DATAMAKER

Installation and Configuration Guide

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Version: **1.0**

Date: **August, 1st 2015**

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Author's Notes

For starters, don't let the size of this document scare you. The first half of the document is the **Installation**, which YES is of twenty seven (27) products, but most take less than a minute and the bulk of the material is screenshots telling you to take the default or "Click Next". Two installations take a little longer, one just over a minute and the other almost 5 minutes. Thus, the first half of this document should be quick and easy, taking less than an hour to fully complete.

There is one minor issue related to the Java installation to be aware of. The Java (x86) installation, once completed, tried to go to validate and upgrade to a newer version. Alone this is not a problem, but the Java (x64) version, does not do this verification nor upgrade automatically, leaving you at the end with Java versions that are out of sync (not a proper configuration). The recommendation is to ignore the Verify and Upgrade during installation of all of the products, this keeps both Java version at the same (7u55) version and then later if you wish manually upgrade both version of Java.

The **Database Creation** section has a lot of material but much of it is redundant. If at all possible use the **MS SQL Method 1 – Attach Starter Database** to attach the "Starter Database", this method has always worked for us and seems to not have any issues. **MS SQL Method 2 – Create Starter Database** produces Warning messages each time, which to date don't seem to be a problem, but it may be a reason for concern later on. The funny thing is, when using the identical **MS SQL Method 2 - Creating TRAVEL, TRAVEL_E, ORDERS, and ORDERS_E Databases** there were no Warning messages.

Licensing of Datamaker is pretty simple and straight forward. It takes a day to get the License Key back, so go to the **Generate the Candidate Key** section just as soon as you finish the **Connecting to Test Data Repository** section. Then while you are waiting for the **License key**, go ahead and create the TRAVEL, TRAVEL_E, ORDERS, and ORDERS_E databases, which you will need once you complete the **Applying the License Key** section. This is because Datamaker needs databases to connect to before everything can be accessed and configured. Licensing of the other products (Agile Designer, Fast Data Masker, and Javelin) is done differently using a product called Code Meter. We'll document these steps shortly.

The **Configuration** section is still a little confusing and needs to be validated. But we think we have covered all of the material and steps that you need to get Datamaker fully operational.

Introduction

Grid-Tools – is a suite of the world's most powerful synthetic test data generation products that provide market-leading software solutions for provisioning the right data, to the right place, at the right time so that it can be used for rigorous testing.

The following is a step-by-step Best Practice Guide for installing, creating, licensing, and configuring the Grid-Tools suite of products using the **GTServer Setup Wizard**. In general, there are four major steps required to make the product operational:

A. Installation
B. Database Creation
C. Licensing
D. Configuration

Installation – using the **GTServer Setup Wizard** this process is greatly simplified, however be prepared because it installs the following products in sequence automatically:

1. .NET Framework 4.5
2. Silverlight 5 x64
3. Java SE Runtime Environment 7u55 x86
4. Java SE Runtime Environment 7u55 x64
5. Visual C++ 2010 SP1 x64 (MFC Security Update)
6. Visual C++ 2010 SP1 x86 (MFC Security Update)
7. Visual C++ Redistributable for Visual Studio 2012 x86
8. Visual C++ Redistributable for Visual Studio 2012 x64
9. SQL Server Native client 2008R2 x64
10. CodeMeter Runtime Kit x64
11. Adobe Reader XI
12. ODP4.NET Deployer
13. GTRemotePublish
14. GT Group Job Executor
15. GT HP ALM Service
16. GT ALM Batch
17. GTDatamaker
18. AgileDesigner
19. TestDataVisualizer
20. GT – Test Data On Demand
21. GTSDM
22. FastDataMasker
23. GTPortusJobProcessor
24. Javelin
25. GTEDI
26. GTServer

Most of the installations take less than a minute and require very little user interaction with the exception of clicking "Next" and taking the default entry. This section is mostly screenshots with a few notations that point out anomalies or issues that you might encounter.

Database Creation – is somewhat simple because you can download the **Datamaker Installation Kit** (datamaker_installation_kit##.zip) which has prebuilt "Starter Databases" for Oracle and MS SQL. With these databases you simply copy them to the Database Server and then "Attach" them as if they were an existing database.

The **Datamaker Installation Kit** also contains the files to create the "Starter Database". Using this method the database is manually created, and then using the files provide in the Kit, commands are executed that create the Database Schemas and import Data.

Also included in the Datamaker Installation Kit are folders and file for creating various other databases that are used for training, and could be used for demonstration and POC purposes.

Licensing – is a required for several of the Grid-Tools products:

- Agile Designer
- GT Fast Data Masker
- Datamaker
- GT Subset

- Quick Design
- Portus Control Centre
- Mainframe (DBOS by Syncosrt)
- Javelin

In some cases you will need to generate a request which is linked to the computer where you have installed Grid-Tools. In other cases you will need to request a license through Support.

Configuration – of the product consists of telling the various Grid-Tools applications where the database and other applications are and how to access them. There are two main Services which must be configured so that they will run:

- GridToolsRemotePublish
- GridToolsTDoDService

Additionally, after you are able to fully access Datamaker you will want to create a REP.XML file to simplify the login process.

Download

To install the Grid-Tools suite of products download the latest version of **setup_GTServer.exe** at the following link:

- www.grid-tools-downloads.com/release/GTServer/Latest/ (opens a directory listing)

To create the product database, training databases, and other additional material download the latest version of **datamaker_installation_kit.zip** at the following link:

- http://grid-tools-downloads.com/release/datamaker_installation_kit31.zip

Document Notes

At the time this document was produced (August 2015) the latest versions of both download files were:

- **setup_GTServer_1.0.64**
- **datamaker_installation_kit31.zip**

Installation

The best way to install the Grid-Tools suite of products is to download the latest version of the **GTServer Setup Wizard (setup_GTServer.exe)**. The *Download* section of this document has the link for this download.

The **GTServer Setup Wizard** walks through each installation sequentially. The following is a step-by-step guide for using the GTServer Setup Wizard.

GTServer Setup – Prerequisites Wizard

1. Right click the **setup_GTServer** executable and select **Run as Administrator**
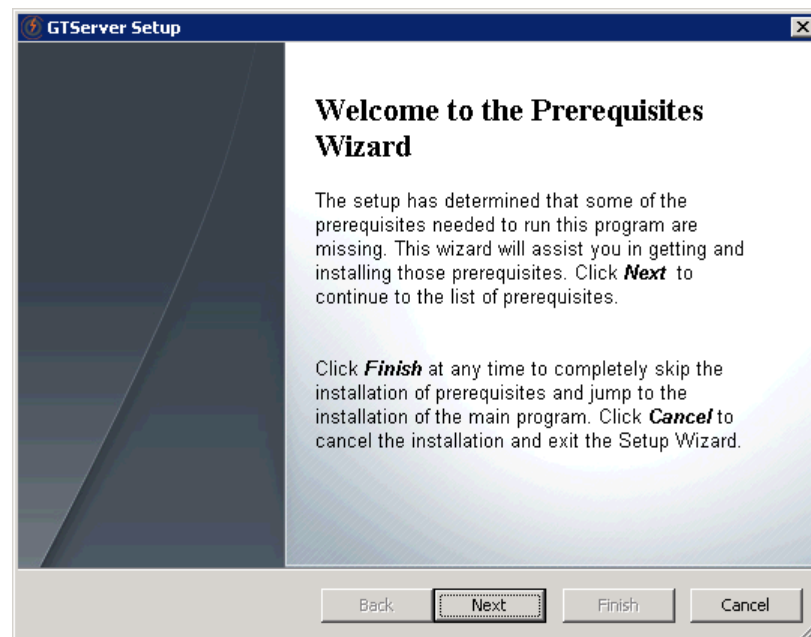
2. Click **Next**

The following are the Prerequisites and Applications that will be installed. In some cases, the **GTServer Setup Wizard** may detect a previous version that has already been installed. If so, it will check to see if the previous installation meets the prerequisite needs and then uncheck the box automatically saying the previous version is acceptable.

In most cases, all of the boxes will be checked. If you do not want to install a particular package simply uncheck that application and the installation will be skipped. Otherwise, each installation will follow in sequence (one after the other) walking through the installation of that particular application.

This window of the **GTServer Setup Wizard** will stay open as each individual product is installed, so if at any time you wish to check on the progress of all of the installation simple refer to this window.
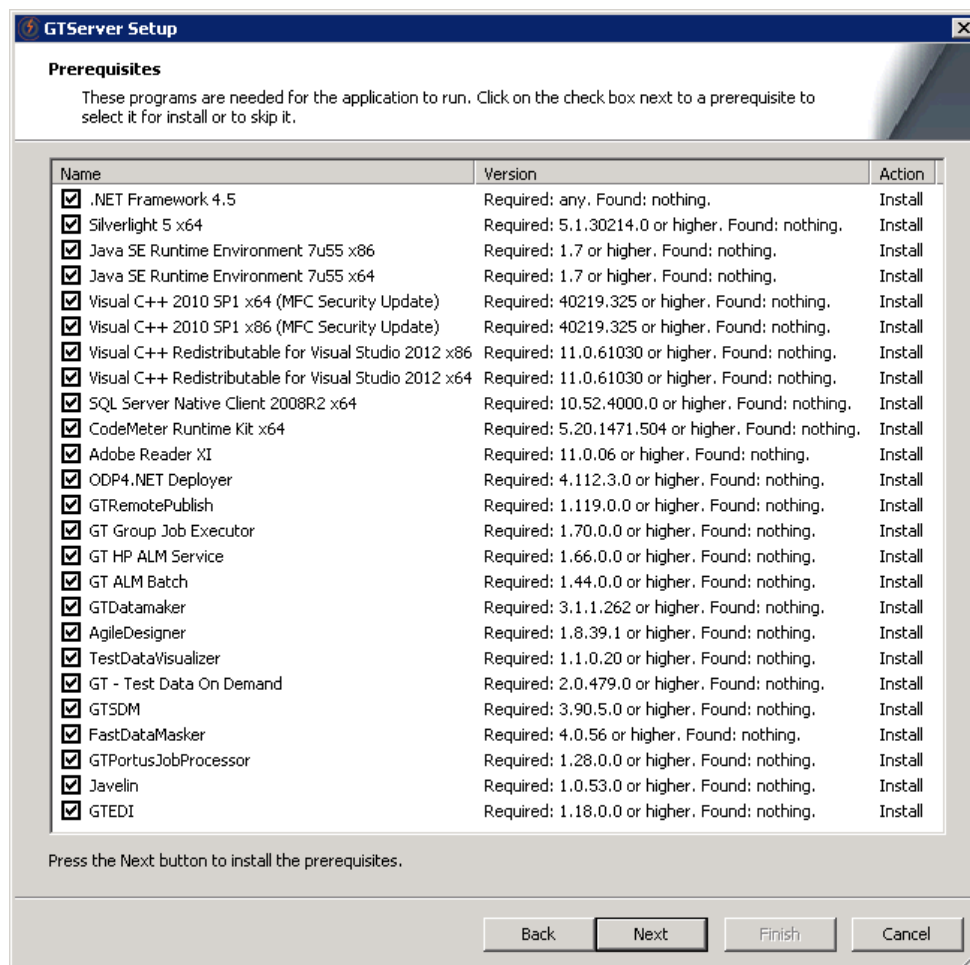
3. Verify that all of the applications you wish to install are checked
4. Click **Next**

The **GTServer Setup Wizard** will extract all of the applications that it is about to install to the C:\Grid-Tools\Installers folder and start the installation of the first application.

Name ▲	Date modified	Type	Size
.NET Framework 4.5	7/30/2015 11:42 AM	File folder	
Adobe Reader	7/30/2015 11:42 AM	File folder	
Silverlight 5	7/30/2015 11:42 AM	File folder	
SQL Server Native Client 2008R2	7/30/2015 11:42 AM	File folder	
Visual C++ 2010 SP1	7/30/2015 11:42 AM	File folder	
Visual C++ Redistributable for Visual Studio 2012	7/30/2015 11:42 AM	File folder	
AgileDesigner_setup	7/30/2015 11:42 AM	Application	162,764 KB
CodeMeterRuntime64	7/30/2015 11:42 AM	Windows Installer Package	36,300 KB
jre-7u60-windows-i586	7/30/2015 11:42 AM	Application	28,716 KB
jre-7u60-windows-x64	7/30/2015 11:42 AM	Application	30,258 KB
ODAC112030Xcopy_x64	7/30/2015 11:42 AM	Compressed (zipped) Folder	55,084 KB
setup_datamaker31_latest	7/30/2015 11:42 AM	Application	454,868 KB
setup_FastDataMasker_trial_latest	7/30/2015 11:42 AM	Application	194,547 KB
setup_GTALMBatch	7/30/2015 11:42 AM	Application	3,773 KB
setup_GTALMService	7/30/2015 11:42 AM	Application	7,837 KB
setup_GTEDI_Latest	7/30/2015 11:42 AM	Application	93,843 KB
setup_GTGroupJobProcessor	7/30/2015 11:42 AM	Application	2,799 KB
setup_GTPortusJobProcessor_latest	7/30/2015 11:42 AM	Application	3,958 KB
setup_GTSDM_latest	7/30/2015 11:42 AM	Application	256,031 KB
setup_Javelin_Latest	7/30/2015 11:42 AM	Application	106,999 KB
setup_odp4net_4.112.3.0	7/30/2015 11:42 AM	Application	58,009 KB
setup_RemotePublish	7/30/2015 11:42 AM	Application	8,519 KB
setup_TDoD	7/30/2015 11:42 AM	Application	101,345 KB
setup_TestDataVisualizer_latest	7/30/2015 11:42 AM	Application	46,447 KB

Once the installation have completed and the **GTServer Setup Wizard** is finished this folder will not be deleted and if needed these executables can be used again if needed.

.NET Framework 4.5
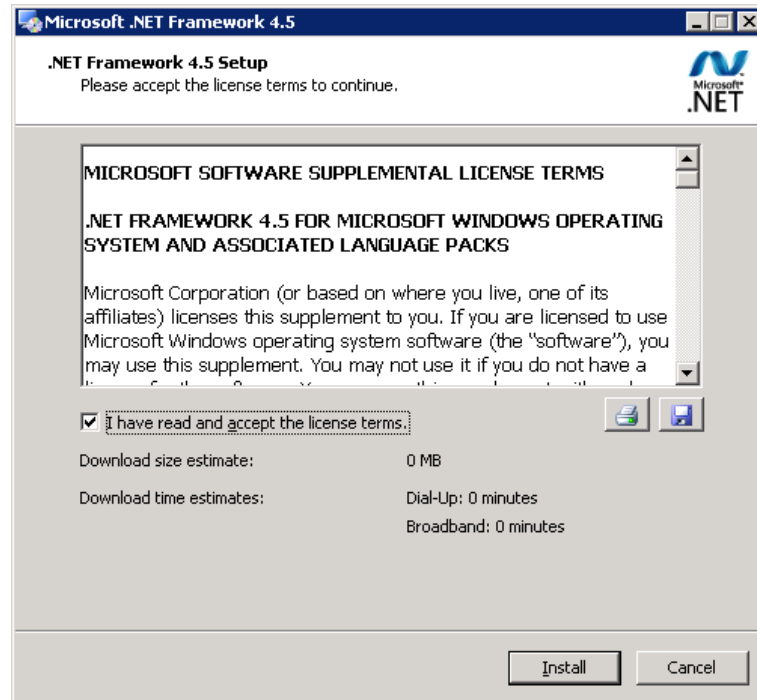
5.   Check the box indicating that **I have read and accept the license terms**
6.   Click **Install**
   - This installation will take around 2 minutes
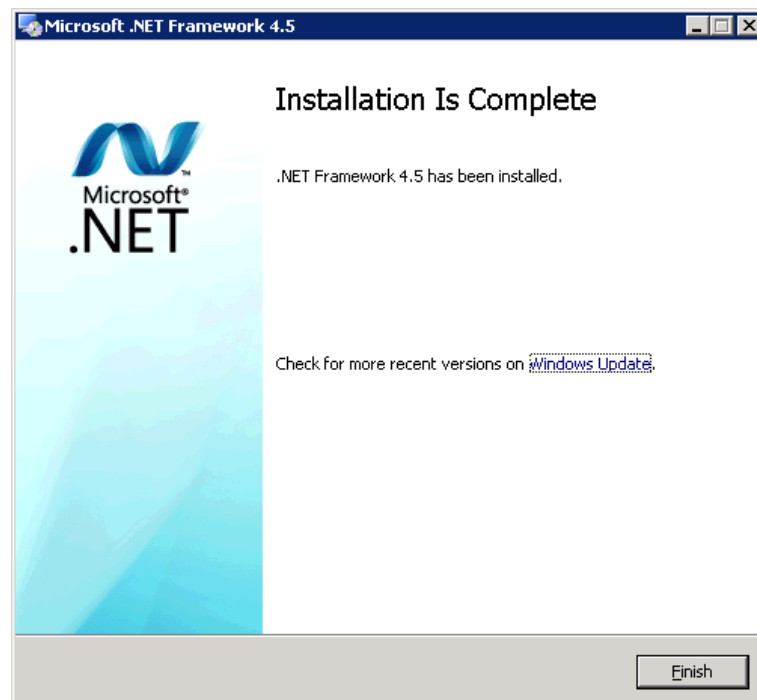
7.   When this screen appears, click **Finish** to proceed to the next installation

Silverlight 5 x64

8.   Click **Install now**
    - This installation takes less than a minute
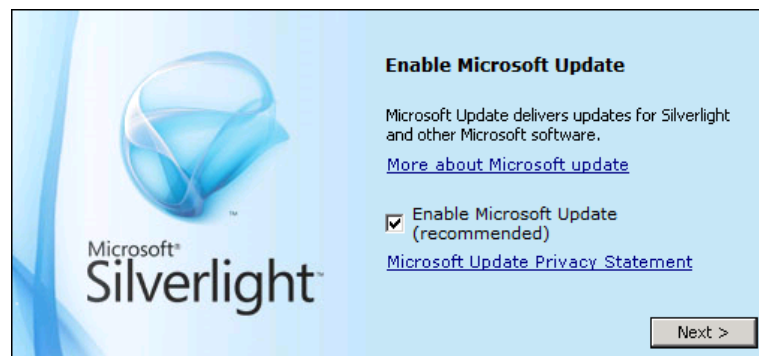
9.   (Optional) Verify that the **Enable Microsoft Update** box is checked or uncheck
10.   Click **Next >**

11.   Click **Close** to proceed to the next installation

Java SE Runtime Environment 7u55 x86

12. (Optional) Check the **Change destination folder** to change the installation location
13. Click **Install >**

14. Click **Close** and proceed to the Java x64 installation
15. Close window(s) where Java (x86) is trying to verify and update, do not do that at this time.

Best Practice: Both the Java x86 and Java x64 version should be in sync (same version number). If you run the Java Verify at this time the Java (x86) will update to the newer version. However, at the end of the Java (x64) installation this does not happen, leaving you with different versions. Since the Grid-Tools products will run on this version don't verify and update at this time and then later if you wish manually update both versions.

Java SE Runtime Environment 7u55 x64

16.   Click **Install >**

17.   Click **Close** to proceed to the next installation

Visual C++ 2010 SP1 x64 (MFC Security Update)
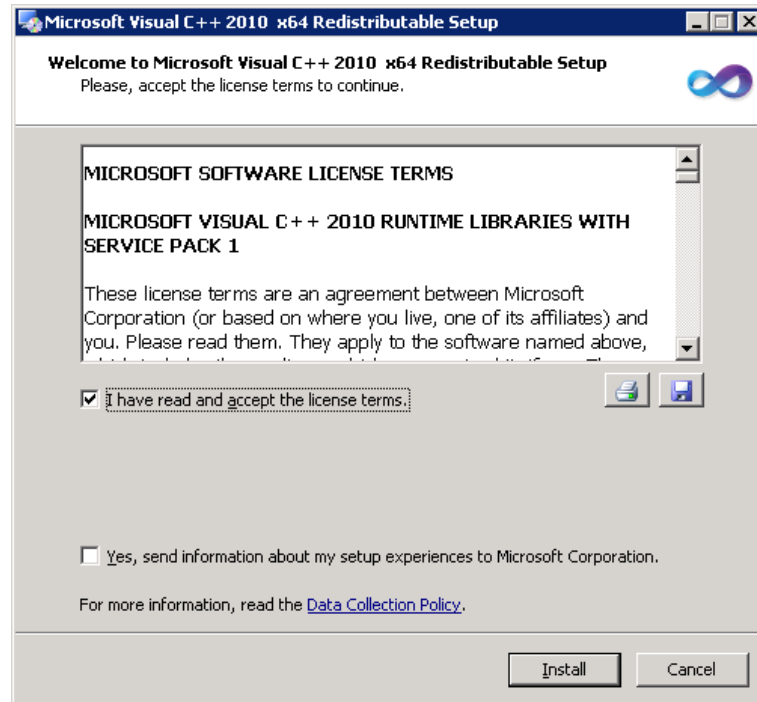
18. Check the box indicating that **I have read and accept the license terms**
19. (Optional) Check the **Yes, send information about setup experience to Microsoft Corporation**
20. Click **Install**
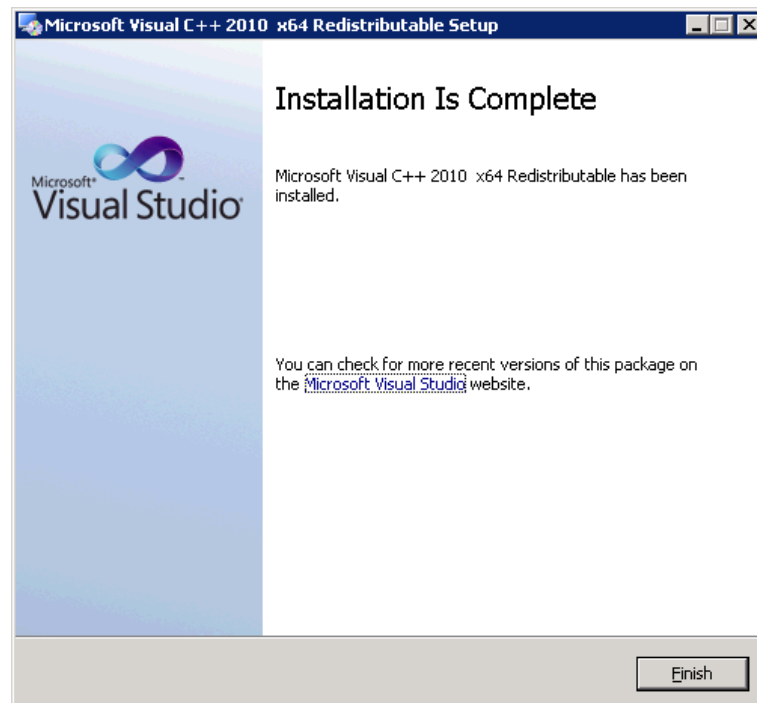
21. Click **Finish** to proceed to the next installation

Visual C++ 2010 SP1 x86 (MFC Security Update)
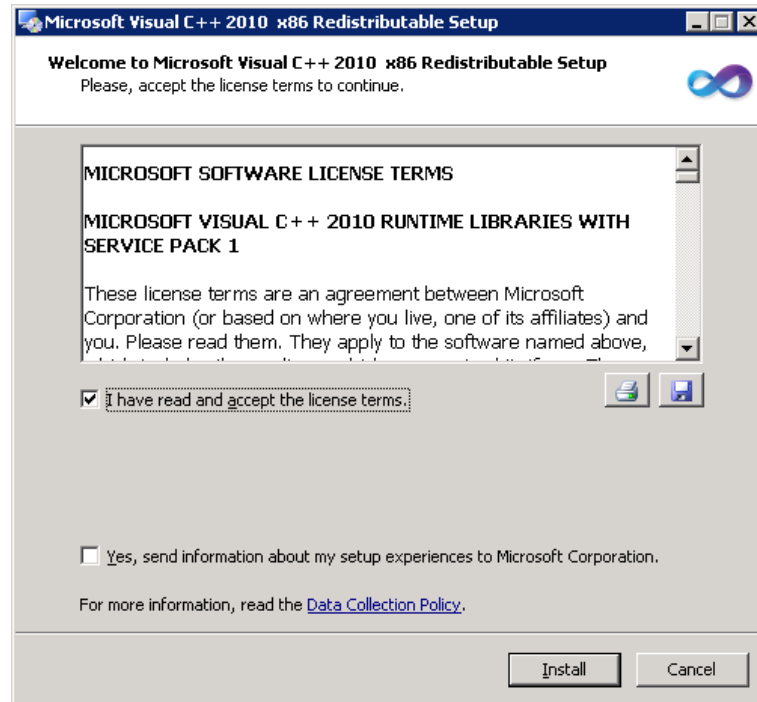
22.   Check the box indicating that **I have read and accept the license terms**
23.   Click **Install**
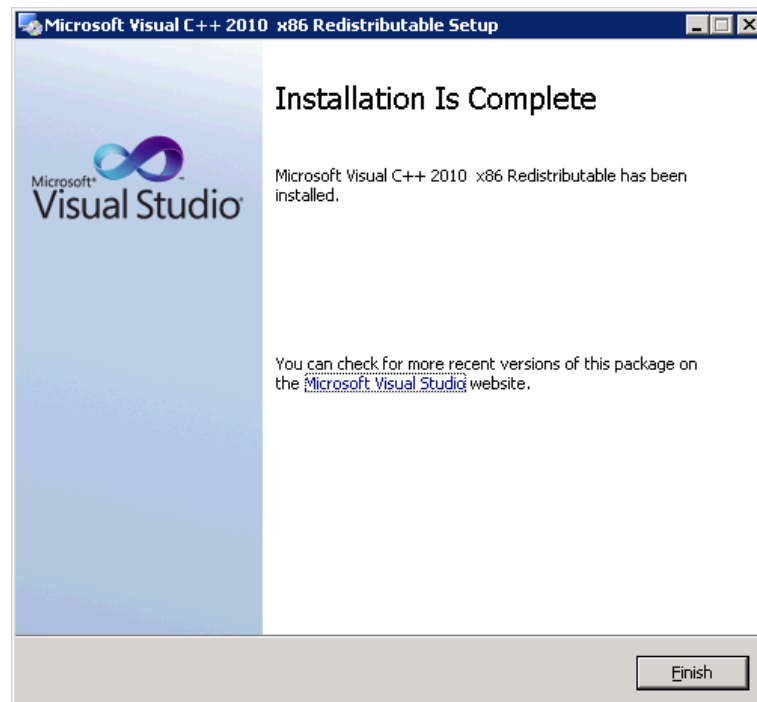
24.   Click **Finish** to proceed to the next installation

Visual C++ Redistributable for Visual Studio 2012 x86
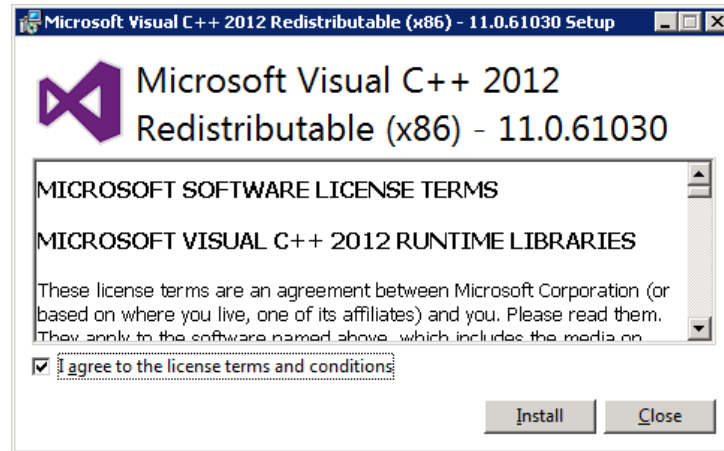
25.   Check the box indicating that **I agree to the license terms and conditions**
26.   Click **Install**
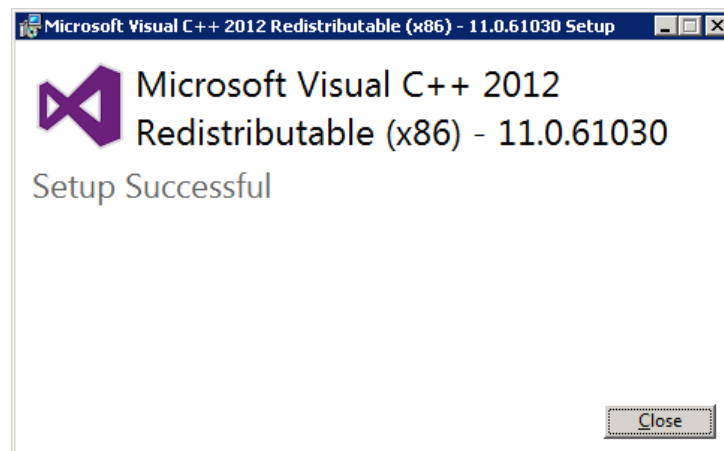
27.   Click **Close** to proceed to the next installation

Visual C++ Redistributable for Visual Studio 2012 x64
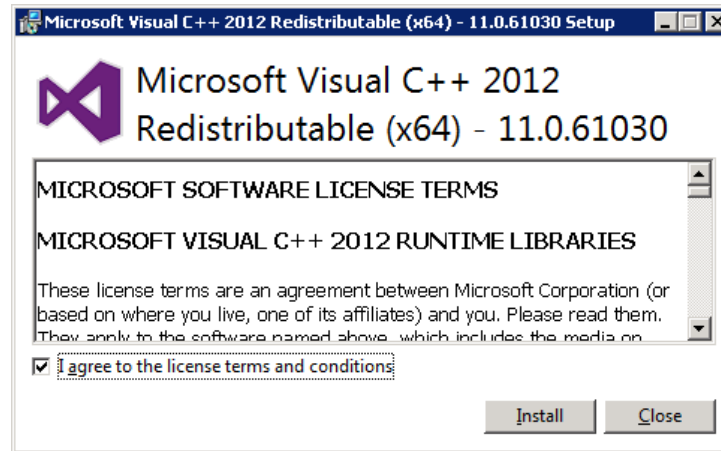
28.   Check the box indicating that **I agree to the license terms and conditions**
29.   Click **Install**
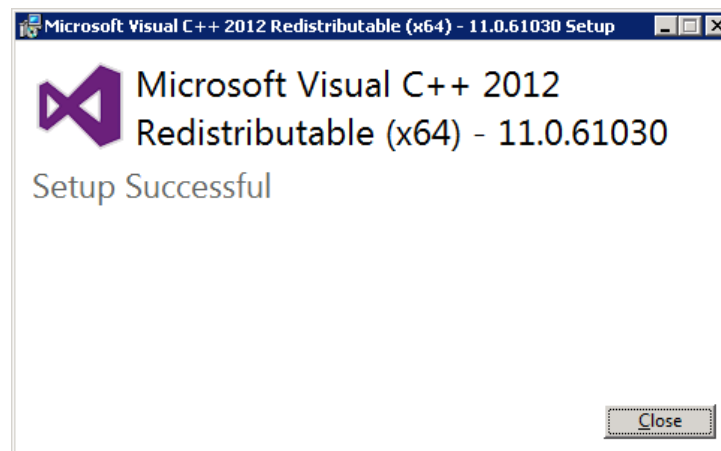
30.   Click **Close** to proceed to the next installation

SQL Server Native client 2008R2 x64
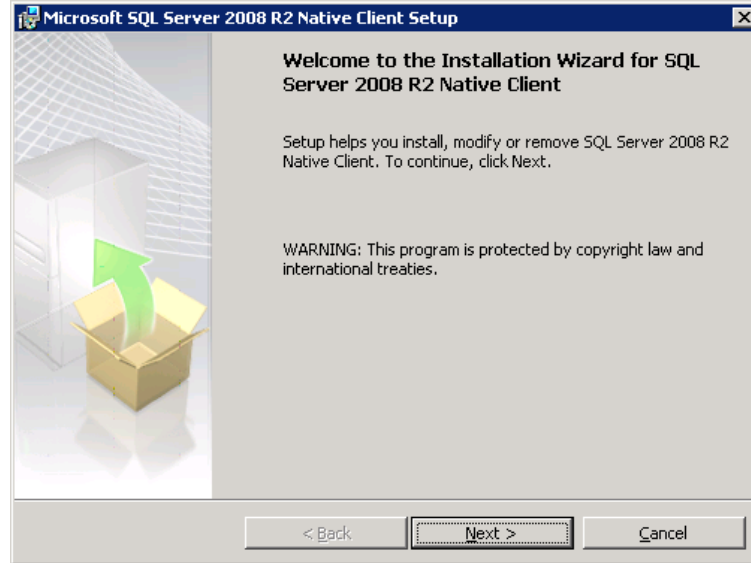
31.   Click **Next >**
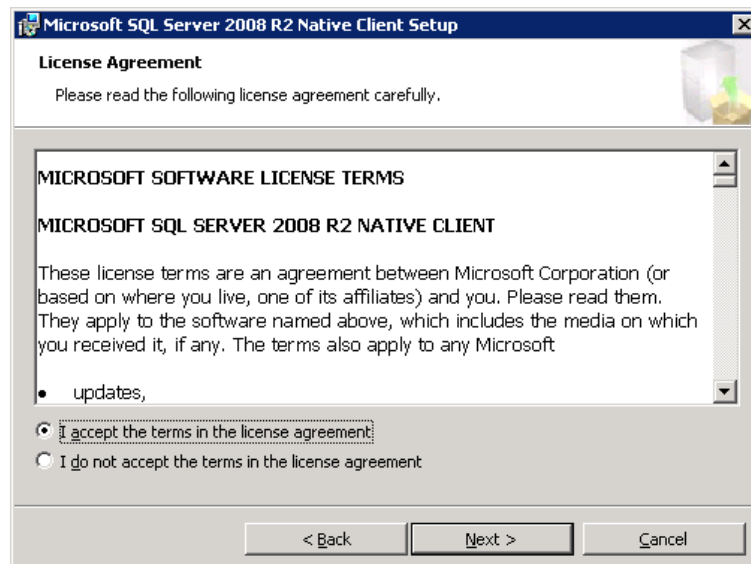
32.   Click **I accept the terms in the license agreement**
33.   Click **Next >**
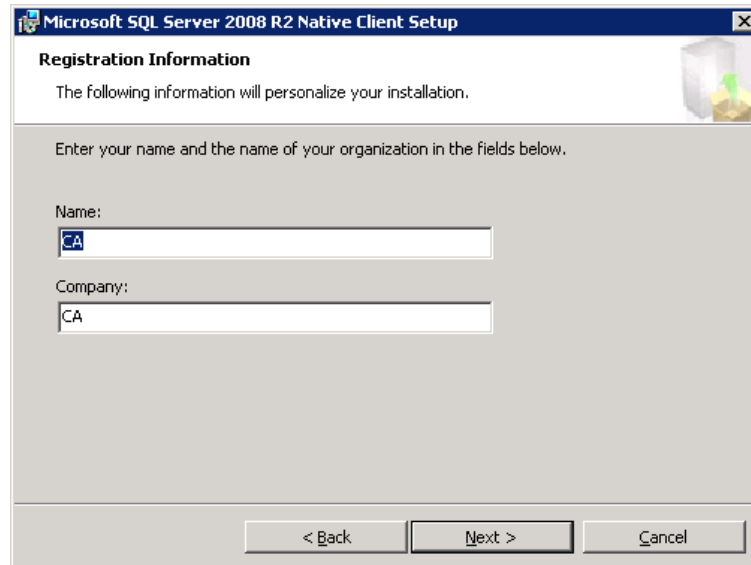
34.   Verify or enter the Name and Company information if needed
35.   Click **Next >**
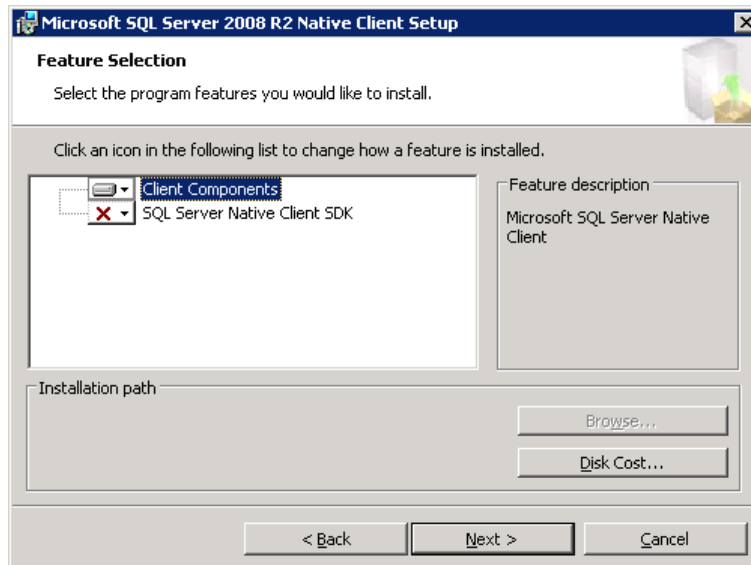
36.   Verify that **Client Components** will be installed
37.   Click **Next >**
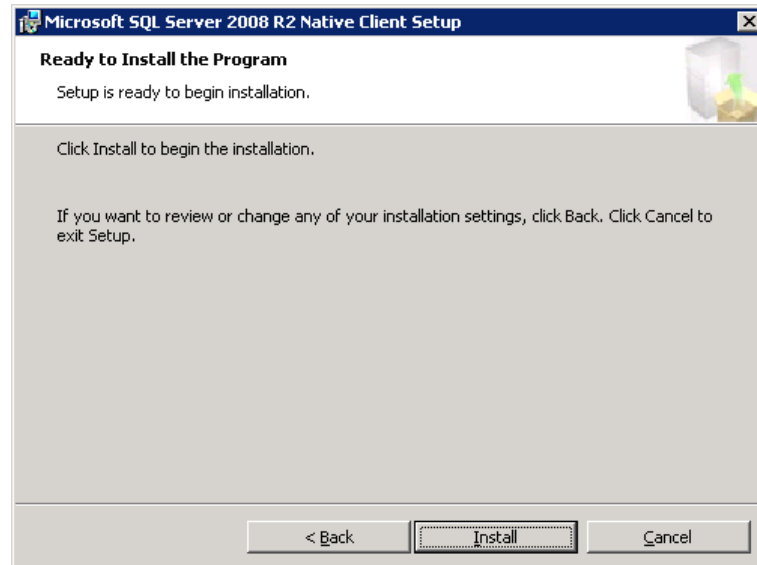
38. Click **Install**
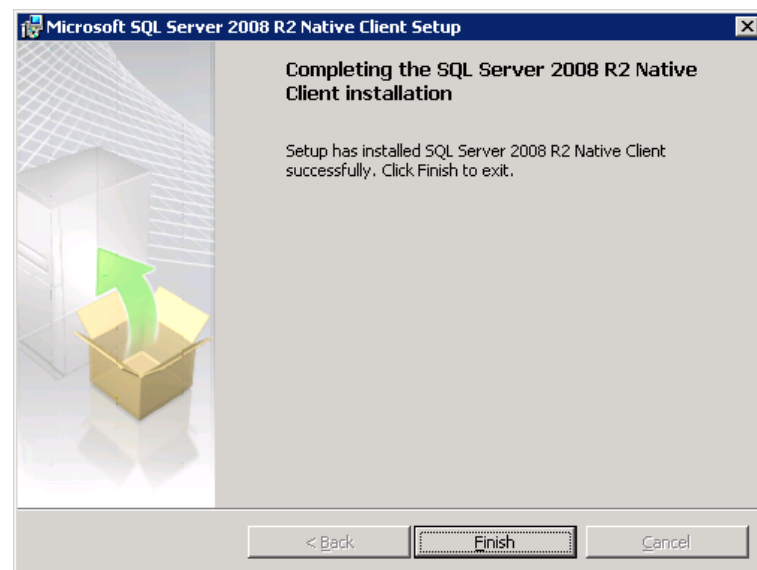
39. Click **Finish** to proceed to the next installation

CodeMeter Runtime Kit x64
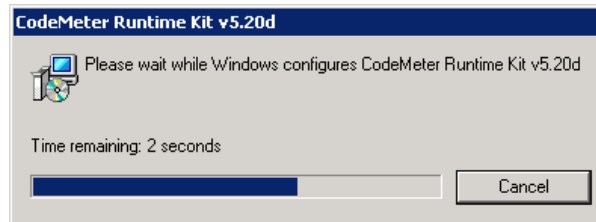


40.   Verify this screen appears. This product automatically installs.
41.   Before proceeding to the next installation go to the original **GTServer Setup Wizard** window.
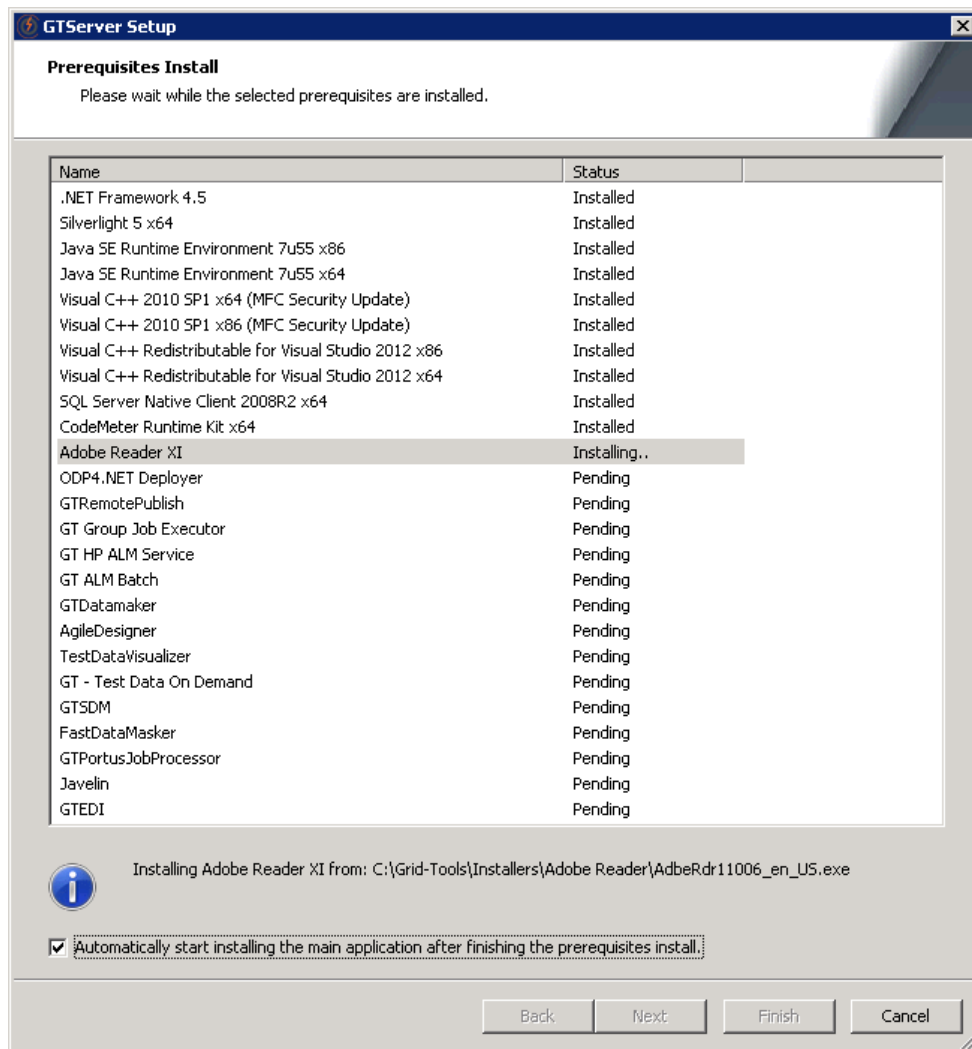
42.   Confirm that the **CodeMeter Runtime Kit x64** has a **Status** of **Installed**
43.   Go back to the next product installation **(Adobe Reader XI)**

Adobe Reader XI

A **Preparing Installation** window should popped up automatically and extracted the installation files.
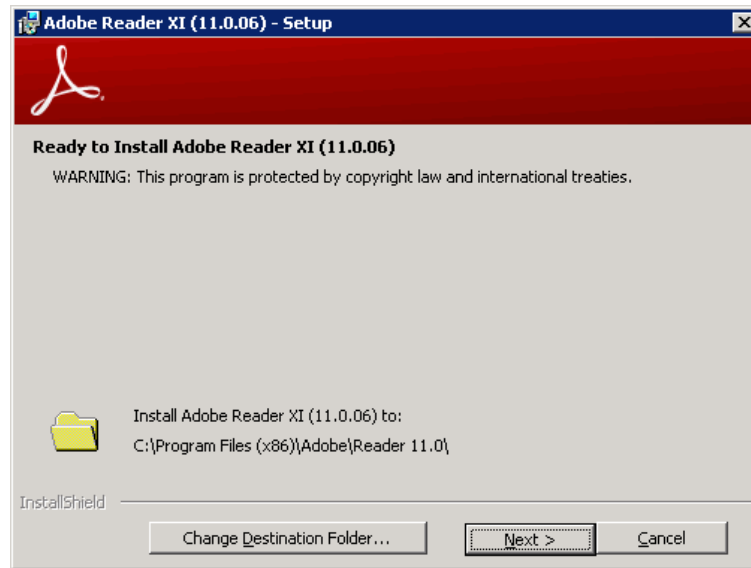
44. Verify or select Change Destination Folder if needed
45. Click **Next >**
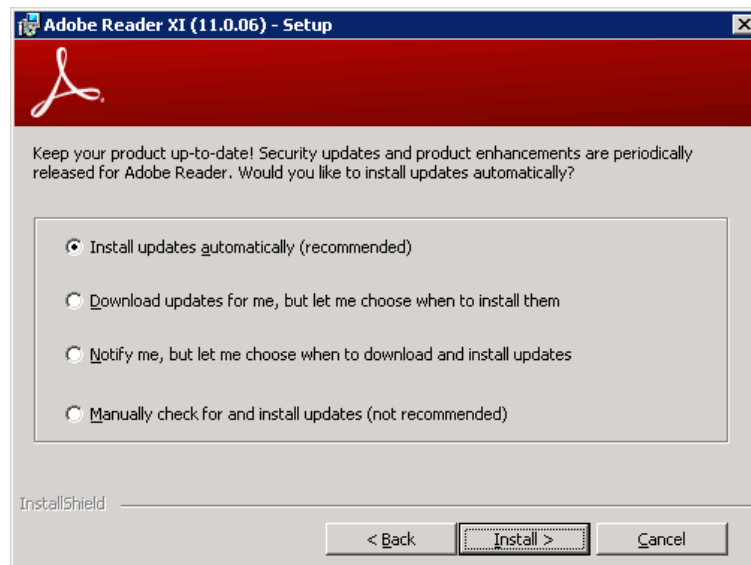
46. Select an Update option or Verify **Install updates automatically (recommended)** is selected
47. Click **Install >**
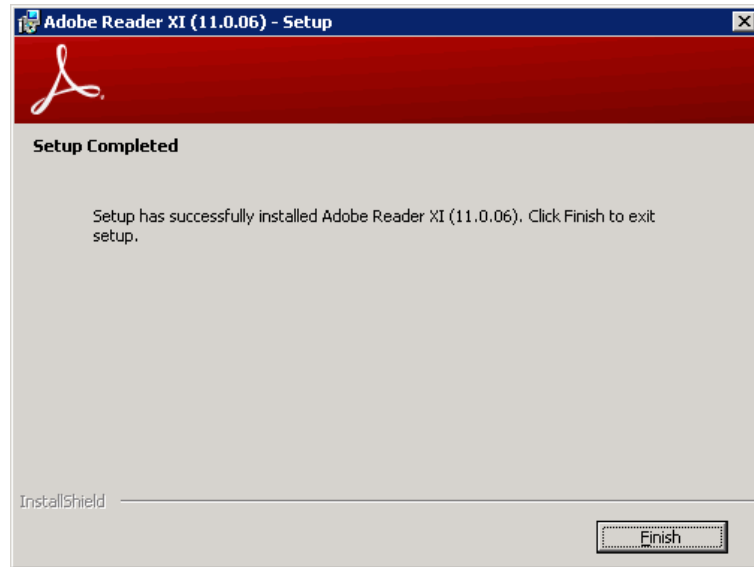
48.   Click **Finish** to proceed to the next installation

ODP4.NET Deployer
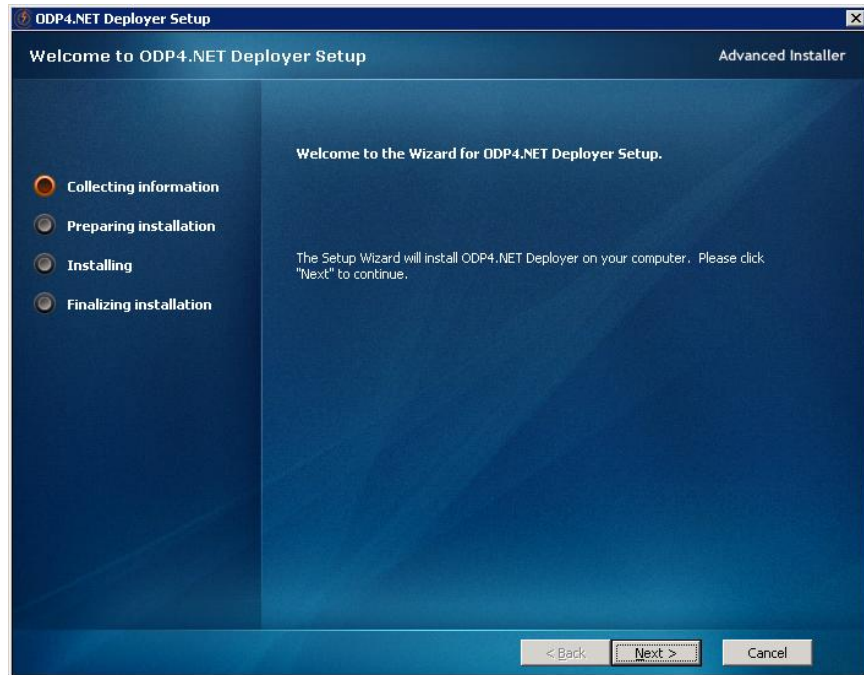
49.   Click **Next >**
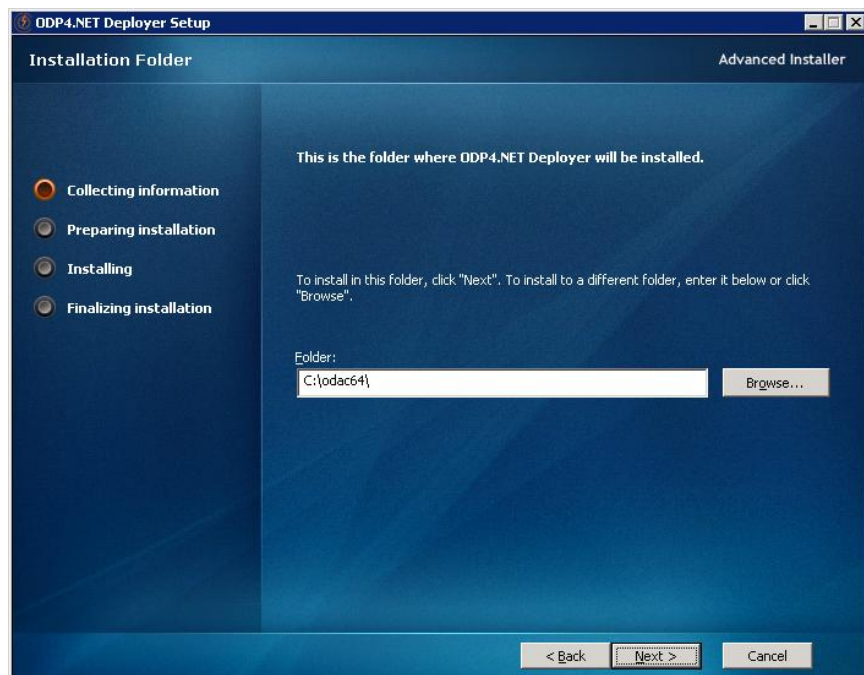
50.   Verify or Browse to change the Folder location
51.   Click **Next >**
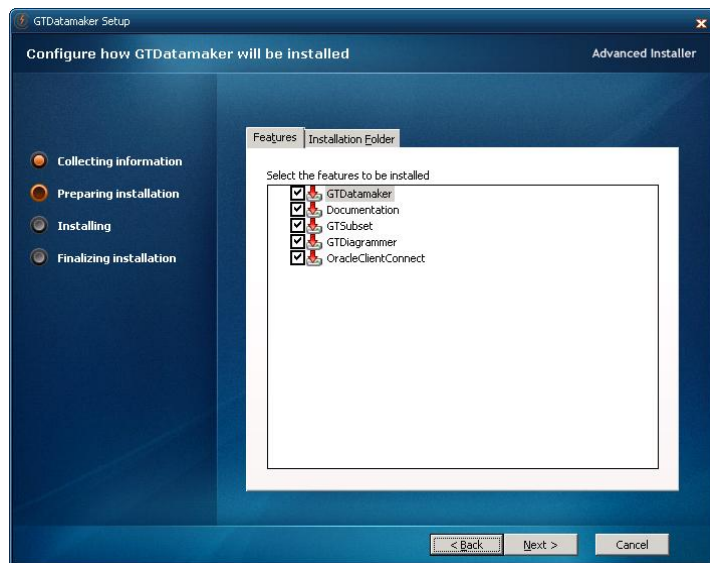
52. Click **Install**

This window will appear, as it says Do Not Close This Window, it will close automatically
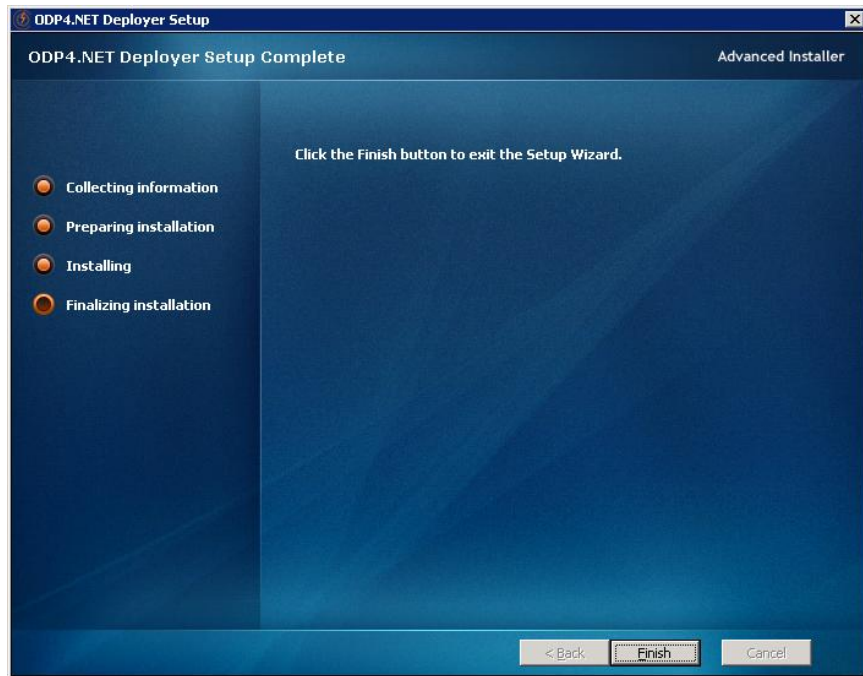
53.   Click **Finish** to proceed to the next installation

GTRemotePublish
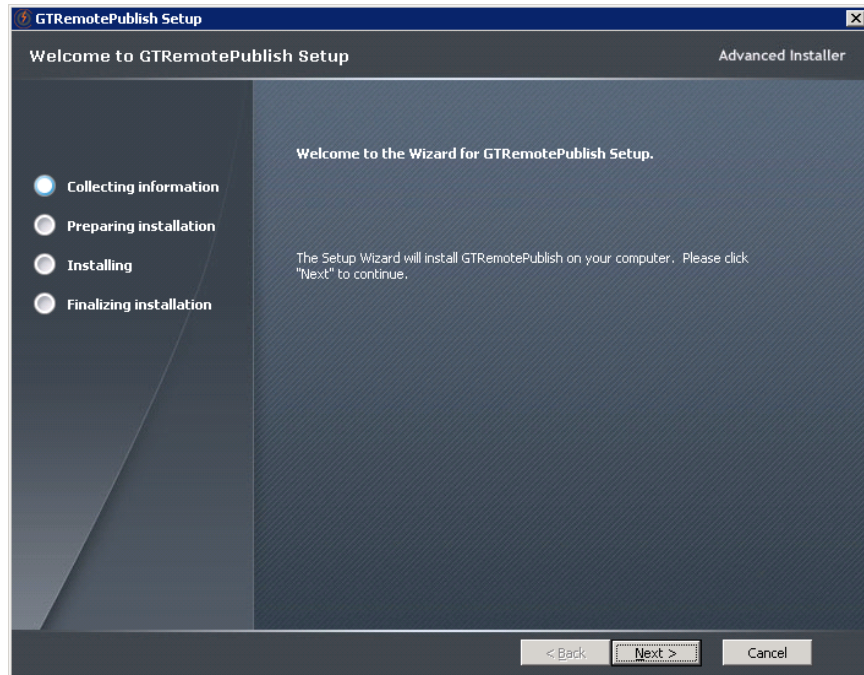
54.   Click **Next >**
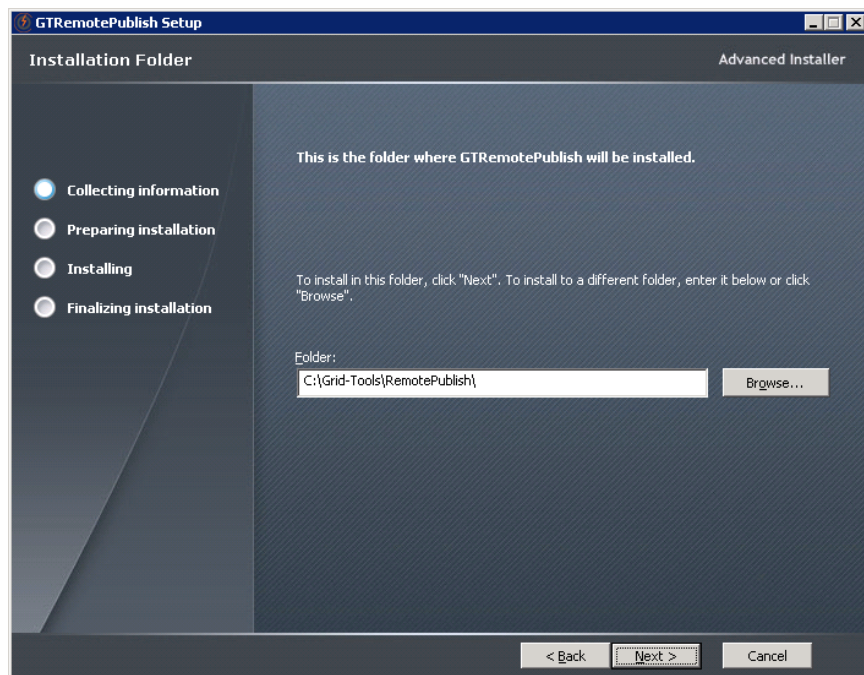
55.   Verify or Browse to change the Folder location
56.   Click **Next >**
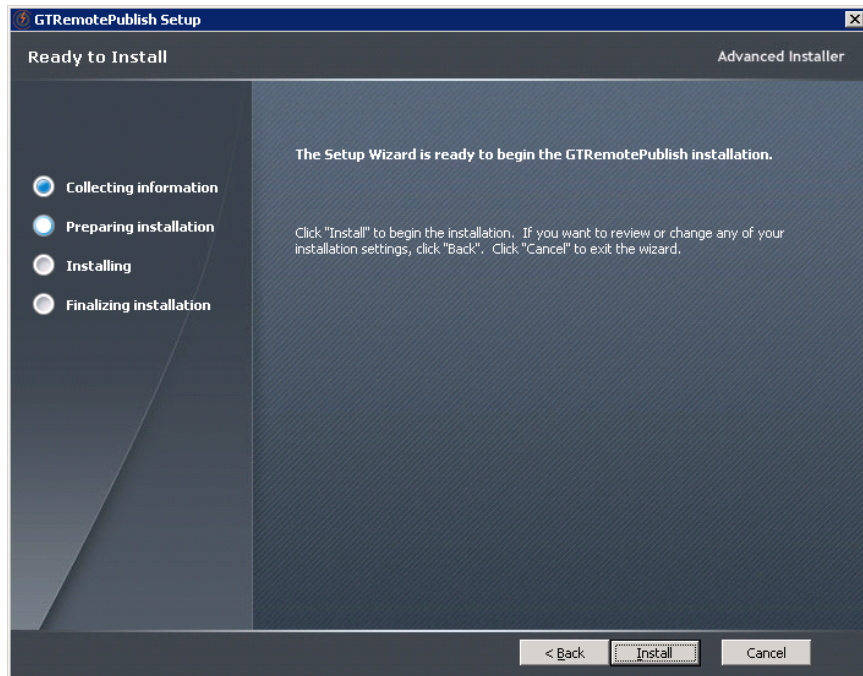
57.   Click **Install**
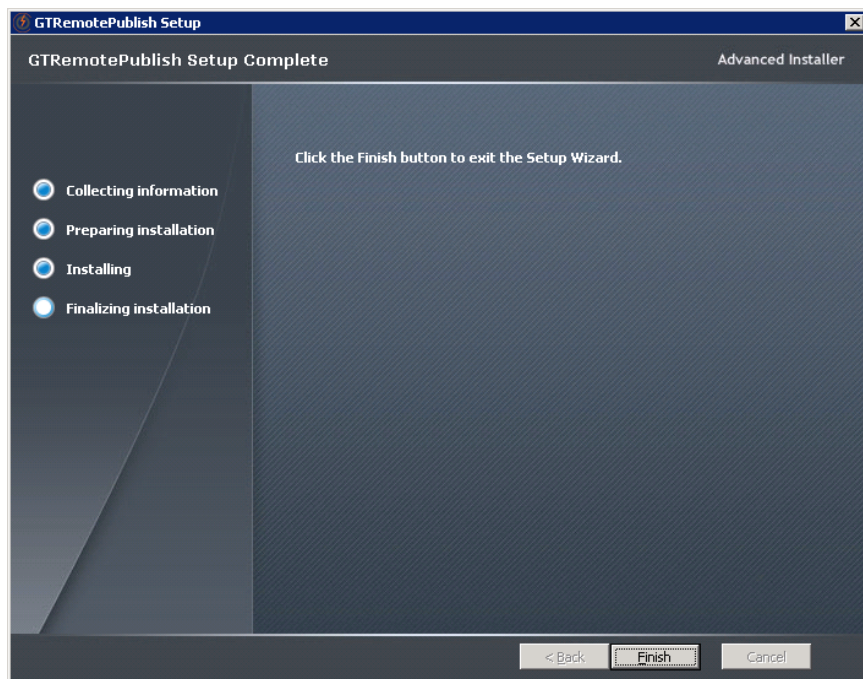
58.   Click **Finish** to proceed to the next installation

GT Group Job Executor
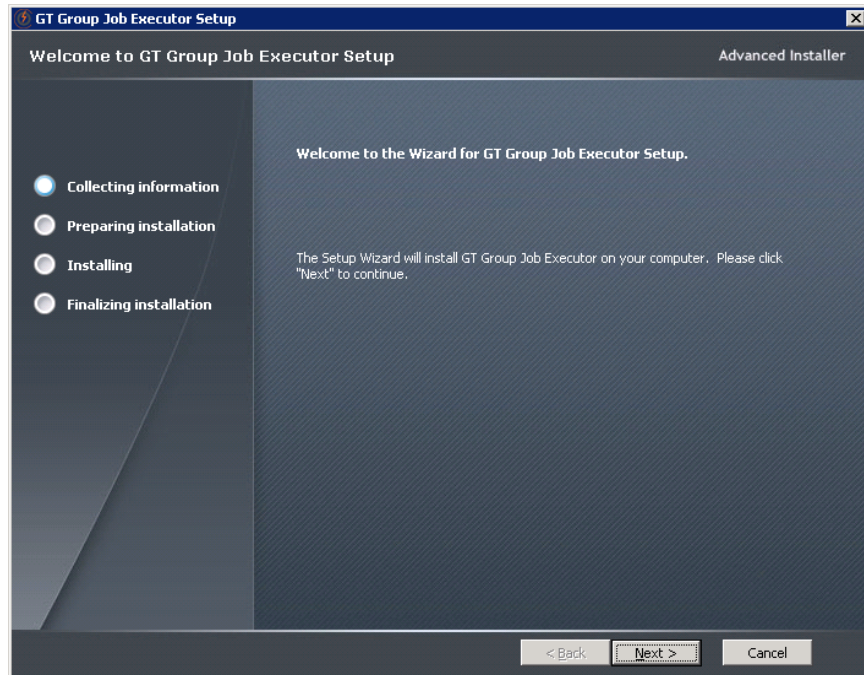
59.   Click **Next >**
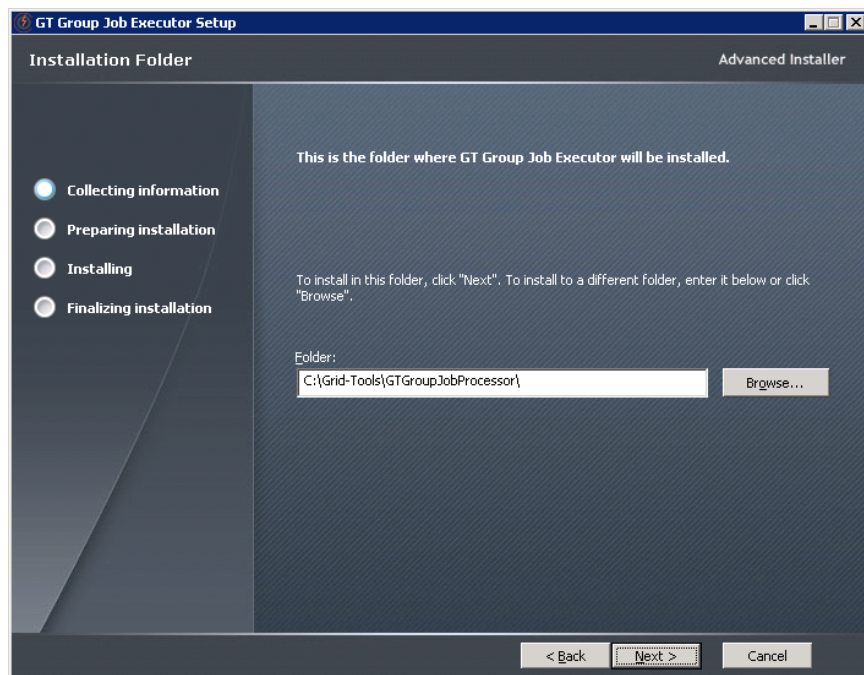
60.   Verify or Browse to change the Folder location
61.   Click **Next >**

28
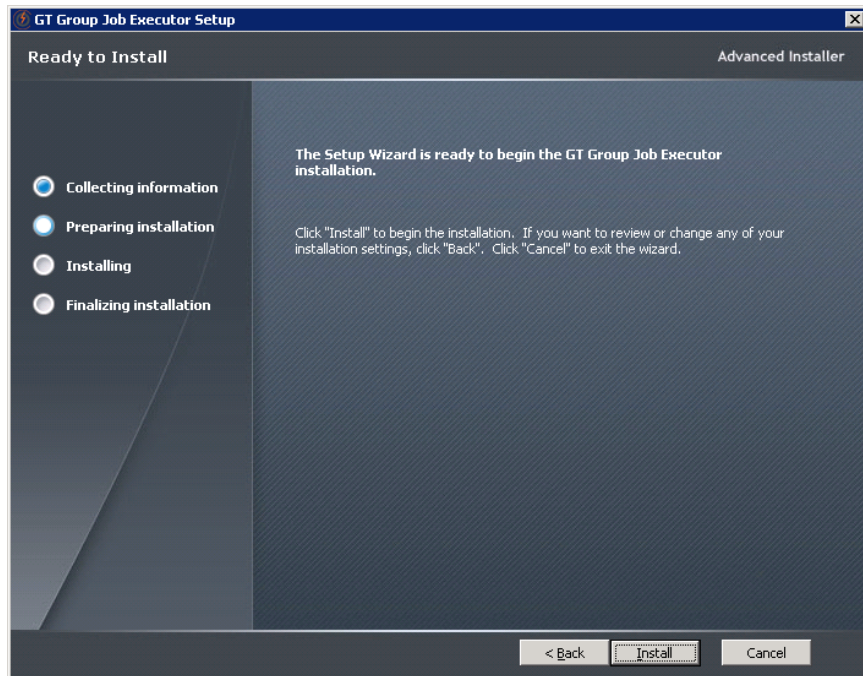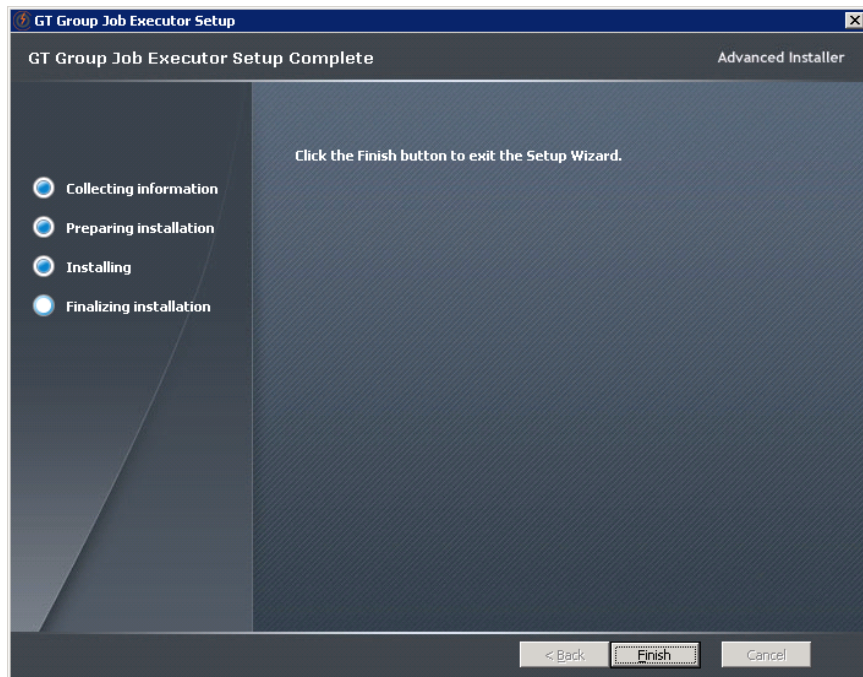
62.   Click **Install**

63.   Click **Finish** to proceed to the next installation

GT HP ALM Service
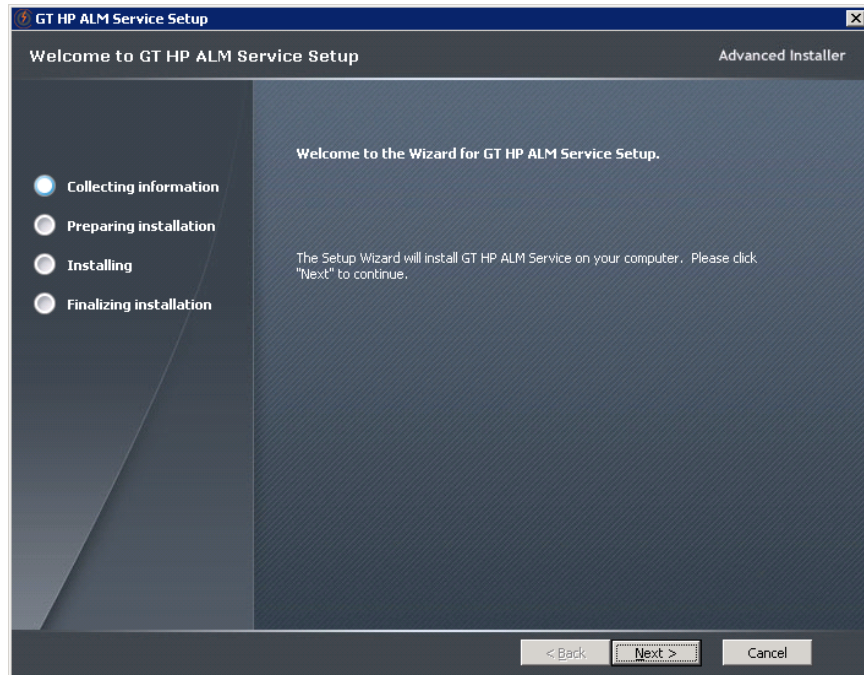
64.   Click **Next >**
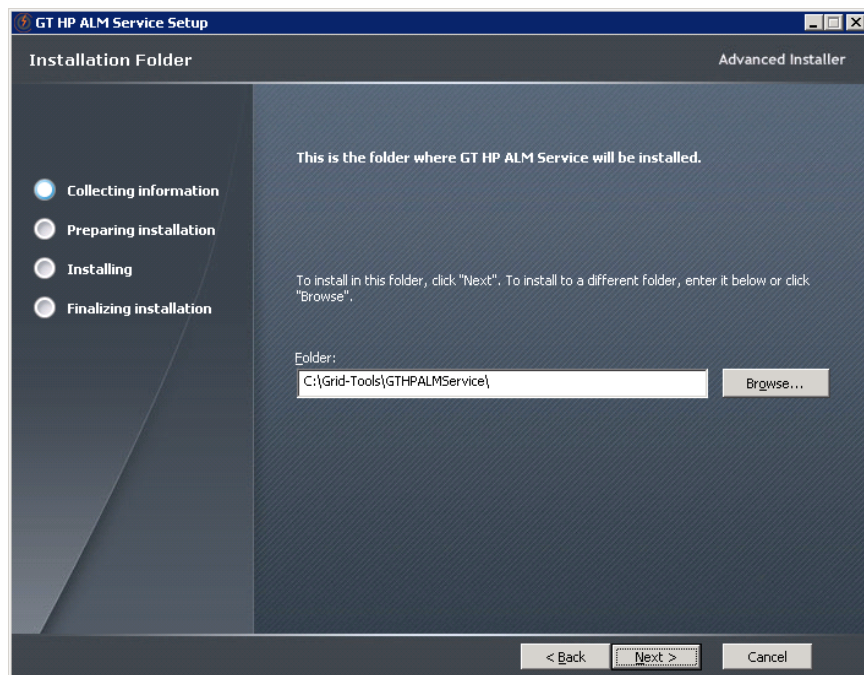
65.   Verify or Browse to change the Folder location
66.   Click **Next >**
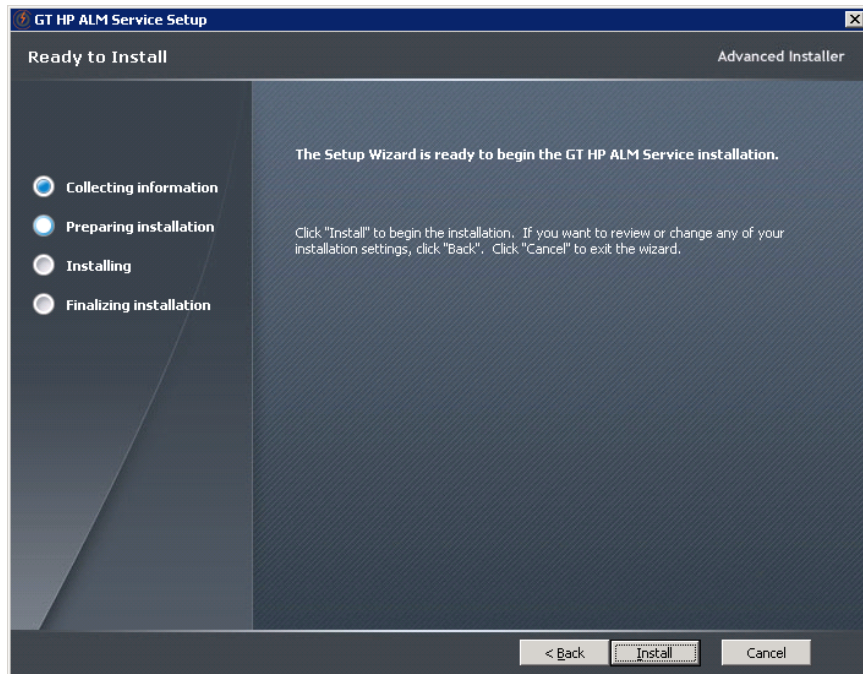
67.   Click **Install**
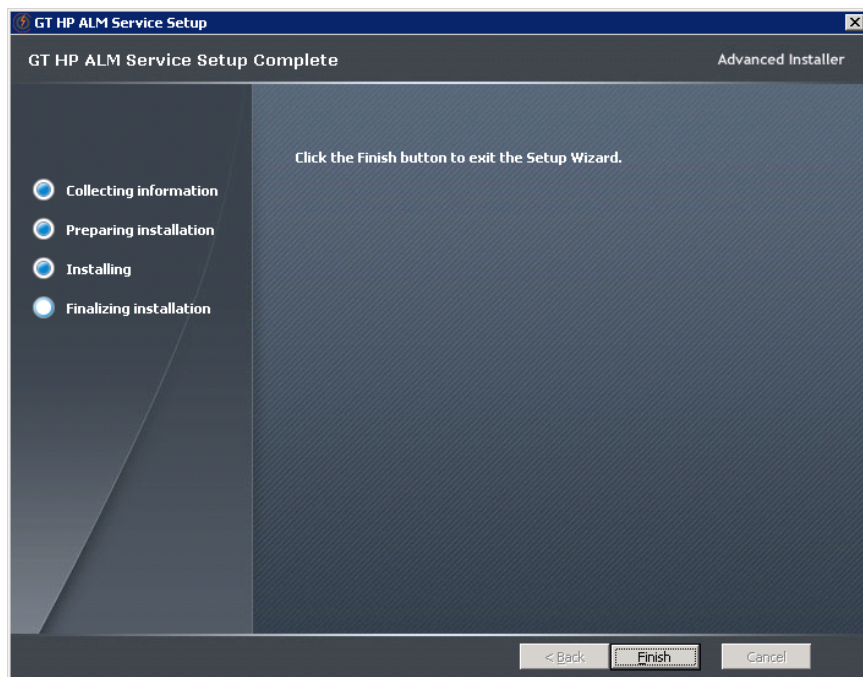
68.   Click **Finish** to proceed to the next installation

GT ALM Batch
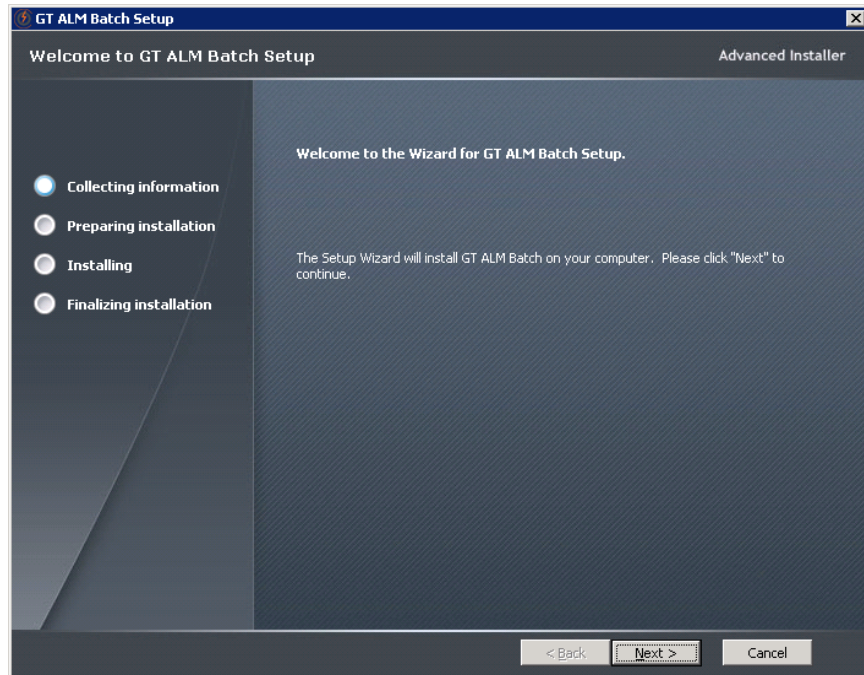
69.   Click **Next >**
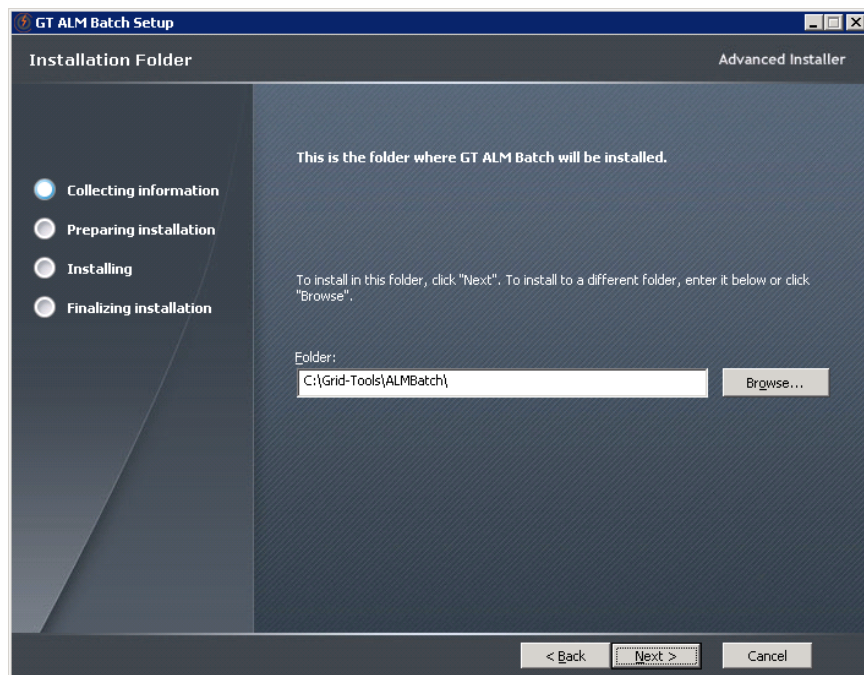
70.   Verify or Browse to change the Folder location
71.   Click **Next >**
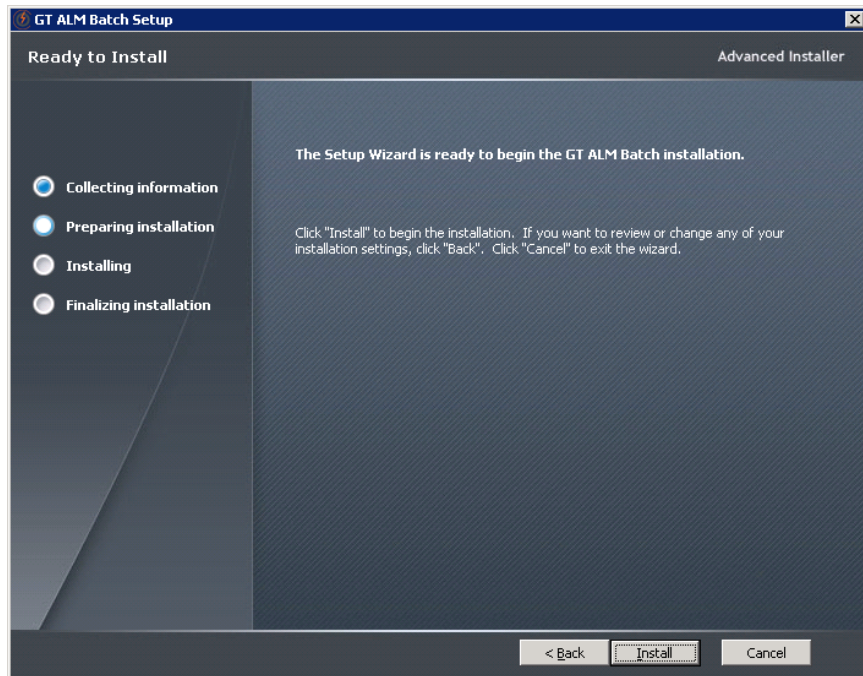
72.   Click **Install**
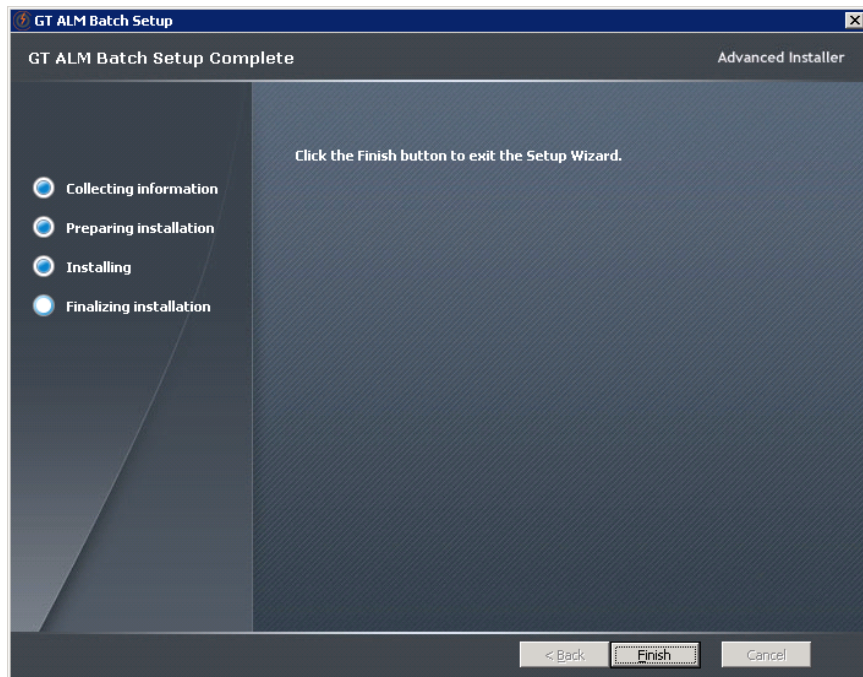
73.   Click **Finish** to proceed to the next installation

GTDatamaker
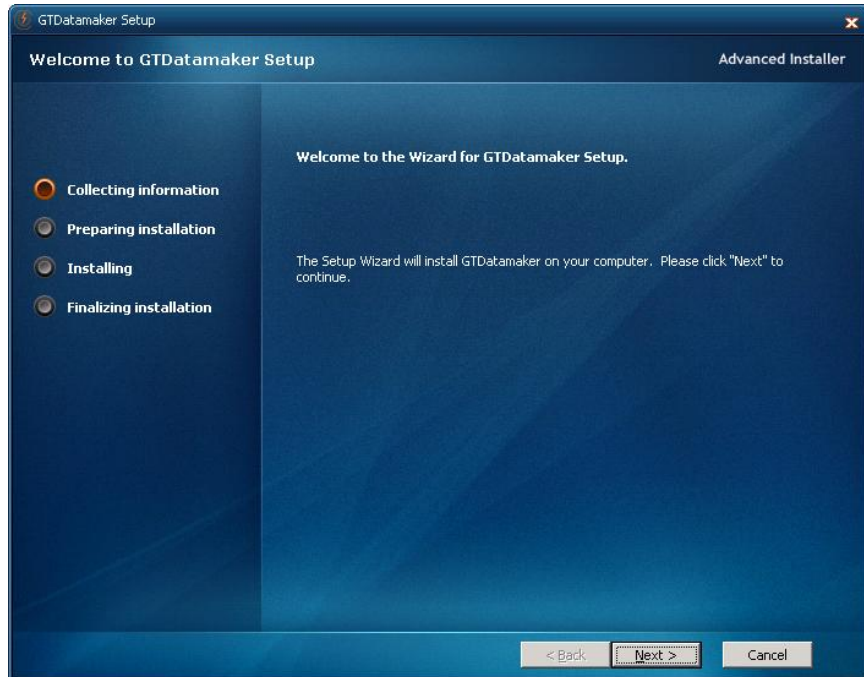
74.   Click **Next >**
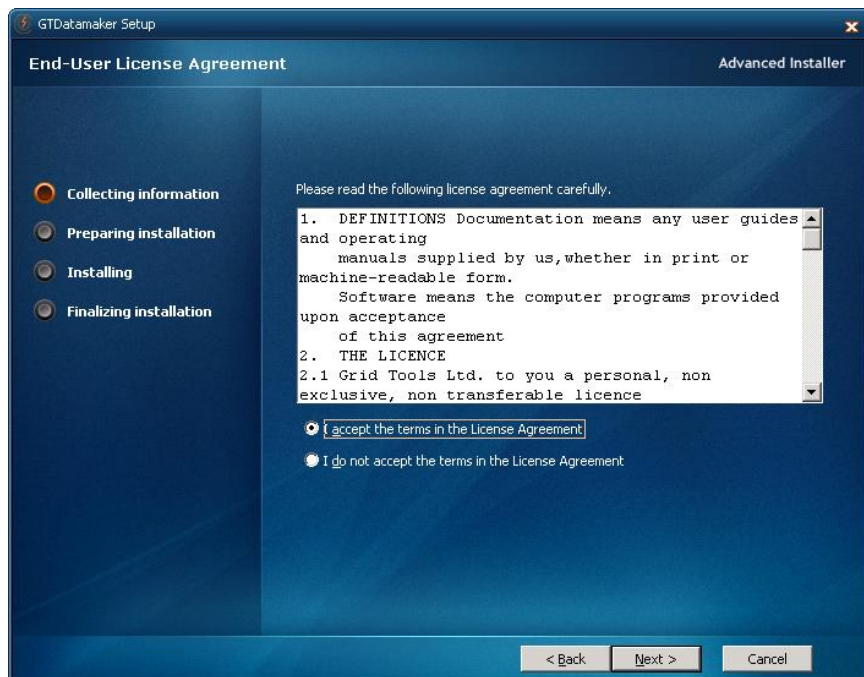
75.   Select **I accept the terms in the License Agreement**
76.   Click **Next >**
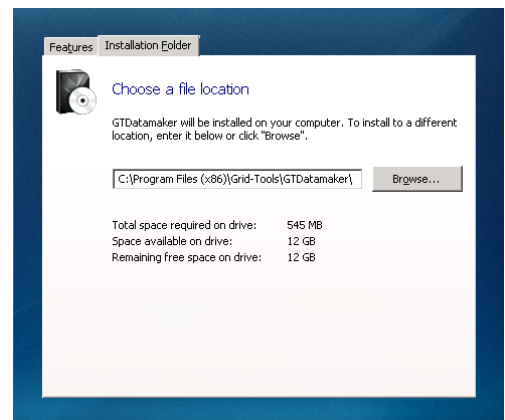
77. **Features** tab: Verify all 5 default features are checked
78. **Installation Folder** tab: (Optional) Change the installation location if needed
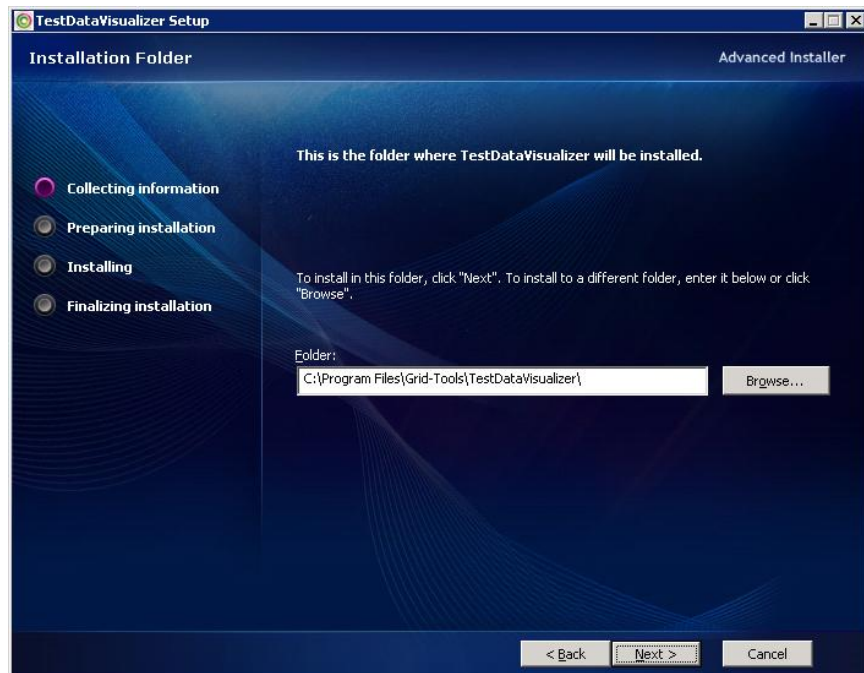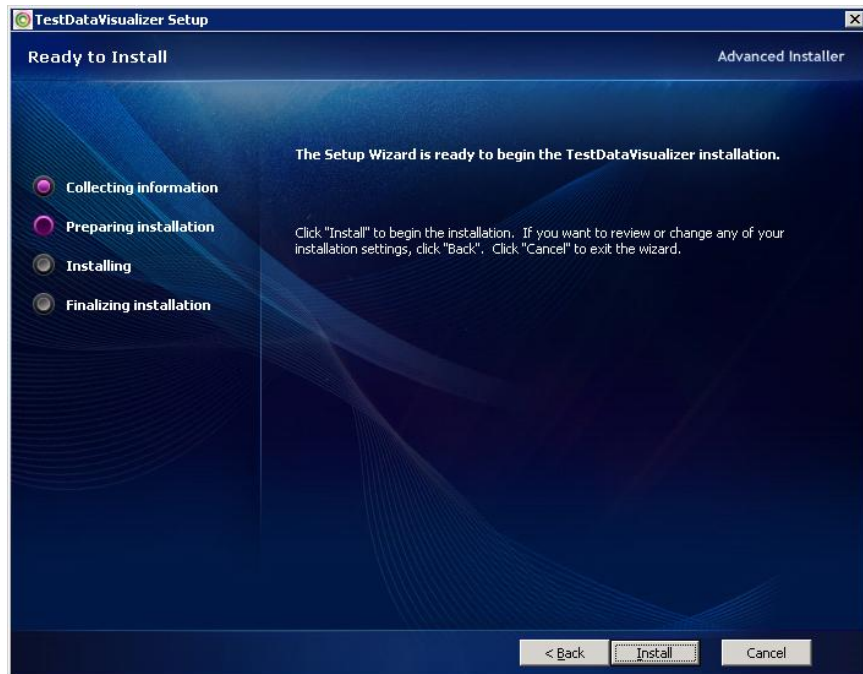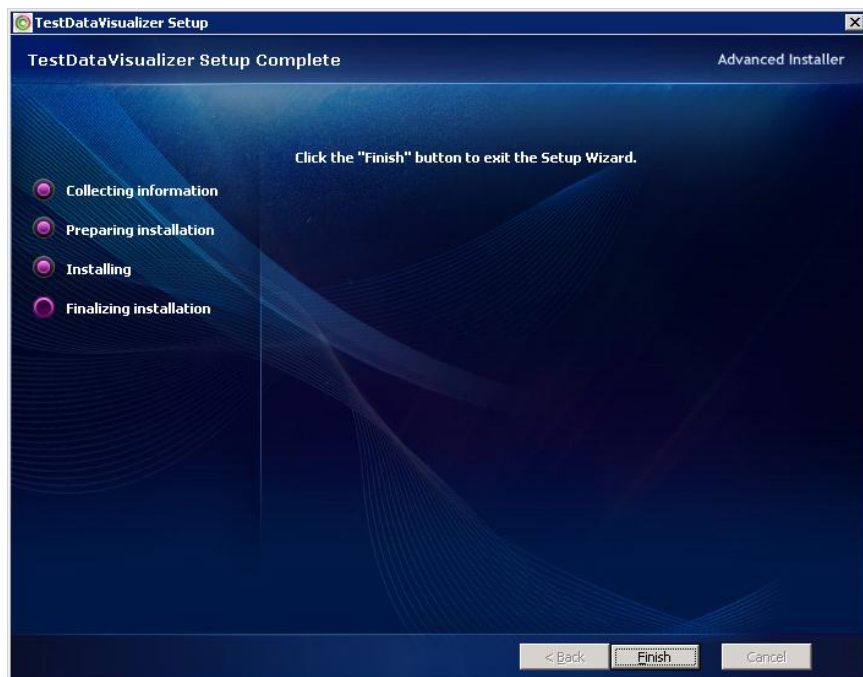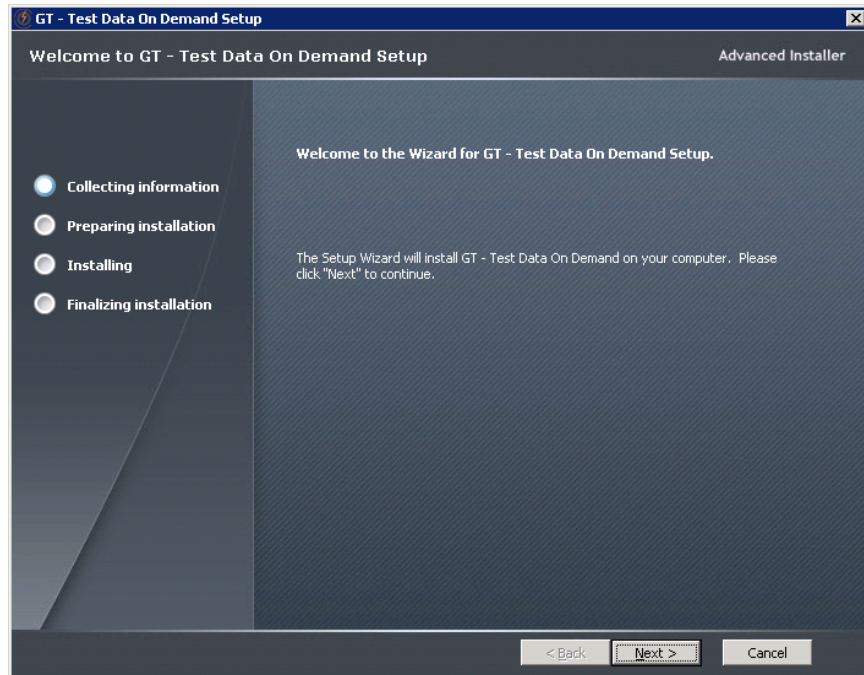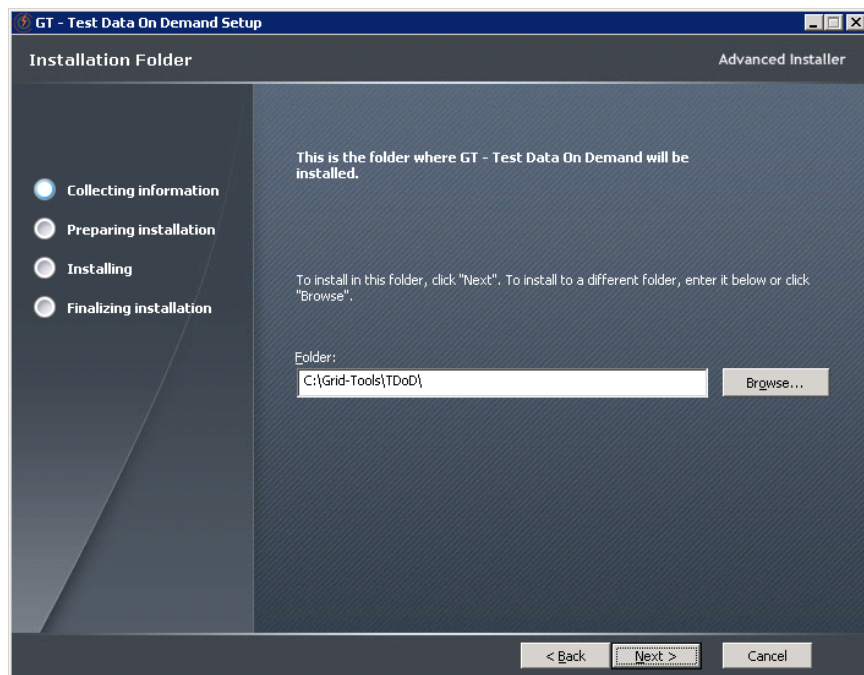79. Click **Next >**
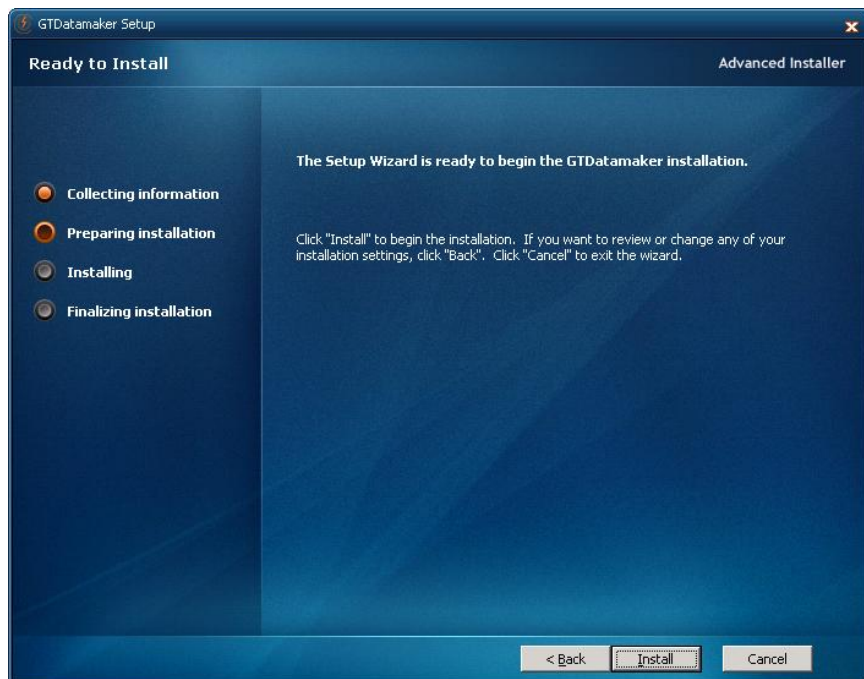
80. Click **Install**
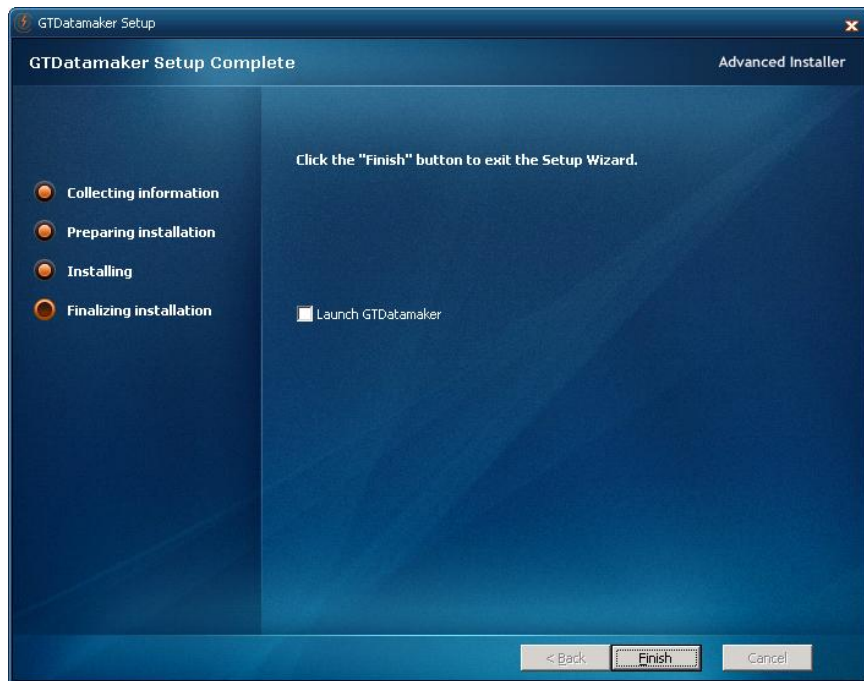
81.   Since this is a continuous install Do Not check **Launch GTDatamaker**
82.   Click **Finish** to proceed to the next installation

AgileDesigner
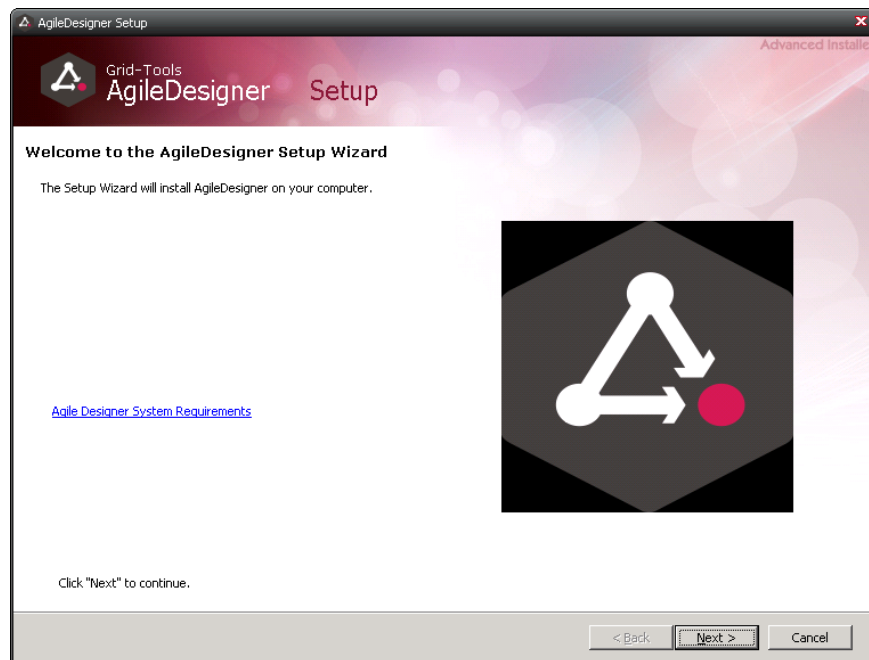
83.   Click **Next >**
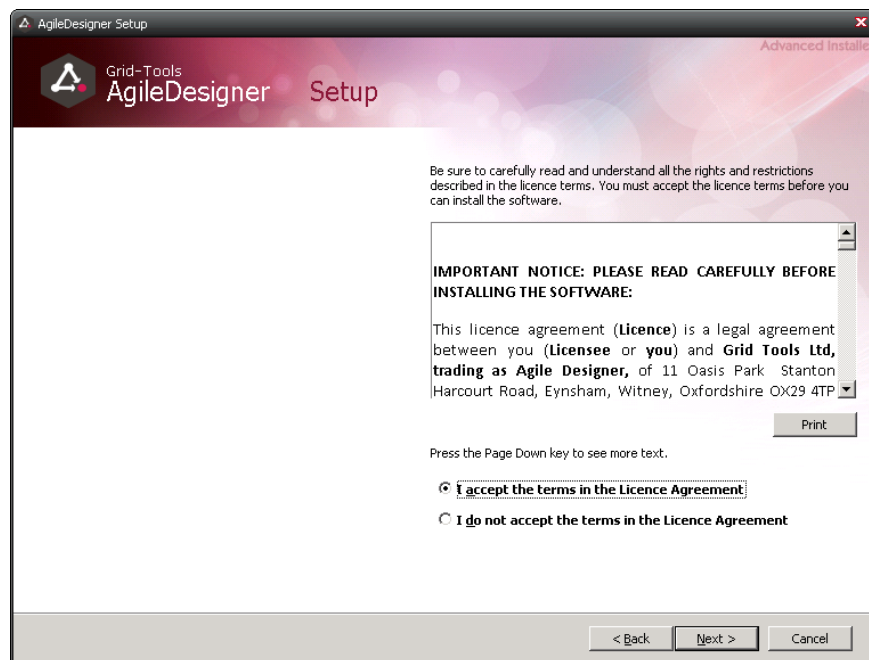
84.   Select **I accept the terms in the License Agreement**
85.   Click **Next >**
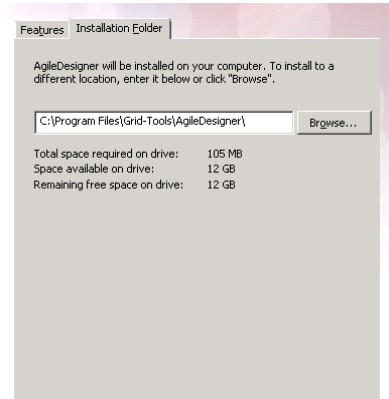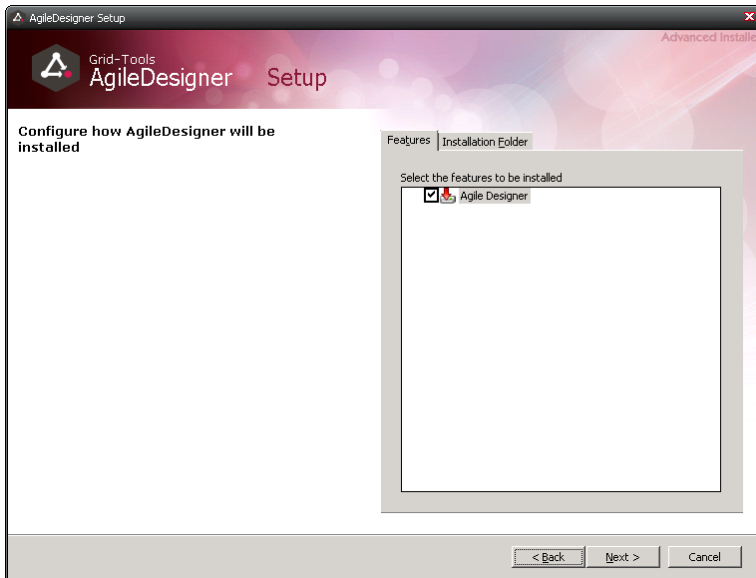
86. **Features** tab: Verify that **Agile Designer** is checked
87. **Installation Folder** tab: (Optional) Change the installation location if needed
88. Click **Next >**
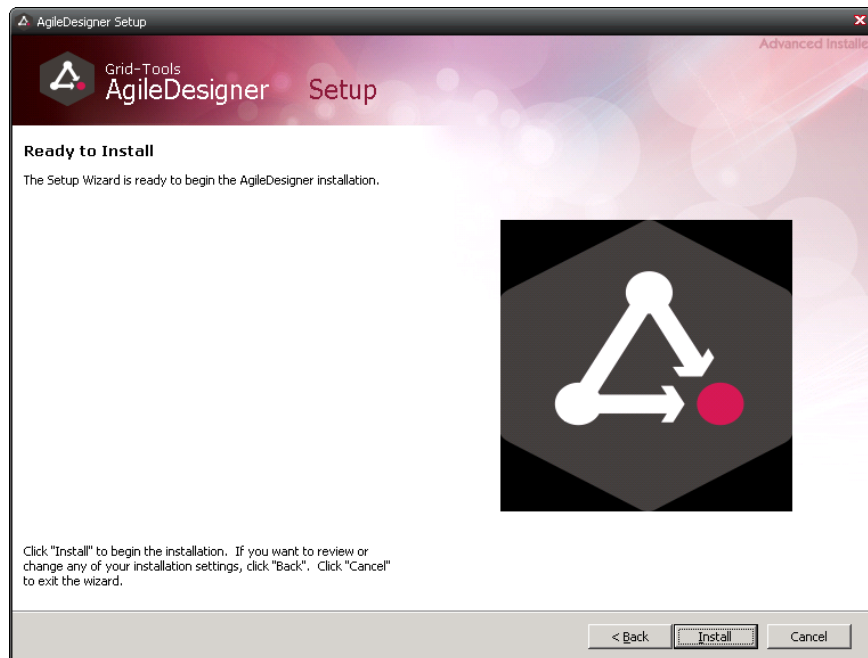
89. Click **Install**
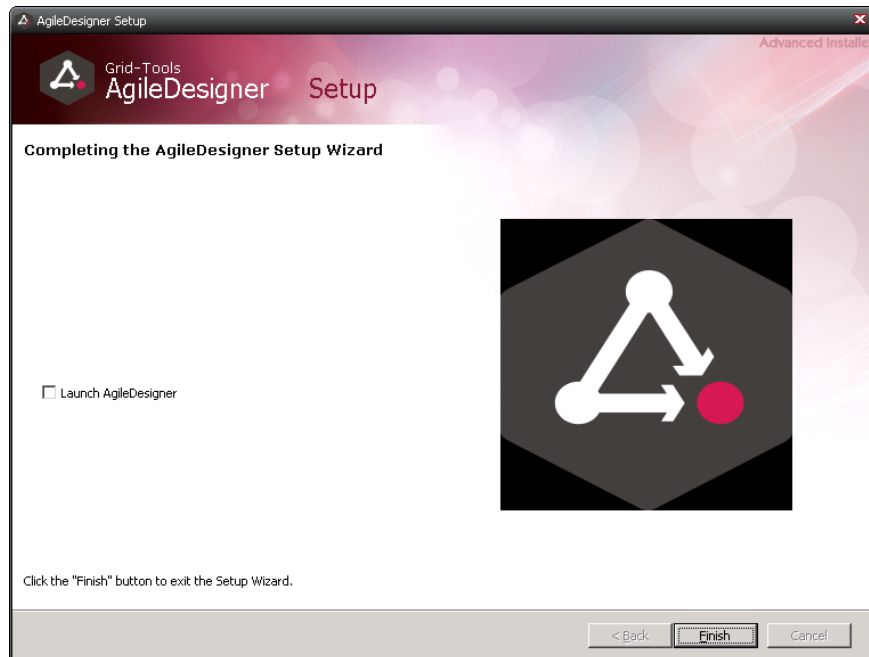
90.   Since this is a continuous install Do Not check **Launch AgileDesigner**
91.   Click **Finish** to proceed to the next installation

TestDataVisualizer

92. Click **Next >**

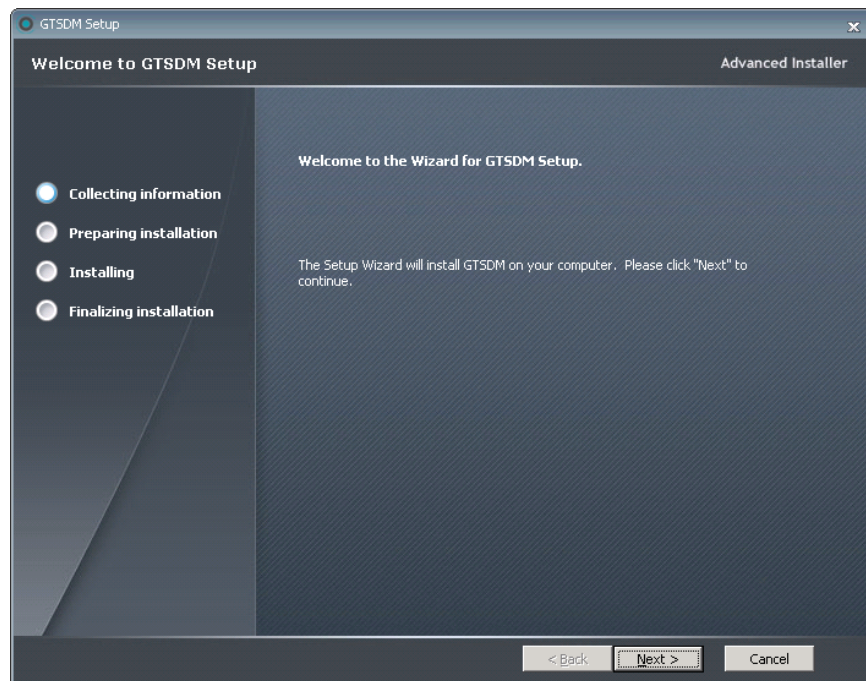93. Verify or Browse to change the Folder location
94. Click **Next >**

95.   Click **Install**

96.   Click **Finish** to proceed to the next installation

GT – Test Data On Demand

97.   Click **Next >**

98.   Verify or Browse to change the Folder location
99.   Click **Next >**
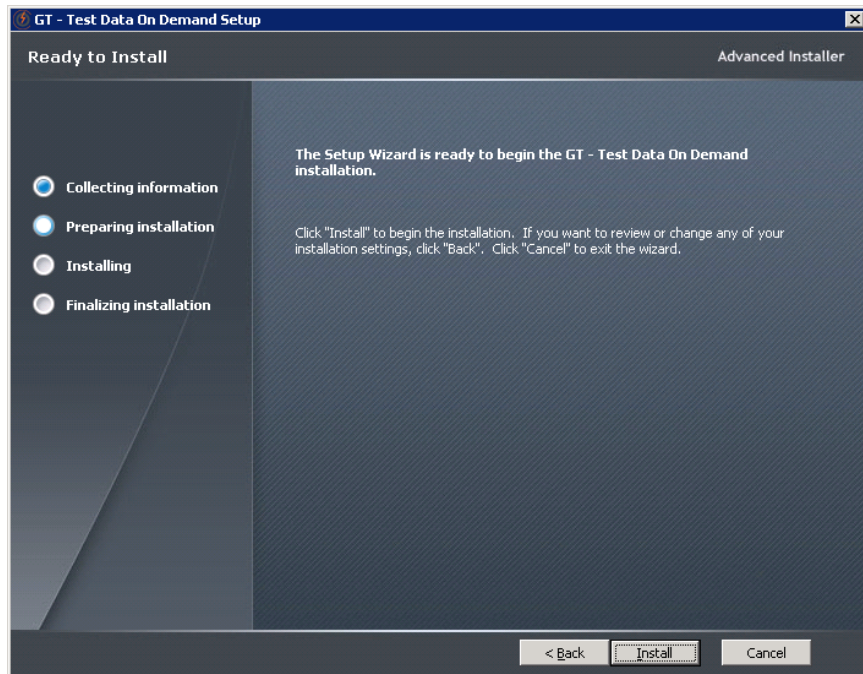
100.　Click **Install**

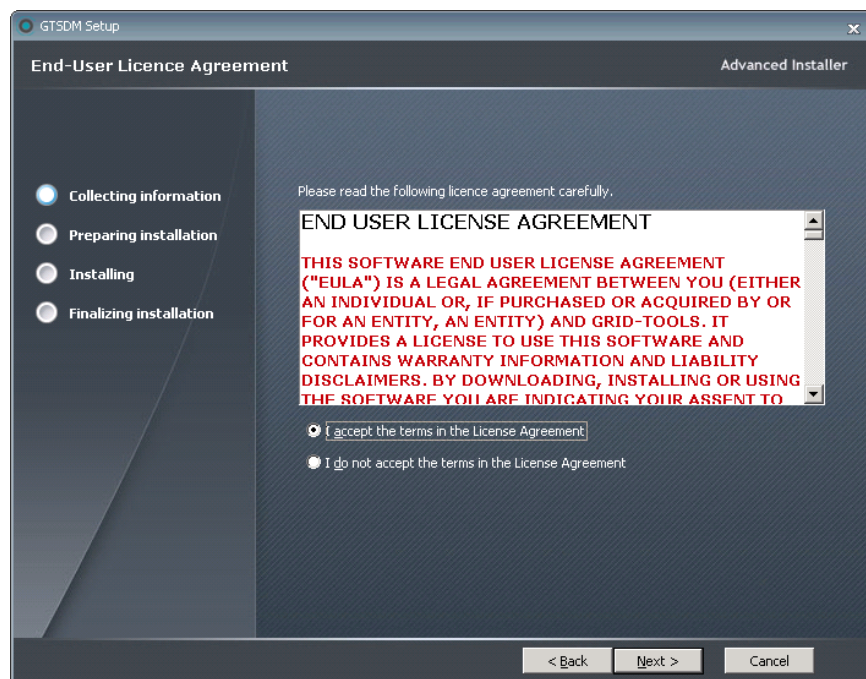- **Note:** This screen seems to freeze, be patient, the installation takes 3 – 4 minutes
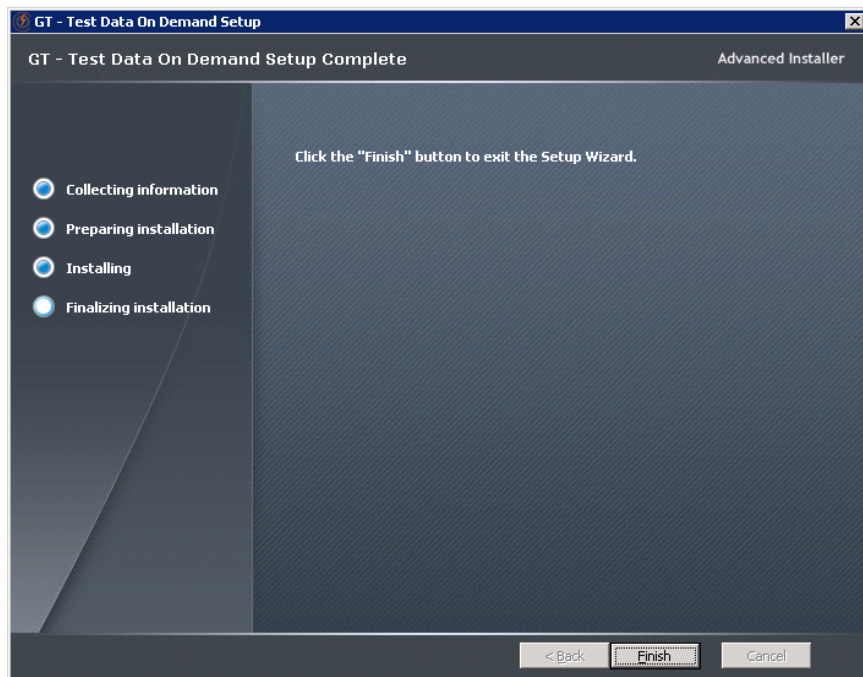
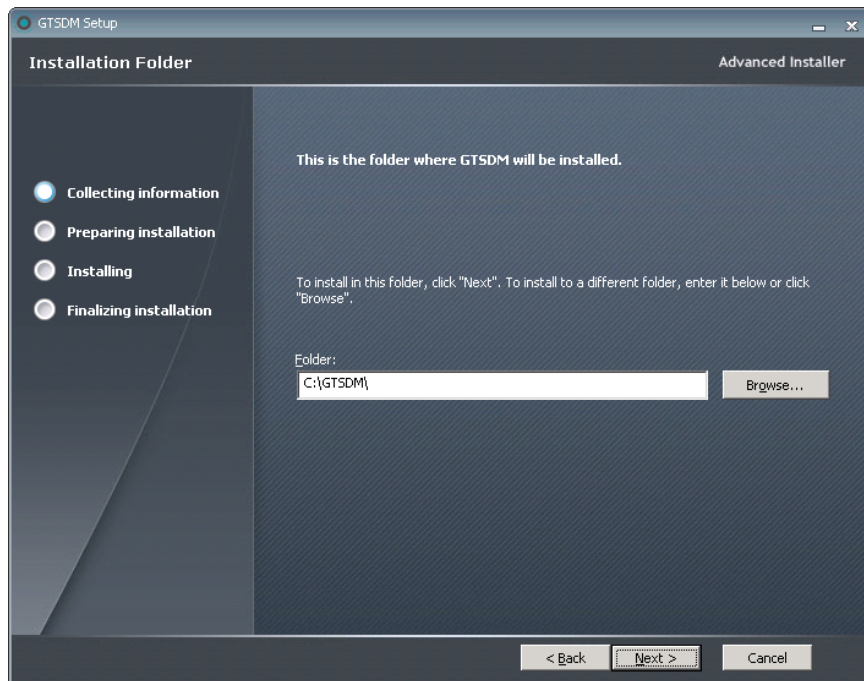101.　Click **Finish** to proceed to the next installation
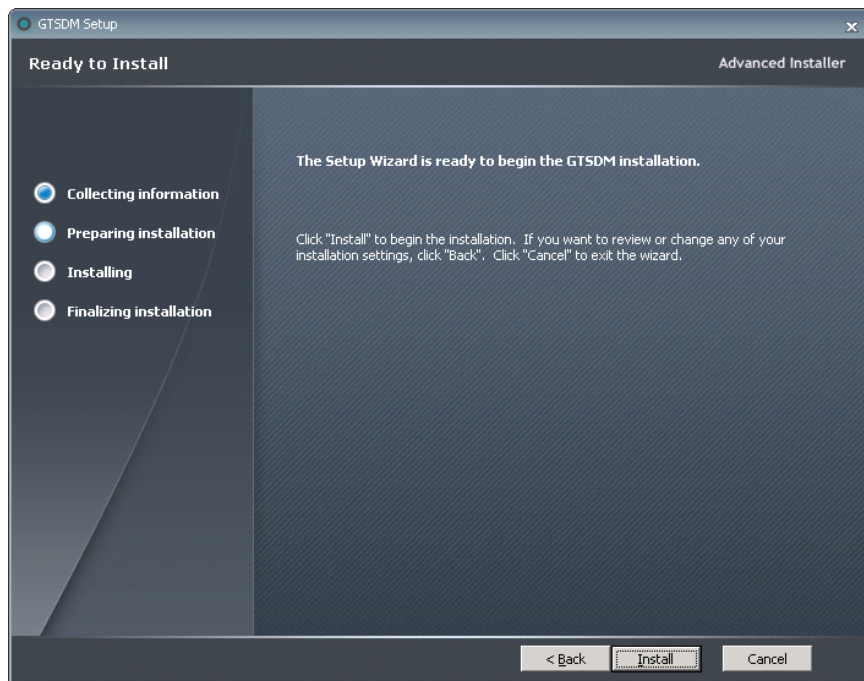
GTSDM

102.   Click **Next >**

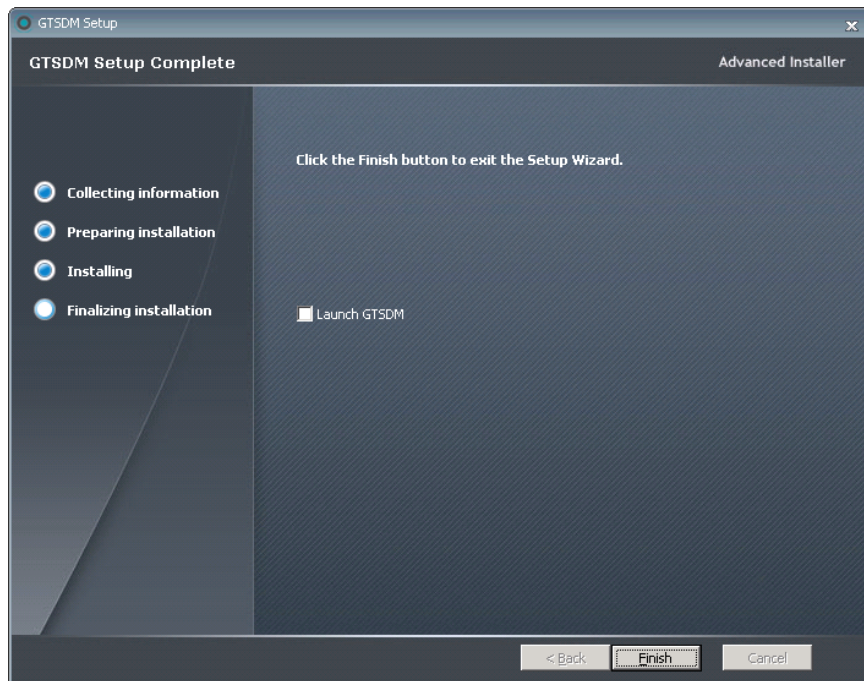103.   Select **I accept the terms in the License Agreement**
104.   Click **Next >**

105.   Verify or Browse to change the Folder location
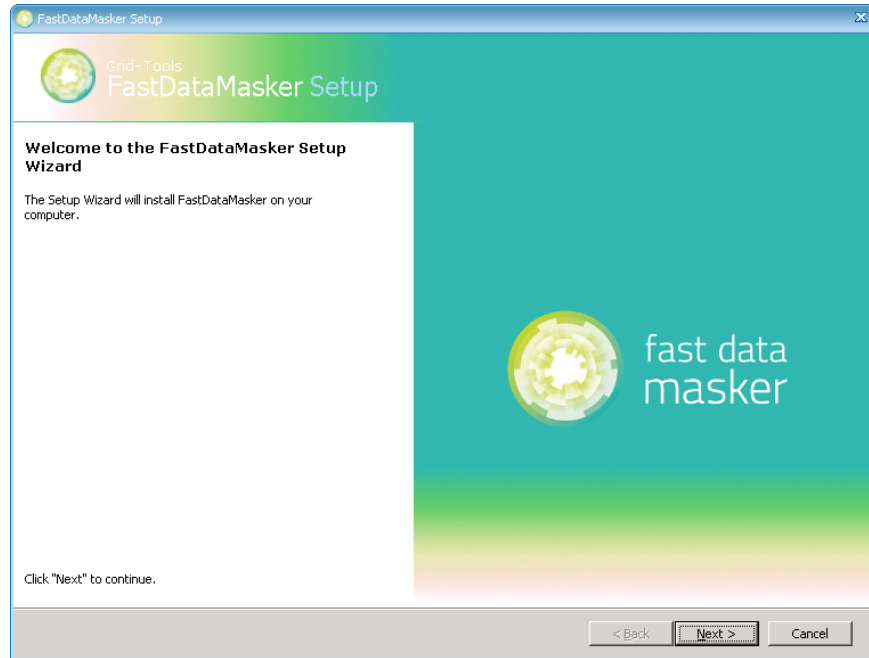106.   Click **Next >**
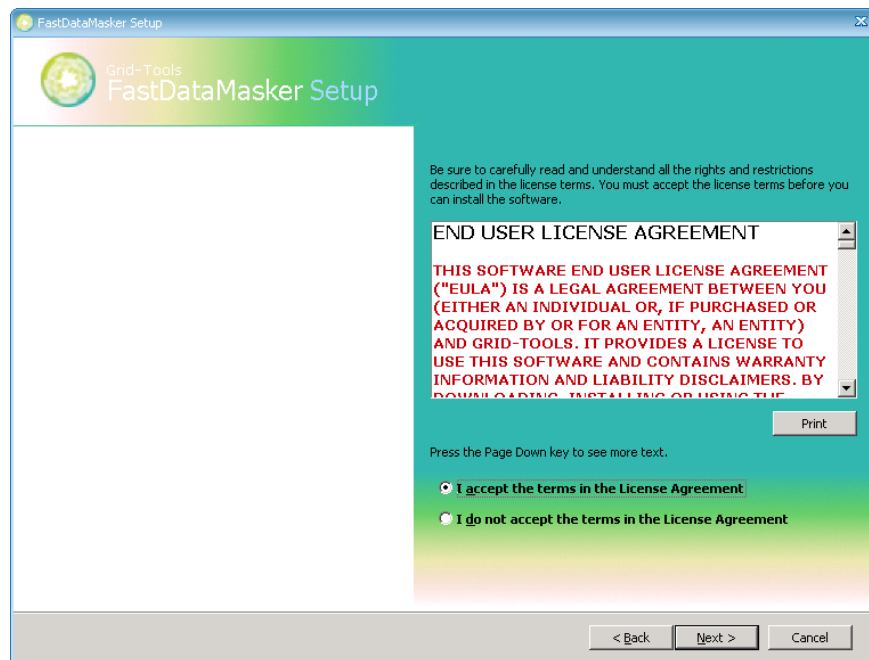

107.   Click **Install**

108. Since this is a continuous install Do Not check **Launch GTSDM**
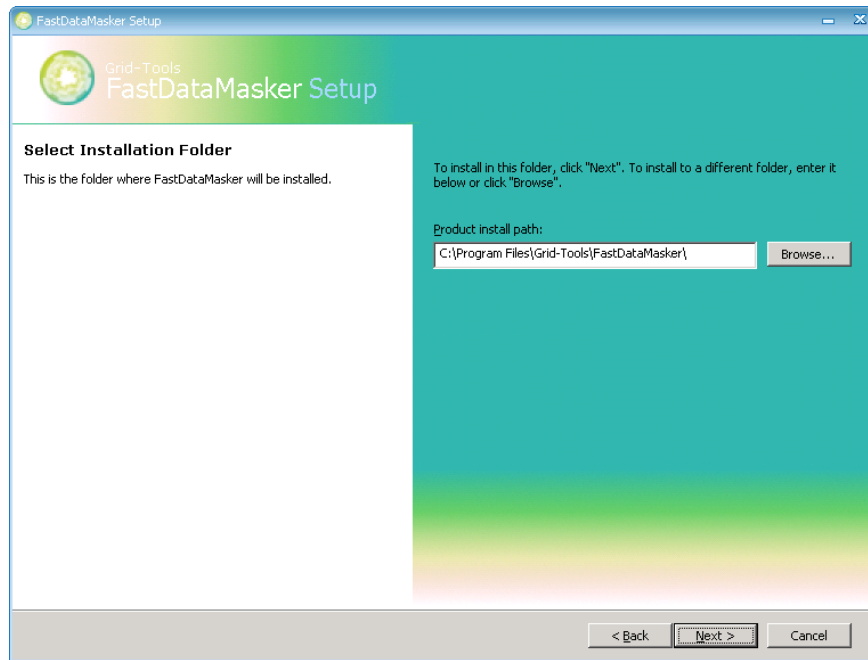109. Click **Finish** to proceed to the next installation

FastDataMasker
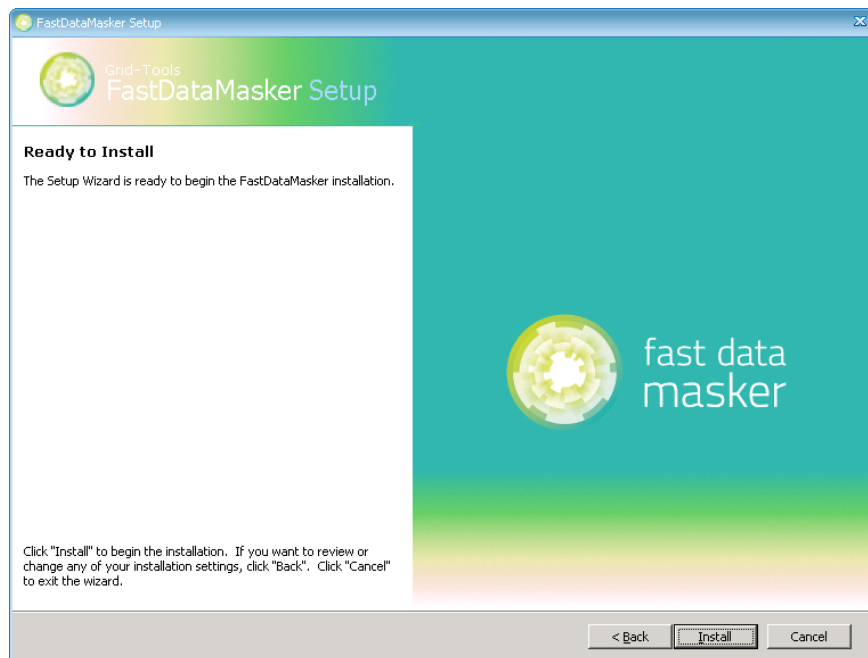

110.   Click **Next >**

111.   Select **I accept the terms in the License Agreement**
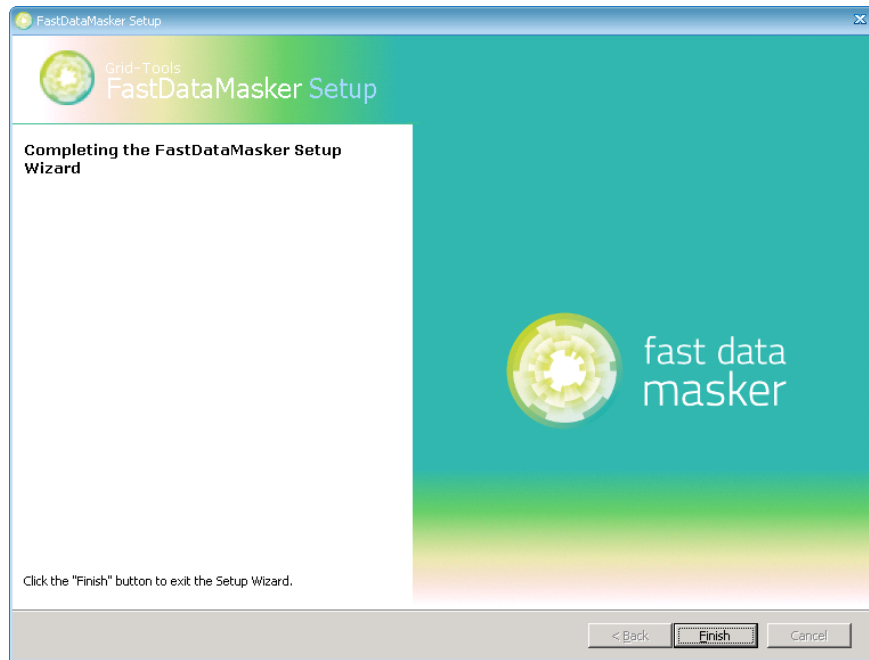112.   Click **Next >**

47

113.   Verify or Browse to change the Folder location
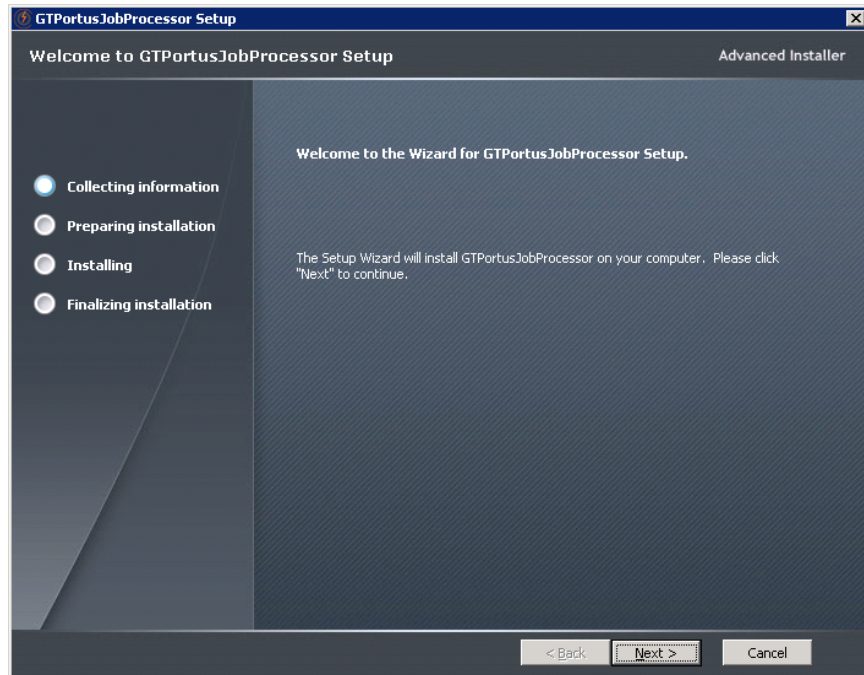114.   Click **Next >**
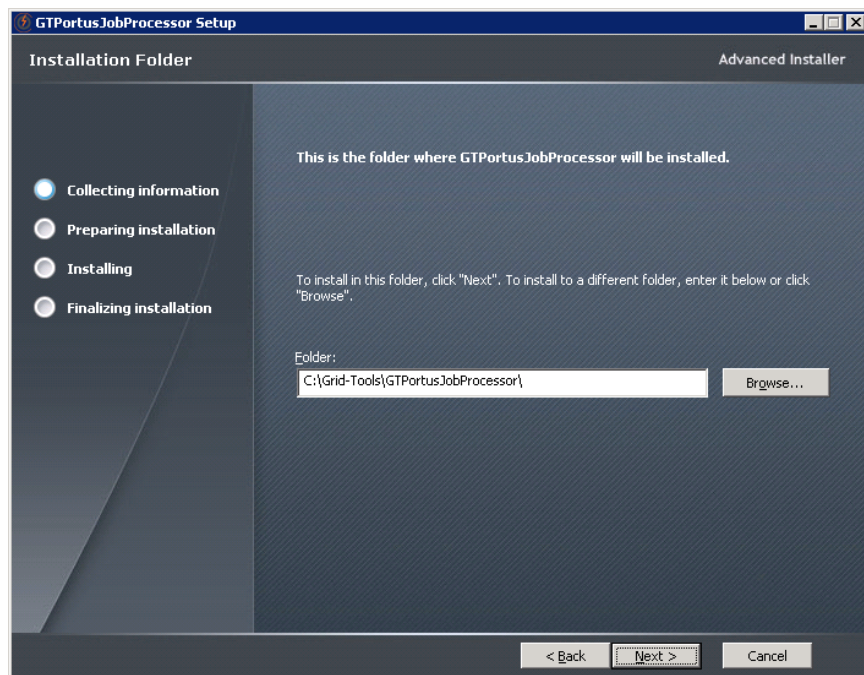

115.   Click **Install**

116.   Click **Finish** to proceed to the next installation
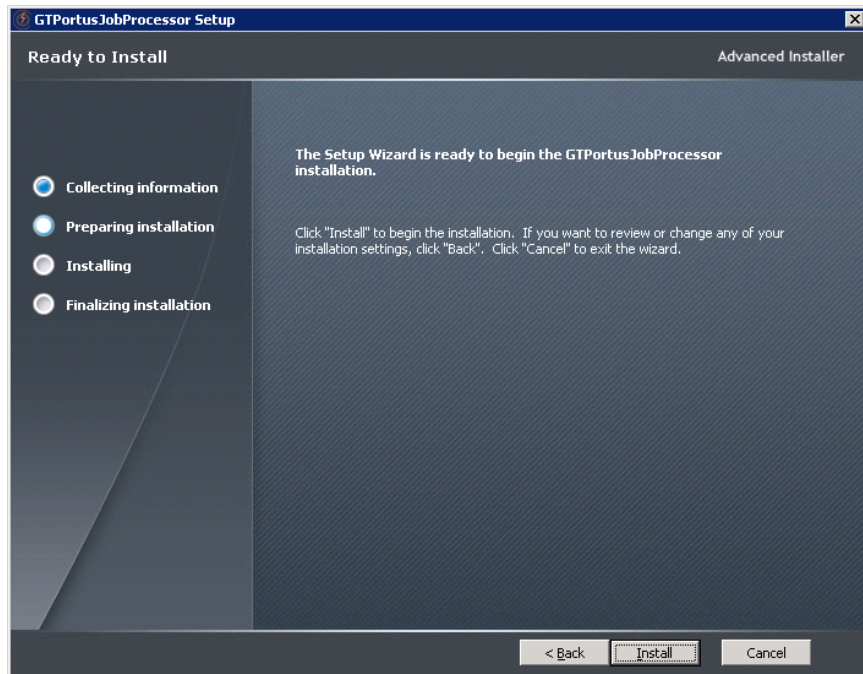
GTPortusJobProcessor

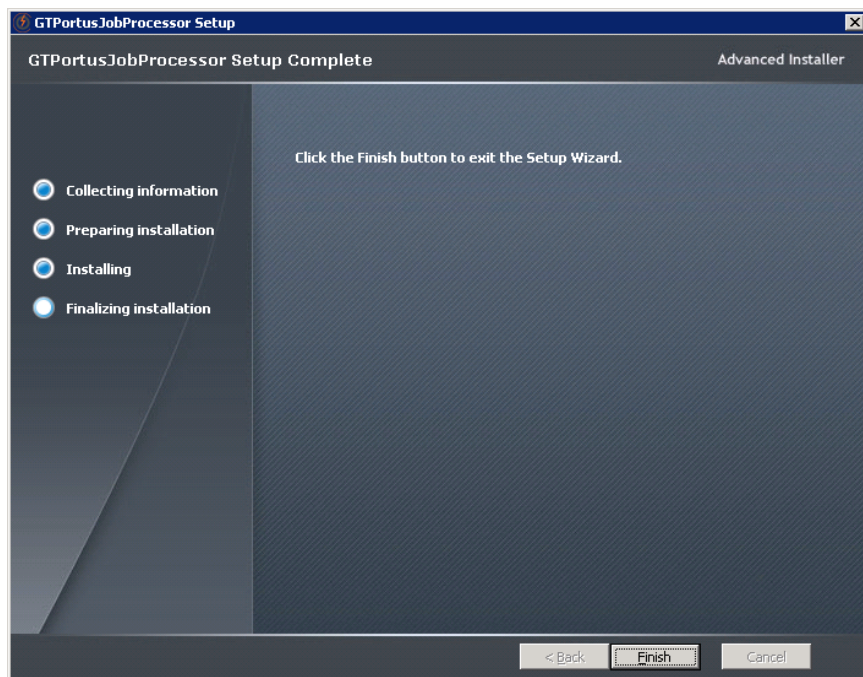117.   Click **Next >**

118.   Verify or Browse to change the Folder location
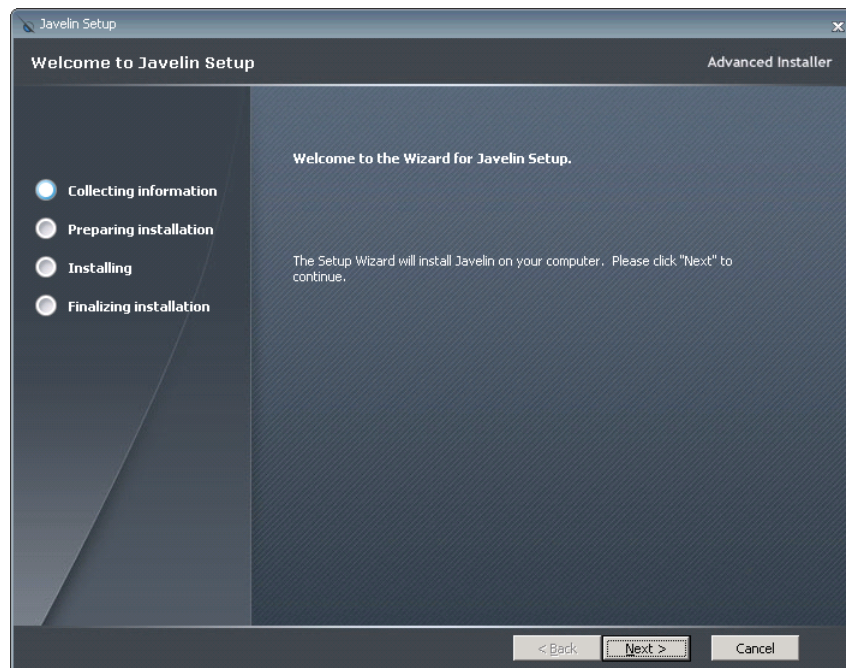119.   Click **Next >**
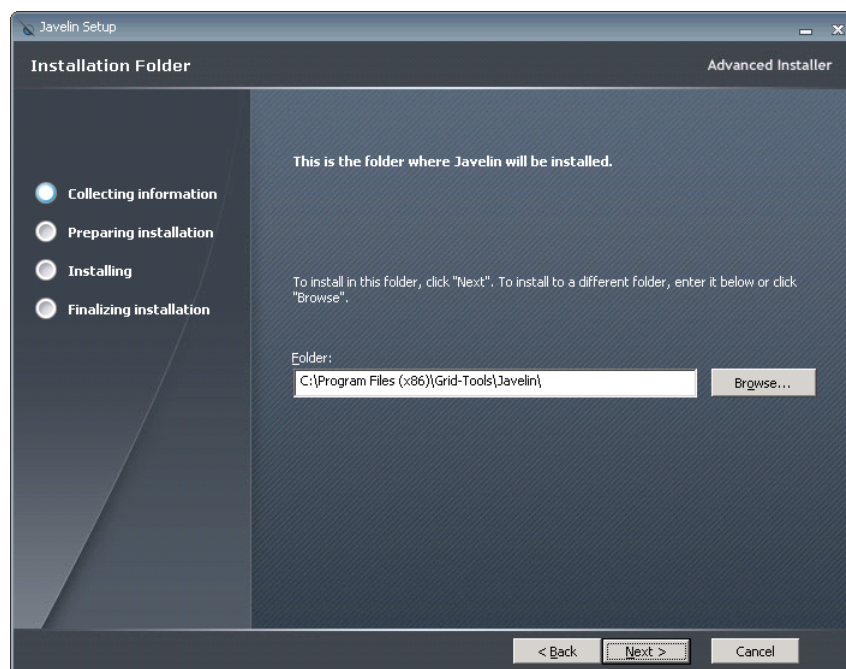
120.   Click **Install**

121.   Click **Finish** to proceed to the next installation
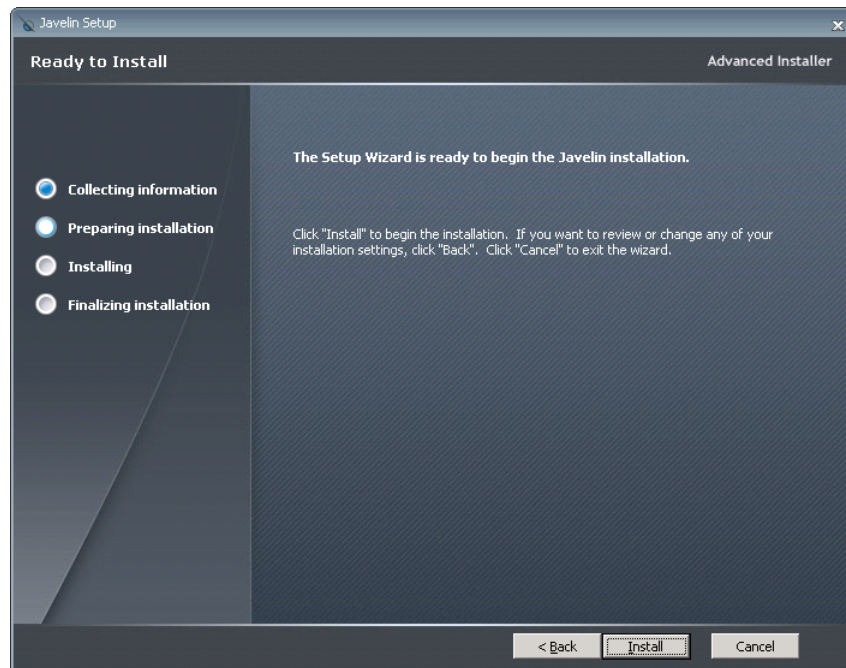
Javelin
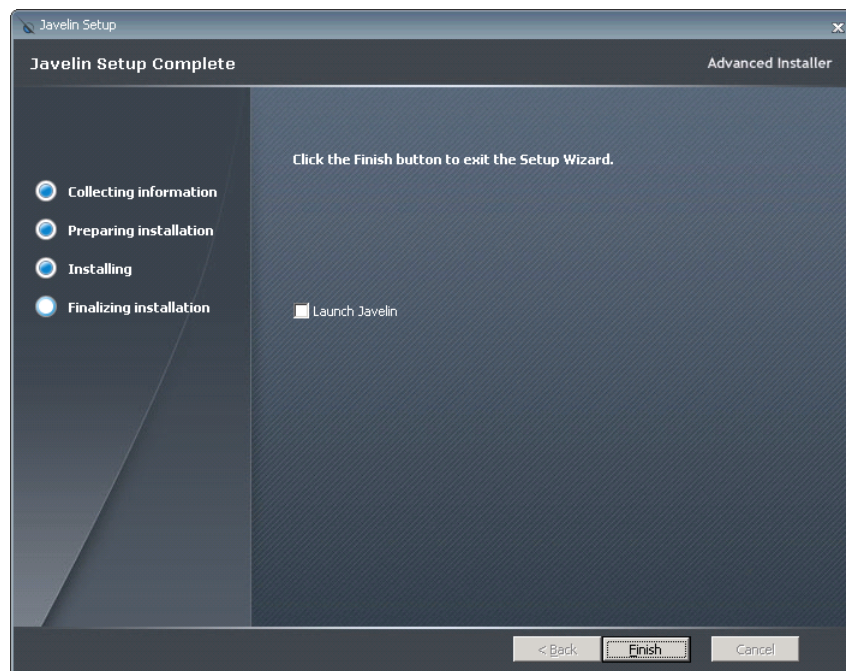

122.   Click **Next >**

123.   Verify or Browse to change the Folder location
124.   Click **Next >**
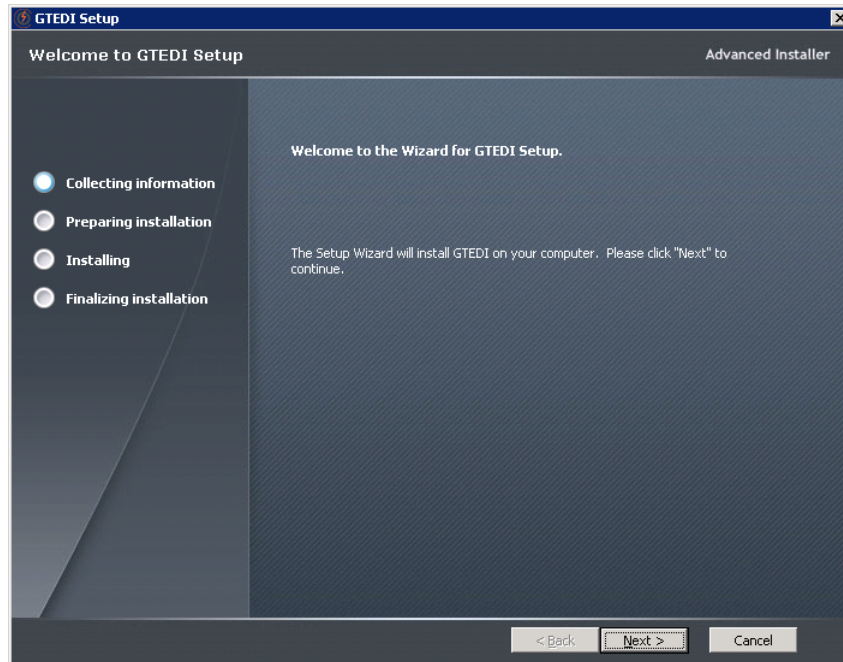
125.   Click **Install**

126.   Since this is a continuous install Do Not check **Launch Javelin**
127.   Click **Finish** to proceed to the next installation
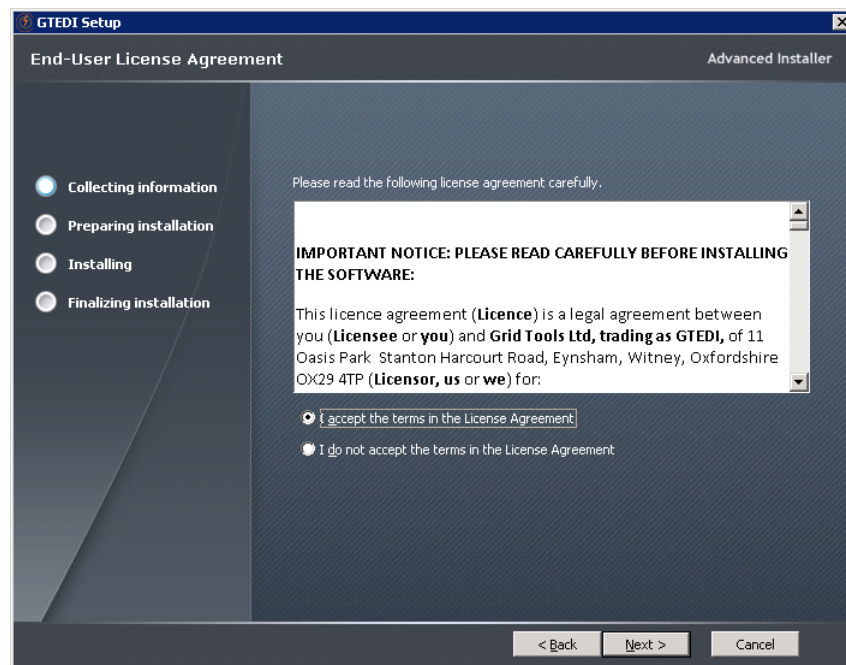
128.   Click **Next >**

129.   Select **I accept the terms in the License Agreement**
130.   Click **Next >**
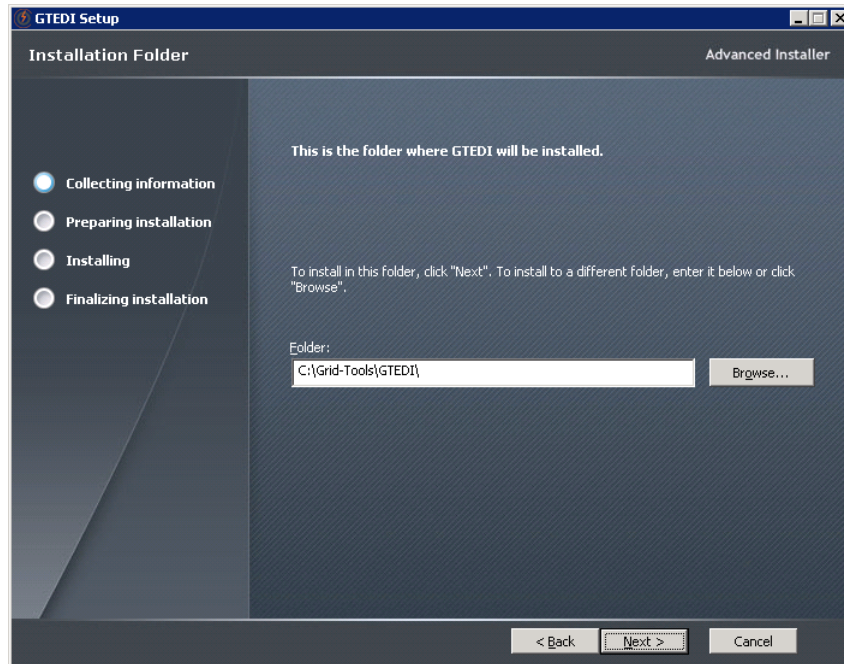
131.   Verify or Browse to change the Folder location
132.   Click **Next >**
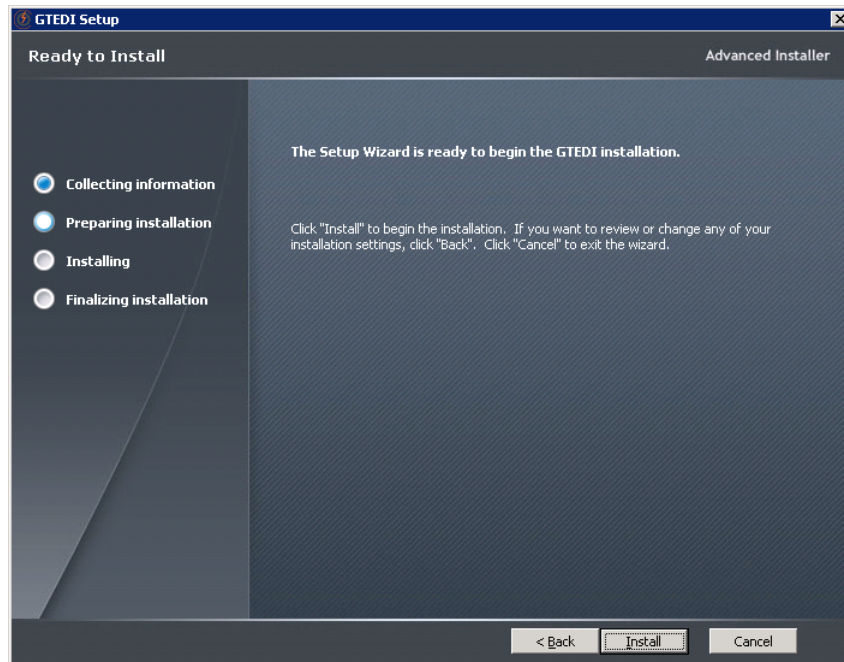
133.   Click **Install**

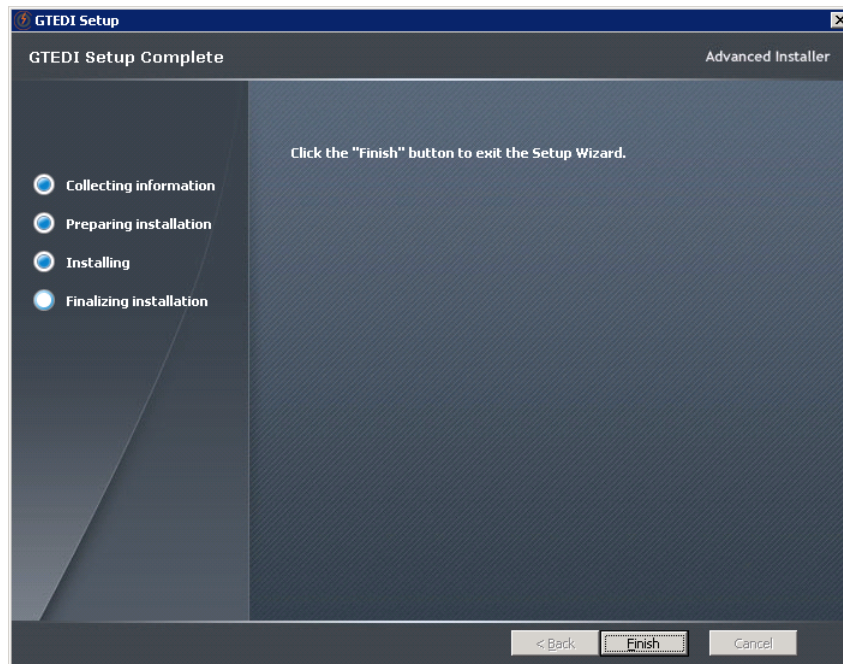134.   Click **Finish** to proceed to the **GTServer** Installation

GTServer
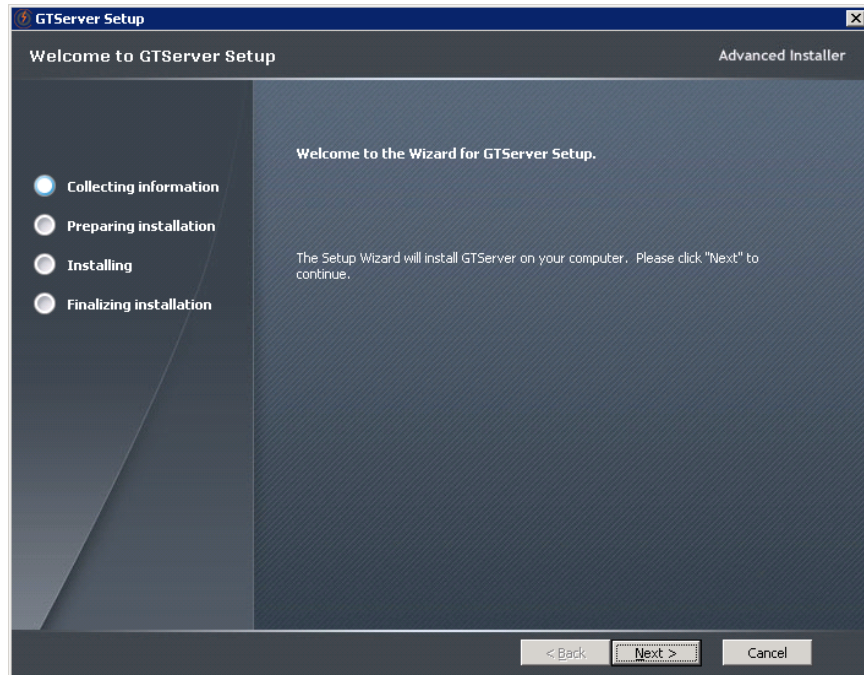
135.   Click **Next >**
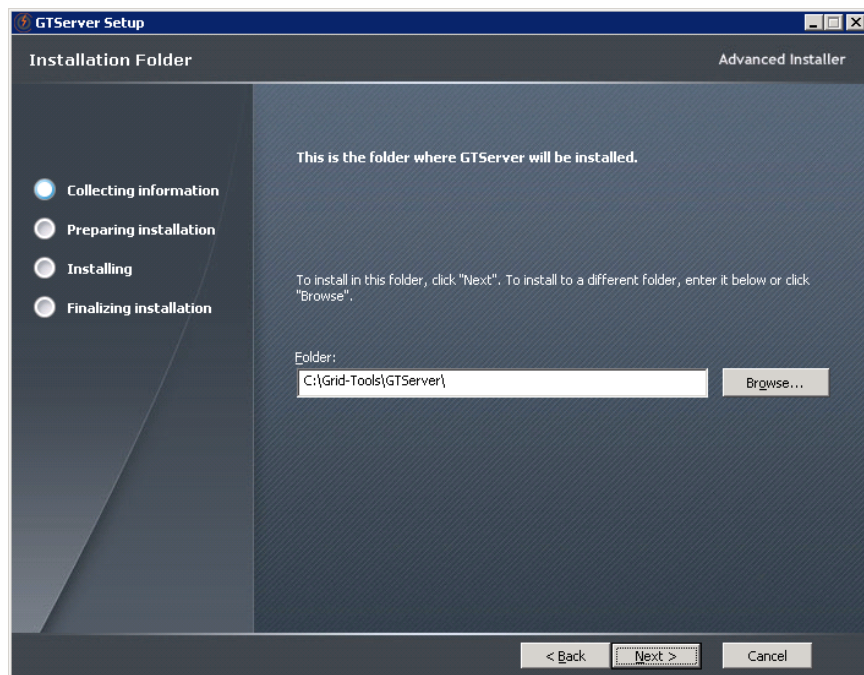
136.   Verify or Browse to change the Folder location
137.   Click **Next >**
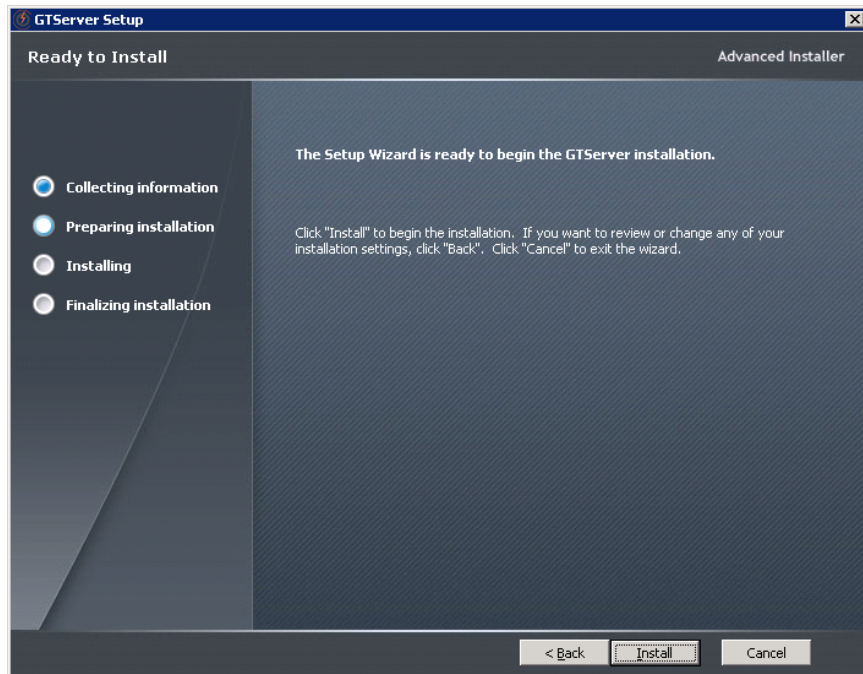
138. Click **Install**
   - **Note:** This screen appears to freeze, but finishes in about a minute
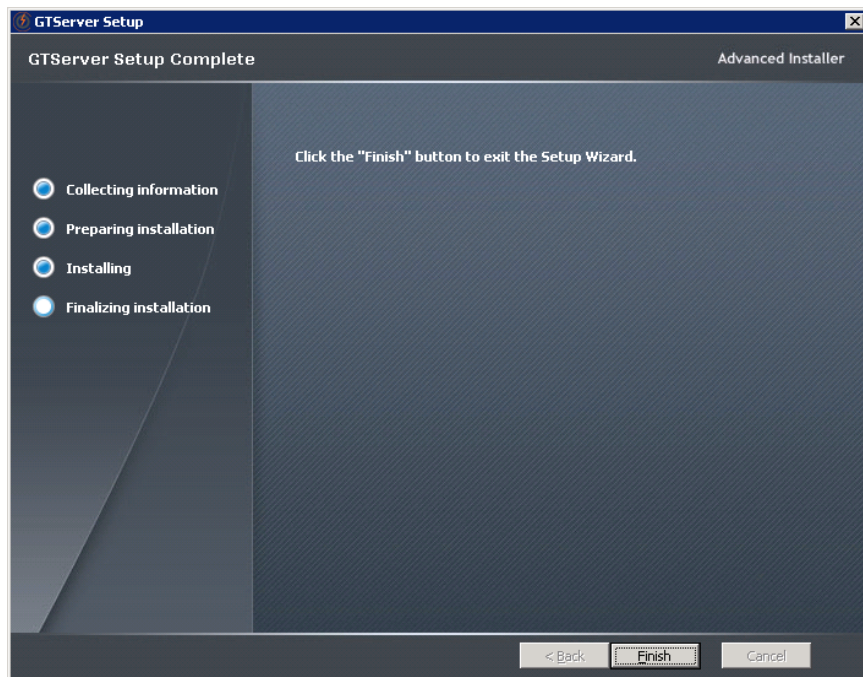
139. Click **Finish**

Verifying the GTServer Setup Installations

Once the **GTServer Setup Wizard** has finished the following icons should appear on the computer's Desktop

140.   Confirm that these Icons (Products) have been installed

The installation of the Grid-Tools suite of products is not complete.

Database Creation

Prerequisite – Install Database Server

The "Starter Database" is used by DataMaker and the other Grid-Tools products as an initial Repository. This database can be either Oracle or Microsoft SQL. Because the **Datamaker Installation Kit** contains the schema and data to build the tables, the only prerequisite is to install one of these database servers.

Datamaker Installation Kit

Once the Grid-Tools suite of products is installed, a "Starter Database" needs to be created for the products to use as a Repository. To assist in this effort Grid-Tools has created a **Datamaker Installation Kit** (**datamaker_installation_kit##.zip**). This Kit is used to create the "Starter Database", training databases, and has other useful material. The **Download** section of this document has the link for this download.

Once you have downloaded the **Datamaker Installation Kit**, extract the compressed (ZIP) file. It will create the following directory structure.
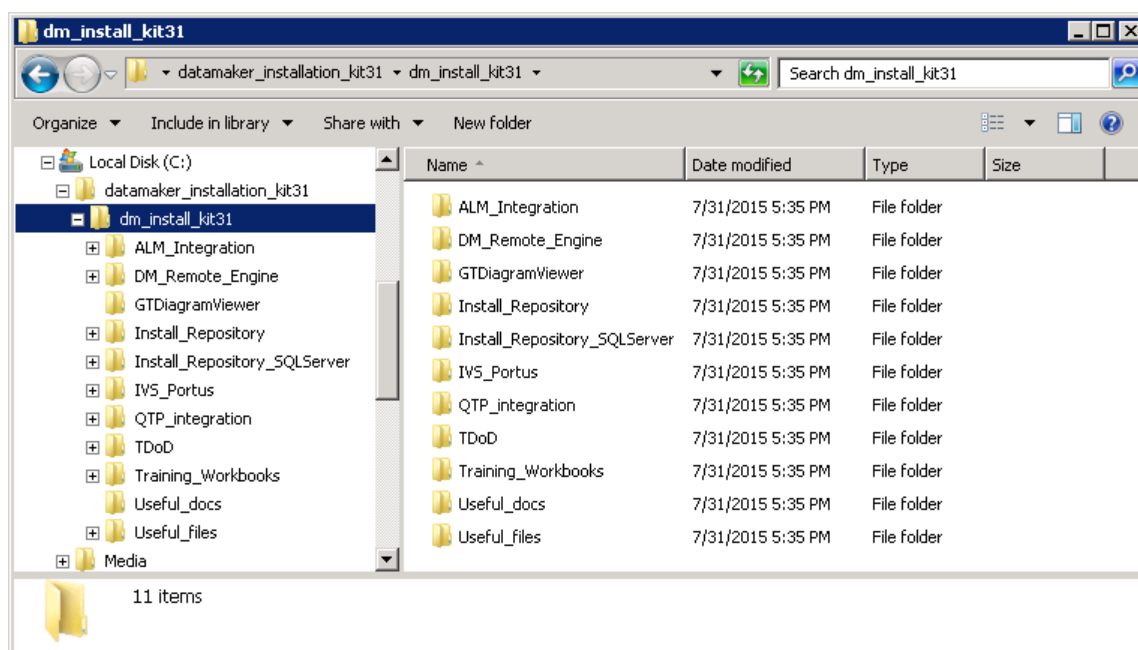
Of key interest are the following two folders which will be used to create the Databases:

- **Install_Repository**   Used for Oracle
- **Install_Repository_SQLServer**   Used for Microsoft SQL Server

The following are the step-by-step instructions for creating the Datamaker "Starter Database" using the **Datamaker Installation Kit** files.

Note: At this time MS SQL Server has been documented, Oracle steps will be completed soon, but a README is provided in the Install_Repository folder if needed.
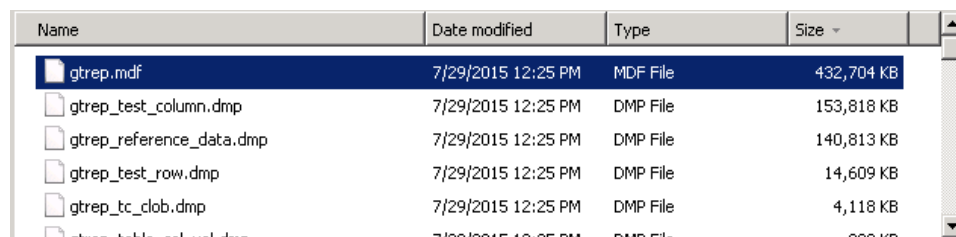
MS SQL Server

Before proceeding this document assumes the following:

- Microsoft SQL Server is installed
- Microsoft SQL Server Management Studio is installed
- The User ID being used has permissions to create databases, tables, views, functions, procedures, indexes, primary keys, foreign keys, and constraints

There are two methods for creating the "Starter Database". The first simply attaches an existing prebuilt database. The second has you create a database and then import schemas and data using standard utilities.
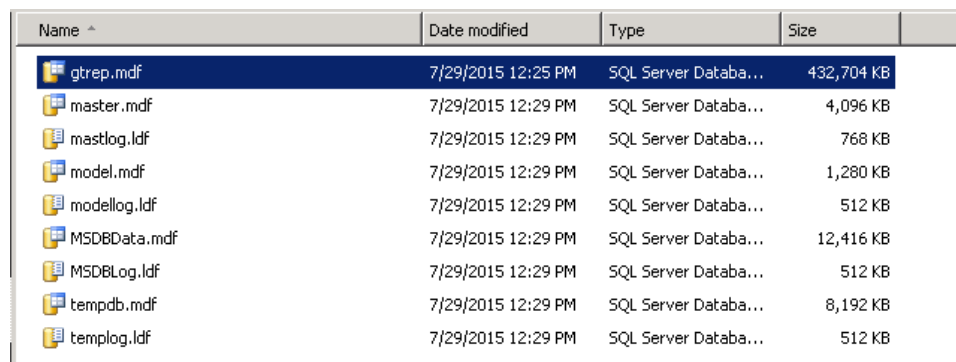
MS SQL Method 1 – Attach Starter Database

1. Open Windows Explorer and go to the extracted Datamaker Installation Kit folders
2. Go to the **Install_Repository_SQLServer** folder and sort the files by Size

Name	Date modified	Type	Size ▼
gtrep.mdf	7/29/2015 12:25 PM	MDF File	432,704 KB
gtrep_test_column.dmp	7/29/2015 12:25 PM	DMP File	153,818 KB
gtrep_reference_data.dmp	7/29/2015 12:25 PM	DMP File	140,813 KB
gtrep_test_row.dmp	7/29/2015 12:25 PM	DMP File	14,609 KB
gtrep_tc_clob.dmp	7/29/2015 12:25 PM	DMP File	4,118 KB
gtrep_table_col_val.dmp	7/29/2015 12:25 PM	DMP File	800 KB

3. Select the **gtrep.mdf** file, which should be the largest
4. **Copy** this file
5. Go to the location where the MS SQL Server database file systems are located, usually:
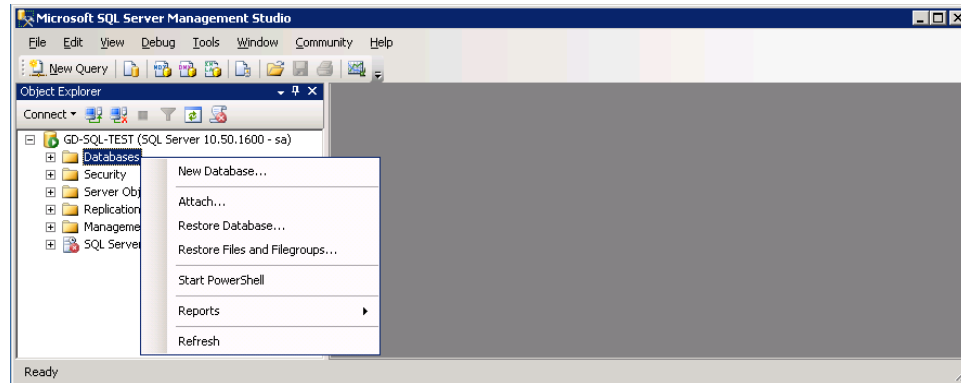
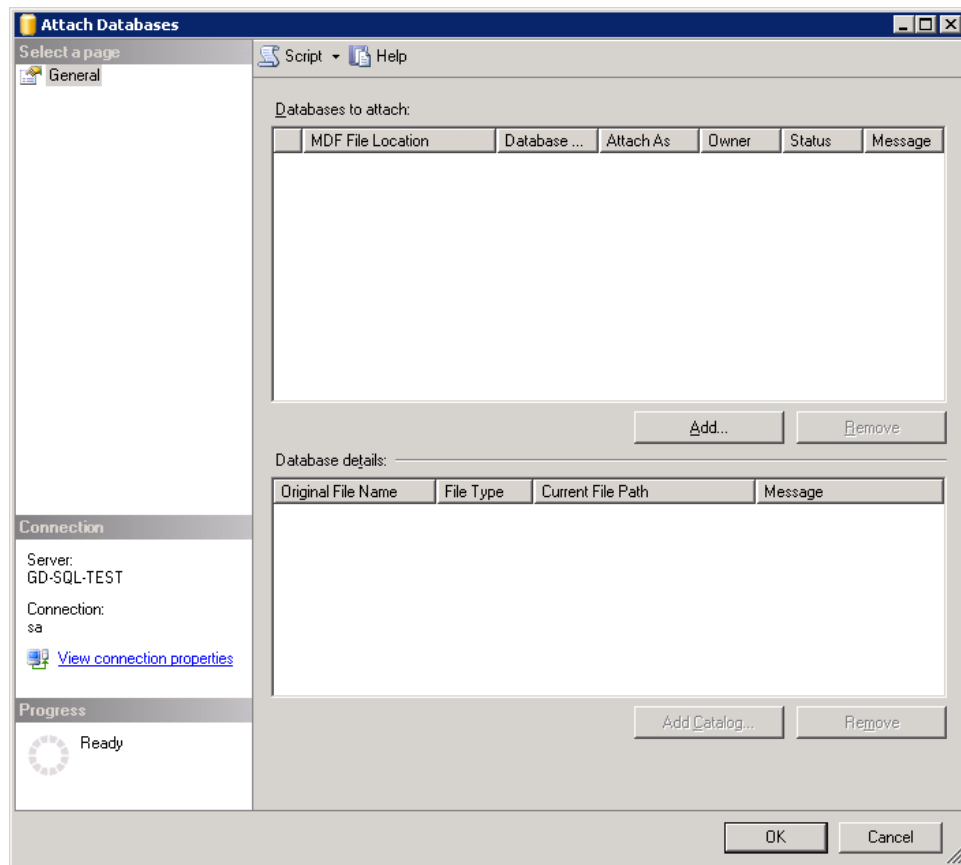**C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA**

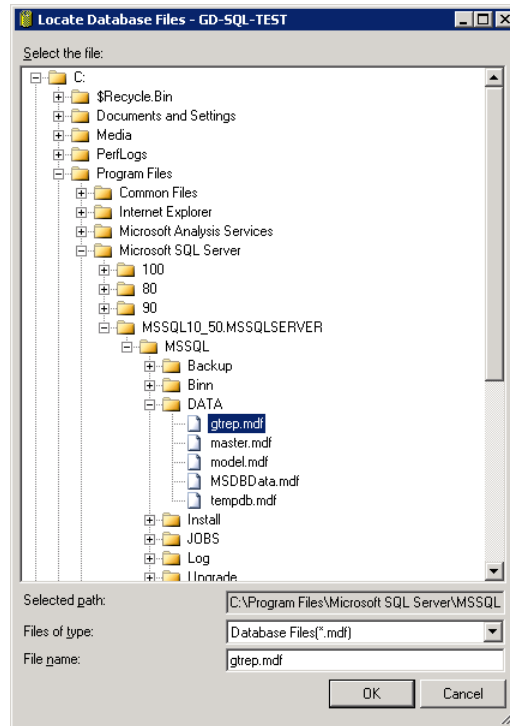| Name ▲	Date modified	Type	Size
gtrep.mdf	7/29/2015 12:25 PM	SQL Server Databa…	432,704 KB
master.mdf	7/29/2015 12:29 PM	SQL Server Databa…	4,096 KB
mastlog.ldf	7/29/2015 12:29 PM	SQL Server Databa…	768 KB
model.mdf	7/29/2015 12:29 PM	SQL Server Databa…	1,280 KB
modellog.ldf	7/29/2015 12:29 PM	SQL Server Databa…	512 KB
MSDBData.mdf	7/29/2015 12:29 PM	SQL Server Databa…	12,416 KB
MSDBLog.ldf	7/29/2015 12:29 PM	SQL Server Databa…	512 KB
tempdb.mdf	7/29/2015 12:29 PM	SQL Server Databa…	8,192 KB
templog.ldf	7/29/2015 12:29 PM	SQL Server Databa…	512 KB

6. **Paste** the **gtrep.mdf** file in this folder
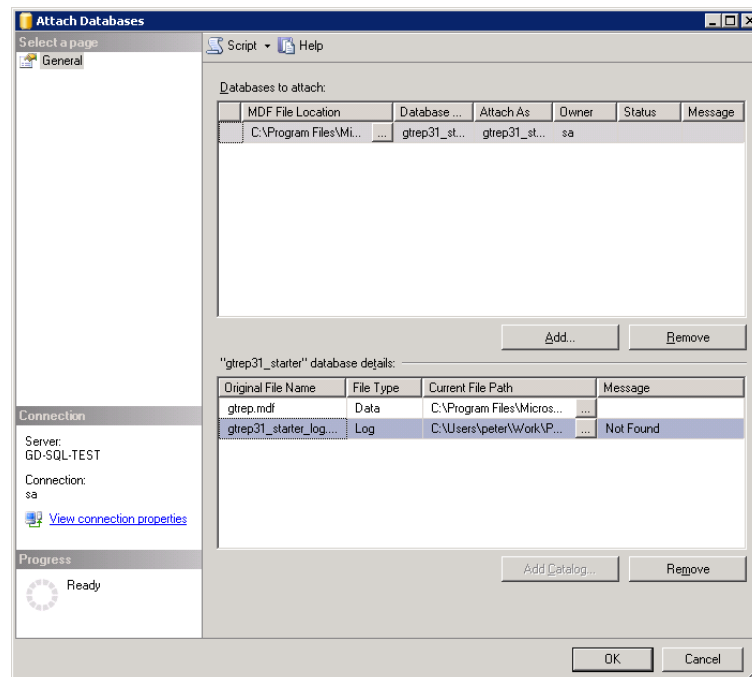
7. Open the **Microsoft SQL Server Management Studio**

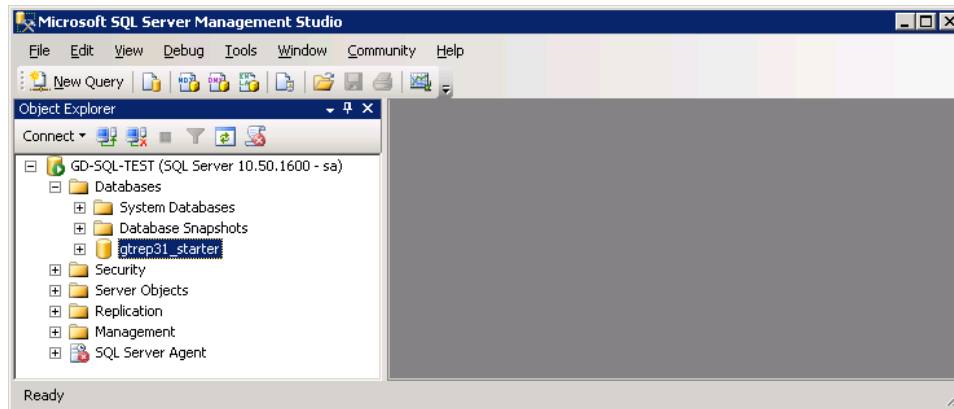8. Right click Databases and select **Attach**

9. Click **Add** under the **Databases to attach** window

10. Go to the location where you pasted the **gtrep.mdf** file
11. Select the file and confirm the **File Name** field reads "**gtrep.mdf**"
12. Click **OK**

13. Highlight the **gtrep31_starter_log**, which should have a message of "**Not Found**"
14. Click **Remove**

15. Confirm the **gtrep31_starter** database is now attached

Final Note: The removal of the log file eliminates error messages and other issues when attaching the database. Once the database is connected and in use a new log file will be created as can be seen above.

The README File indicates that if for some reason you are having trouble attaching the MDF file from the MS SQL Server database file systems (DATA Folder) that you should move the MDF file to the Backup Folder and try to attach from there.

C:\Program Files\Microsoft SQL Server\MSSQL11.SQLEXPRESS64BIT\MSSQL\Backup

The assumption here is that there might be folder and file permission issues.

Personal Note:

The **MS SQL Method 1 – Attach Starter Database** method has always worked successfully for me but we went ahead and validated the MS SQL Method 2 – Create Starter Database because as you will see this method is used when creating the training databases Travel and Travel_E.

If you were successful attaching the prebuilt database then for training or POC purposes you may want to proceed to the **MS SQL Method 2 – Create Travel and Travel_E Databases** section and add those databases.

*MS SQL Method 2 – Create Starter Database*

The following method will have you manually create the database, run a SQL Query to add the Schema to the database, and then execute a batch file from a Command Prompt that will load the Data into the database.
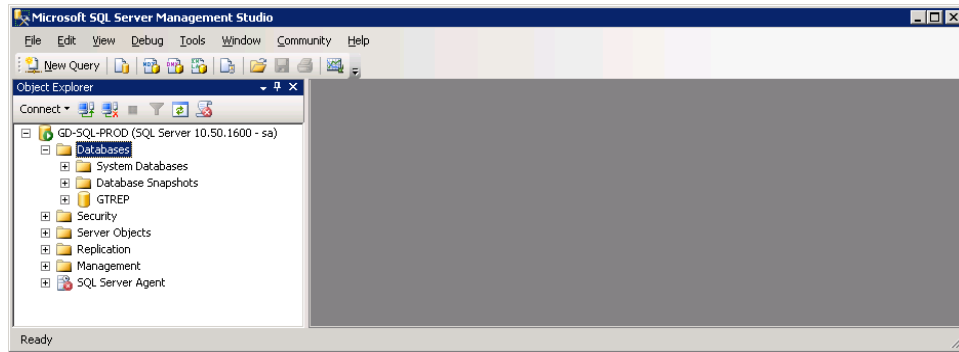
Create the GTREP Database

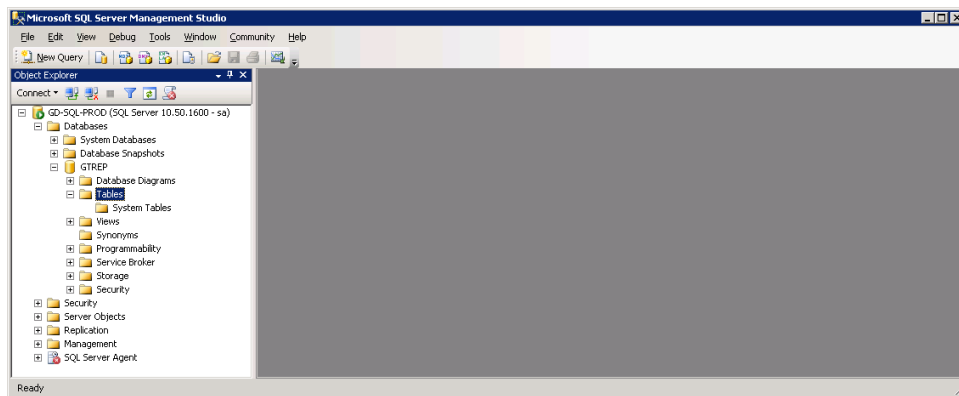1. Open the **Microsoft SQL Server Management Studio**
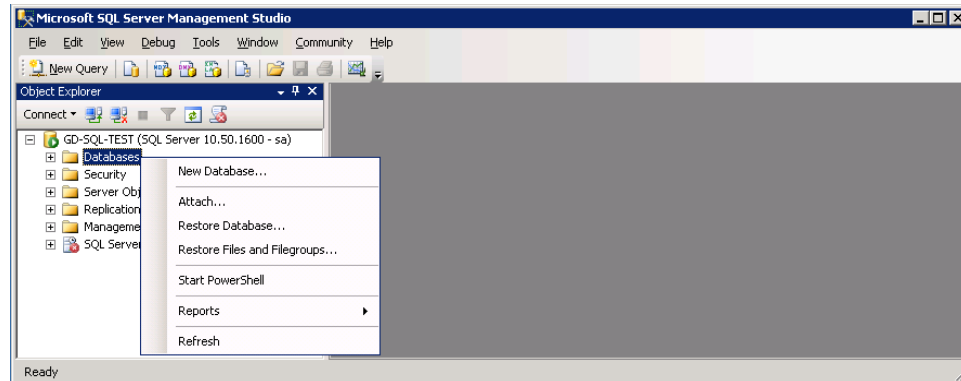
2. Right click Databases and select **New Database**
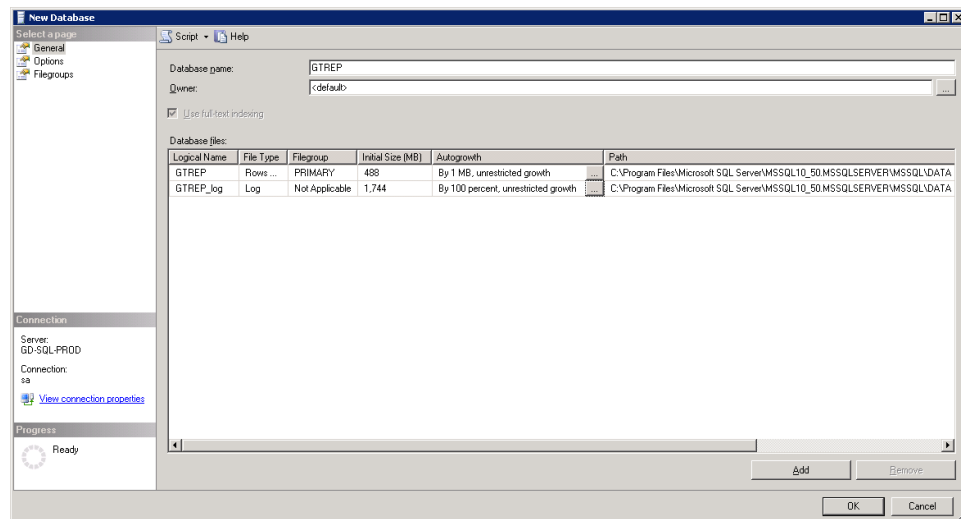
3. For the **Database Name** enter **GTREP**
4. For the database file in the PRIMARY Filegroup make the following changes:
    a. Set the **Initial Size** to **488 MB**
    b. Verify that the **Autogrowth** is set to "**By 1 MB, unrestricted growth**"
5. For the second entry (GTREP_log) make the following changes:
    a. Set the **Initial Size** to **1788 MB**
    b. Change the **Autogrowth** to "**By 100 percent, unrestricted growth**"
6. Click **OK**

7. Confirm that the GTREP database was created
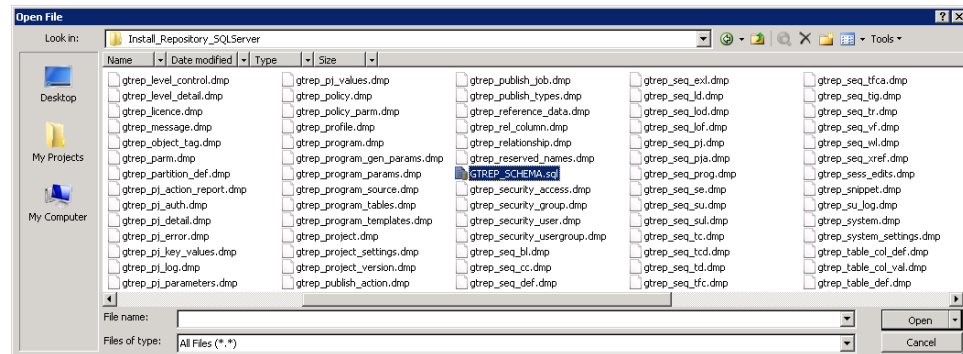8. Expand the GTREP database

9. Expand the GTREP database Tables
10. Confirm that only the System Tables exist
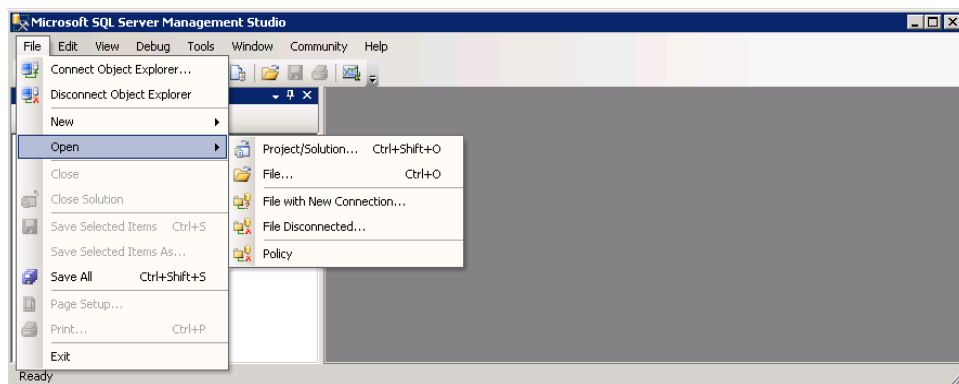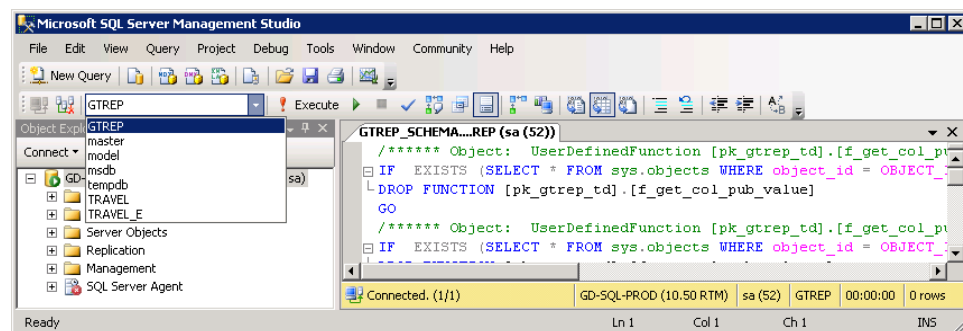
Add the Schema to the GTREP Database

11. Go to **File > Open > File** in the Microsoft SQL Server Management Studio

12. Go to the Datamaker Installation Kit folder **Install_Repository_SQLServer**
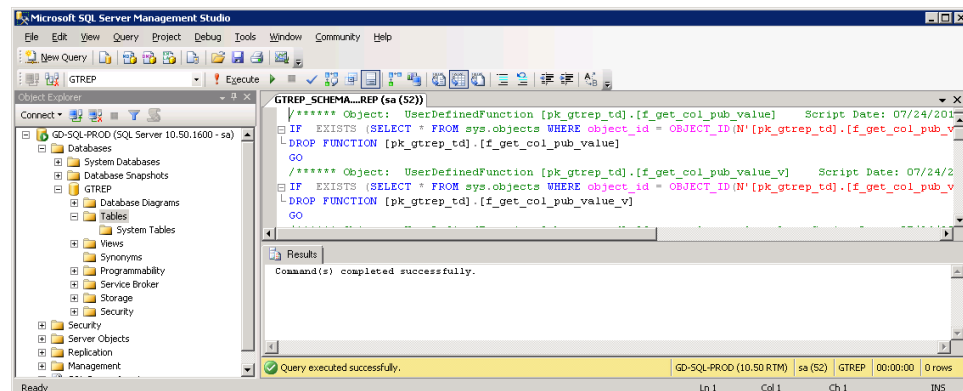13. Select **GTREP_SCHEMA.sql**
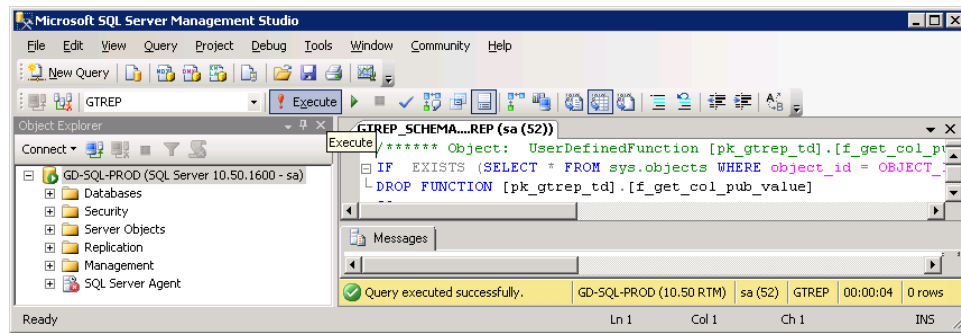14. Click **Open**

15. Verify that the **SQL Query** loaded
16. **Important** – as shown in the picture change the database from master to **GTREP**

17. To test the SQL Query, click **Parse** (blue check above)
18. Verify that in the Results "Command(s) completed successfully" appears
19. Verify that below the Results window a green check followed by "**Query executed successfully**" appears

20. To execute the SQL Query, click **Execute** (red exclamation above)
21. Verify that below the Results window a green check followed by "**Query executed successfully**" appears again.
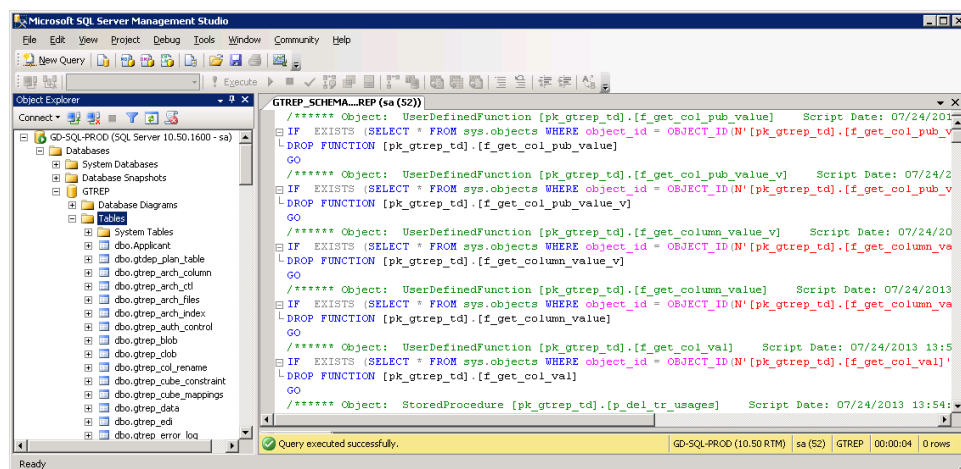
Potential Issue: The SQL Query executed successfully but these Warning Messages appeared
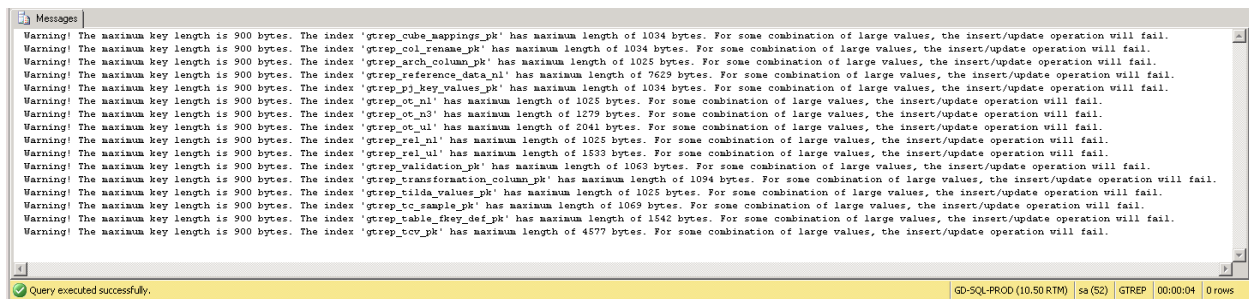
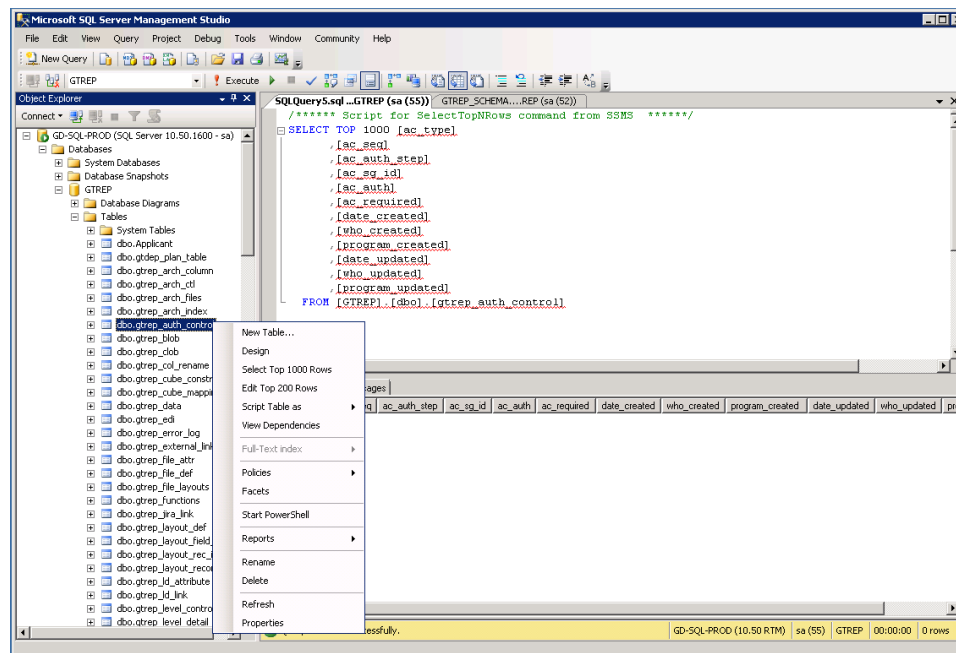At this time, these Warning Messages appear to have no impact.

22. Highlight the GTREP database and Click F5 to Refresh the Object Explorer
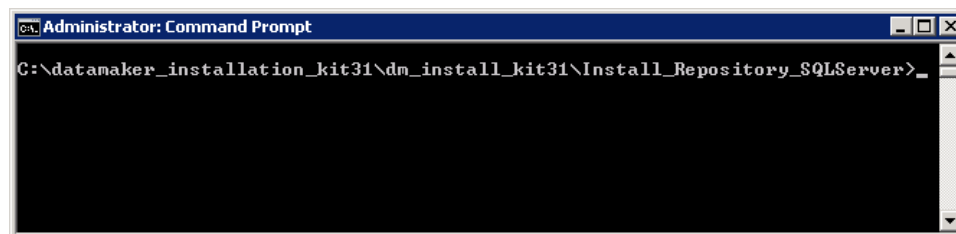23. Expand the GTREP database

24. Expand the GTREP Tables
25. Verify that numerous tables (Schema) are now in the GTREP database

26. Right click **dbo.gtrep_auth_control**
27. From the menu execute **Select Top 1000 Rows**
28. Verify that the Results are empty

Add the Data to the GTREP Database

29. Open a Command Prompt

30. Navigate to the Datamaker Installation Kit folder **Install_Repository_SQLServer**

In this folder there is a batch file **GTREP_IMPORT.bat** that needs to be executed using specific parameters. The parameters or information needed is as follows:

- **Username** – usually "sa" or an equivalent user with equal rights to the "target database"
- **Password** – password for this user
- **Server** – Server Name to the SQL Server machine
- **Target Database** – in this case (since we manually created the database) it is "**GTREP**"
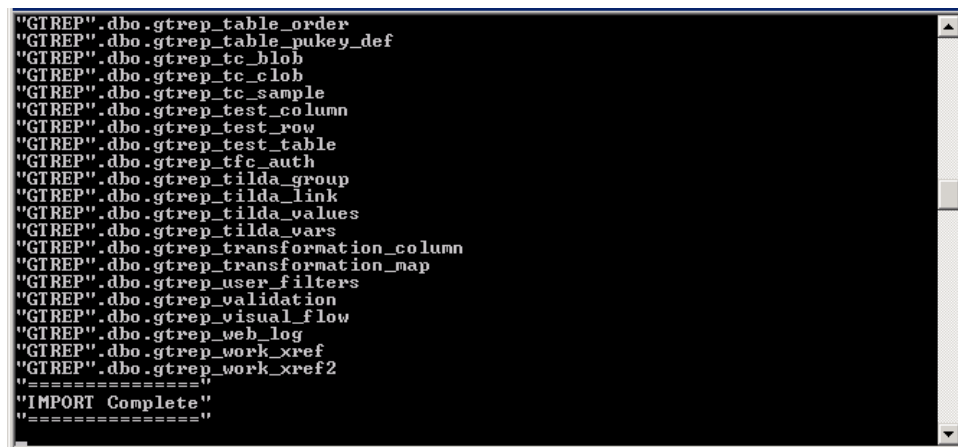
The command that will be entered will look something like this:

GTREP_IMPORT username password server GTREP > gtrep_import_log.txt 2> gtrep_import_errors.txt

Once the command is executed three (3) files will be created:

- **import_report.txt** – this file will open once the command has executed. Check this file for IMPORT errors. Once you close this file the command will finish.
- **gtrep_import_log.txt** – located in the Install_Repository_SQLServer folder. Check this file for "errors" to make sure no commands failed
- **gtrep_import_errors.txt** – located in the Install_Repository_SQLServer folder. It should be empty and will only have information if there are DOS command errors.

31. Execute the GTREP_IMPORT command using the correct parameters for your environment

32. Verify that the Command Prompt stops with "**IMPORT Complete**" but is still waiting
33. Verify that the **import_report.txt** file has opened automatically in Notepad
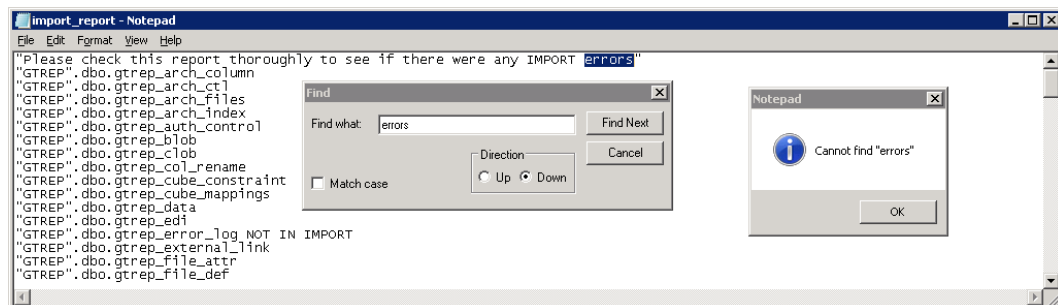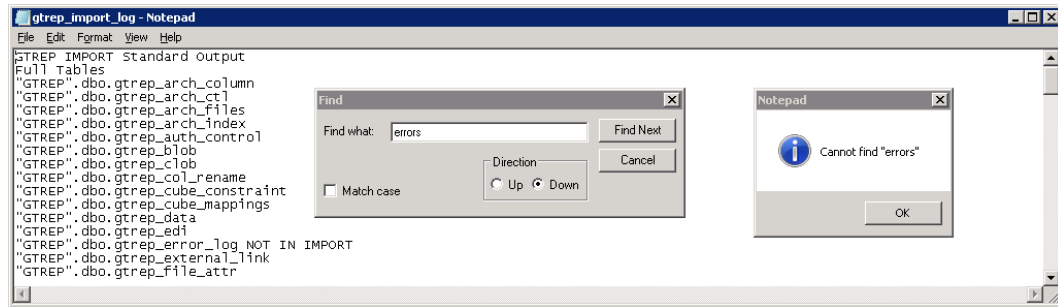

34. Check the **import_report.txt** file for errors
   a. Do a Find looking for the word "**errors**"
35. Close the **import_report.txt** file and verify that the command completes, going back to a prompt
36. Close the Command Prompt window

37. Go to the Datamaker Installation Kit folder Install_Repository_SQLServer
38. Open the **gtrep_import_log.txt** file

39. Check the **gtrep_import_log.txt** file for errors
    a. Do a Find looking for the word "**errors**"
40. Close the **gtrep_import_log.txt** file
41. Open the **gtrep_import_errors.txt** file
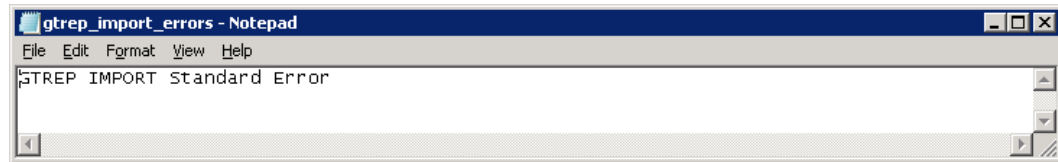
42. Check the **gtrep_import_errors.txt** file for errors
    a. The file should only have one entry "**GTREP IMPORT Standard Error**"
43. Close the **gtrep_import_errors.txt** file
44. Go to the Microsoft SQL Server Management Studio
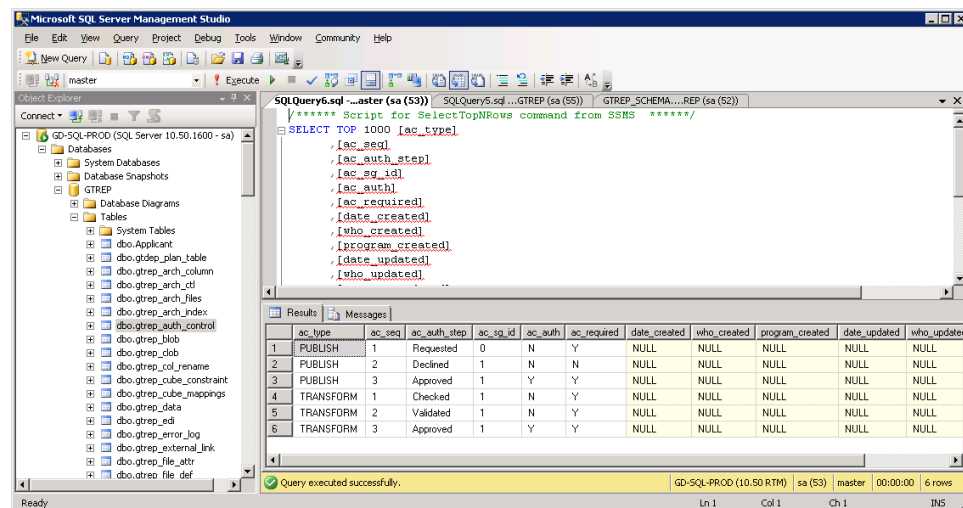
45. Right click **dbo.gtrep_auth_control**
46. From the menu execute **Select Top 1000 Rows**
47. Verify that in the Results there are 6 entries

Connecting to the Test Data Repository

Now that the "Starter Database" or **Test Data Repository** has been created, Datamaker needs to connect to it. This is done by defining a Profile using an ODBC Connection to the Test Data Repository.

1. Open Datamaker by clicking the GT Datamaker icon or go to:
   a. Start > Grid-Tools > GT Datamaker
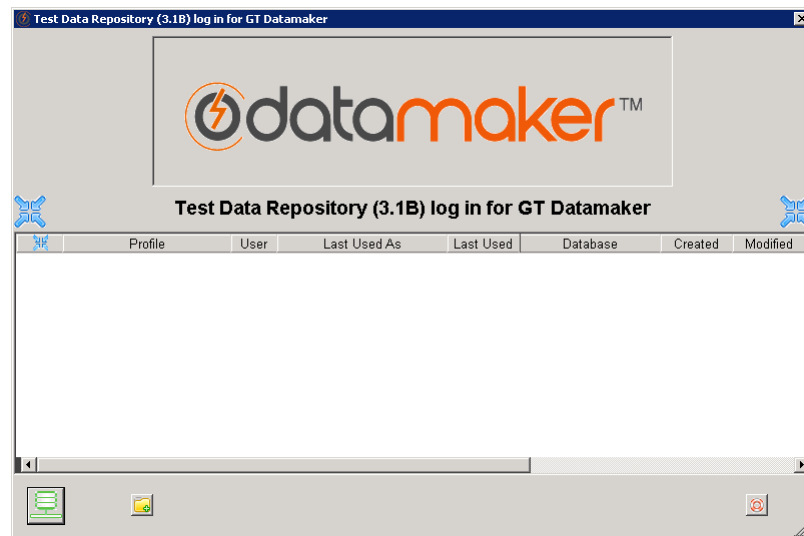
Because there is not a Profile to the Test Data Repository the **Create connection profile for Test Data Repository** window (Step 2) will automatically pop up. However, in case that window gets closed and to help familiarize you with this window, there are 3 buttons on this window you should be aware of:

- **Connect to Test Data Repository** will only work once the Test Data Repository Profile is created. If you click it now you will get an error message.

- **Create new Profile** (which is covered in Step 2 of this section) pulls up the **Create connection profile for Test Data Repository** window. Initially because there is no Profile, this is why it automatically popping up, forcing you to create a connection.

- **Help about GT Datamaker** provides version numbers and DLL dates which can be emailed to Grid-Tools if needed.

Create the Profile for Test Data Repository – MS SQL
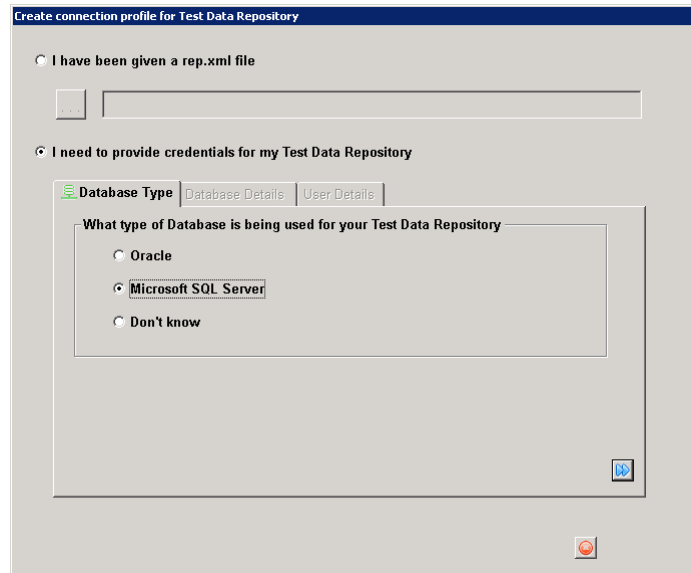
2. Depending upon the type of "Starter Database" that was created, select one of the following:
    a. Oracle
    b. Microsoft SQL Server – Select this Option
    c. Don't know – Give you a window informing you that you need to find out ☺
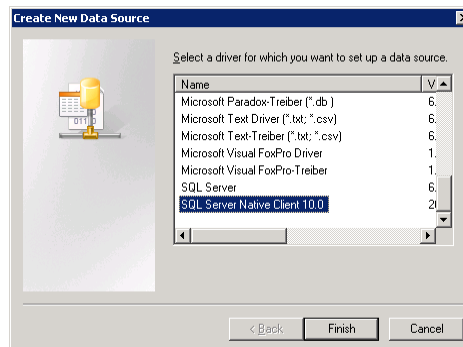3. Click the blue double arrow icon ⏩ to proceed
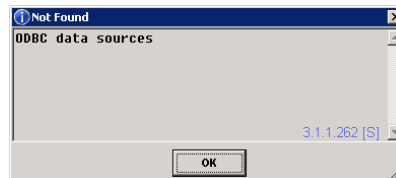
4. Because this is the first time, you will get this message, click **OK**
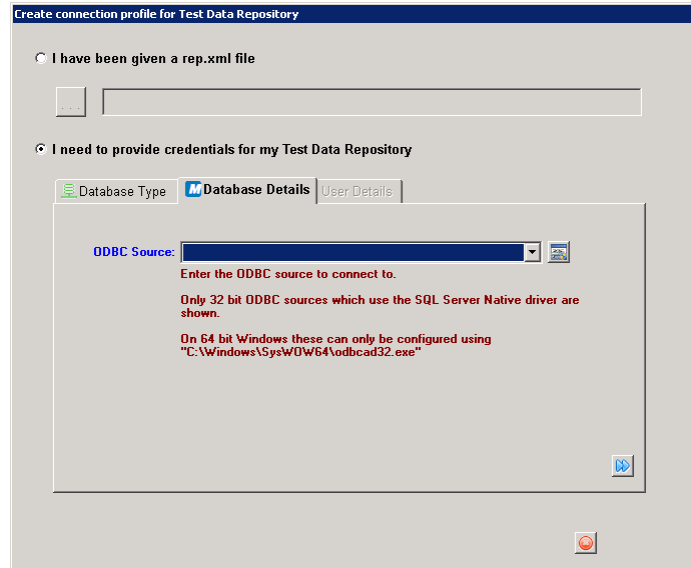
5. The drop-down window will be empty because there are no ODBC Connections, click the icon ⬛ to the right of the drop-down window to **Launch the 32-bit ODBC Administrator**.
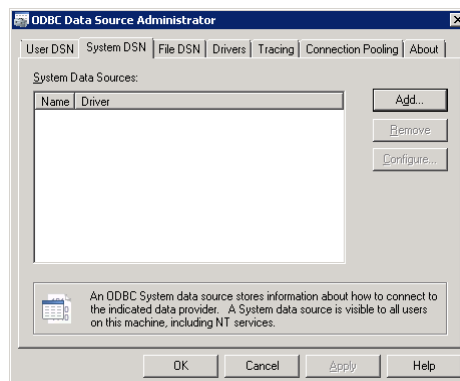

6. Go to **System DSN** tab (2nd tab)
7. Click **Add**

8. Slide the bar to the bottom and select **SQL Server Native client 10.0**
   - SQL Server does not work for this connection
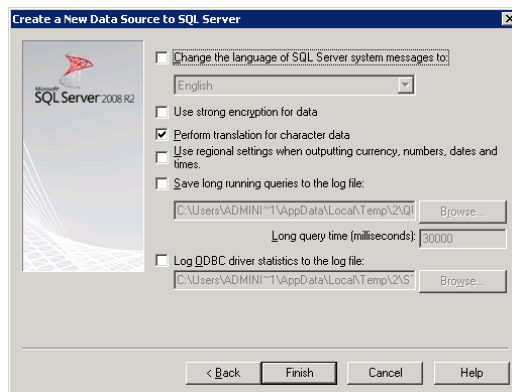9. Click **Finish**
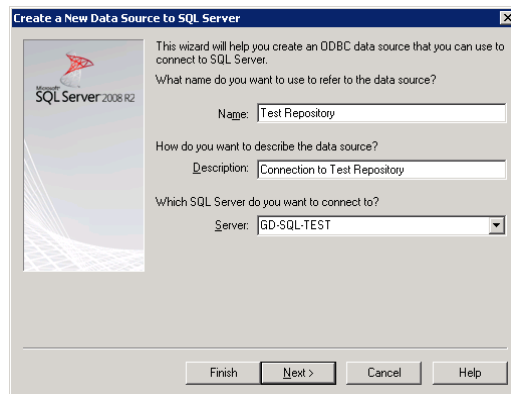
10. Enter a **Name** for this ODBC Connection: **Test Repository**
11. (Optional) Enter a **Description** for this ODBC Connection
12. Use the drop-down window to select the **Server** where the Test Data Repository is located
13. Click **Next**
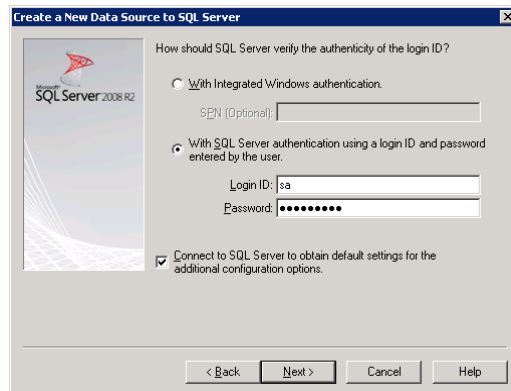
14. Select **With SQL Server authentication using a login ID and password entered by the user**
15. Enter the **Login ID** (sa)
16. Enter the **Password** for this Login ID
17. Verify that **Connect to SQL Server to obtain default settings for the additional configuration options** is checked
18. Click **Next**
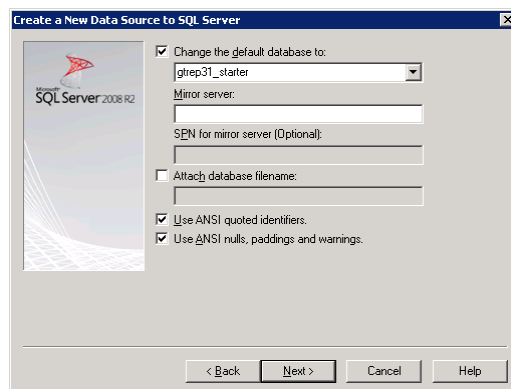
19. Check the box which allows you to **Change the default database**
20. Use the drop-down to select the Test Data Repository database, which will be either:
    - **gtrep31_starter**
    - **GTREP**
21. Verify **Attach database filename** is not checked
22. Verify **Use ANSI quoted identifiers** is checked
23. Verify **Use ANSI nulls, padding and warnings** is checked

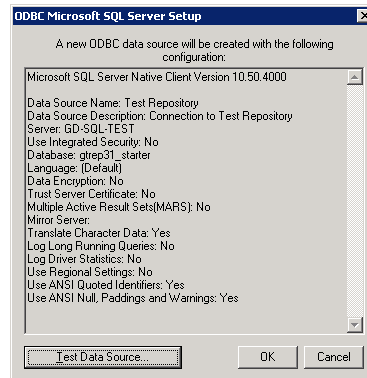24. (Optional) Unless required everything on this screen (defaults) should remain the same
25. Click **Finish**
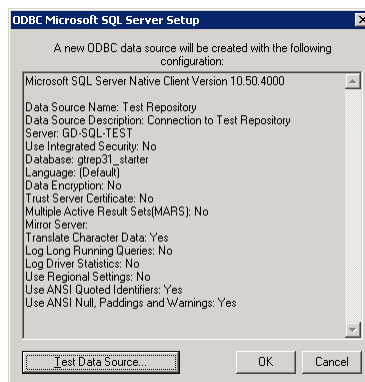
26. Click **Test Data Source**
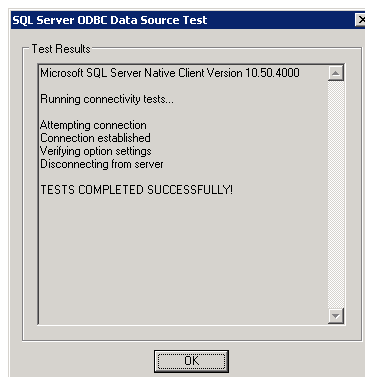
27. Verify that the **TESTS COMPLETED SUCCESSFULLY**
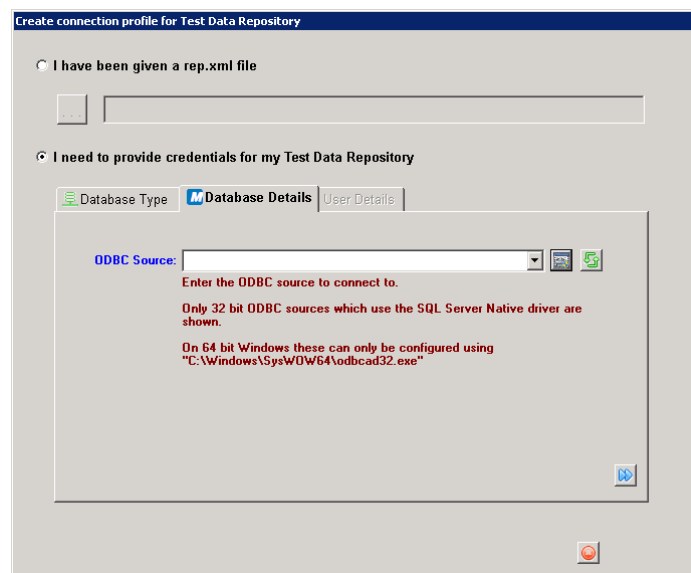28. Click **OK**
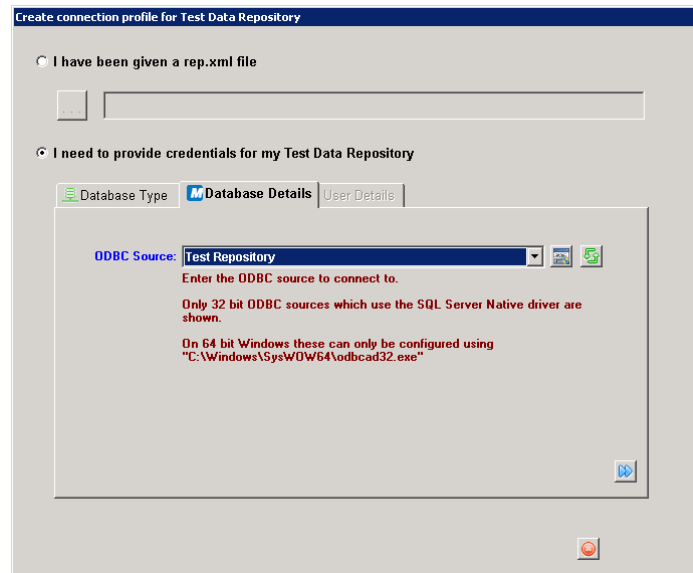

29. Click **OK** to close the Testing window
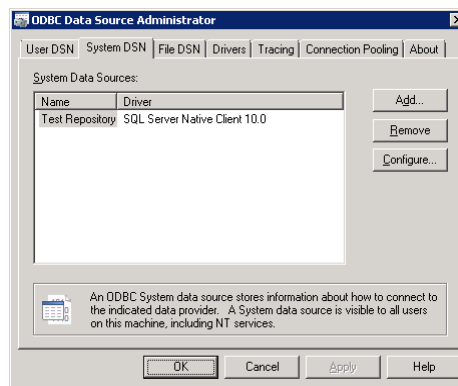
30. Verify that the **Test Repository – SQL Server Native Client 10.0** ODBC driver is created
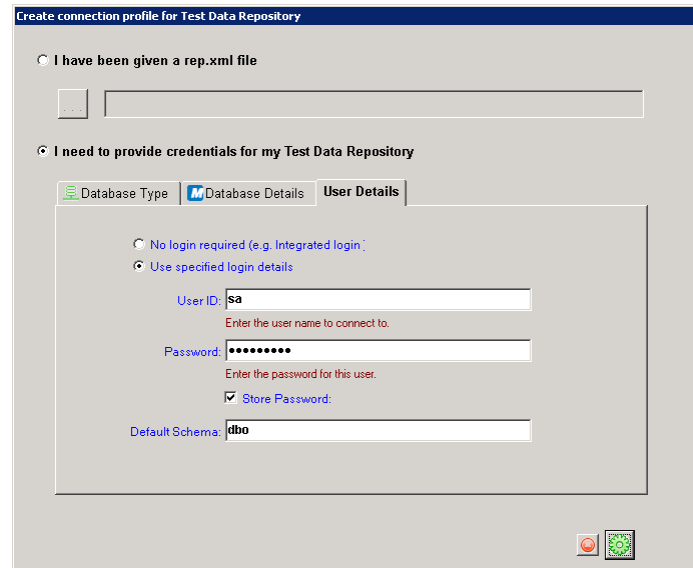31. Click **OK**, this will close the **ODBC Data Source Administrator**

32. A new icon will appear next to the Launch ODBC Administrator icon, this is the Refresh ODBC Data Source List icon ⟳, Click the Refresh icon.


33. Click the arrow beside the drop-down window and select the ODBC Source (**Test Repository**) that was just created.
34. Click the blue double arrow icon ⏩ to proceed

35. Select **Use specified login details**
36. Enter the **User ID** (sa)
37. Enter the **Password** for this User ID
38. Check the box to **Store Password**
39. Enter the **Default Schema** (dbo)
40. A new green gear icon ⚙ has appeared to **Test the connection details**, click this icon
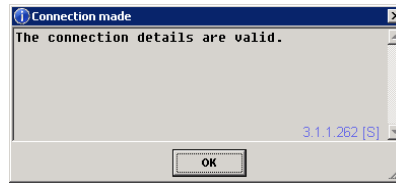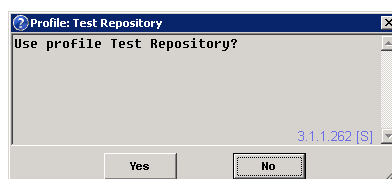
41. Click **OK**
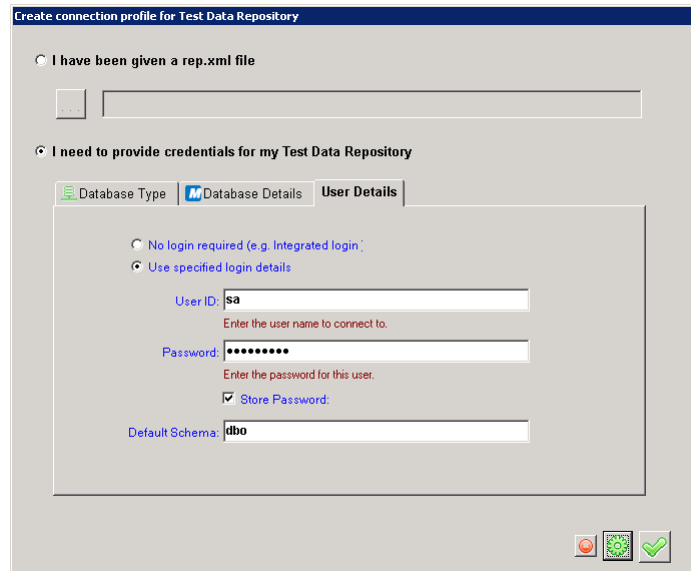
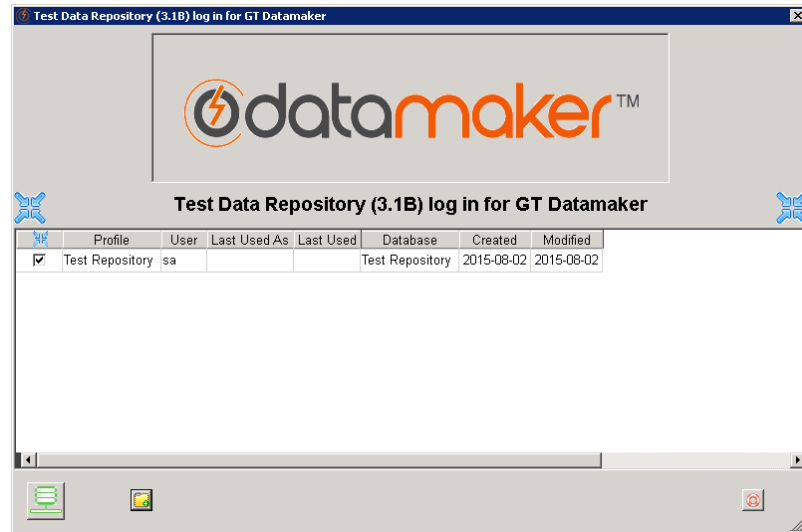42. Another new green check icon will appear, Click this icon to **Save the Profile**
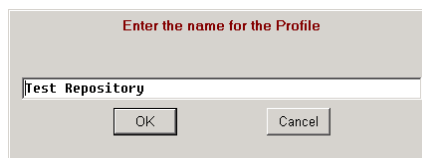
43. The Profile Name will default to the "User ID – ODBC Connection Name". **Best Practice** would be to remove the User ID. Change the Profile Name to the ODBC Connection Name only: **Test Repository**

44. Click **OK**

45. Click **Yes**

46. Confirm the "Test Repository" Profile is now in Datamaker

Note: Before you can use Datamaker it must be licensed. To license Datamaker go to the Licensing section of this document.

Recommendation:

Now that Datamaker is connected to the Test Data Repository, the next step is to License Grid-Tools. Since this usually takes a day or so, we recommend you go to the Licensing section of this document and perform the steps in the **Generate Candidate Key** section immediately.

Once Datamaker is licensed, you may need sample or training databases to connect to for testing and to validate that everything is configured correctly. So while you are waiting for the **License Key**, go to the next section and create the TRAVEL and TRAVEL_E databases.

Then when you receive your **License Key** go to the **Applying the Licensing Key** section and activate Datamaker using the License key.

Then, because you need Source and Target databases, go ahead and build Profiles and connect to the TRAVEL and TRAVEL_E databases.

MS SQL Method 2 – Create Travel and Travel_E Databases

If you are attending training or needing additional databases for a demonstration or POC, by following the same methodology additional databases can be created. Located in the Datamaker Installation Kit Install_Repository_SQLServer folder is another folder called **Install_TRAVEL_SQL_Server**. In this folder are the files needed to create the Schema and import the Data for a set of "Travel" databases.

For training purposes you will want to create two (2) databases and run the SQL Query to create Schemas in both of these databases. However, only on one of the databases will you import Data. This way Datamaker can be used to pull, mask, subset, etc. data from the fully loaded database to the empty but ready database.

Create the Travel Databases

1. Open the **Microsoft SQL Server Management Studio**
2. Right click Databases and select **New Database**
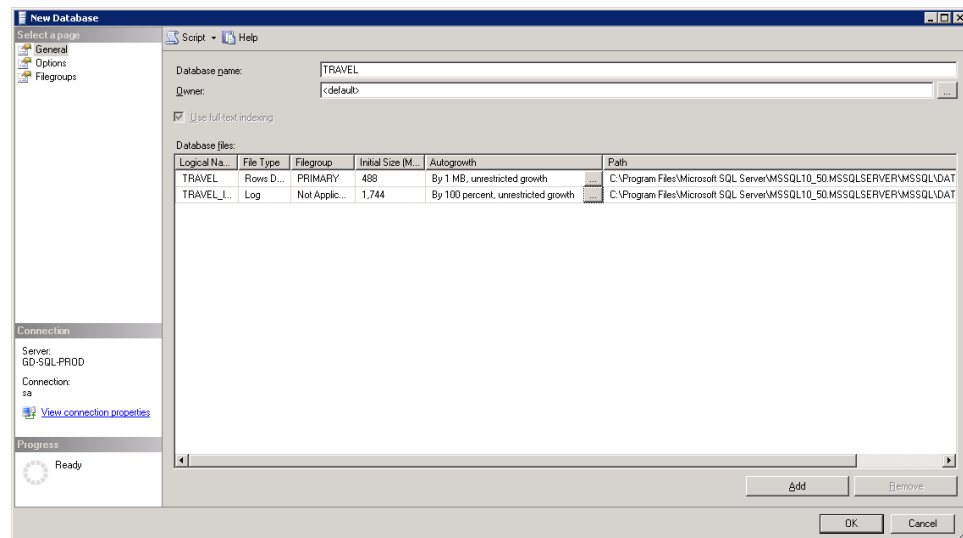
3. For the first **Database Name** enter **TRAVEL**
4. For the database file in the PRIMARY Filegroup make the following changes:
   a. Set the **Initial Size** to **488 MB**
   b. Verify that the **Autogrowth** is set to "**By 1 MB, unrestricted growth**"
5. For the second entry (TRAVEL_log) make the following changes:
   a. Set the **Initial Size** to **1788 MB**
   b. Change the **Autogrowth** to "**By 100 percent, unrestricted growth**"
6. Click **OK**
7. Right click Databases and select **New Database**
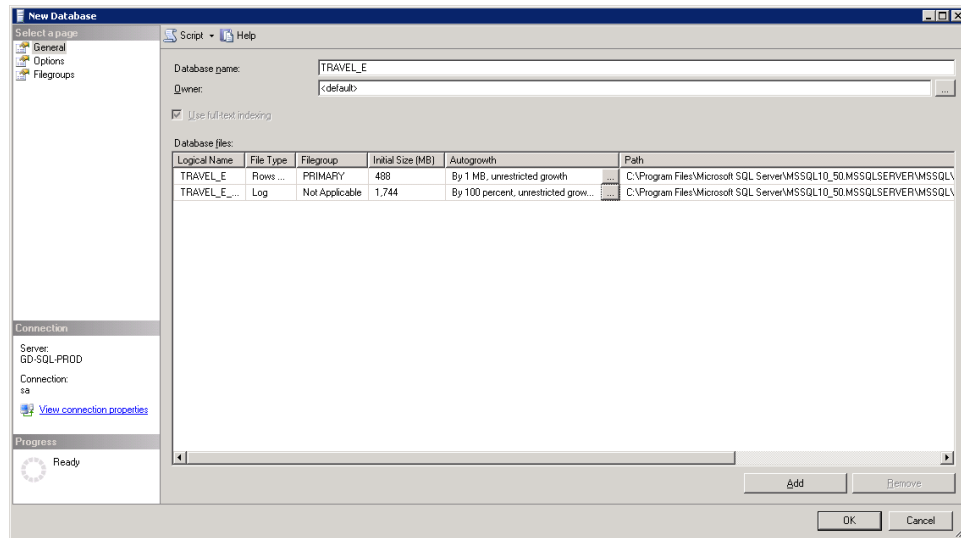
8. For the second **Database Name** enter **TRAVEL_E** ("E" for empty, no data will be added to this database
9. For the database file in the PRIMARY Filegroup make the following changes:
    a. Set the **Initial Size** to **488 MB**
    b. Verify that the **Autogrowth** is set to "**By 1 MB, unrestricted growth**"
10. For the second entry (TRAVEL_E_log) make the following changes:
    a. Set the **Initial Size** to **1788 MB**
    b. Change the **Autogrowth** to "**By 100 percent, unrestricted growth**"
11. Click **OK**

12. Confirm that **TRAVEL** and **TRAVEL_E** databases have been created

Add the Schema to the Travel Databases

13. Go to **File > Open > File** in the Microsoft SQL Server Management Studio
14. Go to the Datamaker Installation Kit folder **Install_TRAVEL_SQL_Server**
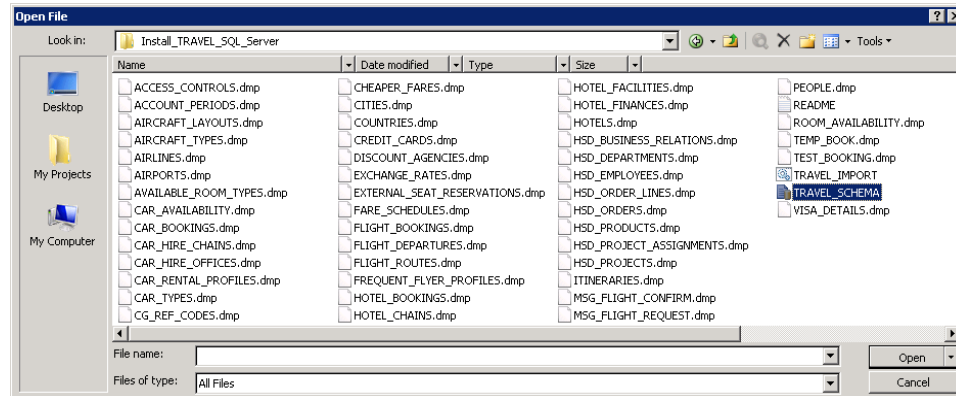
15. Select **TRAVEL_SCHEMA.sql**
16. Click **Open**
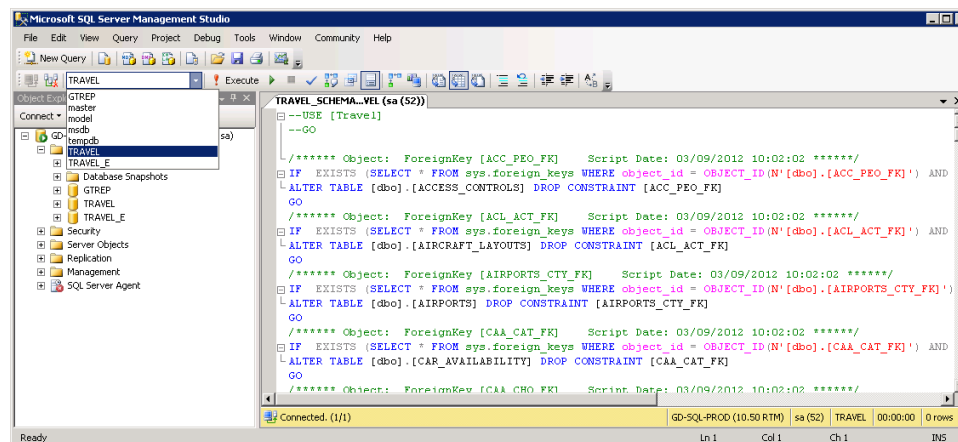
17. Verify that the **SQL Query** loaded
18. **Important** – as shown in the picture change the database from master to **TRAVEL**
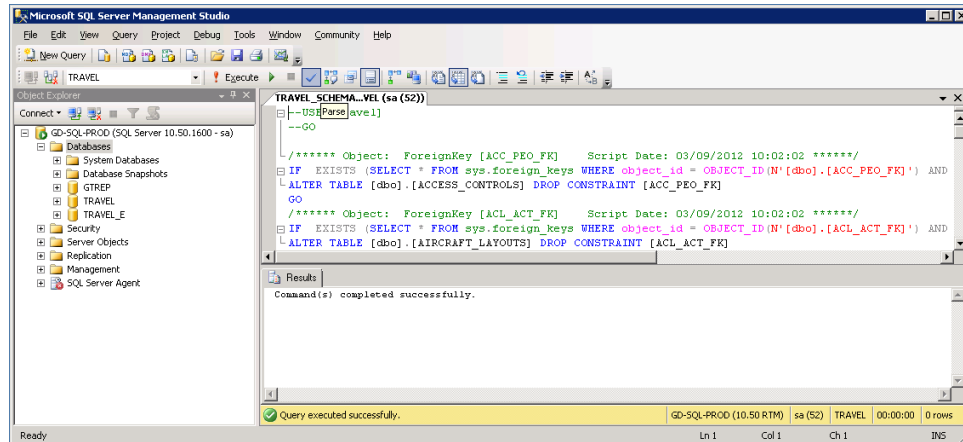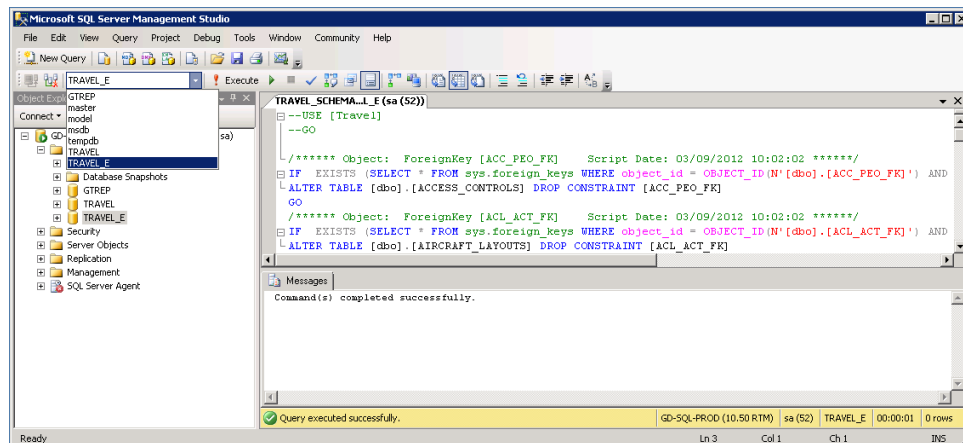
19. To test the SQL Query, click **Parse** (blue check above)
20. Verify that in the Results "**Query executed successfully**" appears
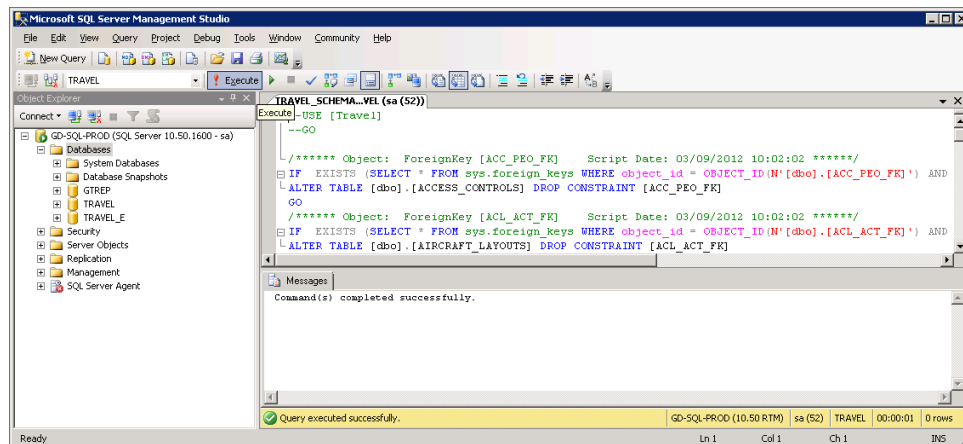
21. To execute the SQL Query, click **Execute** (red exclamation above)
22. Verify that in the Results "**Query executed successfully**" appears again

23. **Important** – as shown in the picture change the database from TRAVEL to **TRAVEL_E**
24. To test the SQL Query, click **Parse** (blue check above)

25. Verify that in the Results "**Query executed successfully**" appears
26. To execute the SQL Query, click **Execute** (red exclamation above)
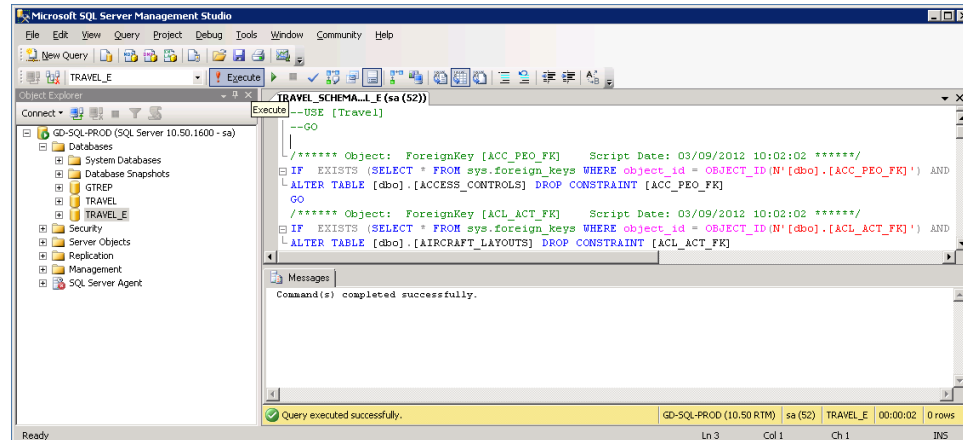
27. Verify that in the Results "**Query executed successfully**" appears again
28. Close the Microsoft SQL Server Management Studio

Add the Data to the TRAVEL Database Only

48. Open a Command Prompt
49. Navigate to the Datamaker Installation Kit folder **Install_TRAVEL_SQL_Server**

In this folder there is a batch file **TRAVEL_IMPORT.bat** that needs to be executed using specific parameters as before, except this time the Target Database will be **TRAVEL** and we will not do the Data Import to the TRAVEL_E database. Additionally, the files should start with "travel" instead of "gtrep".

The command that will be entered will look something like this:

TRAVEL_IMPORT username password server TRAVEL > travel_import_log.txt 2> travel_import_errors.txt

Once the command is executed again three (3) files will be created:

- **import_report.txt** – which needs to be checked for "IMPORT errors" and once it is closed the command will finish.
- **travel_import_log.txt** – which needs to be checked for "errors" to make sure no commands failed
- **travel_import_errors.txt** – which needs to be checked for DOS command errors

50. Execute the TRAVEL_IMPORT command using the correct parameters for your environment against the TRAVEL database only

51. Verify that the Command Prompt stops with "**IMPORT Complete**" but is still waiting
52. Verify that the **import_report.txt** file has opened automatically in Notepad
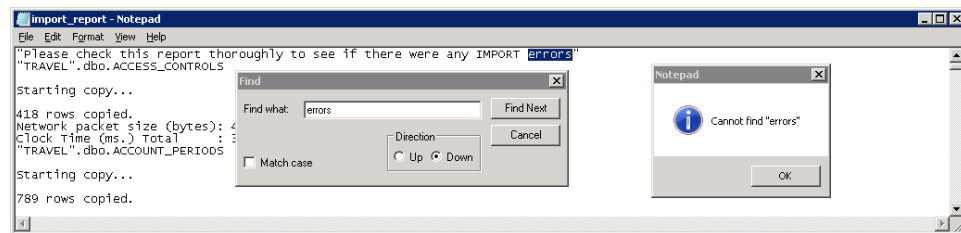
53. Check the **import_report.txt** file for errors
    a. Do a Find looking for the word "**errors**"
54. Close the **import_report.txt** file and verify that the command completes, going back to a prompt
55. Close the Command Prompt window
56. Go to the Datamaker Installation Kit folder Install_TRAVEL_SQL_Server
57. Open the **travel_import_log.txt** file
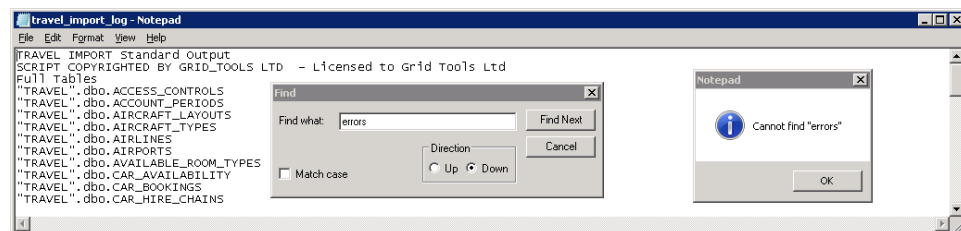
58. Check the **travel_import_log.txt** file for errors
    a. Do a Find looking for the word "**errors**"
59. Close the **travel_import_log.txt** file
60. Open the **travel_import_errors.txt** file
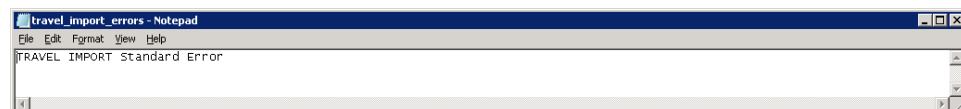
61. Check the **travel_import_errors.txt** file for errors
    a. The file should only have one entry "**TRAVEL IMPORT Standard Error**"
62. Close the **travel_import_errors.txt** file

Licensing

Before starting this section the Datamaker product must be installed, the "Starter Database" or Test Data Repository must be created, and a Datamaker Profile created so that Datamaker can connect to the Test Data Repository.

Generating the Candidate Key

1. Open **Datamaker**
2. Click the **Connect to Test Data Repository** icon to bring up the GT Datamaker Licensing window
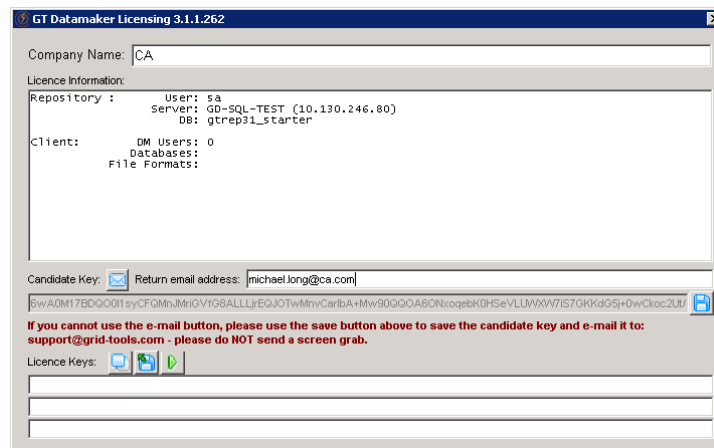
3. Enter the **Company Name** (CA)

 This top part of this screen is initially used to generate a **Candidate Key**, which must be sent to Grid-Tools in order to obtain a **License Key**. There are two ways to do this.

- If the machine where Datamaker is installed has an email client, then enter your email address and click the mail icon ✉ to mail the Candidate Key to Grid-Tools Support.

- If the machine where Datamaker is installed does not have an email client, click the save 💾 icon, go to the location where the Candidate key is, and email the file to Grid-Tools Support.

The **Candidate Key** will be a **GTDMLicenceCandidate.txt** file. By default it is placed in a hidden file, so you may need to adjust your Windows Explorer setting to allow you to see the folder and file location.

C:\Users\Administrator\AppData\Local\Temp\2

4. Generate a **Candidate Key** and Email it to Grid-Tools Support

Applying the License Key

When you receive your **License Key** it will be in a TXT file that will have a naming convention similar to this: "Company Name"–"Server Name.txt". Place this **License Key** on the machine where Datamaker is installed.

5. Open **Datamaker**
6. Click the **Connect to Test Repository** icon to bring up the GT Datamaker Licensing window
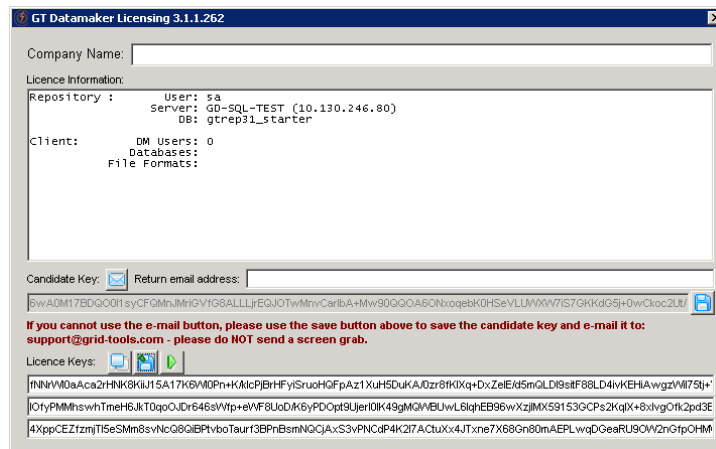
7. Click the **Load from File** icon
8. Browse to the location of the **License Key** and click **Open**
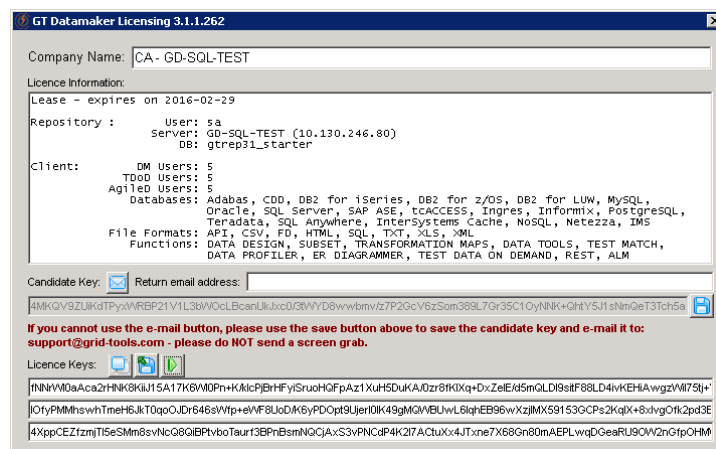
9. Verify that the Company Name, License Information, and License Keys all populate with information
10. Click the Activate icon

The **Datamaker User Logon** screen automatically comes up and you can now log into **Datamaker**

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First Time Login Update:

The first time you log into Datamaker it needs to run a script to update the Schema.
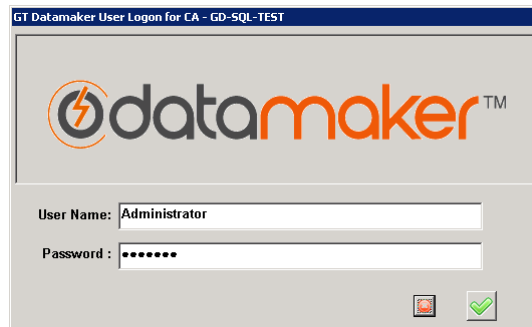
11. Enter ***Administrator*** for the **User Name**
12. Enter ***marmite*** for the **Password**
13. Click the green check icon **Connect to User**
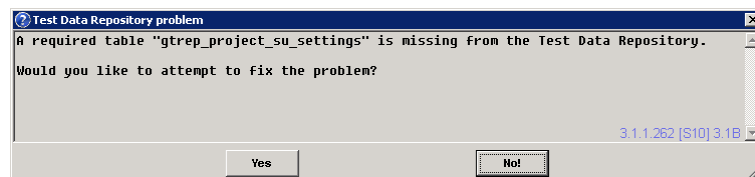
14. Click **Yes** to fix the problem
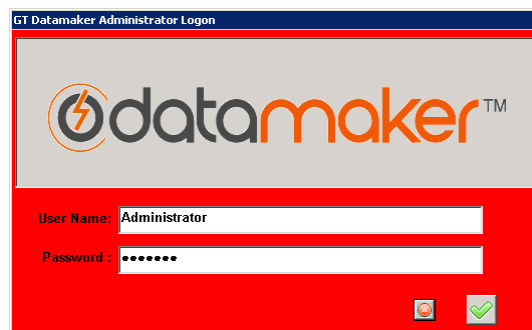
15. Enter ***Administrator*** for the **User Name**
16. Enter ***marmite*** for the **Password**
17. Click the green check icon **Connect to User**
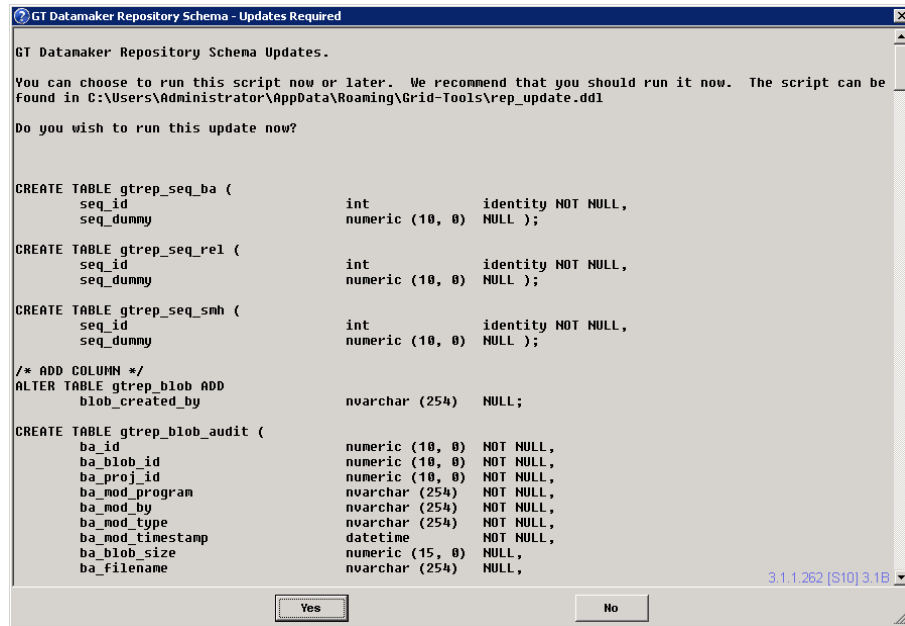
18. Click **Yes** to run the script / update

19. Verify that the **Data Target and Data Source log in GT Datamaker** window appears

Recommended: Close this window and test the login process again.

1. Open **Datamaker**
2. Click the **Connect to Test Data Repository** icon
3. Enter *Administrator* for the **User Name**
4. Enter *marmite* for the **Password**
5. Click the green check icon ✔ **Connect to User**
6. Verify that the **Data Target and Data Source log in GT Datamaker** window appears and that no issues or updates appear

Configuration

Datamaker has two Services that need to be configured before they will run:
- GridToolsRemotePublish
- GridToolsTDoDService

Also, Database Profiles need to be created so that Datamaker has a Source and Target Databases to access when it is operational.

Finally, to simplify the login process a REP.XML file should be created that allow a quicker and easier login process.

Grid Tools Remote Publish Service

The only way we were able to get the GridToolsRemotePublish Service to start was to Uncheck Email Support Enabled box <u>AND</u> clear the AD Domain field, then Save the configuration.

Here are the screenshots and how we configured the **Remote Engine Config Editor**.

1. Open the **Remote Engine Config Editor**
2. Go to **Configure** tab > **Connection String** tab
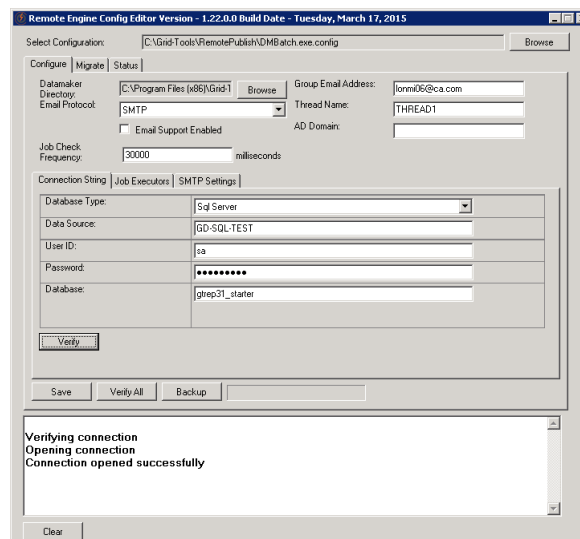
- Here is how we configured these settings

3. Click **Verify** and confirm that the **Connection opened successfully**

4. Go to **Configure** tab > **Job Executors** tab settings
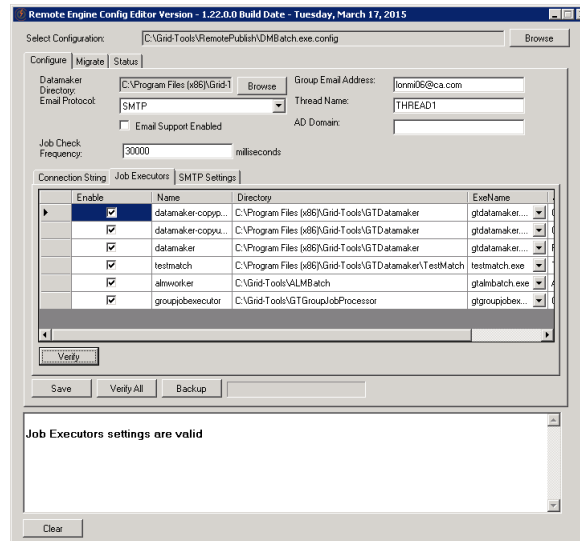
5. Confirm that all items are Enabled
6. Click **Verify** and then confirm that **Job Executors settings are valid** appears
7. Go to **Configure** tab > **SMTP Settings** tab settings
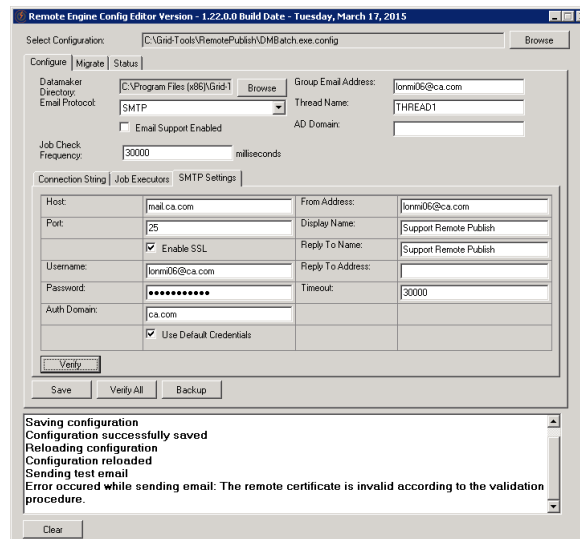
- Here is how we configured these settings

8. Click **Save** and confirm the **Configuration successfully saved** and is **Reloaded**
9. Click Verify – Error not sure how to get around this, which is why the initial settings of Uncheck the box for Email Support Enabled is done (only combination we found that let service start)

- The **Migrate** tab is not configured at this time

10. Go to the **Status** tab
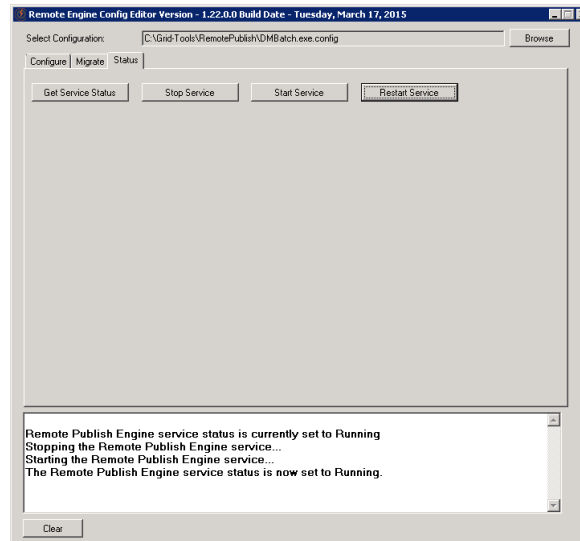
11. Click **Restart Service**
12. Verify that **The Remote Publish Engine service status is now set to Running**
13. Close the **Remote Engine Config Editor**

Grid Tools TDoD Service

Here are the screenshots and how we configured the **TDoD Config Editor**.

1. Open the **TDoD Config Editor**
2. Go to **Configure Service** tab > **Connection String** tab
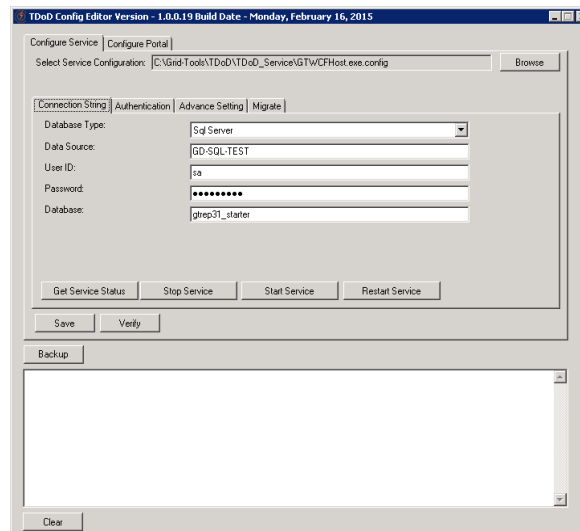
3. Configure this tab accordingly
   a. **Database Type**: (Oracle or SQL Server)
   b. **Database Source**: Enter DB Server Hostname
   c. **User ID**: DB User with rights to access database
   d. **Password**: Password for User ID
   e. **Database**: (gtrep31_starter or GTREP)
4. Go to **Configure Service** tab > **Authentication** tab
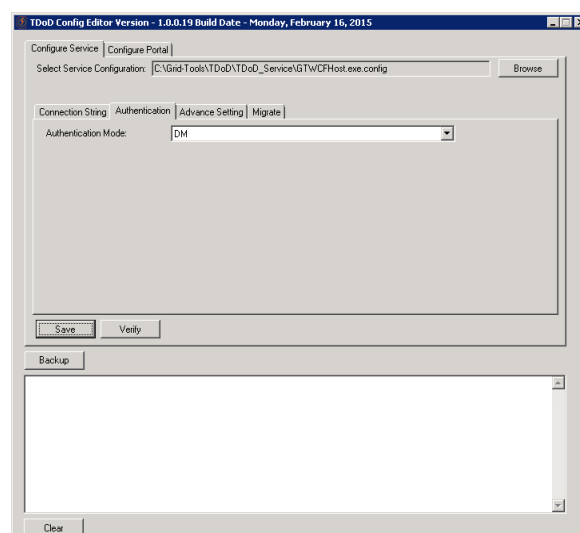
5. Confirm the **Authentication Mode** is set to **DM**

6. Go to **Configure Service** tab > **Advanced Settings** tab
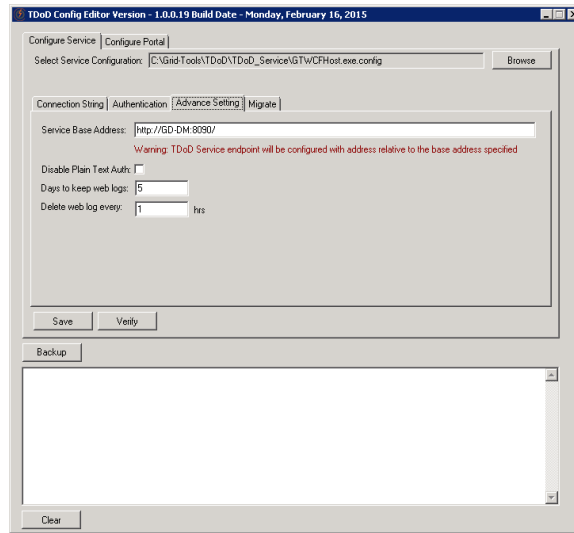
7. Enter the **Service Base Address**: http://(Datamaker server):8090/
8. Confirm **Disable Plain Text Auth** is not checked
9. Confirm **Days to keep web logs** is set to **5**
10. Confirm **Delete web log every** is set to **1** hour

   - Migrate tab is not configured at this time

11. Go to **Configure Service** tab > **Connection String** tab
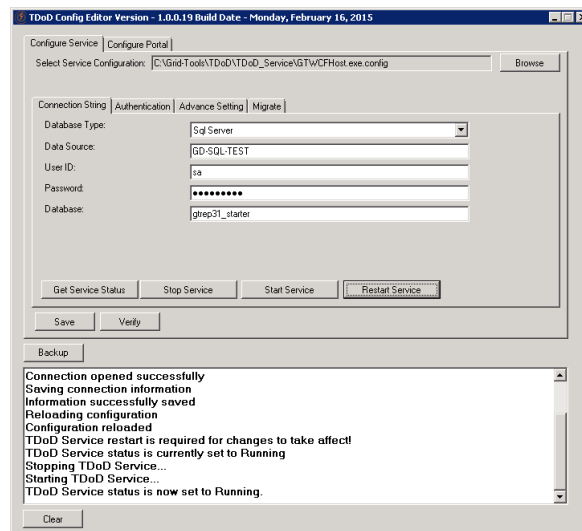
12. Click **Verify** and confirm the **Connection opened successfully**
13. Click **Save** and confirm the **Information successfully saved** and **reloaded**
14. Click **Restart Service** and confirm the **TDoD Service status is now set to Running**

15. Go to **Configure Portal** tab > **Settings**
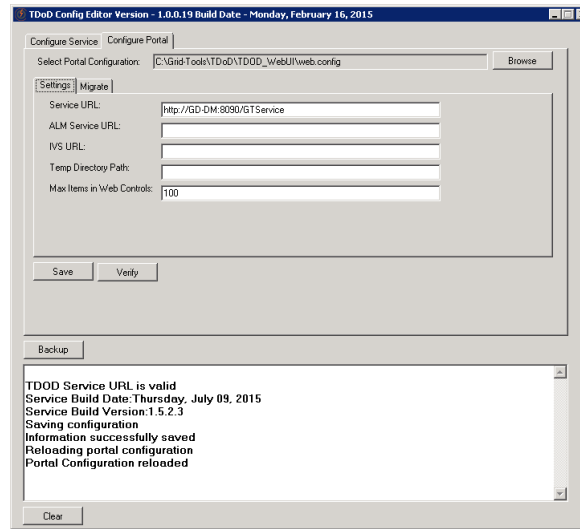
16. Configure this tab accordingly:
    a. **Service URL**: http://(Datamaker Server):8090/GTService
    b. **ALM Service URL**: (blank)
    c. **IVS URL**: (blank)
    d. **Temp Directory Path**: (blank)
    e. **Max Items in Web Controls**: 100
17. Click **Verify** and confirm the **TDOD Service is valid**
18. Click **Save** and confirm the **Information successfully saved** and **reloaded**

    - Migrate tab is not configured at this time

19. Close the **TDoD Config Editor**

Database Profiles

Once you have Datamaker licensed, it needs a Source (database) to pull from and a Target (database) to put data in. As we did with the Test Data Repository, these Source and Target (databases) need Profiles built so that Datamaker can connect.

Because we are using and have built the TRAVEL and TRAVEL_E Databases for Training, we will use them as our Source and Target in this document as examples of how to set each up.

1. Open **Datamaker**
2. Click the **Connect to Test Data Repository** icon
3. Log in to **Datamaker**
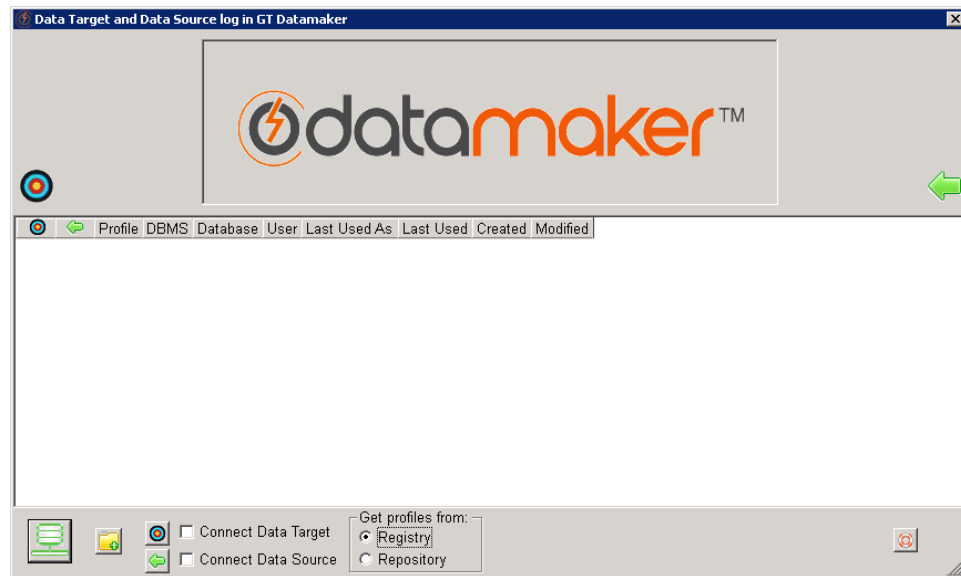
The following is a review and update of the icons which are used to perform various functions:

- Connect to Test Data Repository
- Create new Profile
- Connect Data Target
- Connect Data Source
- Help about GT Datamaker
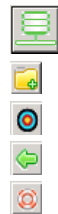
Connecting to a Data Source – TRAVEL

4. Click the **Create new Profile** icon
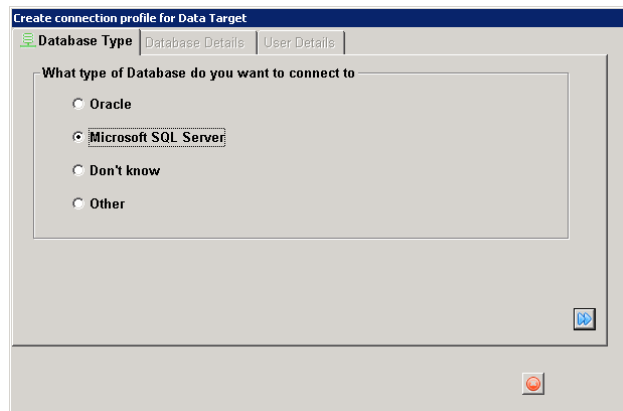
5. Select **Microsoft SQL Server**
6. Click the blue double arrow icon ⏩ to proceed
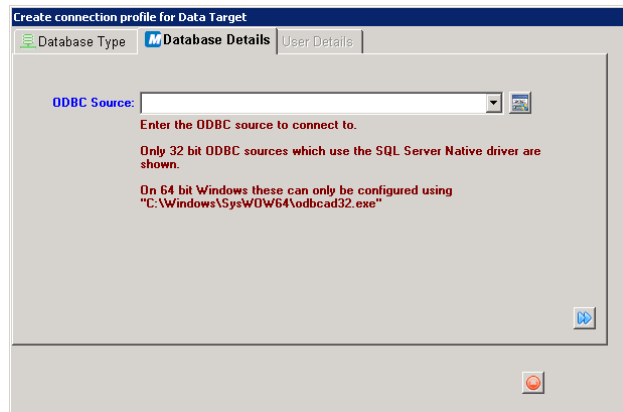
7. Since there is not an ODBC Connection to the TRAVEL Database, one needs to be created, click the icon to the right of the drop-down window to **Launch the 32-bit ODBC Administrator**.
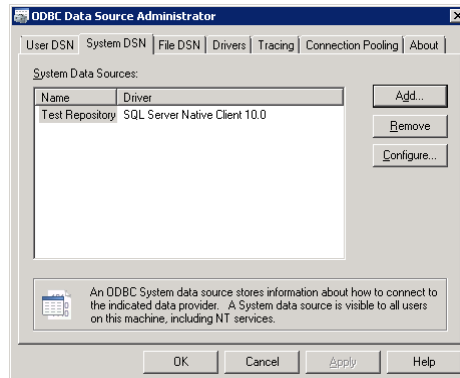
8. Click the **System DSN** (2nd) tab
9. Click the **Add** button to add a new System Data Source
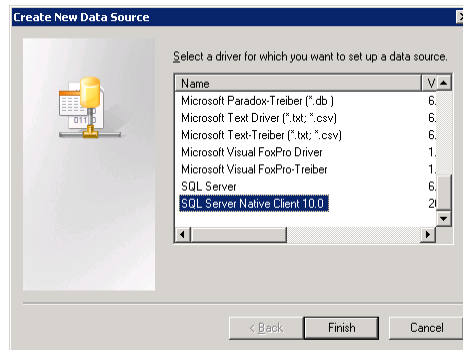
10. Slide the bar to the bottom and select **SQL Server Native Client 10.0**
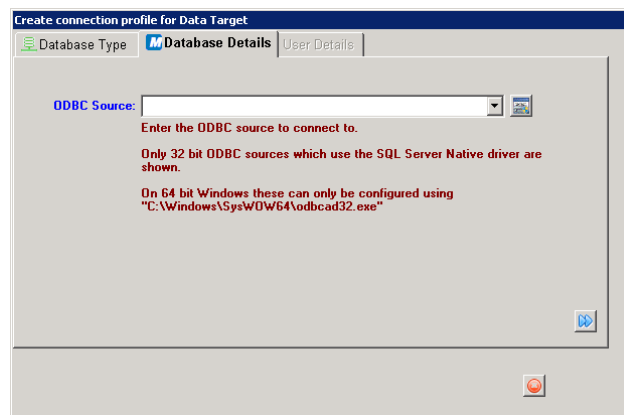11. Click **Finish**
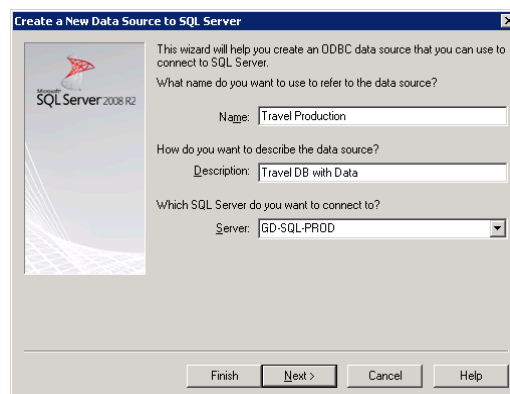
12. Enter a **Name** for this ODBC Connection: **Travel Production**
13. (Optional) Enter a **Description**
14. From the drop-down window select the **Server** where the TRAVEL Database is located
15. Click **Next**
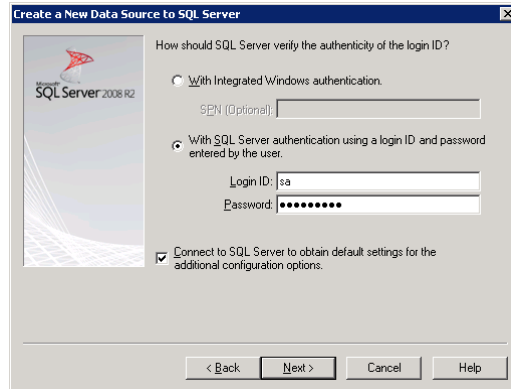
16. Select **With SQL Server authentication using a login ID and password entered by user**
17. Enter the **Login ID** (sa)
18. Enter the **Password** for the Login ID
19. Click **Next**
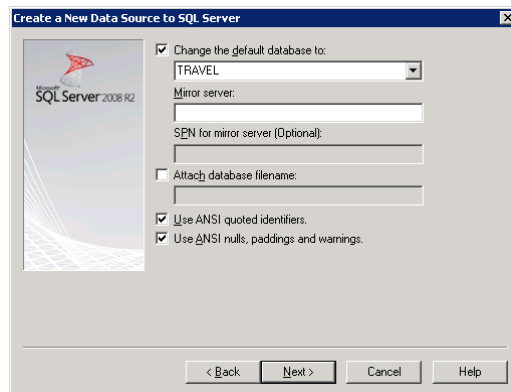
20. Check the **Change the default database to** box
21. From the drop-down window select the **TRAVEL** database
22. Click **Next**
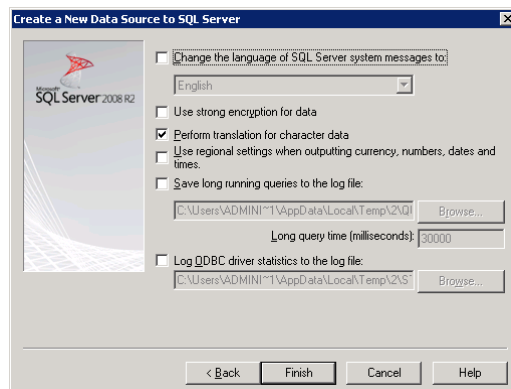
23. Click **Finish**
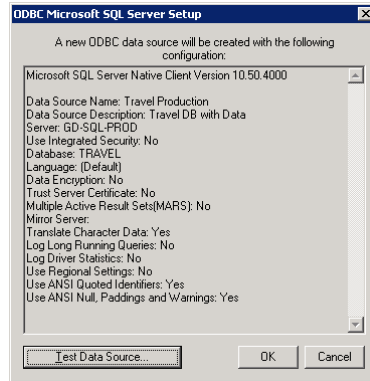
24. Click **Test Data Source**
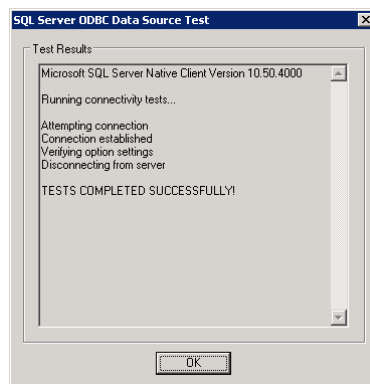
25. Verify the **TESTS COMPLETED SUCCESSFULLY**
26. Click **OK**
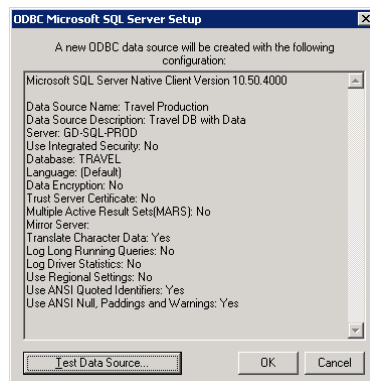
27. Click **OK**
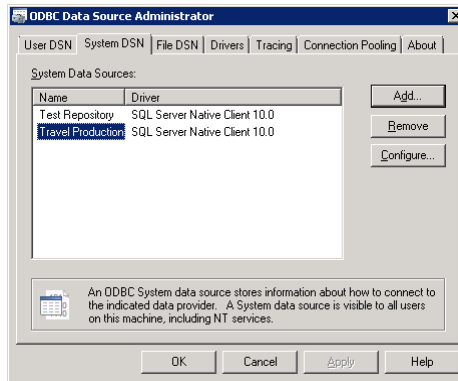
28. Verify that the **Travel Production** System Data Source entry is now available
29. Click **OK**
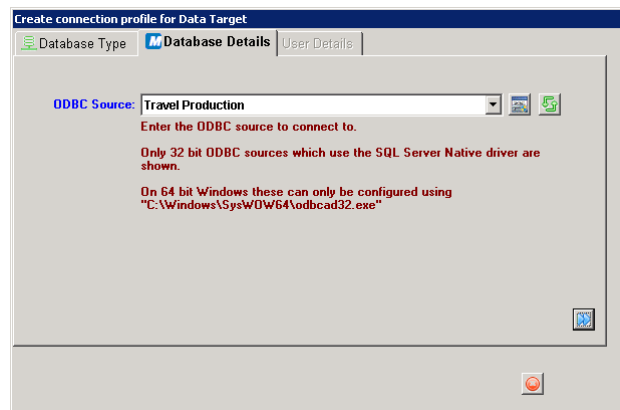
30. Click the **Refresh** icon ⟳
31. From the drop-down window select **Travel Production** for the ODBC Source
32. Click the blue double arrow icon ⟫ to proceed
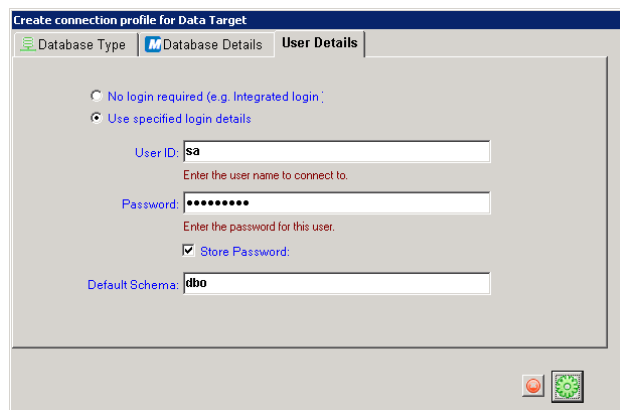
33. Select **Use specified login details**
34. Enter the **User ID** (sa)
35. Enter the **Password** for the User ID
36. Check the **Store Password** box

37. Enter the **Default Schema** (dbo)
38. Click the Test the connection detail icon

39. Click **OK**

40. Click the **Save the Profile** icon
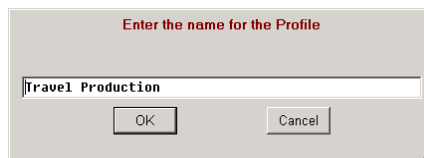
41. Change the name (removing the "sa") to **Travel Production**
42. Click **OK**
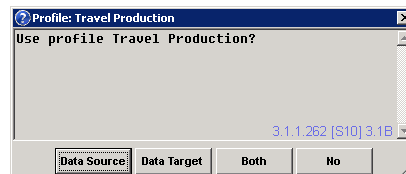
43. Click **Data Source** because this is the TRAVEL Database
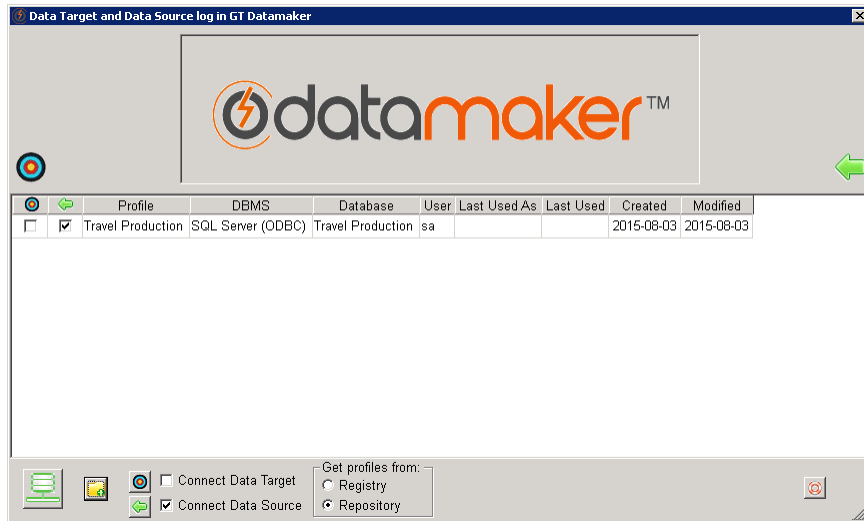
44. Verify that the **Travel Production** Profile has been added and the **Data Source** checkbox is checked

Connecting to a Data Target – TRAVEL_E
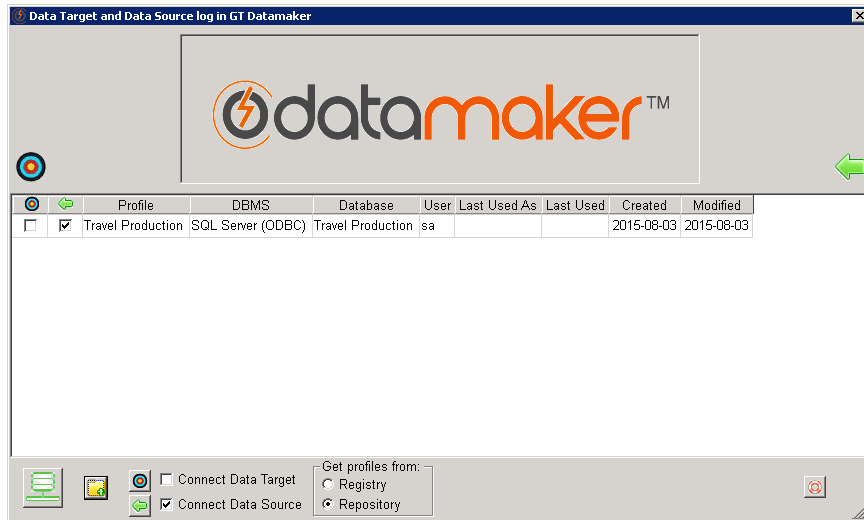
1. Click the **Create new Profile** icon
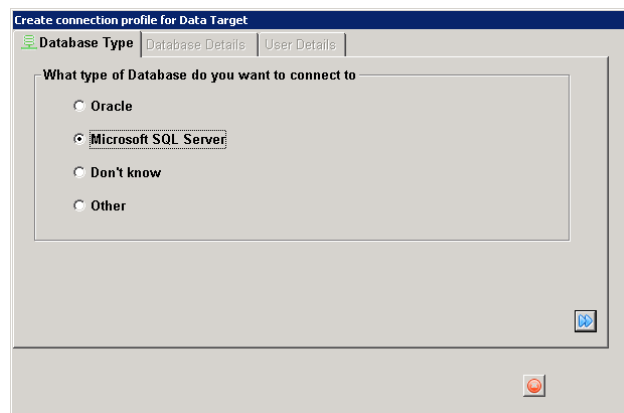
2. Select **Microsoft SQL Server**
3. Click the blue double arrow icon to proceed

4. Click the **Launch the 32-bit ODBC Administrator** icon
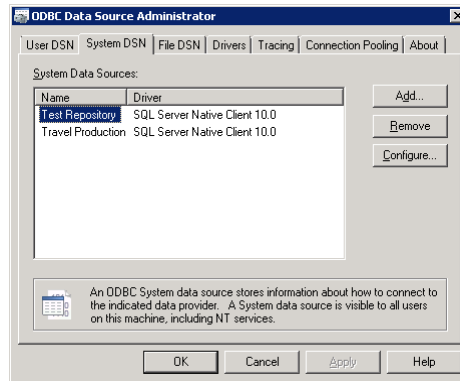
5. Click the **System DSN** (2nd) tab
6. Click the **Add** button to add a new System Data Source
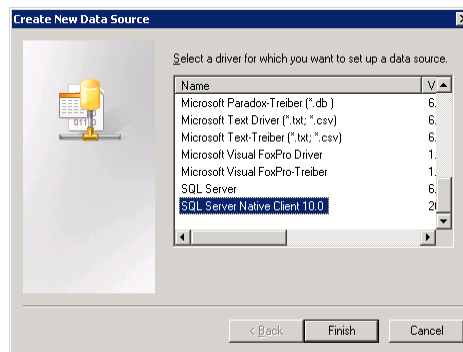
7. Slide the bar to the bottom and select **SQL Server Native Client 10.0**
8. Click **Finish**
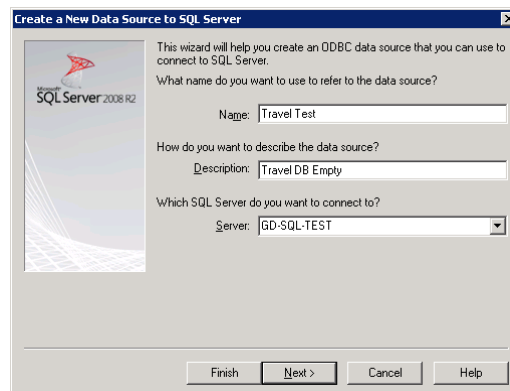
9. Enter a **Name** for this ODBC Connection: **Travel Test**
10. (Optional) Enter a **Description**
11. From the drop-down window select the **Server** where the TRAVEL_E Database is located
12. Click **Next**
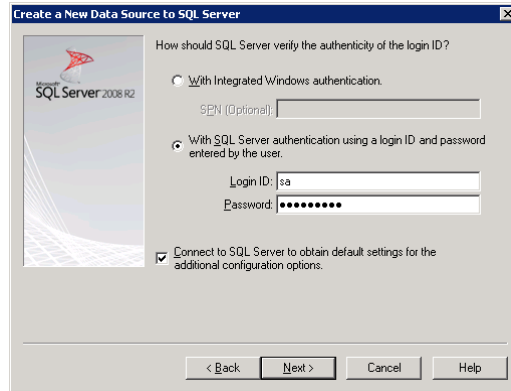
13. Select **With SQL Server authentication using a login ID and password entered by user**
14. Enter the **Login ID** (sa)
15. Enter the **Password** for the Login ID
16. Click **Next**
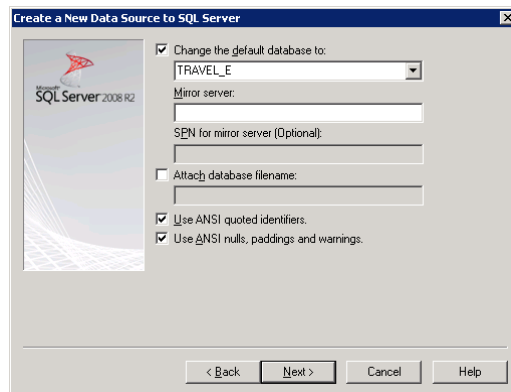
17. Check the **Change the default database to** box
18. From the drop-down window select the **TRAVEL_E** database
19. Click **Next**
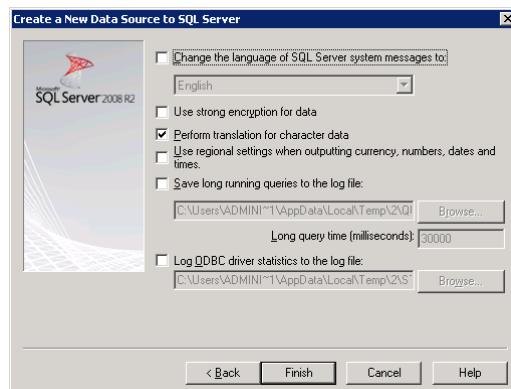
20. Click **Finish**
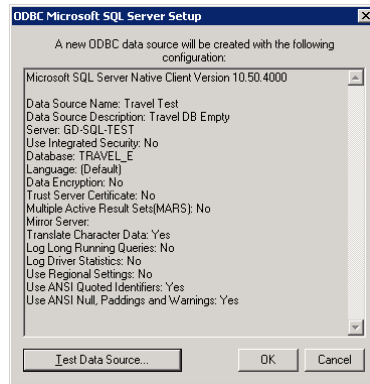
21. Click **Test Data Source**
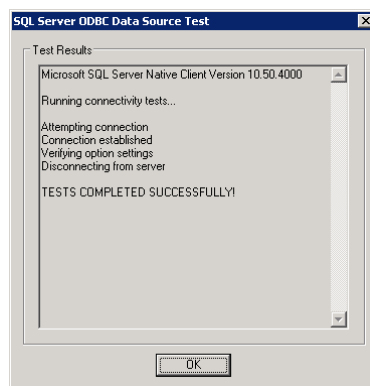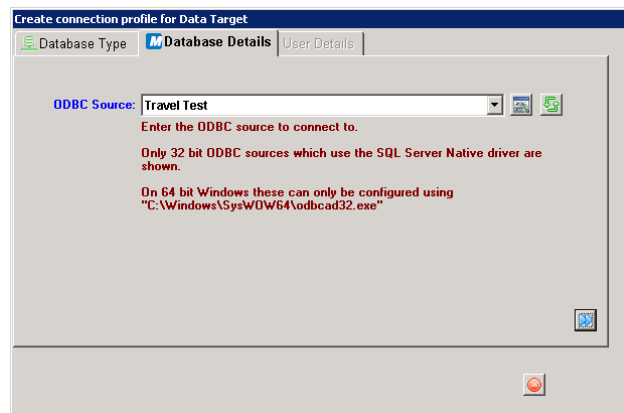

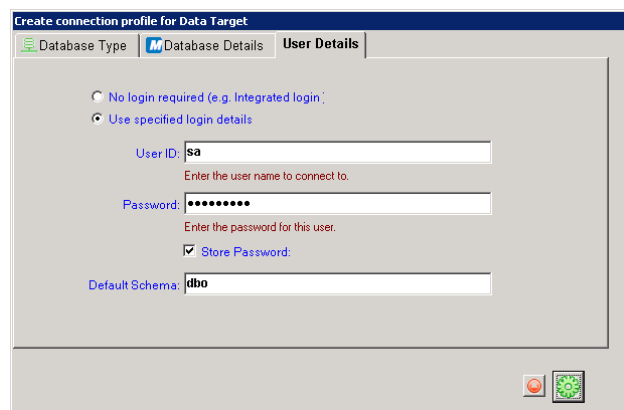22. Verify the **TESTS COMPLETED SUCCESSFULLY**
23. Click **OK**
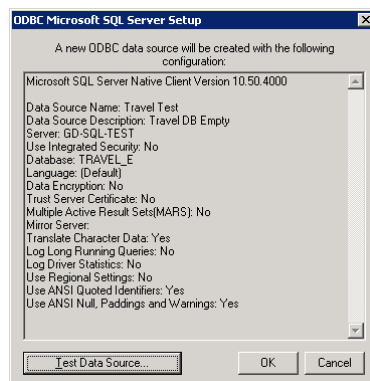
24. Click **OK**
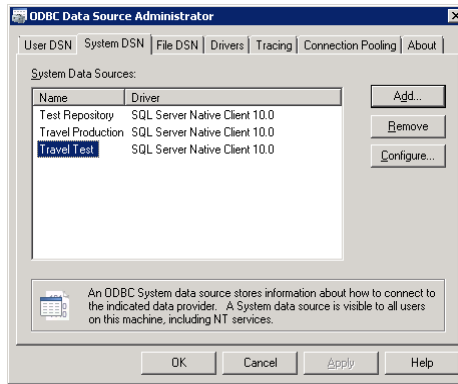
25. Verify that the **Travel Test** System Data Source entry is now available
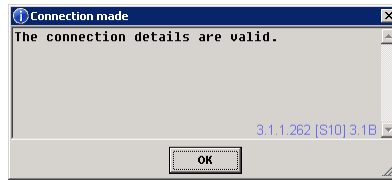26. Click **OK**

27. Click the **Refresh** icon
28. From the drop-down window select **Travel Test** for the ODBC Source
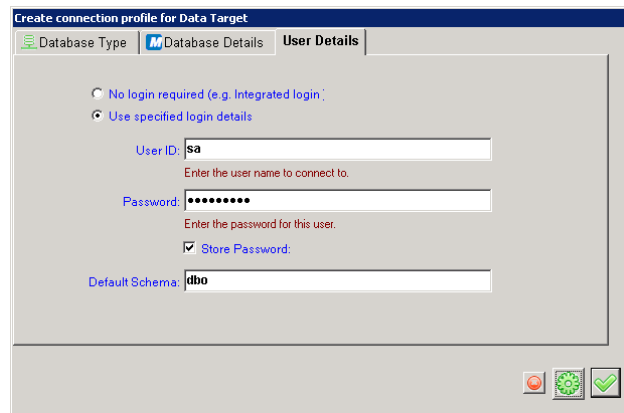29. Click the blue double arrow icon to proceed

30. Select **Use specified login details**
31. Enter the **User ID** (sa)
32. Enter the **Password** for the User ID
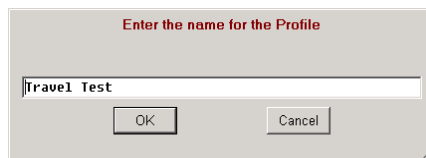33. Check the **Store Password** box

34. Enter the **Default Schema** (dbo)
35. Click the Test the connection detail icon
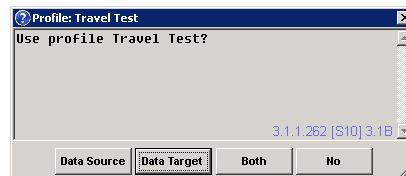

36. Click **OK**

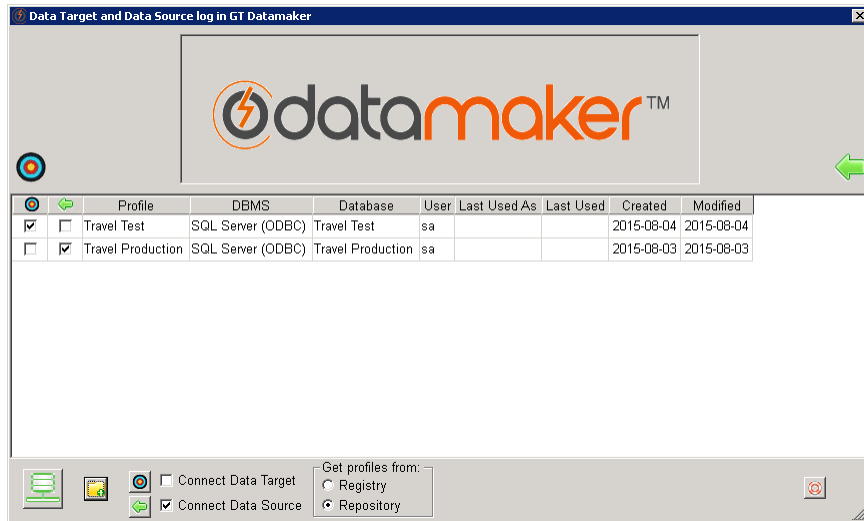37. Click the **Save the Profile** icon

38. Change the name (removing the "sa") to **Travel Test**
39. Click **OK**

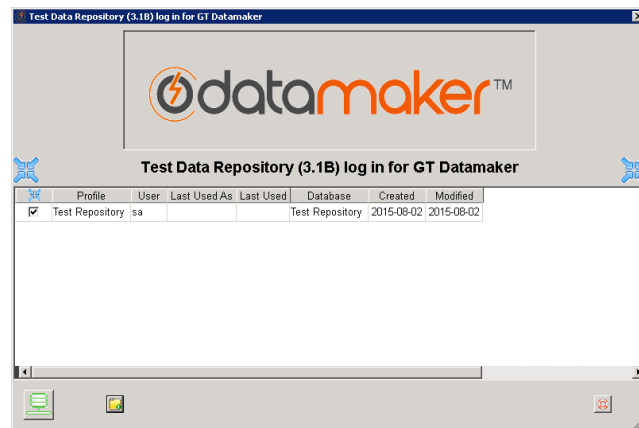40. Click **Data Target** because this is the TRAVEL_E Database

41. Verify that the **Travel Test** Profile has been added and the **Data Target** checkbox is checked

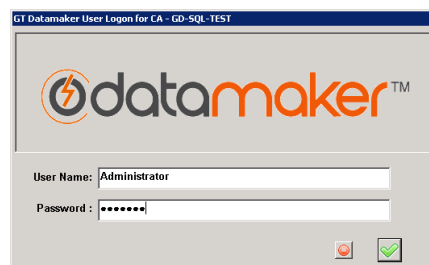**Recommendation:** Repeat Travel and Travel_E processes for Orders and Orders_E

42. Click the **Connect to databases and startup** icon
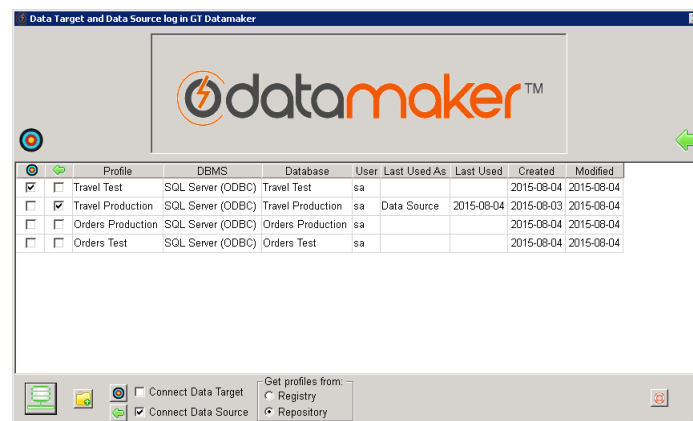
How to Create the REP.XML file
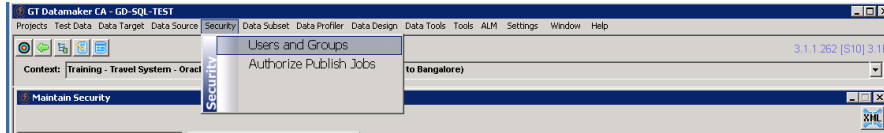
1. Open **Datamaker**

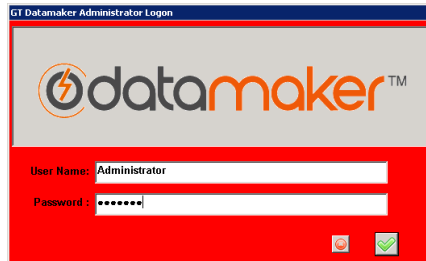2. Click the **Connect to Test Data Repository** icon


3. Log in to **Datamaker**

4. Verify a Data Source and Target are selected
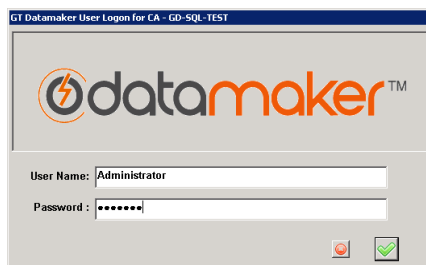5. Click the **Connect to databases and startup** icon

6. Go to **Security** and select from the drop-down menu **Users and Groups**
7. In the upper corner of the **Maintain Security** window, click the XML icon

8. Enter the Administrator **User Name** for your system: (Administrator)
9. Enter the Administrator **Password**: (marmite)
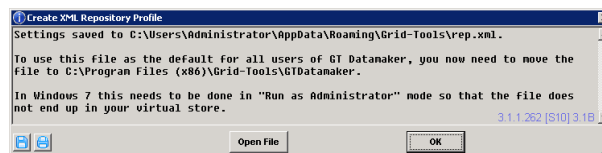
10. Read the message and confirm the location where the rep.xml file was created
    a. **C:\Users\Administrator\AppData\Roaming\Grid-Tools\rep.xml**
    b. This is a hidden folder, adjust the setting on the computer to see this folder
11. Copy the file to the **C:\Program Files (x86)\Grid-Tools\GTDatamaker folder**
12. Click **OK**
13. Close **Datamaker** to validate that the **REP.XML** file works
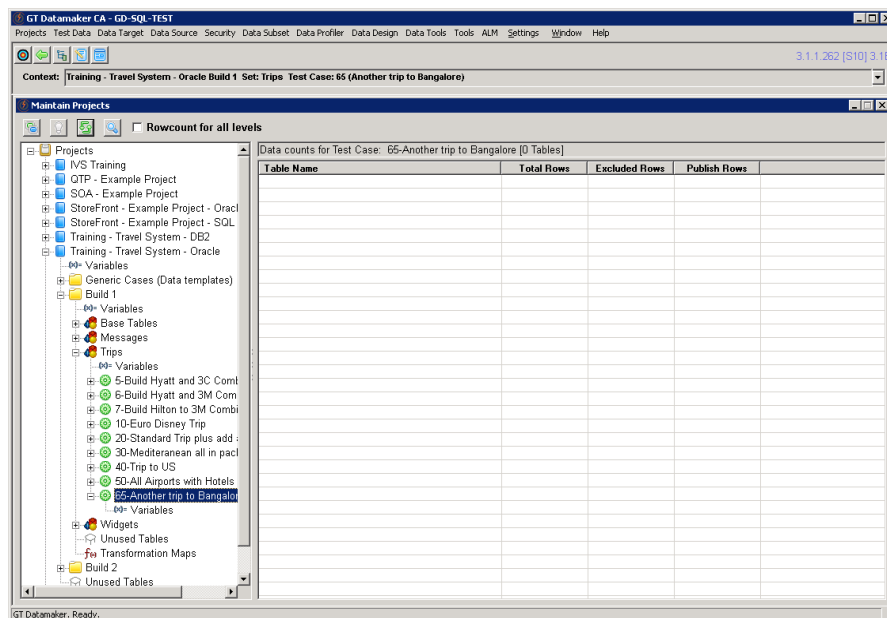14. Open **Datamaker**

15. Verify the **Test Data Repository** window no longer appears
16. Log in to **Datamaker**
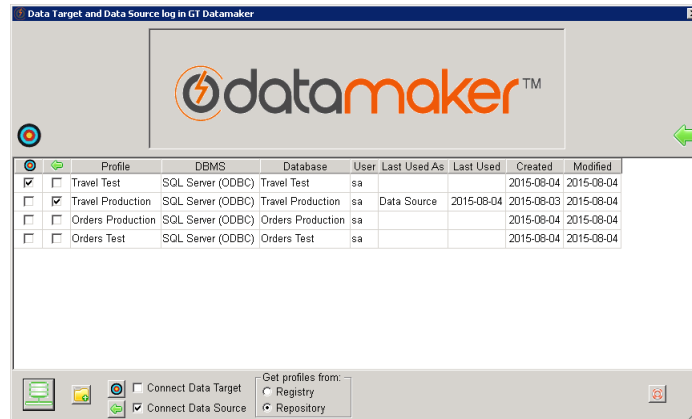
17. Verify the **Data Target and Data Source** window comes up

18. Click the **Connect to databases and startup** icon

19. Confirm Datamaker come up and is fully operational