS Licence

To continue you must accept the licence terms and press the next button.



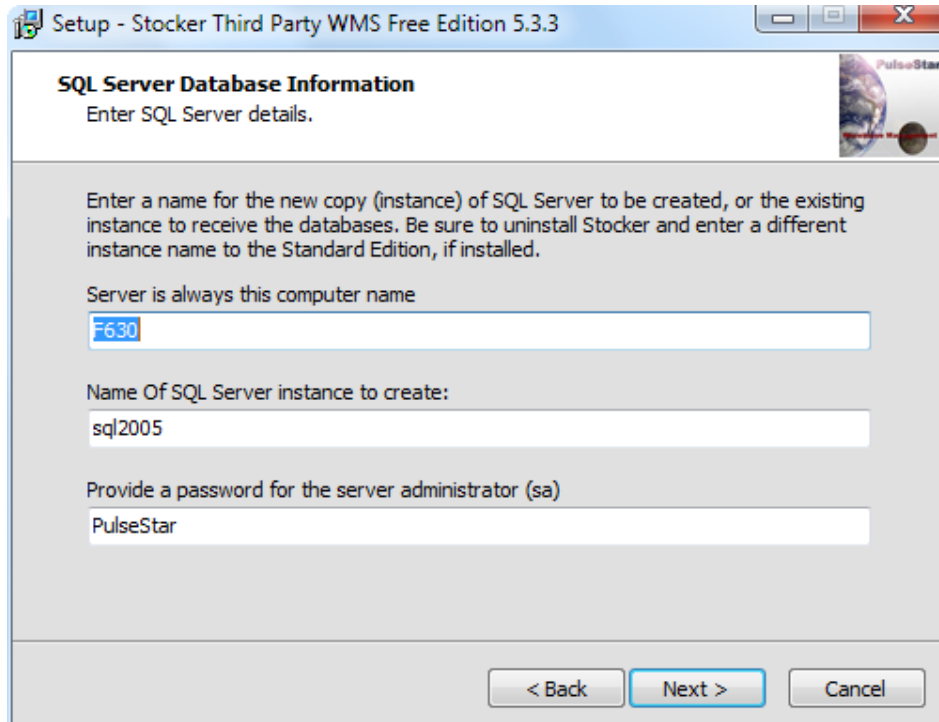
Page 3 – Pre-install Information

Installing SQL Server



Page 4 – Option To Install SQL Server 2005 Database Engine

If you already have SQL Server 2005 you do not need to install the database engine. The following screen will ask you to provide the Server and Instance details of SQL Server you wish to create or use.



Page 5 – Define SQL Server Instance

When you install SQL Server, you install an instance or 'copy' of SQL Server. This is much the same as running two copies or instances of the same Windows program such as Internet Explorer.

Each instance of SQL Server can hold its own set of databases. This does not mean you have to install two instances of SQL Server if you wish to install both the Stocker Owner and Third Party systems. Only one instance/copy of SQL Server Express need be installed and the databases for both systems can be held in the same instance. Note although you can install both versions of Stocker using the same instance, the setup procedures only allow for only the Owner or Third Party to be accessed at any one time.

Remember the instance name you provide here. This server and instance name will have to be provided when installing Stocker on other computers. This computer (a server after this install) and instance name is used to provide access across computers. They tell other computers where the database is stored.

Just as you can define one or more users having access to a computer, in SQL Server you can also define one or more users having access to SQL Server. These users exist within SQL Server.

One user automatically created in SQL Server, during this install, is the administrator. It has a user name sa. You must provide a password for this administrator and that password must be at least 8 characters long. Let's look at completing the entries on this screen.

Server

The server is always the name of the computer on which you are installing SQL Server Express. You cannot change the name of the server entered by the installer. This entry is included for possible future use. Currently you must run this installer on the computer to hold SQL Server Express.

Instance

The installer provides the instance name of PulseStar. SQL Server Express uses the default name SQL Express which you might prefer. You cannot use an instance name which already exist.

Password

This is a password for the automatically created administrator account in SQL Server – the user sa. The installer suggests the password PulseStar. It is recommended you choose your own memorable password which must be at least 8 characters long.

After you have completed the entries press the next button. The following screen is only displayed if you have chosen to install SQL Server Express.

Using An Existing Instance Of SQL Server

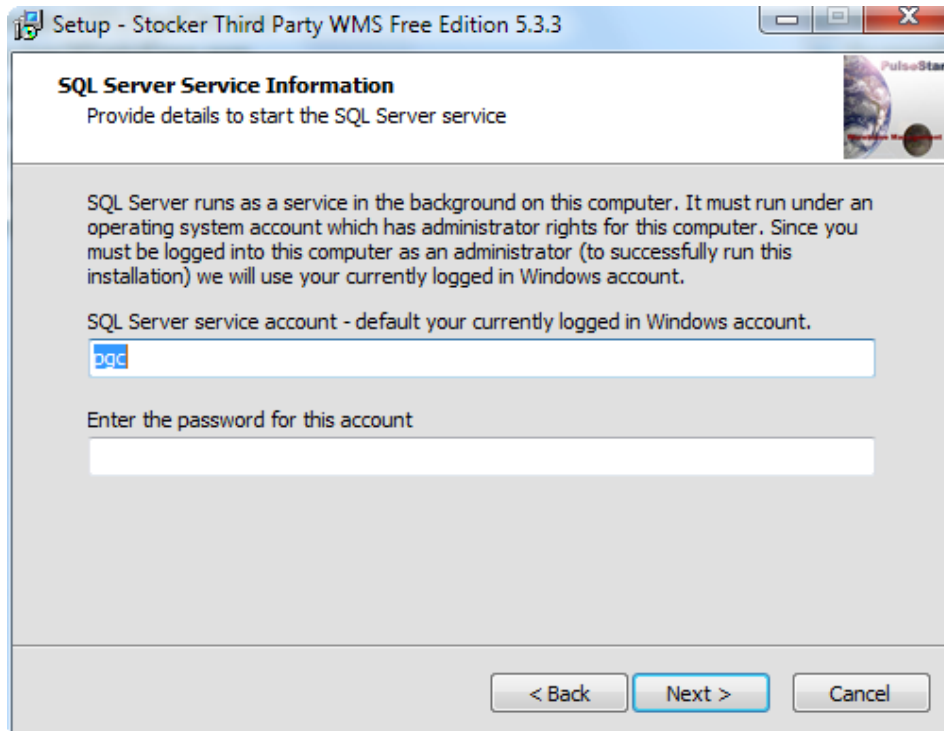
If you have elected not to install the SQL Server database engine enter the server and instance name of your existing SQL Server installation which is to receive Stocker's database and to which Stocker is to connect.

The SQL Server Service

After SQL Server is installed, SQL Server – that part which accesses your data (the database engine) – runs as a service. A service is a program just like any other except it runs in the background on the computer. The service must:

- Start automatically when the computer starts.
- Have sufficient rights/privileges to create the physical files to hold the

databases



Page 6 – Define SQL Server Service

When a computer user runs a program, the program is given all the rights and privileges of that user. These rights and privileges are defined against your Windows XP/7/8 account. We want the SQL Server service to have all the rights of a Windows XP/7/8 administrator so we can be sure it has sufficient rights and privileges to, for example, create the physical files to hold the databases. One of the primary reasons the installer can fail is because the SQL Server service has insufficient privileges to perform all necessary tasks.

This screen defines the XP/Windows 7 etc. operating system user account to be assigned to the SQL Server service when it starts. Since you must be logged into the computer as an administrator to install SQL Server Express, the installation program chooses the currently logged in user. You must now enter the password for the currently logged in user.

If you are not logged in as an administrator log out and log back in as an administrator before continuing.

If you enter an incorrect password the SQL Server service will later fail to start and this installer will fail to create and install Stoker's training database. You will have to perform the following procedure and then re-run this installer deselecting the option to install SQL Server Express.

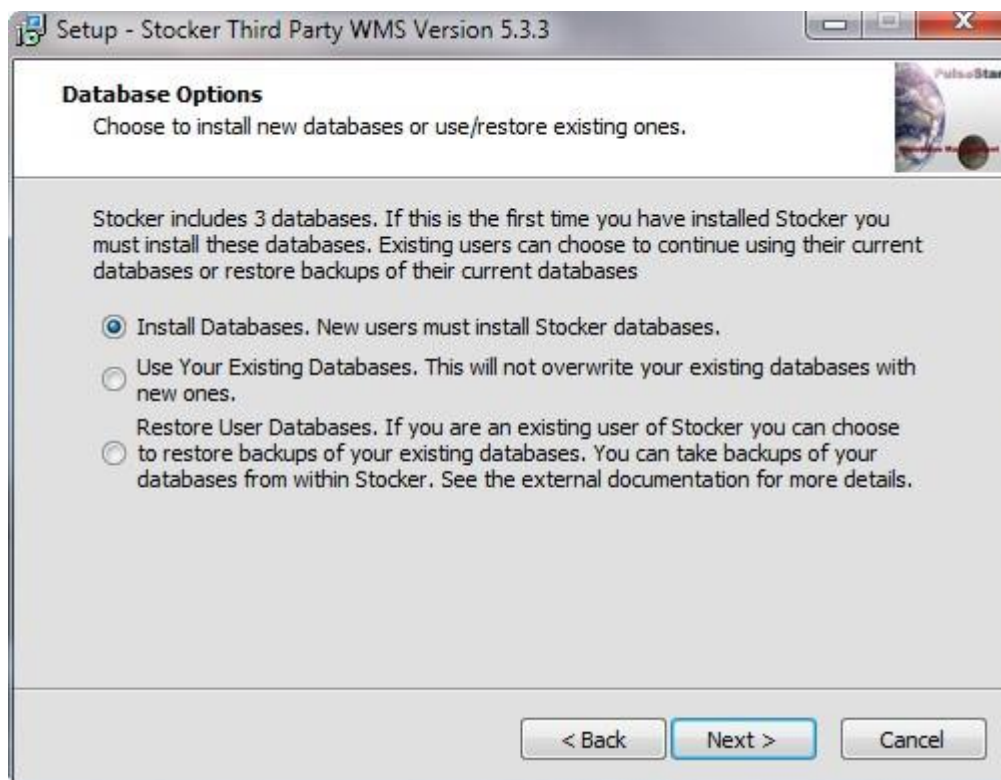
To correct an incorrectly configured SQL Server service:

- *Go to Control Panel->Administrative Tools->Services*
- *Select the SQL Server service (it will have the instance name you provided)*
- *Right click and select properties.*

- Select the Log On tab.
- View the *log on as account entry*
- Make sure the account is that of an administrator.
- Return to the General tab and start the service.

Installing Stocker's Databases or Restoring Your Own Backups

This completes all the information this installer requires to install SQL Server Express. If you have used the default values provided by the installer then all you need have entered was the password for the currently logged in (computer administrator) user.



Page 7 – Install or Restore Databases

Stocker installs three separate databases. Each database has a different purpose.

- **Training Database.** As the name implies this database is to be used for training. It has a fully configured warehouse plus customers, suppliers and products entered. It also has some orders for you to practice receiving and dispatching stock.
- **Lite Database.** This contains a small configured warehouse. It does not contain any customer, supplier or products. It also doesn't contain any orders. It can be used as a starting point for entering your operation into Stocker or again for training.
- **Live Database.** This is an empty database which is the official one you use to create and manage your warehouse operation.

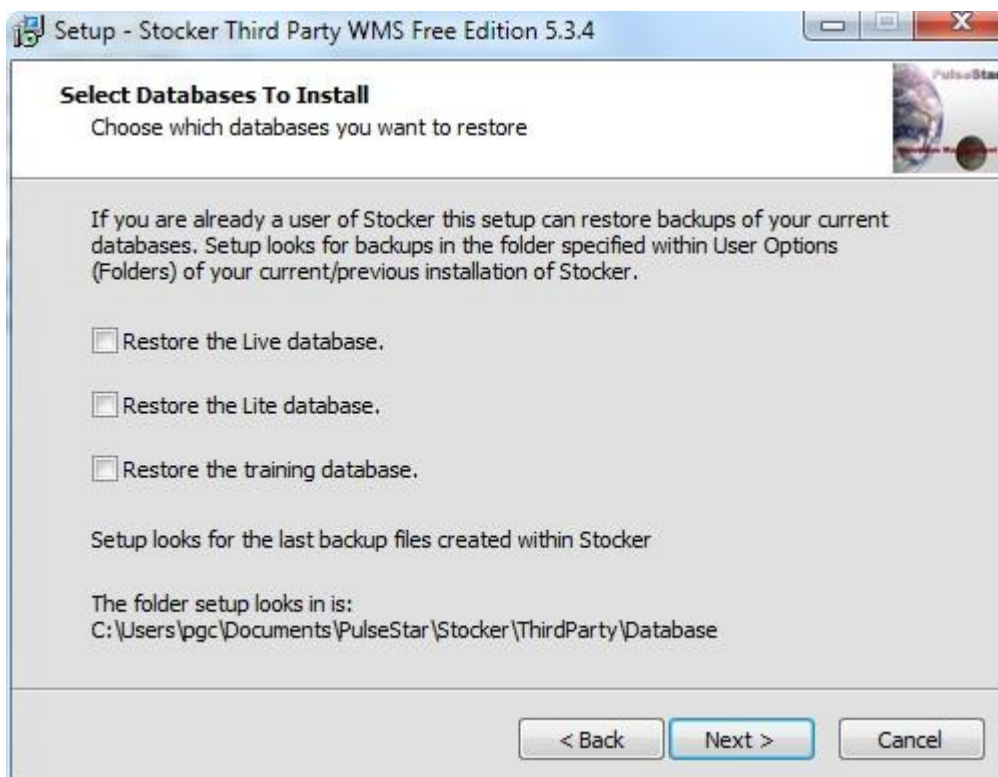
Each user can select which database to use and easily switch between databases from within Stocker. See the *Database Tab* on the *User Options* screen under *Configuration* on the main menu.

After installing Stocker the first task you must perform is backup all three databases so you can return to the initial installation configuration of each database should it be necessary. You can backup the databases within Stocker. See the option *Database Backup* under *Administrator* on the main menu.

New users must select option 1 on this screen to install all three of Stocker's databases. Existing users can choose option 1 to completely replace existing databases.

Option 2 allows existing users to install the Stocker applications but make no changes to existing databases. The new version of Stocker will continue to use the existing databases.

Option 3 allows existing users to selectively replace existing databases with backups of their own databases. When option 3 is selected the following screen is displayed.



Page 8 – Restore User Databases

Select the database you want to restore. All other databases will remain unchanged

Restoring Your Own Databases

Database backups can only be restored into a SQL Server version which is same version as that which created the backup, or into a SQL Server version greater than the one that created the backup.

Backups which were created by a version of SQL Server which is later than the one

targeted by the restore are not possible.

A backup taken by SQL Server 2005 can be restored into SQL Server 2008, 2012 and even 2014.

However, a backup taken by SQL Server 2008 cannot be restored into SQL Server 2005 but can be restored into SQL Server 2008 or later. This is a restriction of SQL Server.

The setup/installation programs look to restore the last backup of a database taken within Stocker. If you need to restore another database you will have to rename it to match that of the last backup created within Stocker.

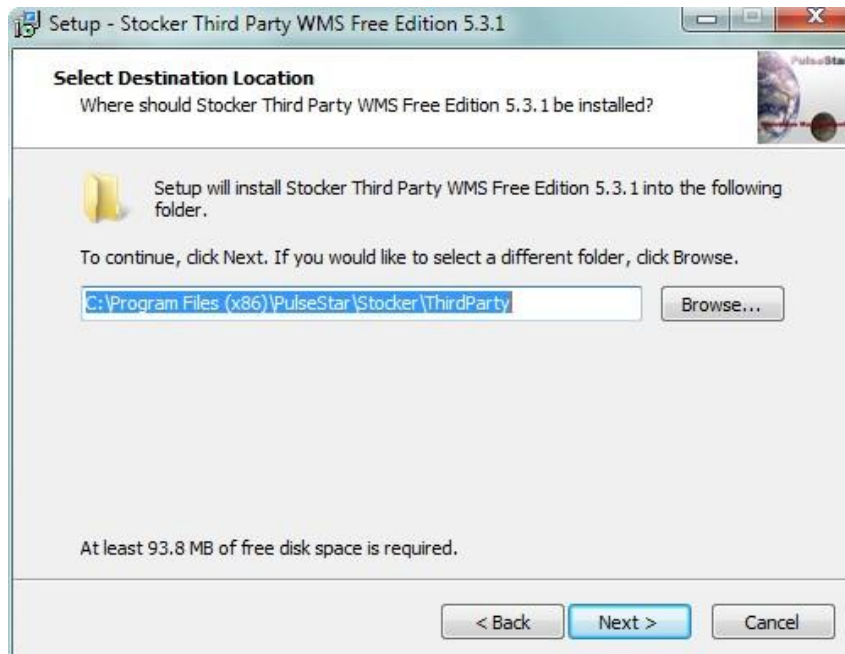
Note Stocker's databases must be installed and available (no other programs must be accessing them) before user databases can be installed.

For more information about restoring your own databases see the document *ExistingInstanceInstallGuide.pdf* which can be downloaded from the Document Library within the support section of the PulseStar website <http://www.pulsestar.co.uk>.

Completing The Installation

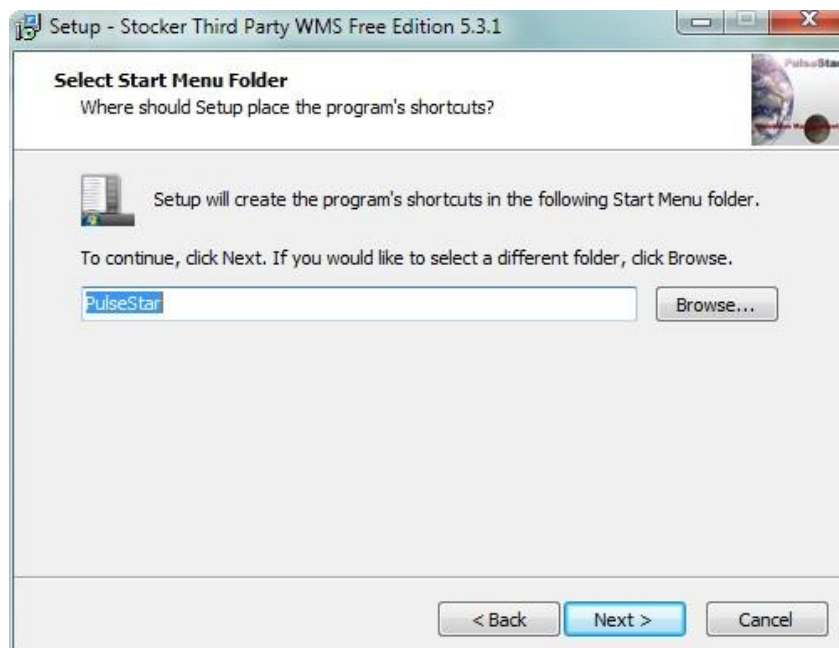
The remainder of the installation follows standard procedures for installing programs on Windows systems.

The next screen asks where you want to install Stocker.



Page 9 – Installation Folder

Stocker is a 32bit program. On 32bit operating systems stocker is installed under the Program Files folder. On 64bit operating systems stocker is installed under the Program Files (x86) folder. It is recommended to use the default location.



Page 10 – Start Menu Folder

Identifies where on the start menu stocker is to be listed.



Page 11 – Select Easy Access Options

Make your selections, press next, and the final *Ready to install* dialog is displayed.



Page 12– Ready To Install

After you press the *Install* button the installation starts and installs all components in the following sequence:

- First Stocker is installed and configured.
- The SQL Server package has already been extracted from the installer into the temporary folder on your computer. Now the SQL Server Express installer, itself, is decompressed.
- Next the SQL Server Express installer is called and SQL Server Express is

installed. During the installation SQL Server displays its progress. SQL Server 2005 is installed as a 32bit program. On 64bit Windows operating systems it is installed in the Program Files (x86) folder. SQL Server 2008 Express is installed as a 32bit program on 32bit Windows operating systems and a 64bit program on 64bit Windows operating systems. Stocker WMS is a 32bit program and on 64bit machines is configured to run under the under the Program Files (x86) folder.

- Finally the databases are installed/restored.

After the restoring the databases, the *Installation Complete* screen should be displayed asking you to press the *Finish* button to complete the installation and remove temporary files used by the installer..

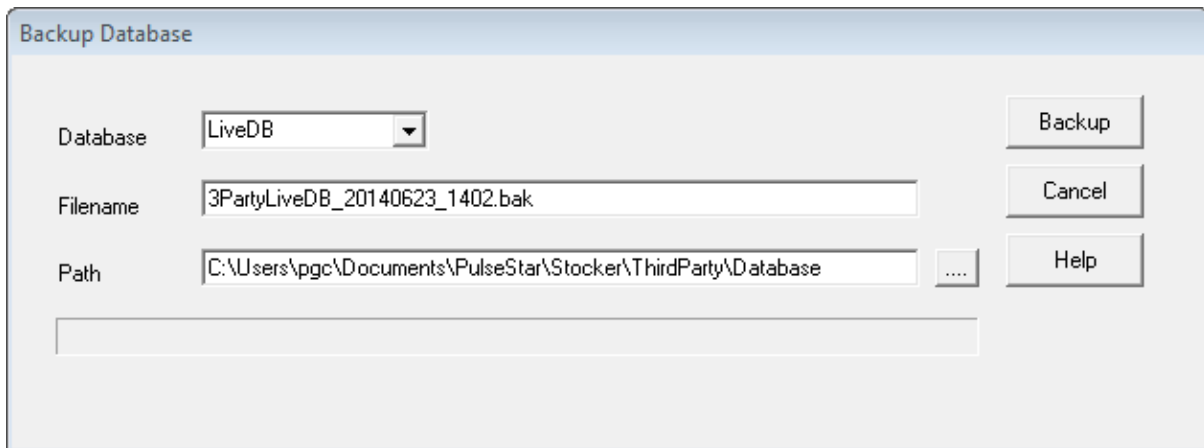
You should not need to restart the computer to start using Stocker. However, if you find you cannot access Stocker you have two options

- Restart the service manually. To do this:
 - *Go to Control Panel->Administrative Tools->Services*
 - Select the SQL Server service (it will have the instance name you provided)
 - Right click and select properties.
 - Select the Log On tab.
 - *View the log on as account entry*
 - Make sure the account is that of an administrator.
 - *Return to the General tab and start the service.*
- Restart the computer whereby the service is started automatically. If the service fails to start use the manual method outlined above

Appendix I - Backing Up Your Own Databases Within Stocker

You can back up your databases from within Stocker WMS. To back up your databases select:

- Administrator from Stocker's main menu
- Then select Backup Database



Page 13 – Backing Up A Database Within Stocker WMS

When creating a backup within Stocker you must specify:

- The database you want to back up
- The file name for the backup
- The folder to receive the back up

Database

Select the database to back up from the drop-down list box. This installer will attempt to restore all three of Stocker's databases. That is the Live database, the Lite database and the Training database. So you must back up all three databases.

Database Backup File Name

Stocker suggests a file name based on the current date and time but you can choose any file name of your own.

It is suggested you choose file names based on current date and time as part of your normal backup strategy. However, this setup program looks for three backup files with the following names:

- ThirdPartyLiveDB2005.bak
- ThirdPartyLiteDB2005.bak
- ThirdPartyTrainDB2005.bak

Therefore, you will most likely need to rename, or preferably copy, your database backups to match these file names.

Note the setup program can restore a backup of a lower version of SQL Server into an instance of a higher version of SQL Server. Therefore a backup of a SQL Server 2005 database can be restored into an instance of 2005, 2008, 2012 and 2014 SQL Server. A backup of a SQL Server 2008 database can be restored into an instance

of 2008, 2012 and 2014 SQL Server.

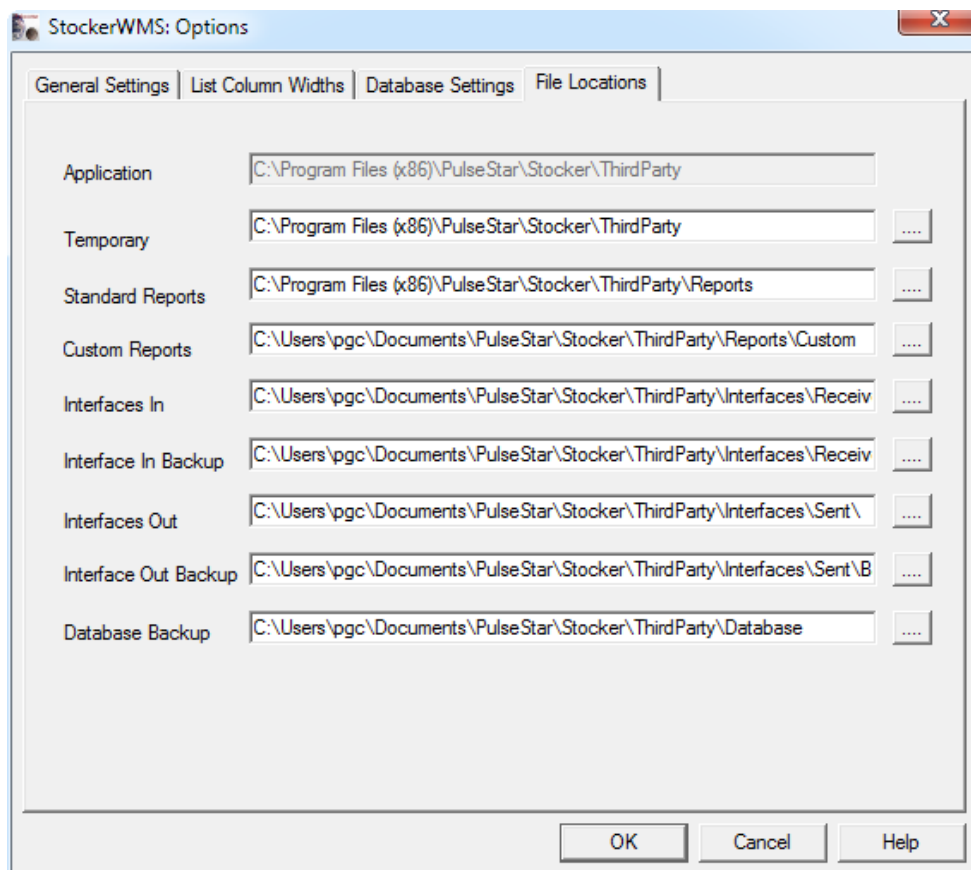
However, the setup program cannot restore a backup from a higher SQL Server instance into an instance of a lower version of SQL Server. Therefore, a database backup from SQL Server 2008 cannot be restored into an instance of SQL Server 2005 and a backup from SQL Server 2012 cannot be restored into an instance of SQL Server 2008 or 2005.

Backup File Location

You specify where the database backup is to be written by selecting:

- Configuration from Stocker's main menu
- Then User Options
- And finally the File Locations tab

At the bottom can be seen the Database Backup Folder. This setup program will look for the above three files within the folder specified here.



Page 14 – Specifying The Database Backup Folder Within Stocker

Appendix II - Problem Solving

Problem 1 - Cannot Create Database

There can be three causes for this

- SQL Server is not running

Action: Check the service is running in *Control Panel->Administrative Tools->Services*

- SQL Server service is not running under an administrator account and doesn't have sufficient privileges to create the physical files to hold the databases

Action: Change the account the service is running under to an administrator for (See document *CheckSQLServerService.pdf* on the support (document library) section of PulseStar website).

- The physical database files exist but are not registered with SQL Server. In this case the setup program can't create the physical files because they already exist.

Action: Check if the databases are visible in SQL Server Management Studio. If they are not got to Microsoft SQL Server folder in *Program Files* or *Program Files (X64)*. Look for the DATA folder. If the data files exist move or delete them.

- The databases exist but are being used by another program which could include a SQL Server Management Query window connected to the database.

Action: Ensure all programs are disconnected from the database.

Problem 2 - Cannot Restore Database

- SQL Server is not running
- The physical database files exist but are not registered with SQL Server.
- The databases exist but are being used by another program
- The databases do not exist.

Action: You must perform a full install of the databases first

Problem 3 - Cannot Connect To ODBC

- You were using Stocker with one version of SQL Server (e.g. 2005) and reinstalled Stocker for a different version of SQL Server. (e.g. 2008).

Action: The ODBC connection details will not have been updated for SQL Server 2008. Uninstall Stocker and re-install for the SQL Server 2008 instance.

- Accessing a SQL Server databases requires :
 - A *Login* to access SQL Server itself
 - A *Database User* against a database to provide access to the individual database

Occasionally the database user may have lost its access permissions especially when restoring a database from another SQL Server instance. (See the document *CheckSqlServerConfig.pdf* on the support (document library) section of PulseStar website).

