



Installation Guide

QAD Demand Management Engine

This document contains proprietary information that is protected by copyright and other intellectual property laws. No part of this document may be reproduced, translated, or modified without the prior written consent of QAD Inc. The information contained in this document is subject to change without notice.

QAD Inc. provides this material as is and makes no warranty of any kind, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. QAD Inc. shall not be liable for errors contained herein or for incidental or consequential damages (including lost profits) in connection with the furnishing, performance, or use of this material whether based on warranty, contract, or other legal theory.

QAD and MFG/PRO are registered trademarks of QAD Inc. The QAD logo is a trademark of QAD Inc.

Designations used by other companies to distinguish their products are often claimed as trademarks. In this document, the product names appear in initial capital or all capital letters. Contact the appropriate companies for more information regarding trademarks and registration.

Copyright ©2012 by QAD Inc.

DemandManagementEngine_IG_v61.pdf/lnr/lnr

QAD Inc.

100 Innovation Place
Santa Barbara, California 93108
Phone (805) 566-6000
<http://www.qad.com>

Contents

Change Summary	v
Chapter 1 Installation	1
Overview	2
Installation Requirements	2
Hardware	2
Installing the DME	3
Installing DME/Viewer in a Network Environment	3
Viewer Installation	4
Database Installation and Upgrade	13
Backup the Database	14
Upgrade the DME Database	14
Restoring or Attaching DME Database	15
Creating a New DME Database	15
Updating and Using SQL 2005/2008	16
Retagging Installation	16
Batch Scheduler Installation	21
Installation Requirements	21
Hardware	22
Software	22
Installing the Batch Scheduler	22
Batch Scheduler Configuration	27
Troubleshooting	28

Change Summary

The following table summarizes significant differences between this document and the version released with QAD Demand Management 5.5.

Date/Version	Description	Reference
March 2012/version 6.1	Major changes throughout	--

Installation

<i>Overview</i>	2
<i>Installation Requirements</i>	2
<i>Installing the DME</i>	3
<i>Database Installation and Upgrade</i>	13
<i>Retagging Installation</i>	16
<i>Batch Scheduler Installation</i>	21
<i>Troubleshooting</i>	28

Overview

The Demand Management Engine consists of five applications, which are detailed in the table below:

Table 1.1 DME Overview

Application	Description
FX_JGD – DME Database	SQL Server Database, which serves as the DME database and repository.
DME Admin Tool	Configures data loading, forecast method and user management among other configuration settings.
DME Viewer	Center of DME; controls and launches all the major features within the DME.
Batch Scheduler	Enables you to configure and run repetitive tasks as part of a batch process, such as monthly maintenance routine. It consists of a server component and a management UI.
DME Connection	Defines FX_JGD Database location and log in information.

All data for the DME is in the FX_JGD Database. This database may exist on a Server or locally on the PC. If the database exists on a server, it should be a SQL Server 2005 or 2008. If the database exists locally it uses either of the following:

- SQL Server 2005 or 2008 (Local)
- Microsoft SQL Server Express 2005 or 2008

Installation Requirements

The installation process for the DME is automated. However, there are certain hardware and software requirements necessary to ensure the application installs successfully.

Hardware

The list below details the required hardware to install the DME.

Hardware	Minimum	Recommended
CPU	Pentium 4 - 2 GHz	Pentium "Core" series - 2.0 GHz
RAM	1 MB	2 GB
Hard Disk	100 GB	200 GB

Software Media

The list below details the required software to install the DME application.

Note The DME installer will download all the necessary pre- requisites once it finds an Internet connection in the system.

- Demand Management Engine v6.1 CD or installation media
- Microsoft .NET Framework 3.5 SP 1

- MSXML 6.0 SP1
- Microsoft SQL Server Native Client
- Microsoft SQL Server Command Line Query
- Microsoft SQL Server 2005 Backward Compatibility Components
- Microsoft SQL Server 2005 Management Objects Collection

Installing the DME

There are two installation components in the Demand Management Engine:

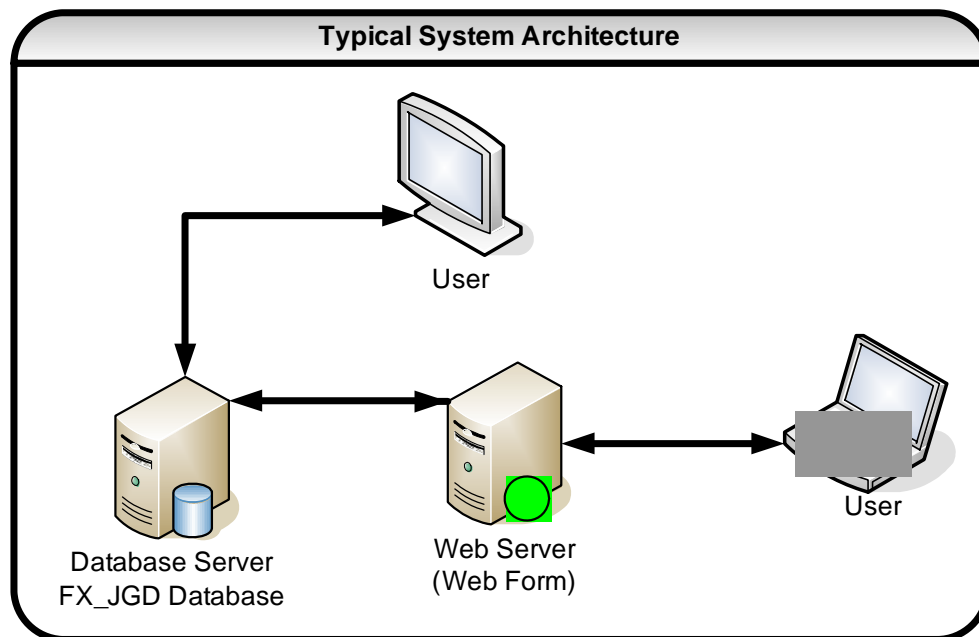
- Batch Scheduler
- Viewer

The Viewer installation also installs the Admin Tool and the Connection Utility. The Demand Management Engine installation process is driven by the following series of steps.

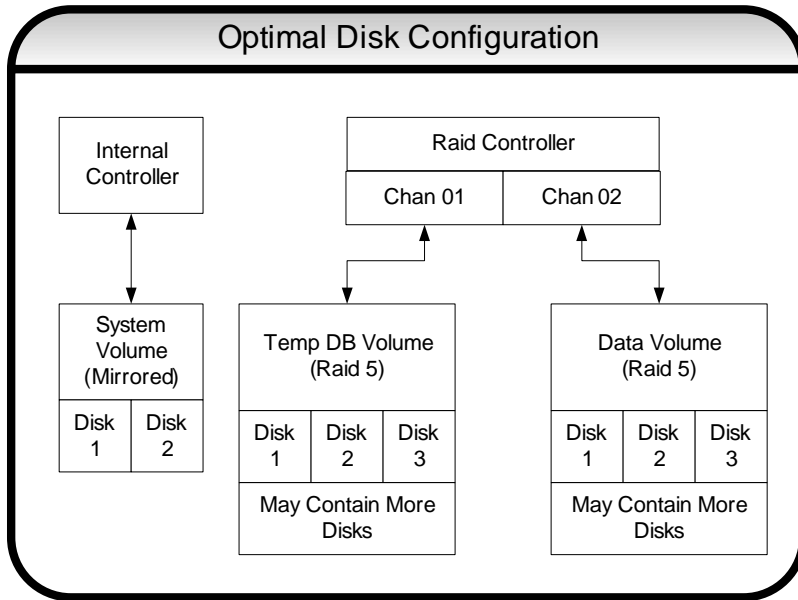
Installing DME/Viewer in a Network Environment

In a network environment, the DME database is accessible from different workstations with the database residing on a SQL 2005 or 2008 Server.

The following figure illustrates two workstations that access the same DME database. Both workstations request and save data in the same database.



The following illustration details the optimal disk configuration for the database server.



Depending on the data volume and performance requirements it is possible to change this configuration.

In a network environment, you must install the DME in the following order:

Table 1.2 DME Installation Order

Location	Description
SQL 2005 or 2008 Server	On the SQL 2005 or 2008 Server, install the DME using the Local installation type.
Workstation	On each workstation, install DME using the Connect to existing database installation type. The workstations will access the DME database on the remote SQL server.

Viewer Installation

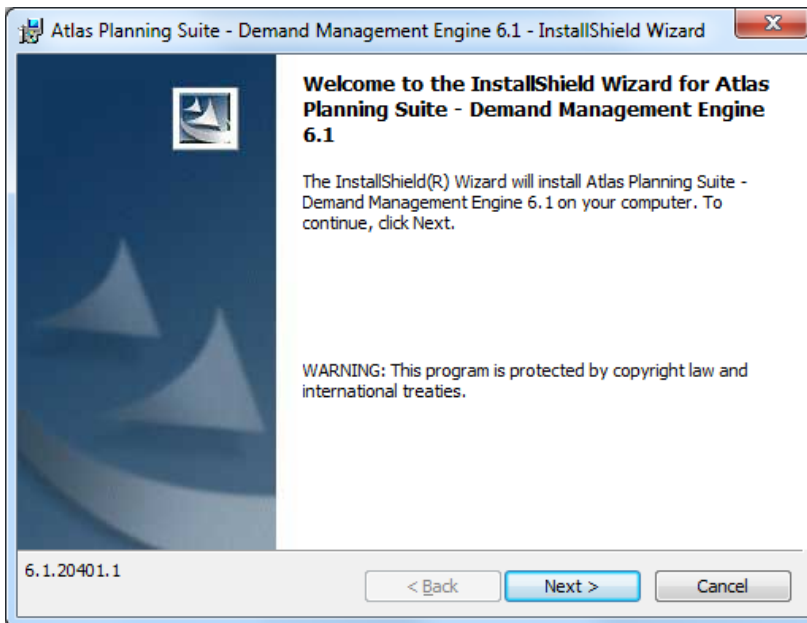
This section describes how to install the Viewer:

- 1 Insert the **Demand Management Engine CD** into your CD-ROM drive.
- 2 Click the **Start** button and select **Run** from the menu.
- 3 Enter the **drive letter:\Setup.exe** in the **Run** dialog box.

Note The drive letter is the drive assigned to your CD. If you do not know the letter assigned to your CD-ROM drive, click the **Browse** button in the prompt window to locate the appropriate drive.

- 4 Click **OK**.

The **Installation Wizard** screen displays.



5 Click **Next**.

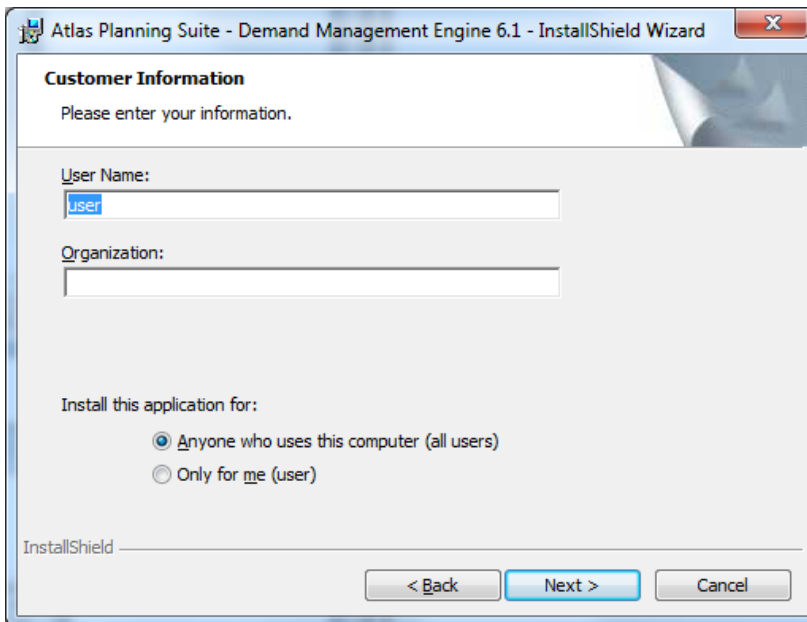
The **License Agreement** window displays.



6 Select **I accept the terms in the license agreement** if you agree to the terms and click **OK**. Click **Cancel** to quit the installer program.

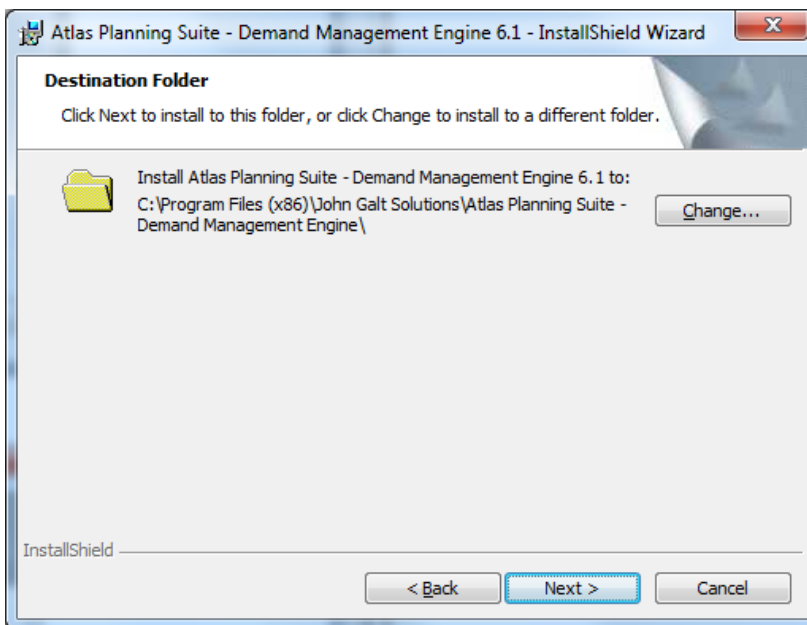
Note The **OK** button will not be activated until the **I accept the terms in the license agreement** option is selected.

The **Customer Information** window displays.



7 Enter your name in the **User Name** textbox.

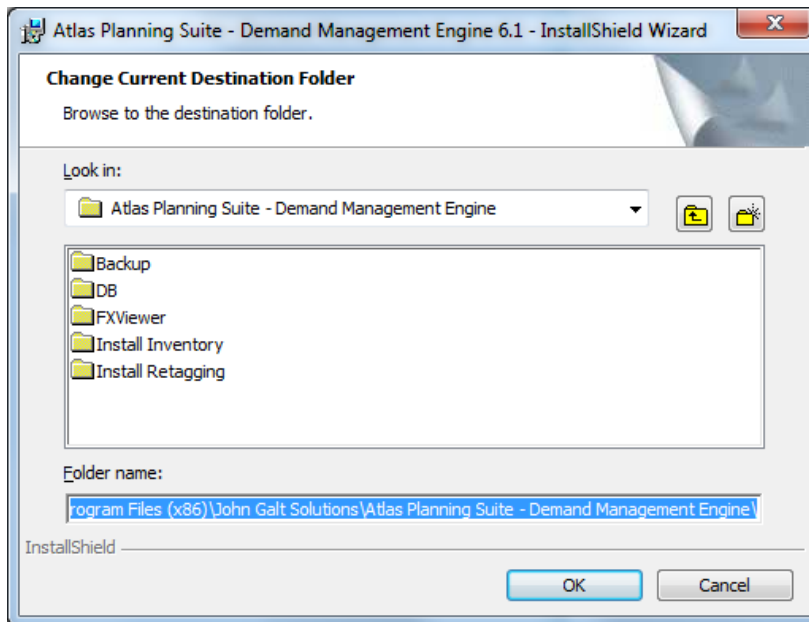
8 Enter your company name in the **Organization** textbox and click **Next**.
The **Destination Folder** window displays.



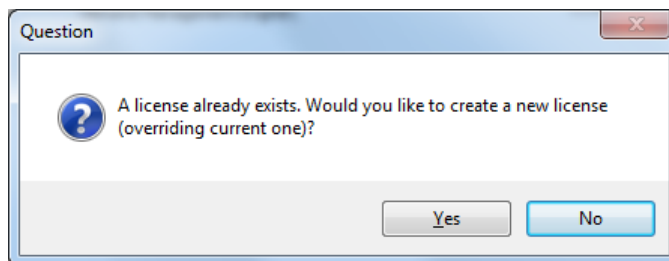
9 Verify the Destination Folder location and click **Next** to install the application in the default location.

To install the software in a different location, click the **Change** button.

The **Change Current Destination Folder** dialog box displays.



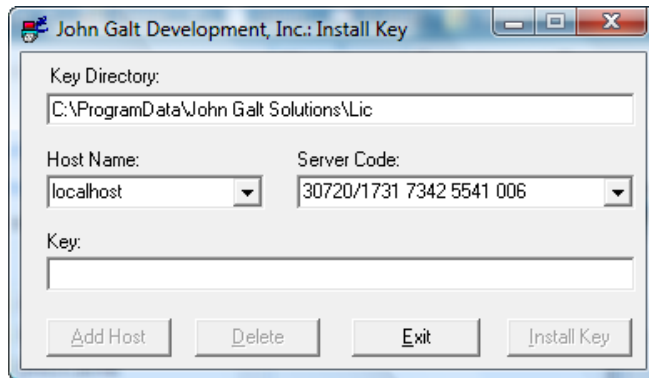
- 10 Select the location where you want the application installed and click **OK**.
- 11 On the **Destination Folder** screen, click **Next**.
- 12 The installation process will now try to locate a license key for the application. If a license key is located, DME will prompt you to either override the existing license with a new one or keep the existing license.



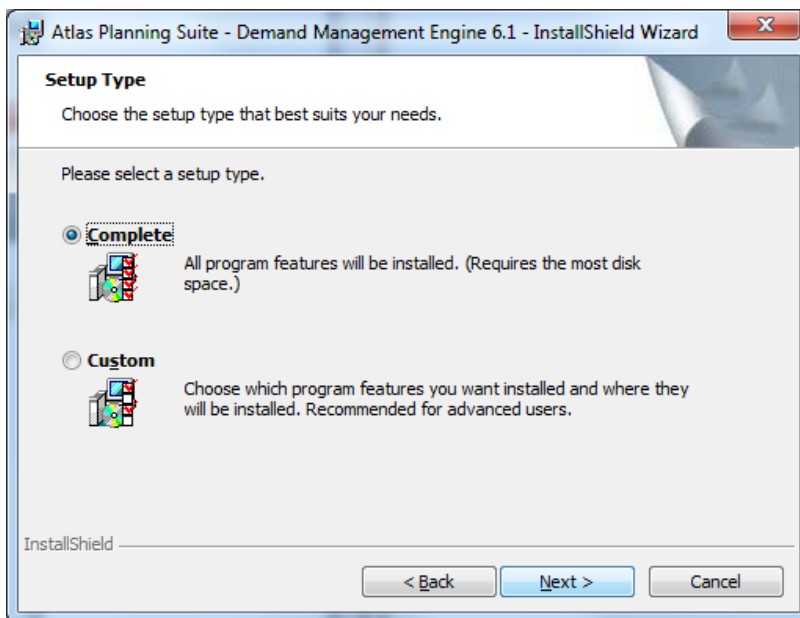
If you select to install a new key, you will be prompted with a Licensing window with the contact information. To get our license key, submit a New Incident at:

<http://support.qad.com/>

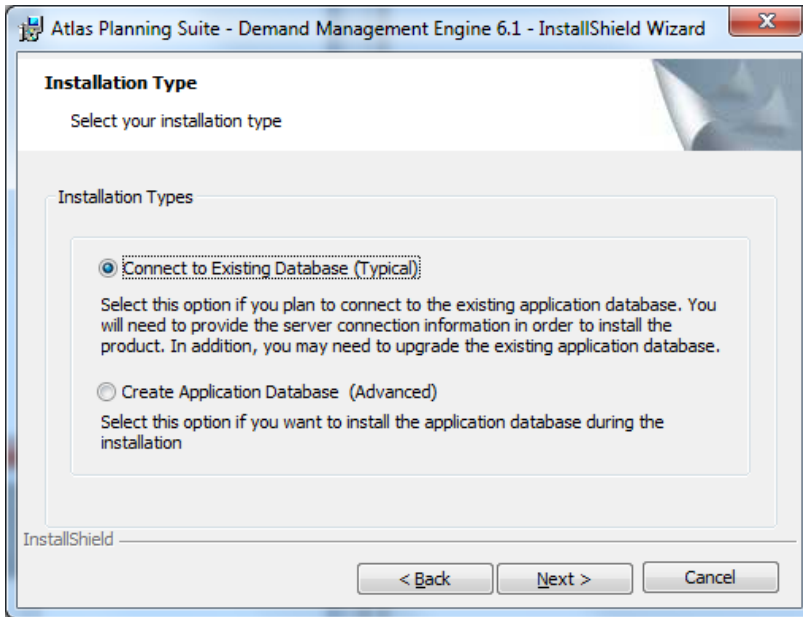
- 13 To begin the Key Installation, click **Yes**.
The **Install Key** window displays:



- 14 Enter the installation key provided by QAD in the **Key** textbox and click **Install Key**.
- 15 Click **OK** in the information messages that the license has been correctly installed.
- 16 Click **Exit** in the Install Key window to continue the installation process.
The **Setup Type** window displays.



- 17 In this setup step you can decide which components of the DME suite you wish to install. Select a **Complete** installation to install all components or select a **Custom** installation to choose which components to install.
- 18 Click **Next**.
The **Installation Type** window displays.

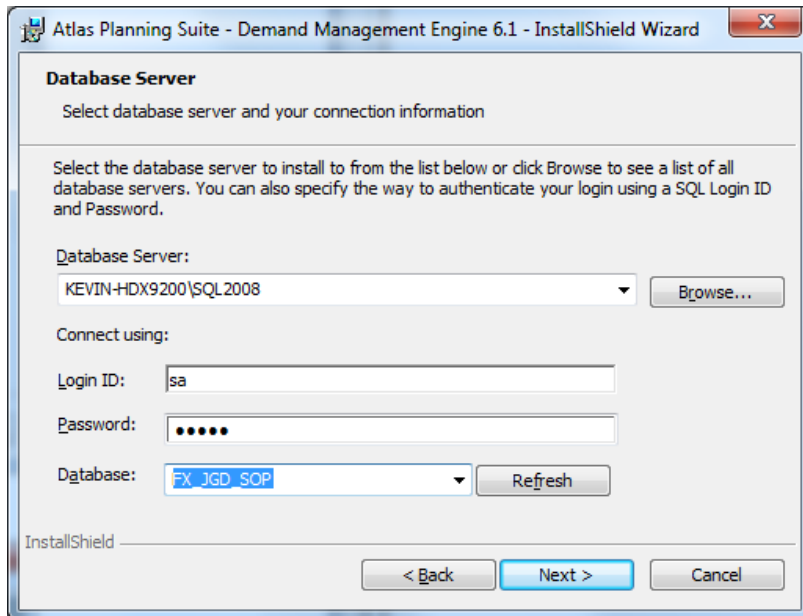


19 Select **Connect to Existing Database** to use an existing DME database or select **Create Application Database** if you do not have a DME database.

20 Select **Connect to Existing Database** and click **Next**.

Note If you selected to create the application database, you will need to run the installer again on the created database to update it correctly.

The **Database Server** window displays:



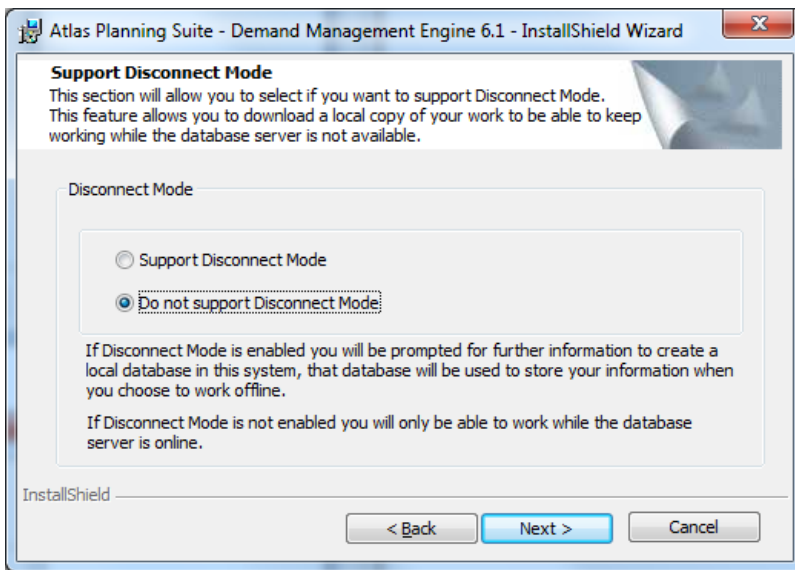
21 Provide the necessary information to connect to your database server, including the **Database Server** name, **Login ID** and **Password**.

- 22 Click the **Refresh** button. If your connection information is correct, the **Database** drop-down list will be populated with the databases in your SQL Server. Select your DME database from the list.

Note The SQL account used to upgrade DME needs to have sysadmin rights on the DME database to be upgraded. It is recommended to use the same account used to create the database.

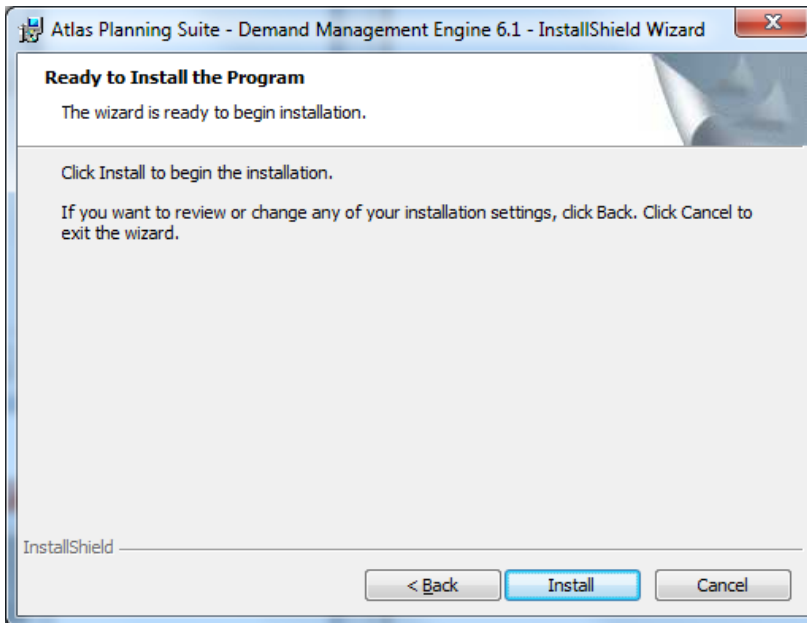
Note The current version of DME (6.1) will allow you to upgrade older versions of the database as far back as version 5.5. Depending on your system configuration it may be required for you to make changes to your process so please consult with the consultant who implemented your system.

- 23 Click **Next**. If you did not select to install the DME Viewer, please skip ahead to Step 26. The **Support Disconnect Mode** window displays:

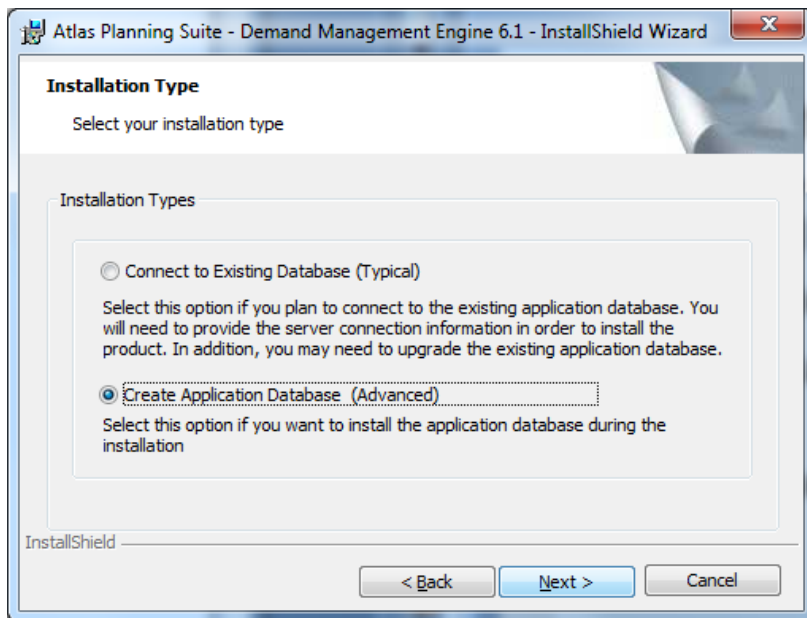


- 24 This step gives you the ability to enable the Disconnect mode feature. If you enable this option a SQL Server Express 2005 instance will be installed locally on the computer running the installer. Select your option and click **Next**.

The **Ready to Install the Program** window displays.



- 25 Click **Install** to begin the installation process or click **Back** to change any of your settings.
- 26 After the installation process is done, the (database) **Installation Type** window displays.

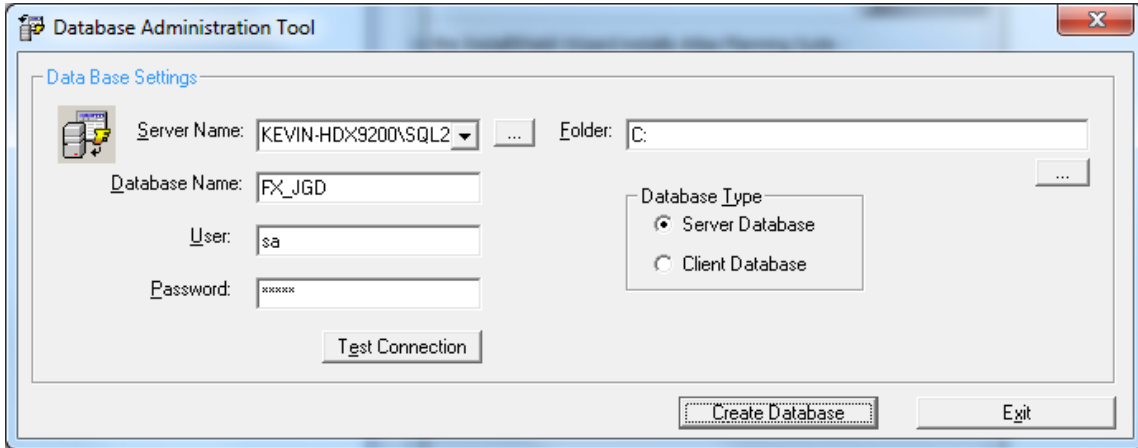


- 27 If you are connecting to an existing database, choose **Connect to Existing Database (Typical)**.

Otherwise, choose **Create Application Database (Advanced)**.

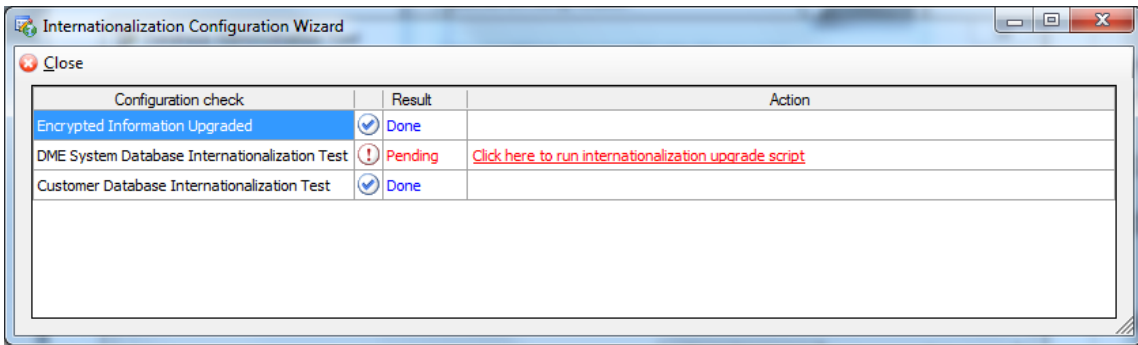
Note The SQL account used to connect to an existing DME database must be configured as the owner of the DME database (db_owner role in User Mapping section of the login properties must be enabled).

28 After the installation process is done, the **Database Administration Tool** displays.



29 Verify the database settings and click the **Test Connection** button. If the test was successful, click **Upgrade Database**. (If you are creating a new database, click **Create Database**.)

30 After the database upgrade has been completed you will see the Internationalization Configuration Wizard window.



This window will allow you to convert your database so that it supports double byte characters necessary for some languages. Some of the configuration checks must be passed even if you do not plan to support double byte characters, there are three configuration checks:

Table 1.3 Configuration Checks

Configuration	Description
Encrypted Information Upgrade	This configuration check is mandatory. It needs to be passed regardless of the type of installation you are performing. If your result shows failed for this test you can click on the link under the Action column to resolve it.
Customer Database Internationalization Test	This configuration check is optional. It is used to convert your customer database, usually named FX_DATA to support multi byte characters.

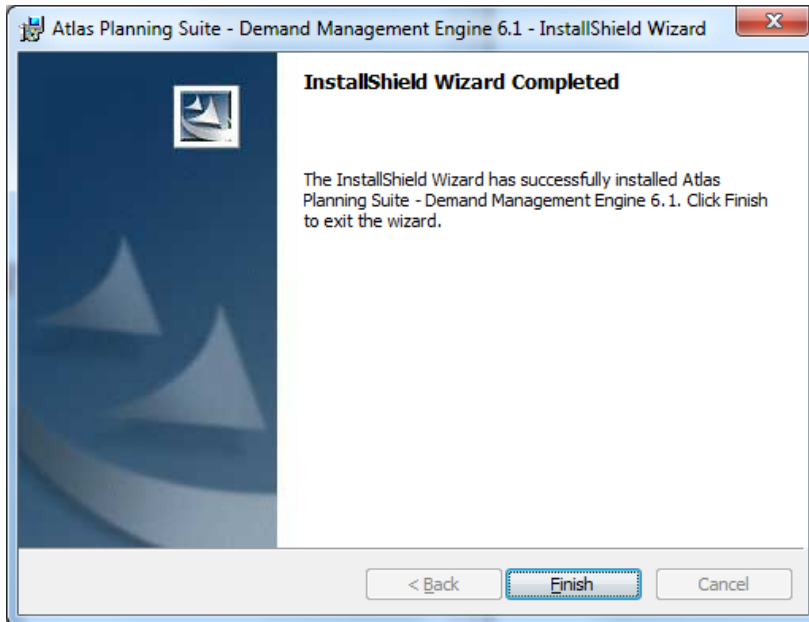
Table 1.3 Configuration Checks

Configuration	Description
DME System Database Internationalization Test	This configuration is optional. It checks to see if the DME database you are trying to upgrade supports double byte characters, if the result for this check failed you can resolve it by clicking the link under the Action column.
	It is highly recommended you backup your database before running this option.

31 When you have completed upgrading the necessary components for the internationalization support, you can close this window.

32 Click **Finish**.

The installation is now successfully installed and a new shortcut for the DME Viewer is created on your desktop.



Database Installation and Upgrade

DME 6.1 only supports SQL Server 2005 or 2008. If you are running SQL Server 2000 or lower upgrade the server to SQL Server 2005 or 2008 before installing DME 6.1.

Warning: It is highly recommended that you backup the current database before upgrading to the DME 6.1 database.

Note The installation or upgrade requires the database system administrator user (sa) user login as password.

Backup the Database

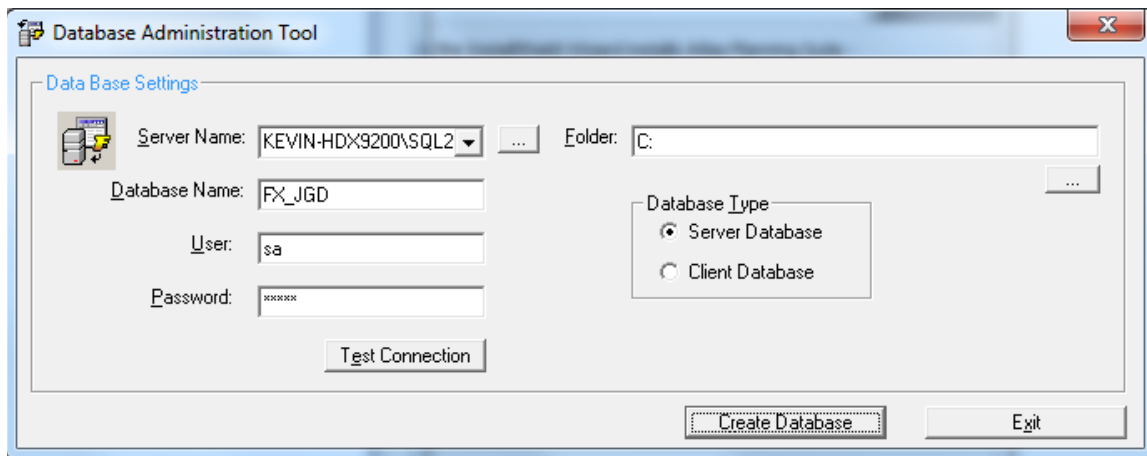
- 1 Go to **Start > All Programs** folder and locate the SQL Server folder. Open “SQL Server Management Studio”.
- 2 After logging into the server containing your DME database, right- click the DME database and select **Tasks, Backup Database**.
- 3 Once in the backup window, you must provide a Destination file for the backup; you do this by clicking on the Add button.
- 4 The Select Backup Destination window will open. Specify a file for the backup and click **OK**.
- 5 Ensure that the **Backup Type** option is set to **Full** and complete the other options based on your environment and click **OK**.

Upgrade the DME Database

There are two options to upgrading a DME database. The first one is to upgrade the database with the installation process, so look for step 22 and following from the section [“Admin Tool & Viewer Installation” on page 26](#).

The second option is to update the database after installing the software. Go to **Start > All Programs > QAD > Demand Management Engine**.

Running this file will allow you to upgrade any database to the latest version.



After entering the information for the **Server Name**, **Database Name** and the login credentials, you can test your connection to the server by clicking the **Test Connection** button. When the connection test has been passed you can upgrade your database by clicking the **Upgrade Database** button.

Note The upgrade requires the database system administrator user (sa) login and password.

Restoring or Attaching DME Database

If you have a completely updated DME Database and need to restore or need to attach it to the your SQL Server instance you **MUST** follow these steps to prepare your database to function properly with the DME.

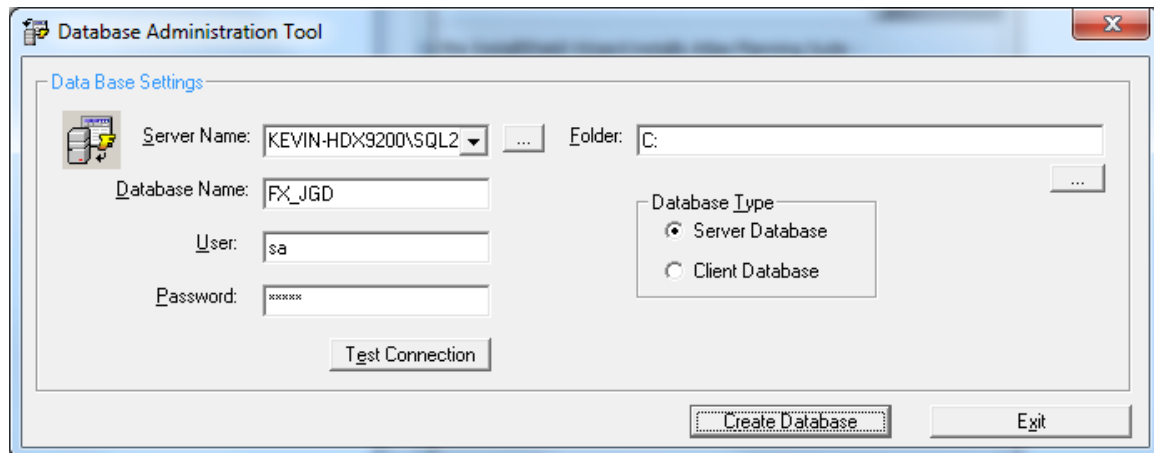
Note It is very important that you run these scripts as the “sa” user.

- 1 Restore the database backup or attach it to the SQL Server.
- 2 Go to the DME program folder

(Usually: **C:\Program Files\QAD\Demand Management Engine**).
- 3 Open the sub-folder **DB**.
- 4 Open the file: **CLRConfigure.sql**.
- 5 If your database is named **fx_jgd**, you can just execute the script as is. If not, you will need to replace all the references to **fx_jgd** with the name of your database.
- 6 Go back to the **DB** folder in step 3 above and open the sub-folder **Utilities**.
- 7 Open the file **Rebalance.sql**.
- 8 Make sure the selected database in the SQL Editor toolbar is your database and execute the script.

Creating a New DME Database

The installation media for the DME v6.0 includes a folder name **DB**, which contains several files, including one named **DBCreate.bat**. This file can be used to create a new empty DME Database.



After running this tool, you will have to specify the **Server Name**, **Database Name** and log in credentials to the SQL server. You must run this tool locally on the computer running the SQL Server because you must also specify the local folder where the database files will be stored.

After completing the required data, you can verify the settings by clicking the **Test Connection** button. If the test is successful, you can start the database creation by clicking the **Create Database** button.

Updating and Using SQL 2005/2008

When you select Integration Services for installation, Setup also installs support for DTS packages, including the DTS runtime and DTS package enumeration in SQL Server Management Studio. Support in the runtime is enhanced to enable DTS packages to access the SQL Server 2005/2008 data sources. For additional information, go to:

<http://msdn2.microsoft.com/en-gb/library/ms143706.aspx>

The SQL Server 2005/2008 Integration Services (SSIS) do not install the DTS designer. An updated version of the DTS package designer is available as a separate Web download. Download the Microsoft SQL Server 2000 or 2005 DTS Designer Components from:

<http://www.microsoft.com/downloads/en/details.aspx?familyid=df0ba5aa-b4bd-4705-aa0a-b477ba72a9cb&displaylang=en>

For SQL 2008:

<http://www.microsoft.com/downloads/en/details.aspx?FamilyID=228de03f-3b5a-428a-923f-58a033d316e1&displaylang=en>

For SQL 2008 R2:

<http://www.microsoft.com/downloads/en/details.aspx?FamilyID=ceb4346f-657f-4d28-83f5-aae0c5c83d52>

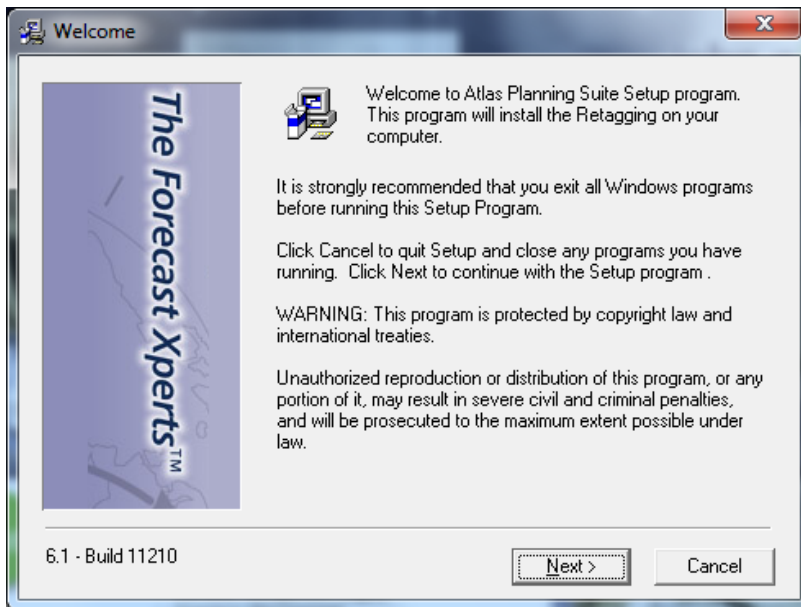
Retagging Installation

The **Retagging** module is an add-on component to the DME Viewer and has its own separate installation. You must have the DME Viewer installed prior to installing Retagging.

This section details the procedures to install Retagging successfully. For information in regard to configuring Retagging, see [“Retag Configuration” on page 305](#).

In order to install Retagging as an add-on to the DME Viewer v6.0, you need an installation CD or another media with the installation files for Retagging v6.0.

- 1 Make sure the DME Viewer is closed.
- 2 Click on the **Setup Retagging.exe** file.
The **Welcome** screen displays.



3 Click Next.

The **License Agreement** window displays.



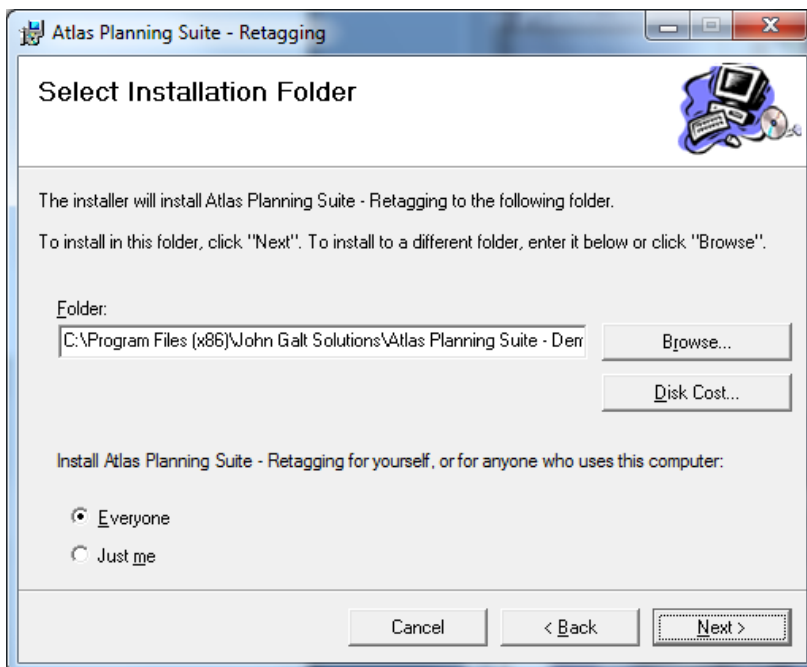
4 Click I Agree.

The **Retagging Setup Wizard** window displays.



5 Click **Next**.

The **Select Installation Folder** window displays.



6 By default, the application installs in the directory shown above.

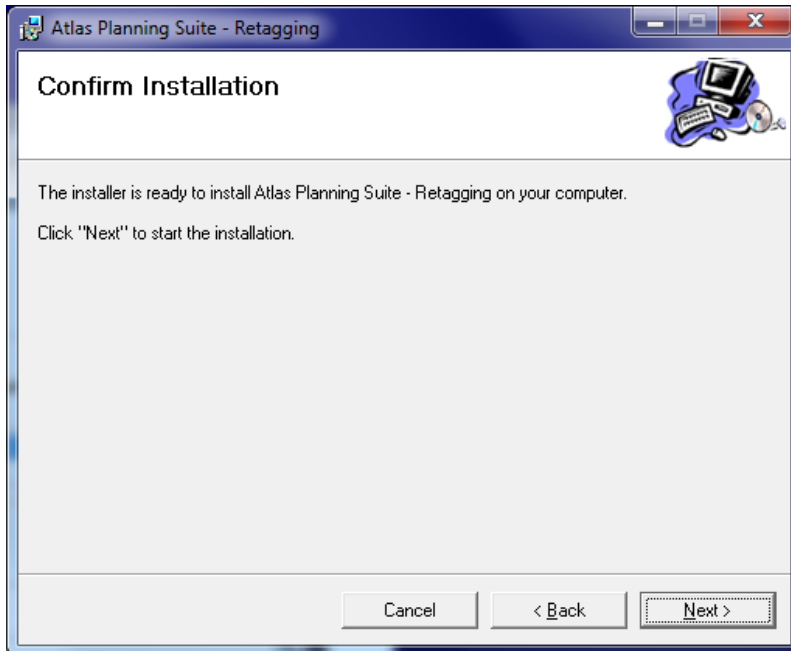
To choose a different location, click **Browse**.

- To view the disk space available on your computer, click the **Disk Cost** button.

- Select the **Everyone** radio button to allow anyone to access the DME from your computer or select **Just Me** to allow only yourself access.

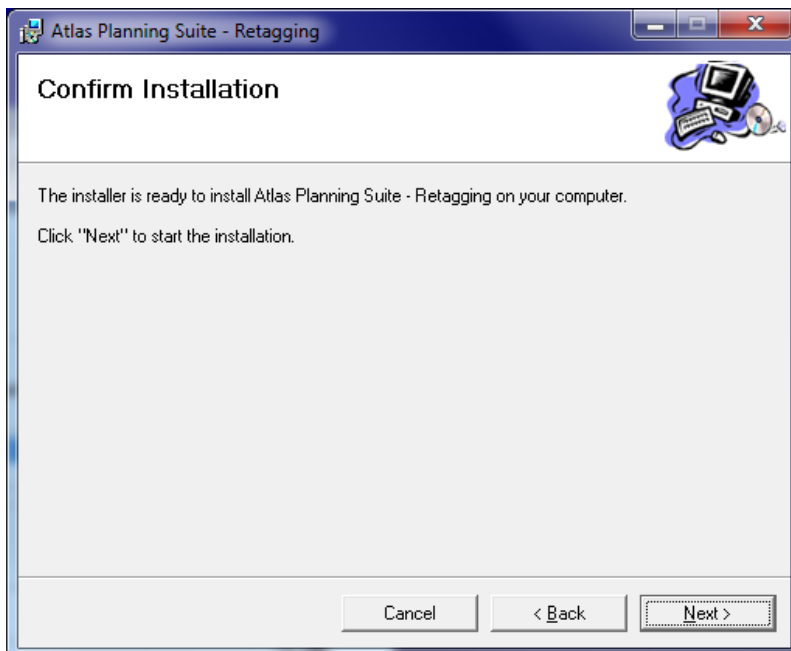
7 Click **Next**.

The **Confirm Installation** window displays.



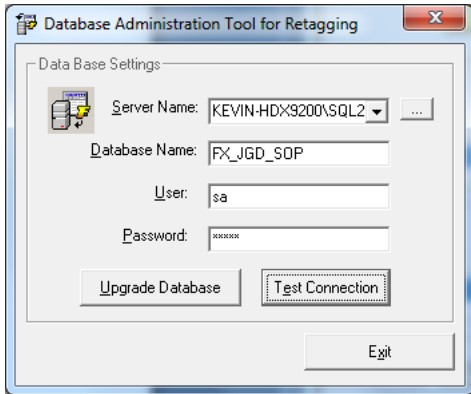
8 Click **Next**.

The **Installation Complete** window displays:



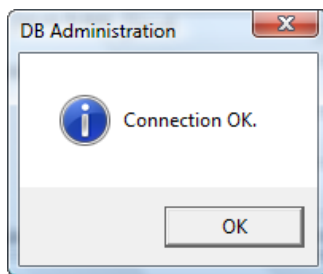
9 Click **Close**.

The **Database Administration Tool for Retagging** window displays:



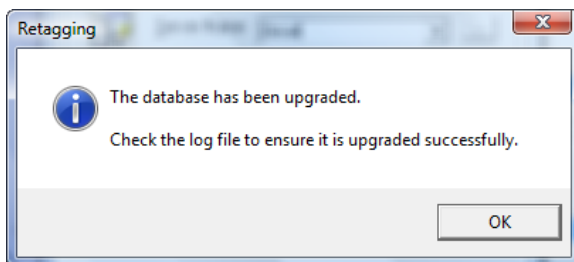
- 10 Verify the **Database Settings**, and click the **Test Connection** button to verify if the test was successful.

The **Test Connection Confirmation** window displays.



- 11 If the test was not successful, verify your Database connection settings. If the test was successful, click the **Upgrade Database** button to upgrade the database.

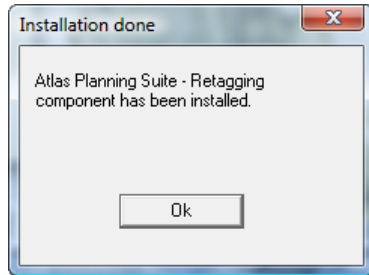
The **Confirmation** window displays.



- 12 Click **OK**.

- 13 Click **Exit**.

The **Installation done** window displays.



14 Click **OK**.

The Retagging feature is now installed. You can access the feature from the DME Viewer on the **Add Ins** tab.

Batch Scheduler Installation

This section details how to install the Batch Scheduler. The Batch Scheduler installation is separate from the DME installation.

In order to install the Batch Scheduler, you need an installation CD or another media with the installation files for the Batch Scheduler .NET v6.0.

The Batch Scheduler requires an existing FX_JGD Database which can be created by the Demand Management Engine installer, see link for more information. This database may exist on a Server or locally on the PC.

The Batch Scheduler has two components to it: Batch Scheduler Manager and Batch Scheduler Server components. The table below details each component.

Table 1.4 Batch Scheduler Components

Component	Description
Batch Scheduler Manager	This component is required to connect to the FX_JGD database to schedule new jobs to run.
Batch Scheduler Server Components	This component is the one responsible for creating all the jobs to run in SQL, this component has no GUI but is required to.

Note The Batch scheduler Server component must be installed in the server that holds the DME Database. If you are using an SQL Cluster the Batch Scheduler Server components must be installed in all the computers that hold databases and are part of the Cluster.

Installation Requirements

There are certain hardware and software requirements necessary to ensure the application installs successfully.

Hardware

The list below details the required hardware to install the Batch Scheduler.

Table 1.5 Required Hardware

Hardware	Minimum	Recommended
CPU		
RAM		
Hard Disk		

Software

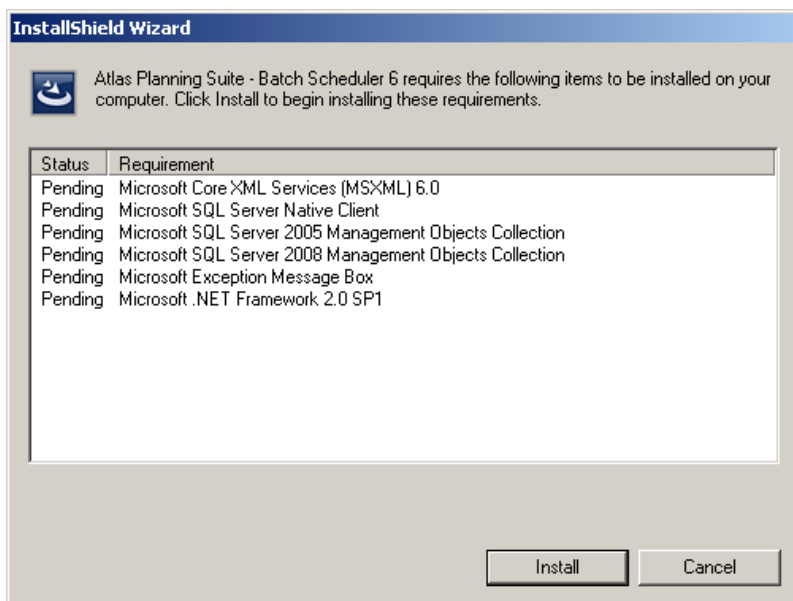
The list below details the required hardware to install the Batch Scheduler:

- Microsoft .NET Framework 3.5
- Microsoft .NET Framework 3.5 Service Pack 1
- Microsoft SQL Server 2005 / 2008 / 2008 R2 (with latest SP)
- Microsoft SQL Server Integration Services
- Microsoft Core XML Services (MSXML) 6.0 SP1
- Microsoft Exception Message Box
- Microsoft SQL Server Native Client
- Microsoft SQL Server 2005 /2008 Management Objects Collection

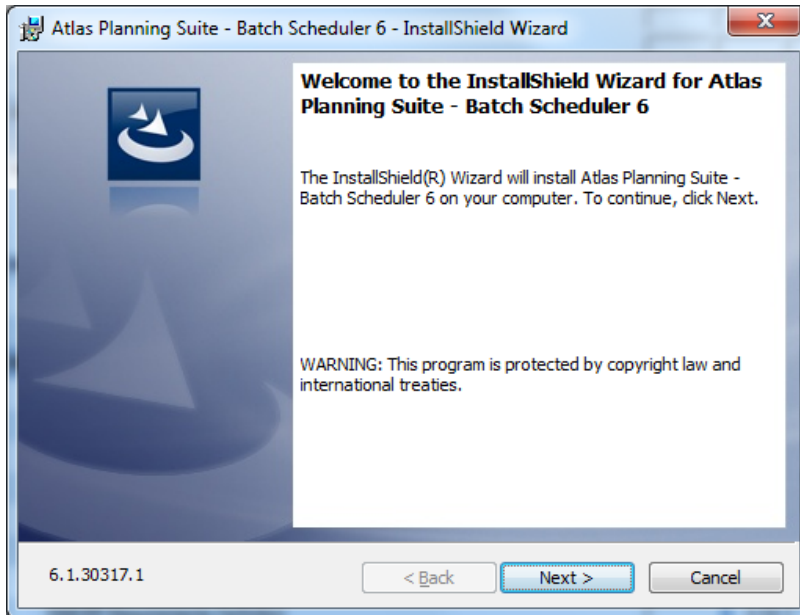
Installing the Batch Scheduler

- 1 Close all DME applications
- 2 Run **Setup.exe**.

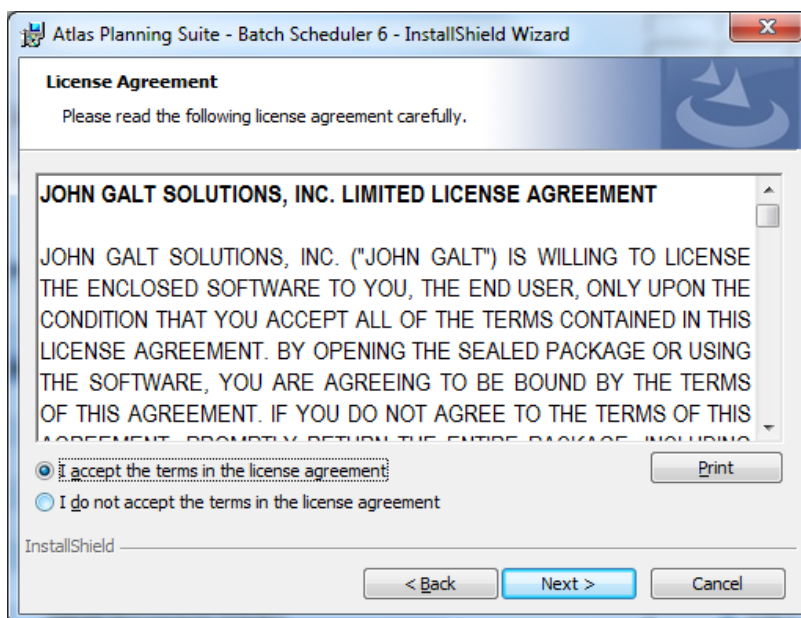
If you are missing any of the prerequisites you will see the following screen that will guide you through installing all the necessary pre-requisites. The Installation Wizard screen displays.



- 3 Click **Install** to install any required pre-requisites and follow any steps when prompted. Some of the pre-requisites might need for you to restart the computer before you continue with the Batch Scheduler setup.
- 4 After all the pre-requisites have been installed or if you did not need any of the prerequisites you will see the main installation window.

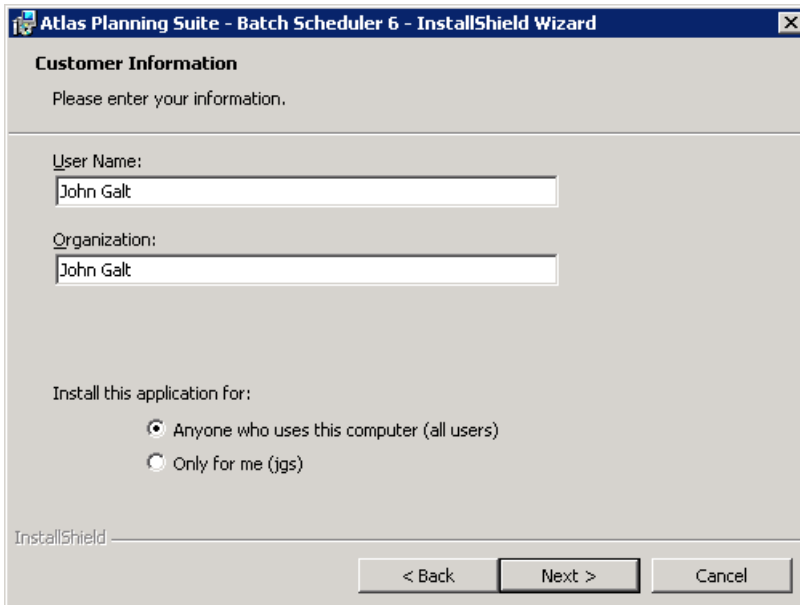


- 5 Click **Next**.
The **License Agreement** window displays.

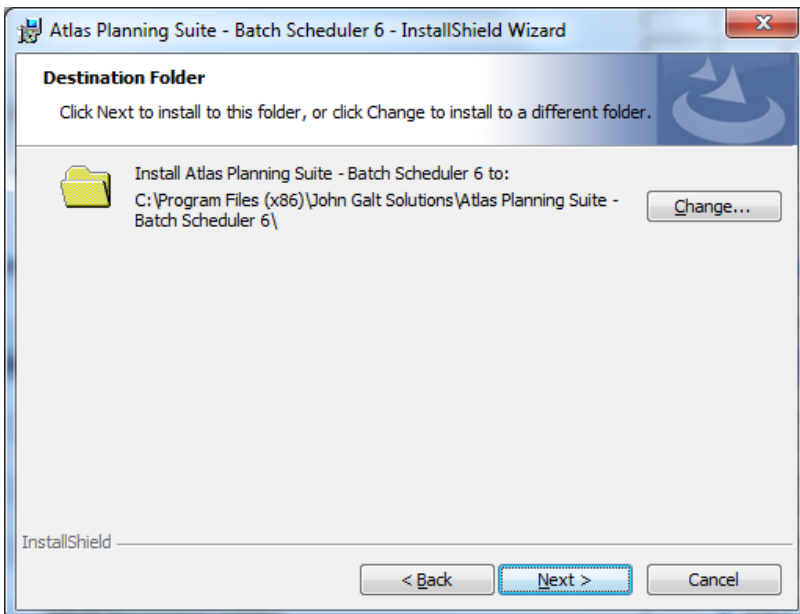


- 6 Click **I accept the terms in the license agreement** if you agree the terms, or click **Cancel** to quit.

The **Customer Information** window displays.

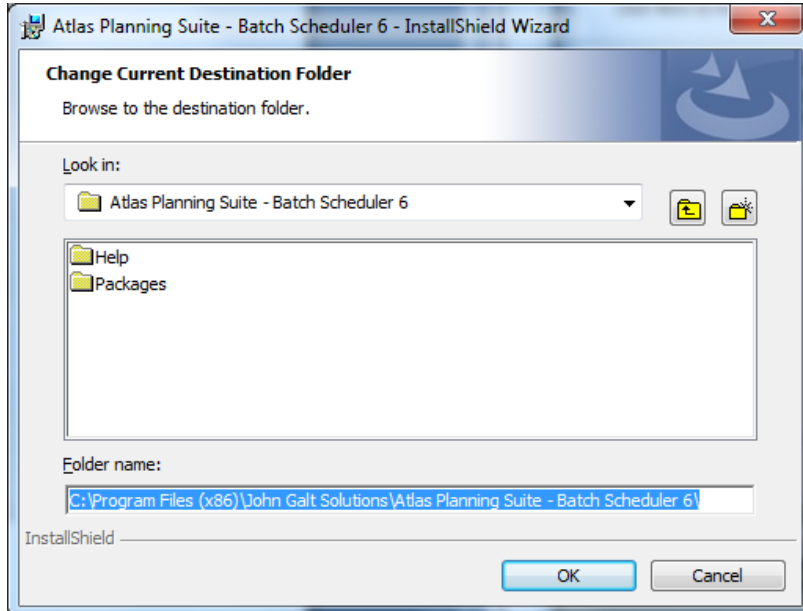


- 7 Enter your name in the **User Name** textbox.
- 8 Enter your company name in the **Organization** textbox and click **Next**.
The **Destination Folder** window displays.



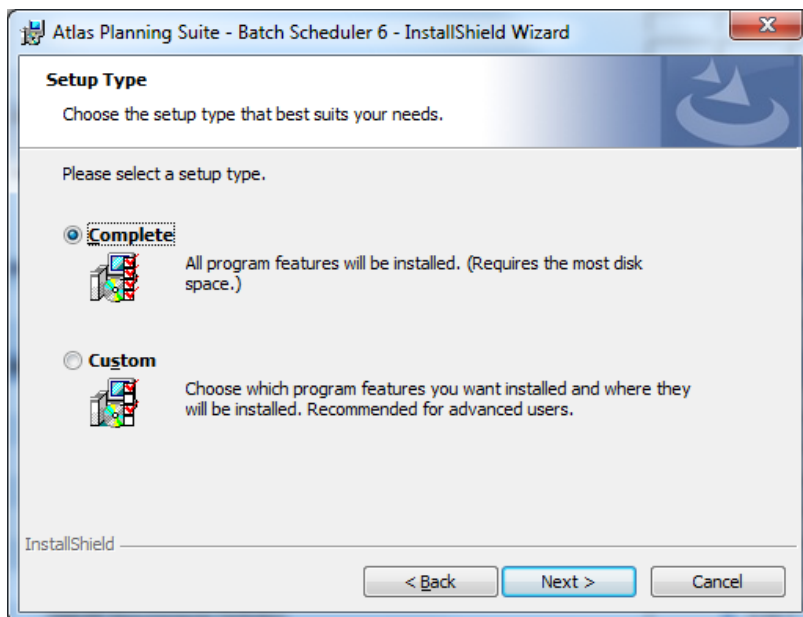
- 9 Select the **Destination Folder** location and click **Next** to install the files in the default location.
If you want the software installed in another location click the **Change** button.

The **Change Current Destination Folder** dialog box displays.



- 10 Select the location where you want the application to be installed and click **OK**. Then click **Next**.

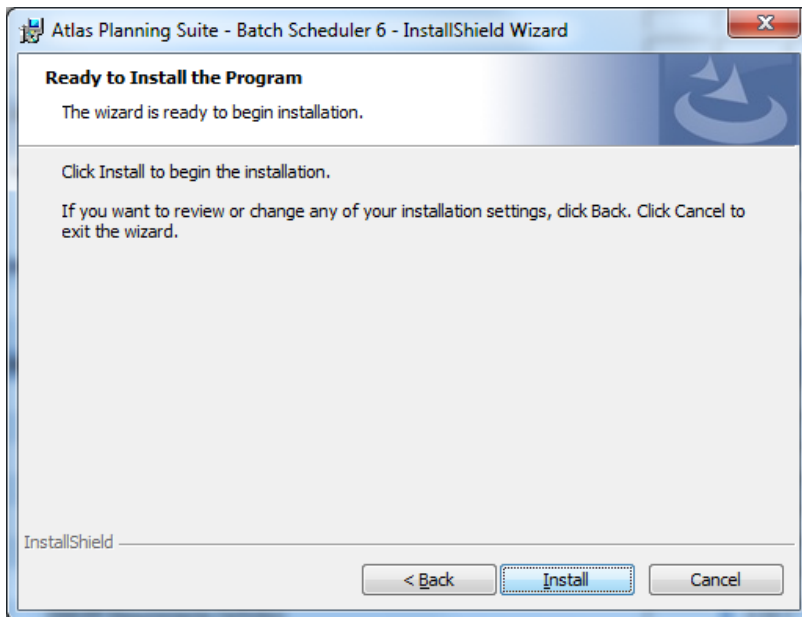
The **Setup Type** window is displayed.



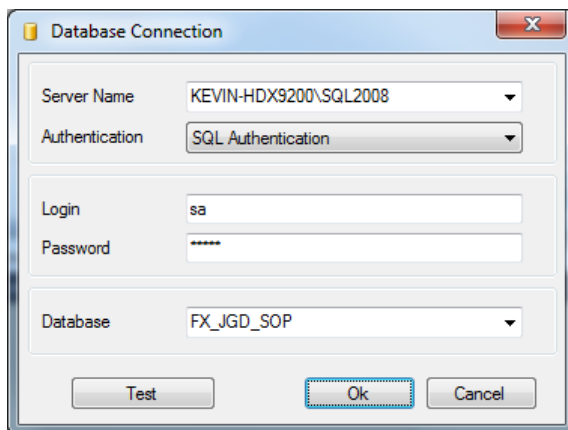
- 11 Select a **Complete** installation to install all components of the Batch Scheduler. Select a **Custom** installation to only install only some components.

- 12 Click **Next** for a Complete installation.

The **Ready to Install the Program** confirmation window displays.



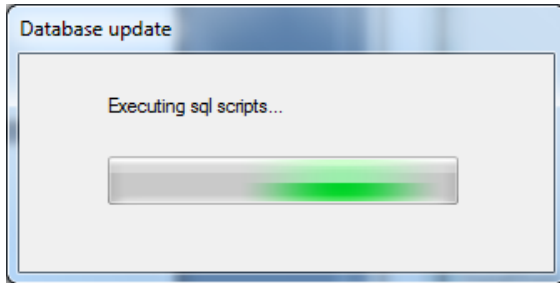
- 13 Click **Install** to start the installation process.
- 14 The installer prompts you to enter the database to which you want to connect. The **Database Connection** window displays:



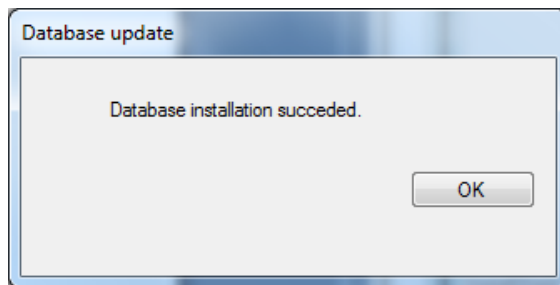
- 15 Provide the necessary information to connect to your database server, including the **Server Name**, **Login** and **Password**.
- 16 After configuring these parameters, click the **Test** button to verify the server connection. If your connection information is correct, the **Database** drop-down list will be populated with the databases in your SQL Server. Select your DME database from the list.

Note The installation requires the database system administrator user (sa) user login as password.

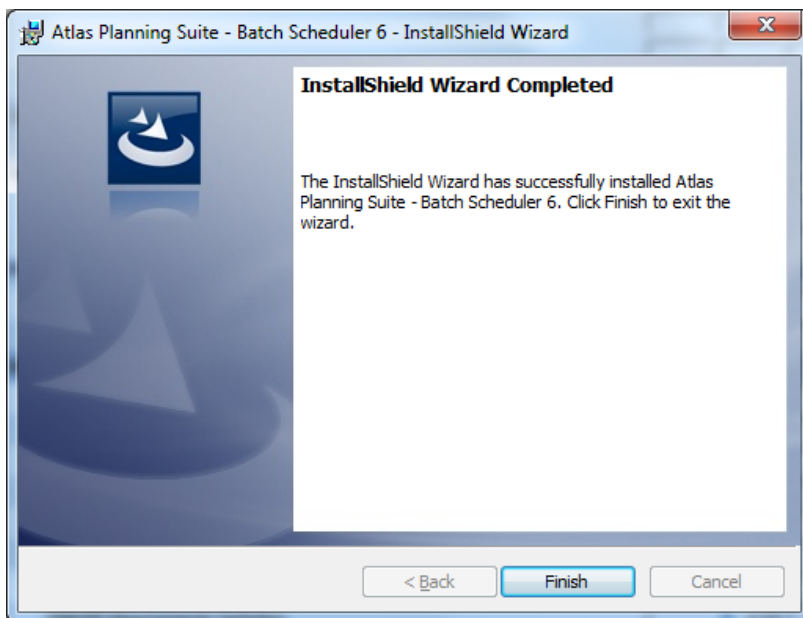
- 17 The installer executes the necessary scripts to update the database.



18 If the scripts were run successfully you will get the following message. Click **OK** to continue.



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



The installation is now successfully installed and a new shortcut for DME Viewer is created on your desktop.

Batch Scheduler Configuration

The Batch Scheduler consists of two components:

- Batch Scheduler Server

- Batch Scheduler Manager

Batch Scheduler Server

The batch scheduler server has to be installed wherever the database is installed. It is the component that the Batch Scheduler Manager depends on to create all the necessary tasks and batches. If you are using a SQL Cluster, you must install the Batch Scheduler Server components in each computer that is part of the cluster.

Note **Note:** SQL Server Agent needs to be running for the Batch Scheduler server to run correctly. If it is not running, users will not be able to create or run tasks, schedules or batches.

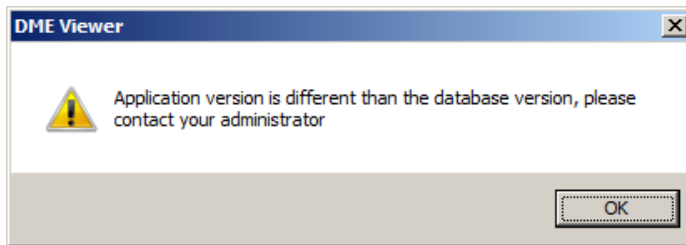
Troubleshooting

The table below details common troubleshooting Scenarios and solutions.

Table 1.6 Troubleshooting Solutions

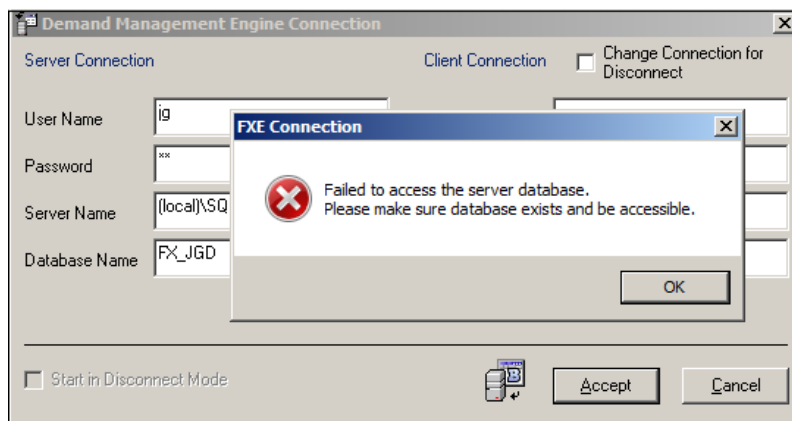
Problem	Solution
Previous version of Microsoft SQL Server 2000 or earlier is installed	You must upgrade your existing SQL Server to Microsoft SQL Server 2005 or 2008 for a DME 6.1 installation.
MSDE could not be started	Try to install the service manually: Start > MSDE > Service Manager When the dialog box displays, click the Start/Continue button.
Installation could not start Microsoft SQL Server	Start the service manually from the Control Manager. If there is still an error, check the log in account for the appropriate permissions.
The DME database is already installed and you want to complete an update	Backup FX_JGD before updating the database. To upgrade the database, see " Database Installation and Upgrade " on page 39 in this chapter.
Database preparation or upgrade has failed	Check the following: <ul style="list-style-type: none"> • SQL Server is running. • User ID, Password and server name are correct. • Permissions to attach and detach to the databases are correct. • The sql account used to connect to an existing DME database must be configured as the owner of the DME database (db_owner role in User Mapping section of the login properties must be enabled).
Cannot login to the DME	If you are trying to login with a user ID other than sa , check to make sure the permissions are correct. The sql account used to connect to an existing DME database must be configured as the owner of the DME database (db_owner role in the User Mapping section of the login properties must be enabled).

Problem: When opening a scenario you see the following error message:



Solution: This could be caused when someone tampered with internal system tables or the latest upgrade to your system was not done correctly, please contact the consultant that implemented your system.

Problem: When trying to configure the DME database connection using the “Demand Management Engine Connection” tool you get the following error message:

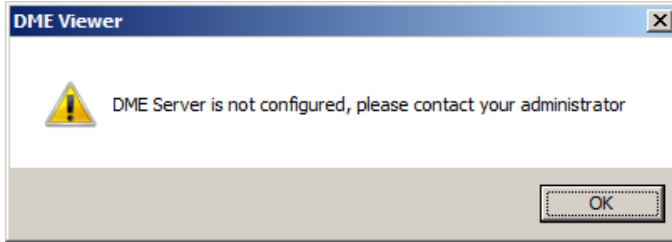


Solution: This problem can be caused for a few reasons:

- The Server Name specified may not be reached over the network, make sure the server name is typed in correctly.
- There is a DNS problem in your network and server name cannot be resolved correctly, try connecting to the SQL server using it's IP address instead.
- The database server may not be accessible from the computer you are trying to connect, make sure you are able to connect to that same server from another tool, for example, you can create a test connection using the “ODBC Data Source” window available in the administrative section of the control panel.
- The username and password are not the correct ones; please make sure to type them in correctly and using the correct case.
- In order to successfully connect to an SQL server instance over a network there are some SQL services and options that need to be enabled, please make sure, please follow the instructions in this link to configure SQL Server to allow remote connections:
<http://support.microsoft.com/kb/914277>
- In order for the DME to properly configure the database connection the user changing the connection string must have read/write permissions on the following key in the registry:

- 64 bit systems: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Elan\John Galt Development, Inc.\CurrentVersion\John Galt Development, Inc.
- 32 bit systems: HKEY_LOCAL_MACHINE\SOFTWARE\Elan\John Galt Development, Inc.\CurrentVersion\John Galt Development, Inc.

Problem: If when opening a scenario you get the following error:



Solution: The problem is that the database has been restored, or re attached and after these two tasks there is a necessary procedure to follow, please see section “**Restoring or Attaching DME Database**” in this guide.