



global-roam
deSide
Installation and Upgrade Manual
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Introduction and Prerequisites

This manual describes how to install deSide as either an upgrade to a previous version of deSide, or as a clean installation.

This manual applies to deSide Client version 3.1 or later and deSide Updater version 5.3.0 or later.

What you will need

The tasks involved in this deployment include such things as installation and configuration of a database and configuration of proxy settings.

To successfully install or upgrade deSide you will need:

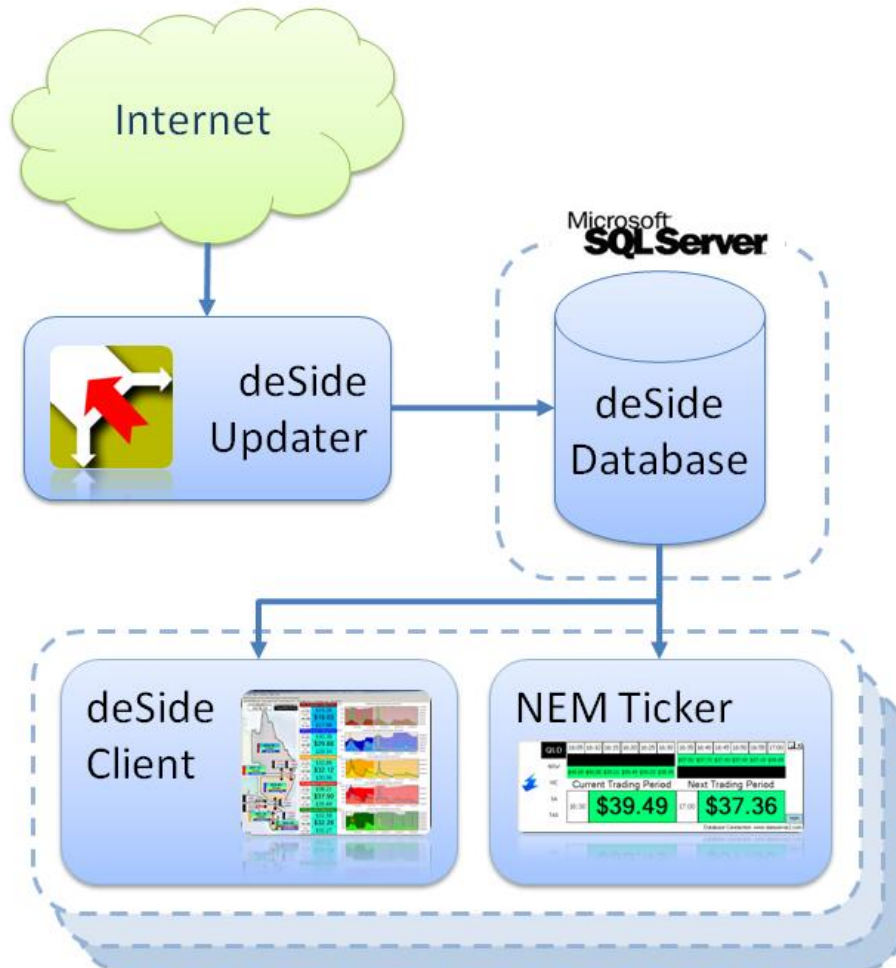
- Intermediate IT skills.
- Basic knowledge of Microsoft SQL Server.
- Your GR-ID and password.
- Access to a user account with administrative permissions.
- Knowledge of any proxy settings or other internet security processes in place in your organization.
- Access to the internet.

For each of the global-roam products that you install or upgrade, you will need to go through the following steps:

1. Installation of the software
2. Configuration of Proxy settings
3. Activation of your software license
4. Configuring a connection to the database
5. Install databases and tables

The deSide Suite

The deSide Suite consists of 4 components. The deSide Updater, the deSide Database, the deSide Client and the NEM Ticker.



The deSide Updater is responsible for obtaining NEM (National Energy Market) data from global-roam using the Internet. It stores this data in the deSide Database.

The deSide Database is a set of two databases installed into an SQL Server instance. This is the primary storage location for all NEM data, as well as some of the end user settings for the deSide Client.

The deSide Client is a windows desktop application that displays NEM data, as read from the deSide Database.

The NEM Ticker is a small windows desktop application that also displays NEM data as read from the deSide Database.

Supported Platforms

Operating Systems

deSide is officially supported on the following platforms:

deSide Client / Ticker	deSide Updater
<ul style="list-style-type: none">• Windows XP SP3 (32 bit)• Windows Server 2003• Windows Vista (32/64 bit)• Windows 7 (32/64 bit)• Windows Server 2008 R2• Windows 8 (32/64 bit)• Windows 8.1 (32/64 bit)• Windows 10 (32/64 bit)• Windows Server 2012• Windows Server 2012 R2• Windows Server 2016	<ul style="list-style-type: none">• Windows Vista (32 bit and 64 bit)• Windows 7 (32 bit and 64 bit)• Windows Server 2008• Windows Server 2010• Windows Server 2012• Windows Server 2016

Windows XP SP3 and Windows Server 2003 users please refer to the [Enabling SHA2 Certificate Support on Windows XP and Server 2003](#) to ensure the latest version of the deSide Updater is compatible with your operating system.

deSide may work on other Windows platforms – please let us know how you get on...

SQL Server

deSide requires an installation of Microsoft SQL Server. The following database versions are officially supported:

Microsoft SQL Server
<ul style="list-style-type: none">• Microsoft SQL Server 2000• Microsoft SQL Server 2005• Microsoft SQL Server 2008• Microsoft SQL Server 2008 R2• Microsoft SQL Server 2008 R2 Express• Microsoft SQL Server 2012• Microsoft SQL Server 2012 Express• Microsoft SQL Server 2016

deSide may work on other versions of SQL Server – again, please let us know how you get on...

.NET Framework

deSide Client	deSide Updater
<ul style="list-style-type: none">• .NET Framework 2.0 SP2	<ul style="list-style-type: none">• .NET Framework 4.5.2 Full Profile

If you do not have the .NET Framework installed, and you are using the .EXE file, it will install it for you. This may take also some time.

If you use the .MSI file to install, you must have the .NET Framework installed beforehand, or the .MSI will simply fail with an error message.

File System Access

The deSide Client and Updater may create and write to a number of folders under the following locations:

deSide Components
<ul style="list-style-type: none">For Windows XP: Documents and Settings/All Users/Application Data/global-roamFor Vista and above: ProgramData/global-roam

Hardware Requirements

deSide Client
<ul style="list-style-type: none"><i>Processor</i> : Pentium III-compatible processor or faster; minimum 1.0 GHz, recommended 2.0 GHz or faster.<i>Disk Space</i>: 182 MB free disk space. This assumes that the .NET prerequisites are already installed on the target machine.<i>Memory</i>: 1 GB RAM or more (recommended 4 GB)

deside Updater
<ul style="list-style-type: none"><i>Processor</i> : Pentium III-compatible processor or faster; minimum 1.0 GHz, recommended 2.0 GHz or faster.<i>Disk Space</i>: 275 MB free disk space. This assumes that the .NET prerequisites are already installed on the target machine.<i>Memory</i>: 1 GB RAM or more (recommended 4 GB)

Note: This assumes that other systems are not running on the box

Network Requirements

The deSide Client and deSide Updater require access to the Internet using HTTP and XML over HTTP (SOAP). You will need to make sure that your proxy is configured to permit this access.

deSide Client		
URL	Description	Port
www.global-roam.com	Configuration service and GRoam messaging service	80
global-roam.webcentral.com.au	License	80
www.dataserver3.com	Automatic messages	80
www.dataserver4.com	Automatic messages	80
webdb.deside.info	Emergency fail over data service	1433

Enabling SHA2 Certificate Support on Windows XP and Server 2003

The deSide Updater uses HTTPS to communicate with the deSide configuration service over <https://desideconfig.datastripe1.com>. The HTTPS communication uses the Global-Roam SHA2 certificate.

In response to a security vulnerability relating to digital signatures Microsoft released the security bulletin [MS13-095](#) and associated [operating system specific update](#) on the 12 November 2013. The update enables older Windows operating systems to support SHA2 certificates. For a full list of files included in the update please review the M13-095 security bulletin.

Without the Microsoft security update the latest version of the deSide Updater will not run on Windows XP or Server 2003 as SHA2 certificates are not supported natively.

To verify whether or not the security update has already been applied to your operating system you will need to confirm that the version of the `WINDOWS\system32\Crypt32.dll` is 5.131.3790.5235 or above.

If the security update has not been applied to your operating system you will need to download and apply the security update before installing or upgrading to the latest version of the deSide Updater;

- [Download Microsoft security update 2868626](#) for your operating system
- Apply the security update as per the installation instructions provided by Microsoft

If you require any more information or help to resolve this issue please contact our support team.

deside Updater		
URL	Description	Port
http://desideupdater.datastripe1.com	Data service	80
http://desideupdater.datastripe2.com	Data service	80
http://desideupdater.datastripe3.com	Data service	80
http://desidelicensing.datastripe1.com	License verification	80
https://desideconfig.datastripe1.com	Configuration service	443*

*can only be accessed by https

NOTE: The deSide Updater service is installed by default under the Local Service account. If your proxy requires authentication, then this account will not work. To resolve this, run the deSide Updater Service under a domain account that does have the ability to authenticate to the proxy.

Data Delivered by the deSide Updater

For Full licensed copies of deSide you will need to gain access to the market data by connecting the deSide Client to a database that has been populated by global-roam's deSide Updater data feed.

Instructions later in this document provide guidance on setting up the deSide Client and deSide Updater to access the appropriate data.

The deSide Updater delivers you data that is published by AEMO via their Market Management System (MMS). The deSide Updater replicates the following tables from the AEMO MMS system.

CONNECTIONPOINTDETAILS
DISPATCHINTERCONNECTORRES
DISPATCHPRICE
DISPATCHREGIONSUM
MARKETNOTICEDATA
NEMMCO_VERSION
P5MIN_INTERCONNECTORSOLN
P5MIN_REGIONSOLUTION
P5MIN_UNITSOLUTION
PREDISPATCHINTERCONNECTORRES
PREDISPATCHLOAD
PREDISPATCHPRICE
PREDISPATCHPRICESENSITIVITIES
PREDISPATCHREGIONSUM
TRADINGCUMULATIVEPRICE
TRADINGINTERCONNECT
TRADINGLOAD
TRADINGPRICE
TRADINGREGIONSUM

Documentation for these tables can be found in the AEMO Publication titled *MMS Data Model* which is generally revised twice per year, and is available from the AEMO web site. At the time of writing the URL for this document was <http://www.aemo.com.au/Electricity/Resources/Information-Systems/Market-Management-System-Data-Model>. If you have difficulties locating this documentation please contact us and we will be happy to assist.

Contacting Global-Roam

If you experience difficulties in installing or upgrading deSide, please feel free to contact us at:

e-mail: support@global-roam.com

phone: +61 7 3368 4064

Start Here

QUESTION: *Are you upgrading an existing installation of the deSide Suite?*

If you currently have deSide, and the version of the Client or Updater is less than the version available on the deSide Portal (<http://install.deside.info>), then you have an existing installation, and you'll need to upgrade it.

If “Yes” (you are upgrading), go to the question at the start of the section [Upgrading an Existing Installation](#) on page 45.

If “No”, continue on to the next section.

Installing For the First Time

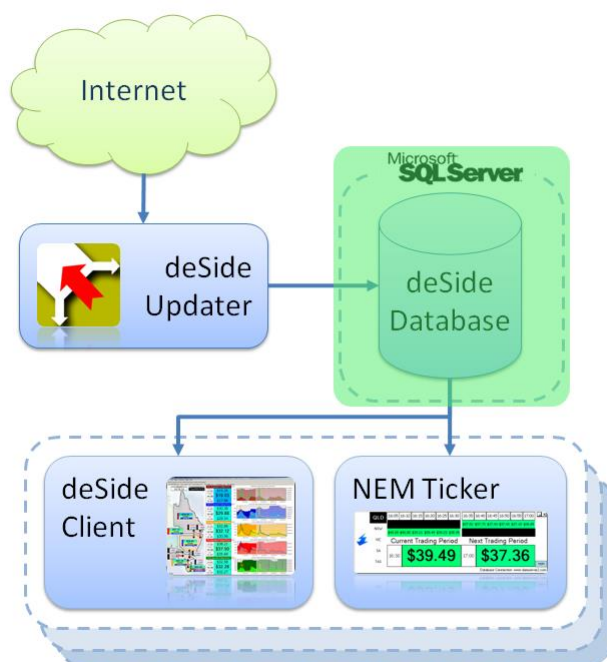
QUESTION: Do you already have an SQL Server instance that you are able to install the deSide Database on? (see Supported Platforms on page 6 for a list of the SQL Server versions that deSide can use)

If “Yes”, skip down to the section [Installing the deSide Updater](#) on page 15.

If “No”, go to the section [Installing an Instance of SQL Server](#) on page 13.

Installing an Instance of SQL Server

You're about to install the component highlighted in green in the following diagram.



We recommend that you install **SQL Server 2008 R2 Express**. SQL Server 2008 R2 Express is a free database server provided by Microsoft.

Download SQL Server 2008 R2 Express from

<https://www.microsoft.com/en-au/download/details.aspx?id=30438>.

- Make sure you download version appropriate for your operating system (32 bit for 32 bit operating systems, 64 bit for 64 bit operating systems).
- Also, make sure that you download both the database and the management tools.

Run the installer for SQL Server Express. You may be prompted to install .NET Framework v3.5 as a prerequisite.

- These instructions assume you use the default name for the database instance which is "SQLEXPRESS".
- During the install of SQL Server Express, you will be prompted an authentication mode. We recommend that you select "SQL Authentication Mode". You will also be prompted to create an account for connecting to the database. We recommend that you create an account specifically for deSide to access the database. This account must have read/write access to the database.

Run the installer for the SQL Server Management Tools.

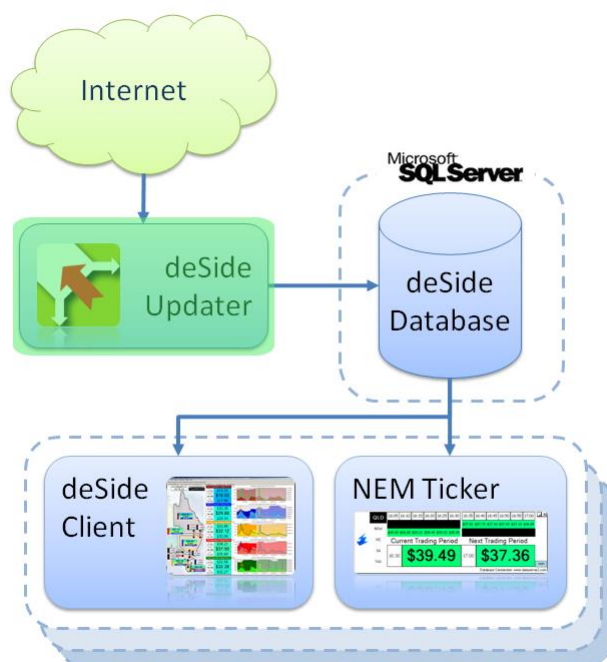
Having run the installers, run the "SQL Server Configuration Manager" to check that the install worked. You can find the SQL Server Configuration Manager through the Windows Start menu under [Programs - Microsoft SQL Server 2008 R2 - Configuration Tools].

- Use the SQL Server Configuration Manager to make the SQL Server instance accessible over your network. To do this, select [SQL Server Network Configuration -> Protocols for SQLEXPRESS] from the panel on the left hand side of the screen, and enable at least TCP/IP.
- NOTE: To access your SQL Server instance over the network you may also need to open up TCP ports appropriately in your firewall to the host machine. The default SQL Server port is 1433.

You can now continue on to the next section - [*Installing the deSide Updater*](#).

Installing the deSide Updater

You are about to install the component highlighted in green in the following diagram.



The deSide Updater connects to the SQL Server and so you will need to have the details for this connection. These details are:

- The address for this SQL Server instance (machine name and SQL server instance name).
- The account details for connection to the database. Make sure you have an account with write permissions, because you will be using the deSide Updater to create the necessary database and tables. The deSide Updater also requires write permissions to the database in general, as it will be constantly writing to the database as part of its normal operation.

The deSide Updater should be installed on a stable machine, one with high availability (on all the time, does not regularly get restarted). Desktops and laptops are not usually acceptable for the deSide Updater (there's nothing stopping you from installing the deSide Updater on them, but do it at your own peril).

Installation

Download the install file for the deSide Updater from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

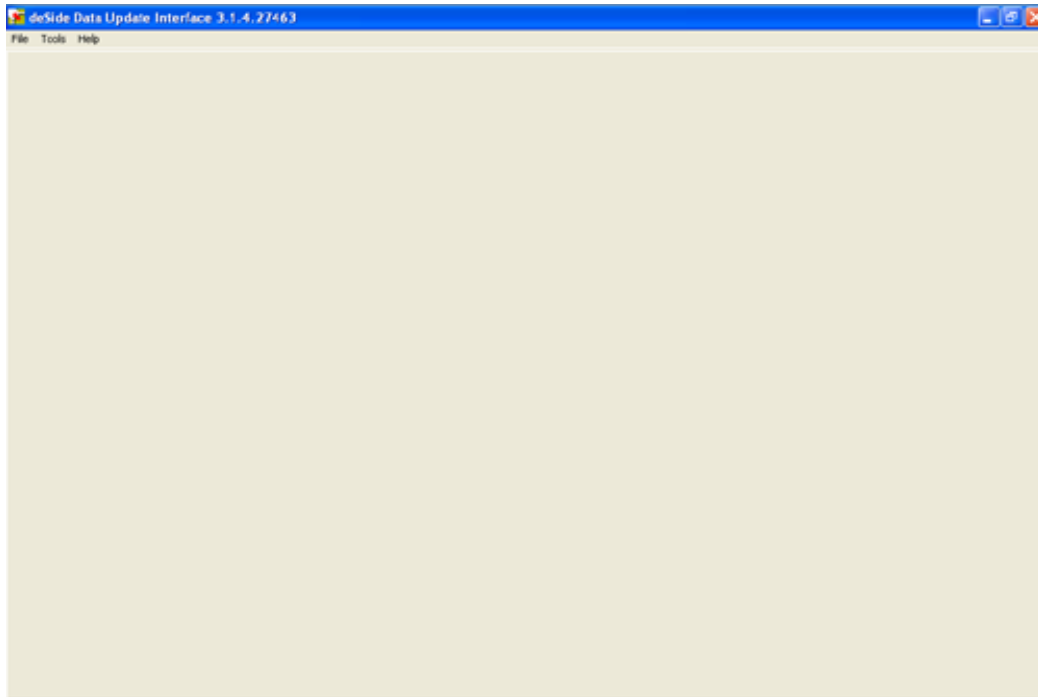
If you do not already have the .NET Framework 4.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the deSide Updater on your desktop. Additionally, there will be a Windows Service installed with a service name of “deSideDataUpdateService”.

The Windows Service will be installed with default login details. Following the install, confirm that these logon details are set to a user who has access to the internet and to the SQL Server instance that you have chosen (the deSide Updater requires access to the internet and to its database).

Configuration

Double-click on the deSide Update Service shortcut on the desktop. This is the deSide Updater interface when it's not doing anything:



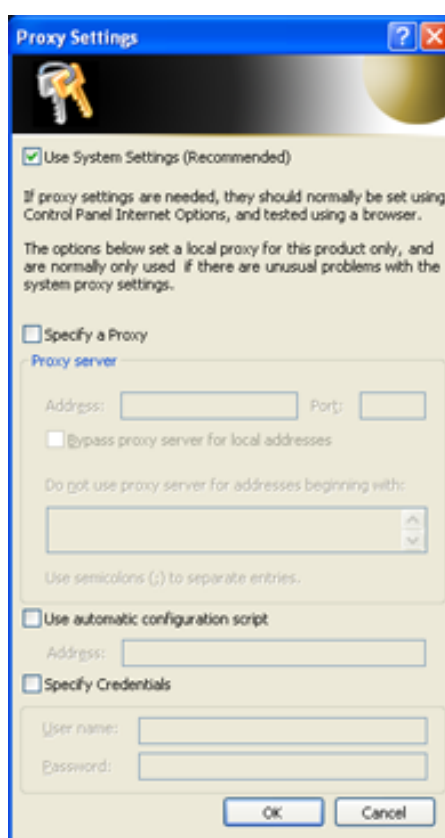
Go to [File -> Application -> Start].

Proxy Setup

The deSide Updater requires access to the following websites using HTTP and XML over HTTP (SOAP)

deside Updater		
URL	Description	Port
http://desideupdater.datastripe1.com	Data service	80
http://desideupdater.datastripe2.com	Data service	80
http://desideupdater.datastripe3.com	Data service	80
http://desidelicensing.datastripe1.com	License verification	80
https://desideconfig.datastripe1.com	Configuration service	443*

If the deSide Updater has experienced a problem with connecting to any of the websites above, it will display the Proxy Settings screen. It looks like this:



If you do not use a proxy to access the internet, simply click OK.

If you do use a proxy, then we suggest that you maintain your proxy information in your system settings. If you make sure the [Use System Settings] option is checked on the Proxy Settings screen, then your system settings should automatically be detected and used in the deSide Updater.

If you have difficulties with the deSide Updater with regards to internet access, you may need to manually specify your proxy settings and credentials. This can be done on the Proxy Settings screen.

NOTE: The Proxy Settings screen is also available from inside the application at [Tools -> Internet Settings]. This option is only available when the deSide Updater is running as an Application, this option will not be available if the deSide Updater is running as a Service.

NOTE: The deSide Updater service is installed by default under the Local Service account. If your proxy requires authentication, then this account will not work. To resolve this, run the deSide Updater Service under a domain account that does have the ability to authenticate to the proxy.

License Activation

On first startup, the deSide Updater will display a screen saying that “This machine does not have a license for deSide”.

Simply follow the instructions on the screen to configure a license for the deSide Updater (it mostly involves entering information/selecting options and clicking next).

If you do not have any licenses to select on Step 3, and you believe that you should have a full commercial license, then you will need to go to <http://www.global-roam.com/secure> to manage your licenses before you can go any further. After you login to the website, click on My Licenses (top-right corner). On this page you can manage your licenses. If you didn't have a license available in Step 3, you may need to deactivate one of your existing licenses to free it up for use.

You cannot start the deSide Updater without a valid license.

Database Setup

On first startup, the deSide Updater will display a screen called “Data Source Setup”. This screen is the database settings screen. It will allow you to point the deSide Updater at the database that it needs to update. On first startup, it will look something like this:

Data Source Setup

... Delivering Clarity, Consensus and Cost Effectiveness through information systems that make the electricity market understandable

GLOBAL-ROAM **DataAccessManager Settings**

Welcome to the database setup for deSideV2 Data Updater. You can use this form to show deSideV2 Data Updater how to locate the sources of data that it will need to run successfully.

If this is the first time you have seen this screen, you will need to setup each of the data sources below with valid settings. You can do this by clicking on the data source, and then clicking on the Configure button. You can use the form that pops up to setup the settings for the data source you selected.

You can also choose to mark a data source as IGNORED. Keep in mind, that this will prevent that data source from working at all.

AEMO Database Connection	Error

This is the AEMO database. This Data Source is where all of the data obtained from the AEMO regarding the NEM will be stored. This database is actually a cut down version of the InfoServer database.

This Data Source has not yet been configured. Please configure this Data Source with appropriate settings.

Configure Selected Ignore Selected

Export Settings to File Import Settings from File

Done Ignore and Continue

Configuring the AEMO Database Connection

This database is where the deSide Updater stores all of the data that it downloads. To configure the AEMO Database Connection, from the database settings screen

- Select the AEMO Database Connection
- Click the Configure Selected button.

On the next screen, select AEMO_MSSQL in the drop-down box at the top, and click the New button.

AEMO Database Connection Settings

Select Database Type:

AEMO_MSSQL

Connection Strings (in order of preference):

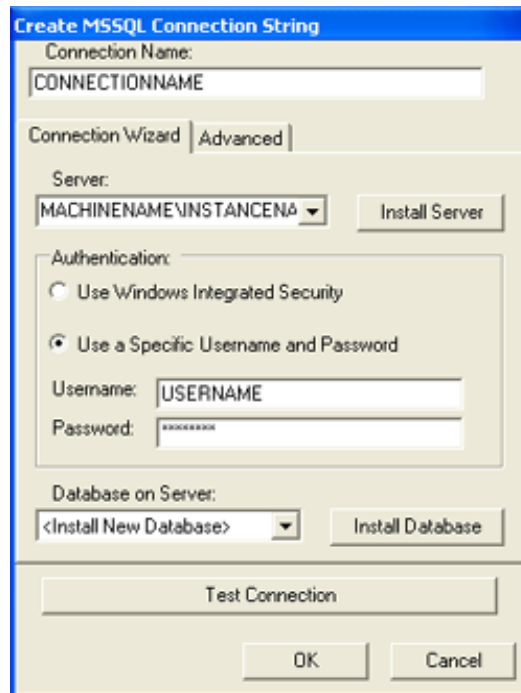
Name	Connection String	Status

U D

New Modify Delete Set Active

OK Cancel

Fill the next screen in with information about how to connect to an SQL Server where you want to install the deSide Database.



Note:

If you cannot find your SQL Server in the server drop down box, you can simply type in the name of the machine that it is on, followed by a “\” character, followed by the instance name. e.g. MACHINE_NAME\INSTANCE_NAME.

Once you have filled out the name, server and authentication, use the “Database on Server” drop down box to select the “<Install New Database>” option.

Click on the “Install Database” button.

Enter the name for the deSide Database. If the default name is fine, simply click OK. If you enter something different write it down for later.

Enter the confirmation word at the bottom of the next screen and click “Confirm” to execute the installation script. If you wish to check the script, or run it in some other way, feel free to extract it from the text box (or save it using the Save button).

Once the script has finished executing, the database you just installed will be selected in the “Database on Server” drop down box. Click Test Connection to verify that everything is okay. If it is, click OK.

Keep clicking OK until you get back to the main database settings screen. It should now look like this:

Data Source Setup

... Achieving Clarity, Convenience and Cost Effectiveness through information systems that make the electricity market understandable

GLOBAL-ROAM **DataAccessManager Settings**

Welcome to the database setup for deSideV2 Data Updater. You can use this form to show deSideV2 Data Updater how to locate the sources of data that it will need to run successfully.

If this is the first time you have seen this screen, you will need to setup each of the data sources below with valid settings. You can do this by clicking on the data source, and then clicking on the Configure button. You can use the form that pops up to setup the settings for the data source you selected.

You can also choose to mark a data source as IGNORED. Keep in mind, that this will prevent that data source from working at all.

AEMO Database Connection	Valid

Configure Selected Ignore Selected

This is the AEMO database. This Data Source is where all of the data obtained from the AEMO regarding the NEM will be stored. This database is actually a cut down version of the InfoServer database.

Export Settings to File Import Settings from File

Done Ignore and Continue

Note that the AEMO Database Connection says “Valid” next to it (this means it’s all set up and ready to go).

Click Done.

Note:

If you need to change your database settings after setting them up initially, stop the deSide Updater, go to “C:\Documents and Settings\All Users\Application Data\global-roam\deSide Data Updater\” (on Windows Vista and above, C:\ProgramData\global-roam\deSide Data Updater\”) and delete the file “deSideDataUpdater_DataAccessManager.settings.xml”. Restart the deSide Updater in application mode (File -> Application -> Start) and it will prompt you for database settings again.

Done with the deSide Updater

At this point your updater should be showing a list of file types, and the last times that a file of that type was downloaded and processed.

Please leave the deSide Updater to run until it has finished populating the database for the first time. This may take an hour or so, depending on the speed of your machine.

Once the population has run for about an hour, you can safely go to File -> Application -> Stop, and then go to File -> Service -> Start in order to set the deSide Updater to run completely autonomously. You can safely close the Updater Interface at this point, and it will continue to work in the background as a Windows Service.

If you cannot see at least some activity, or if you do not have any files appearing at all, or you see red errors, something is wrong, and the deSide Updater is probably not working. If this is the case, please contact global-roam.

Go to the section *Installing the Database Maintenance Scripts (the Reaper Script)* on page 24.

Installing the Database Maintenance Scripts (the Reaper Script)

The reaper is a small SQL Script set to run automatically at regular intervals, to keep the size of the deSide Database relatively small. This section provides instructions for setting up a Windows Scheduled task to run this Reaper Script at regular intervals. You will need to download the script and place it in a well known folder that is accessible to the Scheduled Task.

Download the Reaper Script for the deSide Updater from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

Set up a new Windows Scheduled Task – if you need to, please consult the Windows Help system to find out how to establish a Scheduled Task on your operating system.

The Scheduled Task should be set up to run a command line as follows:

```
sqlcmd.exe -S [SERVER_NAME] -U [USERNAME] -P [PASSWORD] -i [PATH TO SCRIPT]
```

where the following are the arguments:

- SERVER_NAME is the fully qualified address of the SQL Server that the deSide Database is installed on (MACHINENAME\INSTANCENAME)
- USERNAME is a user account in the specified SQL Server with delete permissions on the deSide Database
- PASSWORD is the SQL Server password for the above USERNAME
- PATH_TO_SCRIPT is the full path to the Reaper script file that you downloaded above

Note that sqlcmd.exe is typically located in

```
C:\Program Files\Microsoft SQL Server\[VERSION]\Tools\Binn.
```

Pick the latest version if there are multiple.

Schedule this task to occur every day (once every 24 hours) at midnight.

Example [brackets not to be included]:

```
"C:\Program Files\Microsoft SQL Server\100\Tools\Binn\SQLCMD.EXE" -S  
examplemachine -U sa -P letmein -i "C:\Program Files (x86)\global-  
roam\deSide Update Service\deSide_Maintenance.sql"
```


Note:

If you followed the steps above you had the option of changing the default database name, which is “NEMMCO”. The Reaper Script relies on the fact that the database name is correct in the script. If your deSide database is NOT named “NEMMCO” you will need to slightly change the downloaded script file.

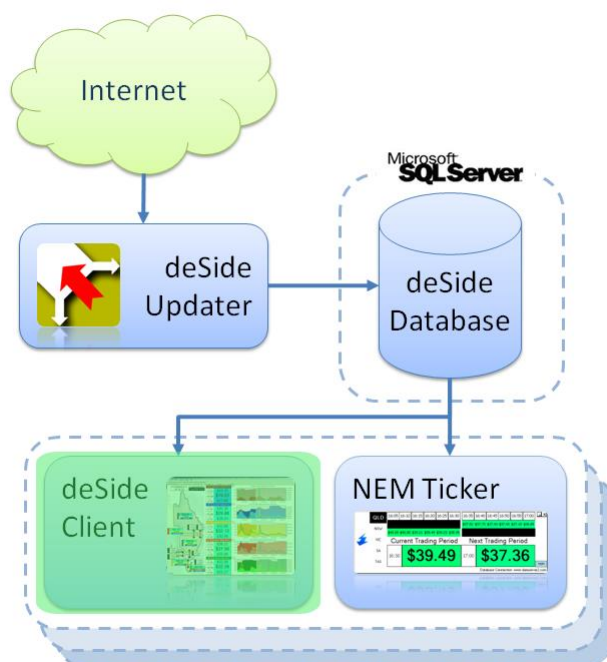
The section you need to modify is at the top of the file. It looks like this:

```
USE NEMMCO  
GO
```

Change the word “NEMMCO” to [YOUR_DATABASE_NAME] (make sure you include the square braces), and save the script.

Installing the deSide Client

You're about to install the component highlighted in green in the following diagram.



Installation

Download the deSide Client from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

If you do not already have the .NET Framework 2.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the deSide Client on your desktop.

Configuration

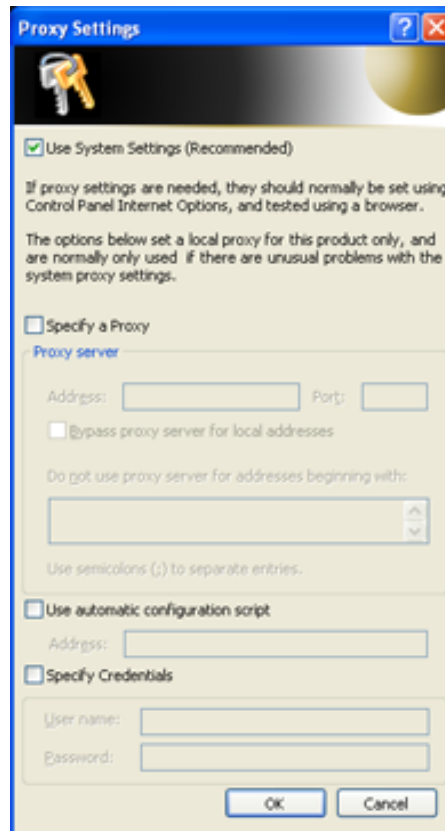
Double-click on the deSide Client shortcut on the desktop to begin configuration.

Proxy Setup

The deSide Client requires access to the following websites using HTTP and XML over HTTP (SOAP):

- www.global-roam.com
- global-roam.webcentral.com.au

On first startup, the deSide Client will display the proxy settings screen. This screen looks like this:



The Proxy Settings screen is also available from inside the application at [Tools -> Internet Settings].

If you do not use a proxy to access the internet, simply click OK.

If you do use a proxy, then we suggest that you maintain your proxy information in your system settings. If you make sure the [Use System Settings] option is checked on the Proxy Settings screen, then your system settings should automatically be detected and used in the deSide Client.

If you have difficulties with the deSide Client with regards to internet access, you may need to manually specify your proxy settings and credentials. This can be done on the Proxy Settings screen.

License Activation

On first startup, the deSide Client will display a screen saying that “This machine does not have a license for deSide”.

Simply follow the instructions on the screen to configure a license for the deSide Client (it mostly involves entering information/selecting options and clicking next).

If you do not have any licenses to select on Step 3, and you should have a full commercial license, then you will need to go to <http://www.global-roam.com/secure> to manage your licenses before you can go any further. After you login to the Secure website, click on My Licenses (top-right corner). On this page you can manage your licenses. If you didn't have a license available in Step 3, you may need to deactivate one of your existing licenses to free it up for use.

You cannot start the deSide Client without a valid license.

Database Setup

By default the deSide Client will attempt to connect to the global-roam web database. You should only use this database as a failover for your local database. To connect to the global-roam web database, you will need internet access to the URL webdb.deside.info over port 1433.

If you will be using a database on your local network, then you should already have an SQL Server instance available, with the deSide Database installed on it. You will need access credentials to the deSide Database (read-only is acceptable, as deSide does not need to write data into the deSide Database).

You will also need access credentials to the SQL Server instance with write/create permissions, to install the deSide Settings database.

In this section we establish connectivity from the deSide Client to the appropriate database.

Database Setup For a Licensed Version

QUESTION: *Can you start the deSide Client up normally, and did it start displaying data?*

If “Yes”, you have managed to connect to the global-roam web database.

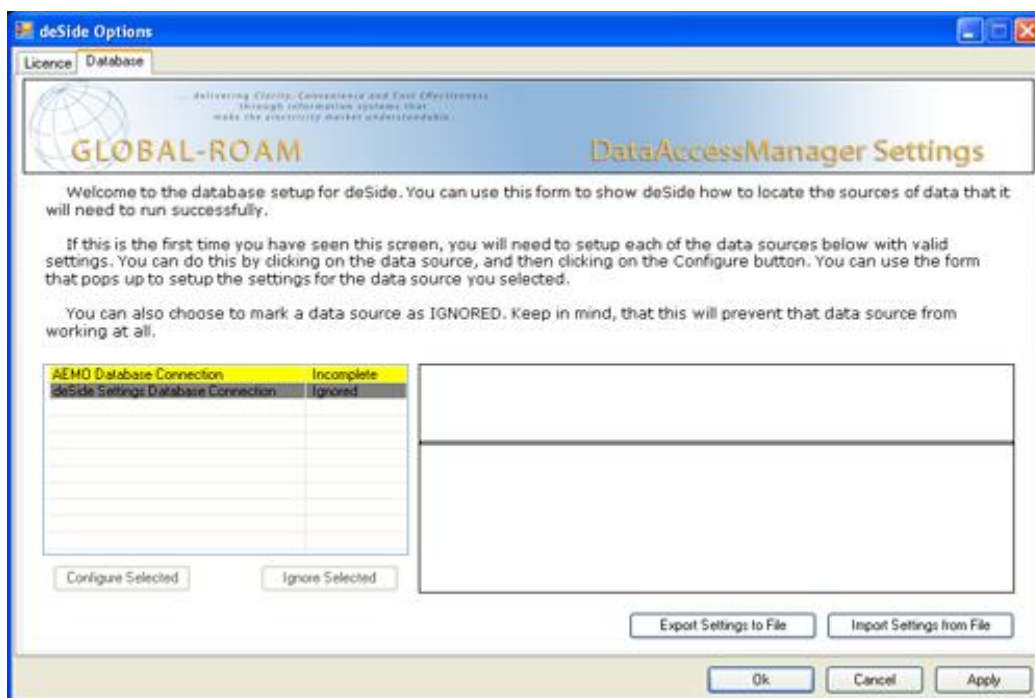
The deSide Client will be displaying a large title bar that says “You are currently using a backup database provided by Global-Roam. Please check your database settings”. You should click the title bar. This will display the database settings screen. You can now go to the section [Configuring your Database Connection](#) on page 30 to complete the configuration through this screen.

If “No”, you will need to configure database settings to connect to your local database.

The deSide Client will be displaying the database settings screen. You can go to the section [Configuring your Database Connection](#) on page 30 to complete the configuration through this screen.

Configuring your Database Connection

You should see a screen that looks similar to the following:



Note that the AEMO Database Connection on this screen will be either:

- Red, indicating it is in error. Errors must be dealt with before you can continue (either by fixing them, or specifically marking the connection as ignored).
- Yellow, indicating that it is incomplete, and only contains the backup connection provided by us (connecting to the global-roam web database). Using the backup connection by itself for a full commercial license is not recommended.

The deSide Settings Database Connection will appear grey by default, indicating that it is ignored.

The following instructions assume that you already have a deSide database (installed/created during the installation and configuration of the deSide Updater), but do not have a deSide Settings database. If you do have a deSide Settings database, skip the part that deals with how to install it.

Note:

If you have previously exported your database settings, you can import them by clicking on the Import Settings From File button. Importing settings is a much quicker way of configuring the database settings, especially if you are dealing with multiple installations of the deSide Client.

Read on to the next section.

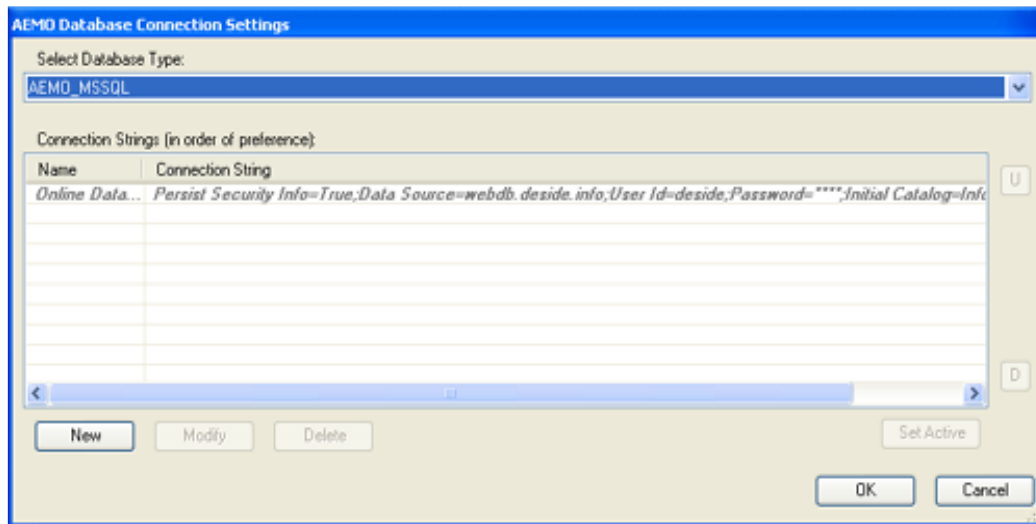
Configuring the AEMO Database Connection

Configuring the AEMO Database Connection is NOT optional.

This database is where the deSide Client obtains all of the data that it displays.

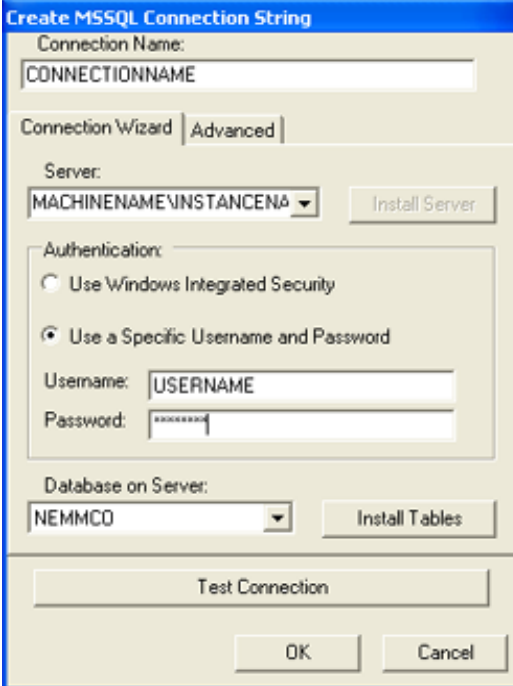
To configure the AEMO Database Connection, on the database settings screen, select the AEMO Database Connection, and click the Configure Selected button.

You will see:



On this screen click the New button. This will create a new connection for the deSide Client to use.

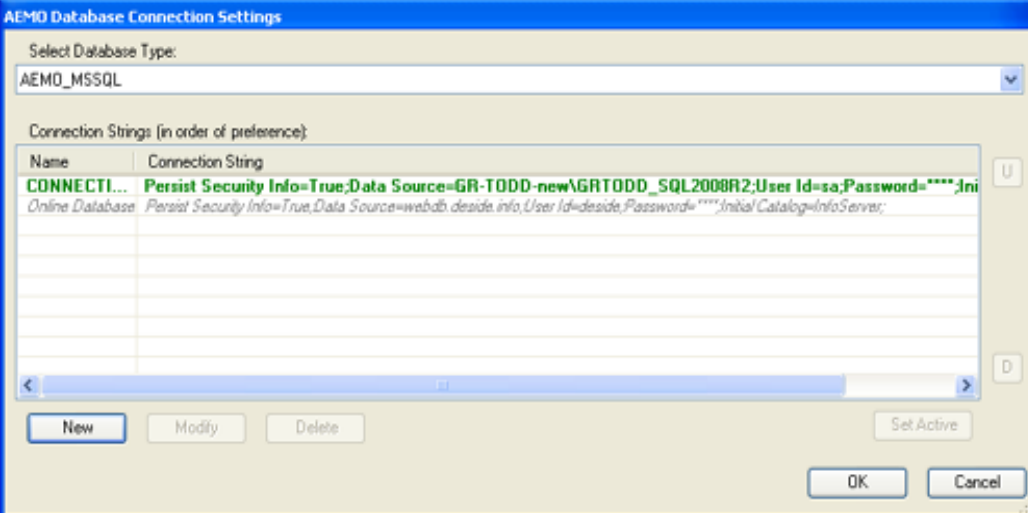
You will see:



The 'Create MSSQL Connection String' dialog box is shown. It has a 'Connection Name' field with the text 'CONNECTIONNAME'. Below it are tabs for 'Connection Wizard' and 'Advanced'. The 'Advanced' tab is selected. In the 'Server' section, there is a dropdown menu showing 'MACHINENAME\INSTANCENAME' and an 'Install Server' button. The 'Authentication' section has two radio buttons: 'Use Windows Integrated Security' (unselected) and 'Use a Specific Username and Password' (selected). Below these are 'Username' and 'Password' text boxes, with 'USERNAME' entered in the first. The 'Database on Server' section has a dropdown menu showing 'NEMMCO' and an 'Install Tables' button. At the bottom, there is a 'Test Connection' button, and 'OK' and 'Cancel' buttons.

Fill this screen in with information about how to connect to the SQL Server with the deSide Database on it. Test the connection to make sure that it works, and when it does, click OK.

You will see:



The 'AEMO Database Connection Settings' dialog box is shown. It has a 'Select Database Type:' dropdown menu with 'AEMO_MSSQL' selected. Below it is a table titled 'Connection Strings (in order of preference):'. The table has two columns: 'Name' and 'Connection String'. The first row is highlighted in green and contains the text 'CONNECTI...' and 'Persist Security Info=True;Data Source=GR-TODD-new\GR-TODD_SQL2008R2;User Id=sa;Password=****;Initial Catalog=InfoServer;'. Below this row is a row labeled 'Online Database' with a connection string. At the bottom, there are 'New', 'Modify', and 'Delete' buttons, a 'Set Active' button, and 'OK' and 'Cancel' buttons.

Your new connection has been added into the list of available connections used by the deSide Client. It should appear above the connection named "Online Database".

You can freely add additional connections if you have access to other deSide Databases (for example, if you have more than 1 deSide Updater, you'll probably want to add a connection to each deSide Database you have).

The deSide Client will use the connections in the order that they appear here (i.e. if the first connection becomes unavailable or out-of-date, then the second connection will be used. If the first connection returns to a good state, it will be used). This is to allow for redundancy. The Online Database connection should always be the last in the list.

Configuring the deSide Settings Database Connection

The deSide Settings Database Connection is optional, but it is recommended that you set one up.

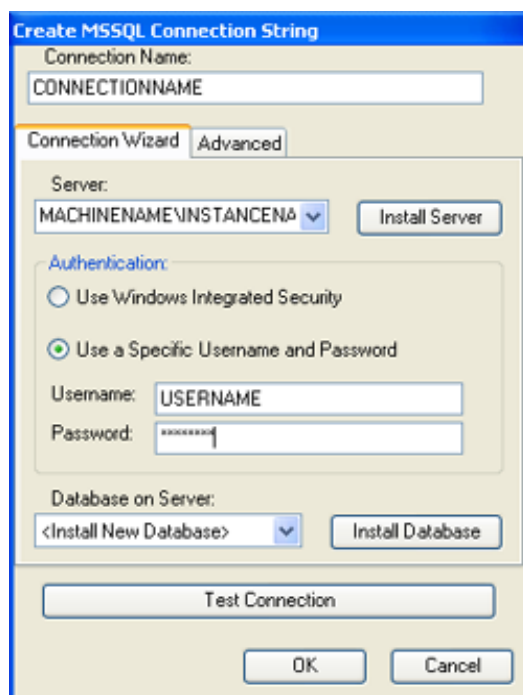
This database is where all of the user configurable settings for the deSide Client are stored (price thresholds, graph settings, price scales etc). If you want all of your copies of the deSide Client across your entire organization to share the same settings, you will need to setup one of these databases.

To configure the deSide Settings Database Connection, on the database settings screen:

Select the deSide Settings Database Connection, and click the Unignore Selected button. Follow the instructions on the screen (Click Yes). Click Configure Selected.

On the next screen, select deSide_Settings_MSSQL from the drop-down box at the top, then click the New button. This will create a new connection for the deSide Client to use for its settings.

Fill the next screen in with information about how to connect to an SQL Server where you want to install the deSide Settings Database.



Note:

If you cannot find your SQL Server in the drop down box, you can simply type in the name of the machine that it is on, followed by a “\” character, followed by the instance name. e.g. MACHINE_NAME\INSTANCE_NAME.

Note:

If you have previously installed a deSide Settings database, simply select it in the drop down, click Test Connection, then click OK. You don’t have to install it again.

Once you have filled out the name, server and authentication section, use the "Database on Server" drop down box to select the "<Install New Database>" option.

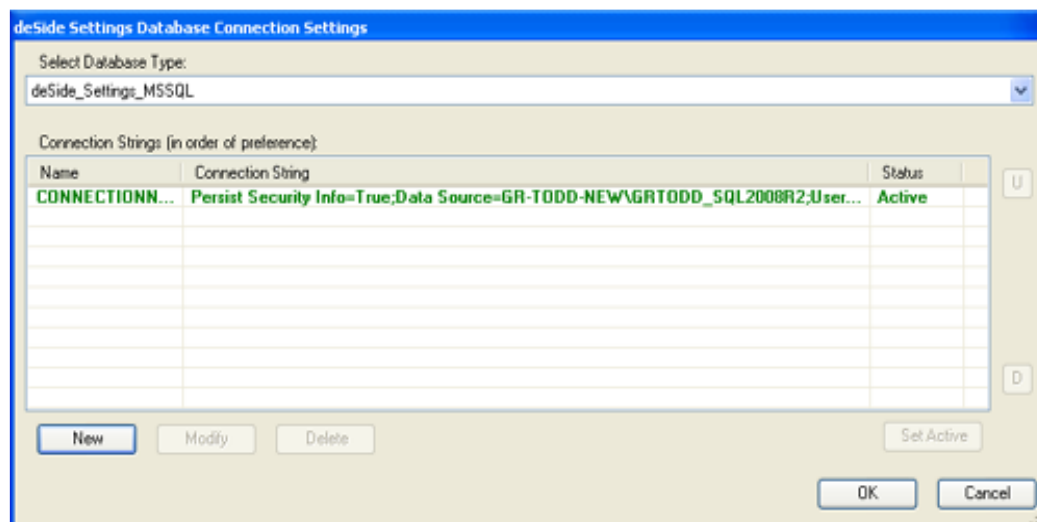
Click on the "Install Database" button.

Enter the name for the deSide Settings Database. If the default name is fine, simply click OK.

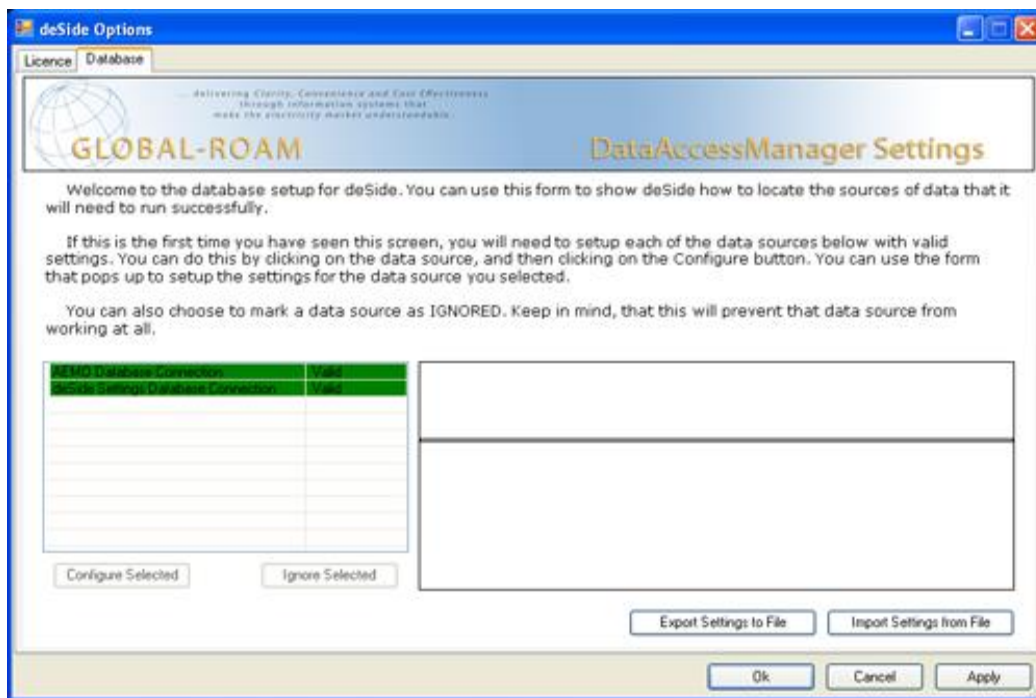
Enter the confirmation word at the bottom of the next screen and click "Confirm" to execute the installation script. If you wish to check the script, or run it in some other way, feel free to extract it from the text box (or save it using the Save button).

Once the script has finished executing, the database you just installed will be selected in the "Database on Server" drop down box. Click Test Connection to verify that everything is okay. If it is, click OK.

Your new connection will be added into the list of available connections for the deSide Client to use. Click OK.



Both of your database connections (AEMO Database Connection and deSide Settings Database Connection) should now be green, with a status of Valid. If not, you will need to investigate why (likely involving reconfiguring the connections, like in the instructions above).



Note:

At this point, when all your databases are configured to be Valid, you may want to export the settings to file, so you can easily import them again later. This can save you time, and reduce the likelihood of errors while entering connections manually. Very handy if you plan on installing the deSide Client on another machine or machines.

Simply click on the Export Settings To File button to do this, and save the settings in some easily accessible place.

Exit the database connection screen, saving your changes.

Done with the deSide Client

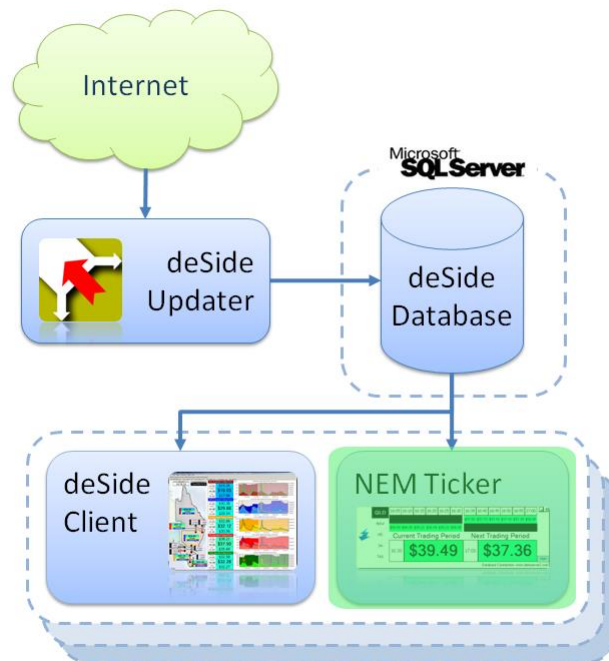
You're done with the deSide Client.

It should look something like this:



Installing the NEM Ticker

You're about to install the component highlighted in green in the following diagram.



You should have an SQL Server instance available, with the deSide Database installed on it. You will need access credentials to the deSide Database (read-only is acceptable, as the NEM Ticker does not need to write data into the deSide Database).

Installation

Download the install file for the NEM Ticker from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

If you do not already have the .NET Framework 2.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the NEM Ticker on your desktop.

Configuration

Double-click on the NEM Ticker shortcut on the desktop.

Proxy Setup

Since you have already setup the deSide Client, the NEM Ticker requires no additional proxy setup (it piggybacks off the deSide Client settings).

License Activation

On first startup, the NEM Ticker will display a screen saying that “This machine does not have a license for NEMTicker”.

Simply follow the instructions on the screen to configure a license for the NEM Ticker (it mostly involves entering information/selecting options and clicking next).

If you do not have any licenses to select on Step 3, and you should have a full commercial license, then you will need to go to <http://www.global-roam.com/secure> to manage your licenses before you can go any further. After you login to the Secure website, click on My Licenses (top-right corner). On this page you can manage your licenses. If you didn’t have a license available in Step 3, you may need to deactivate one of your existing licenses to free it up for use.

You cannot start the NEM Ticker without a valid license.

Database Setup

By default the NEM Ticker attempts to access 2 database connections. In priority order they are:

- webdb.deside.info:1433
- www.dataserver3.com:1433

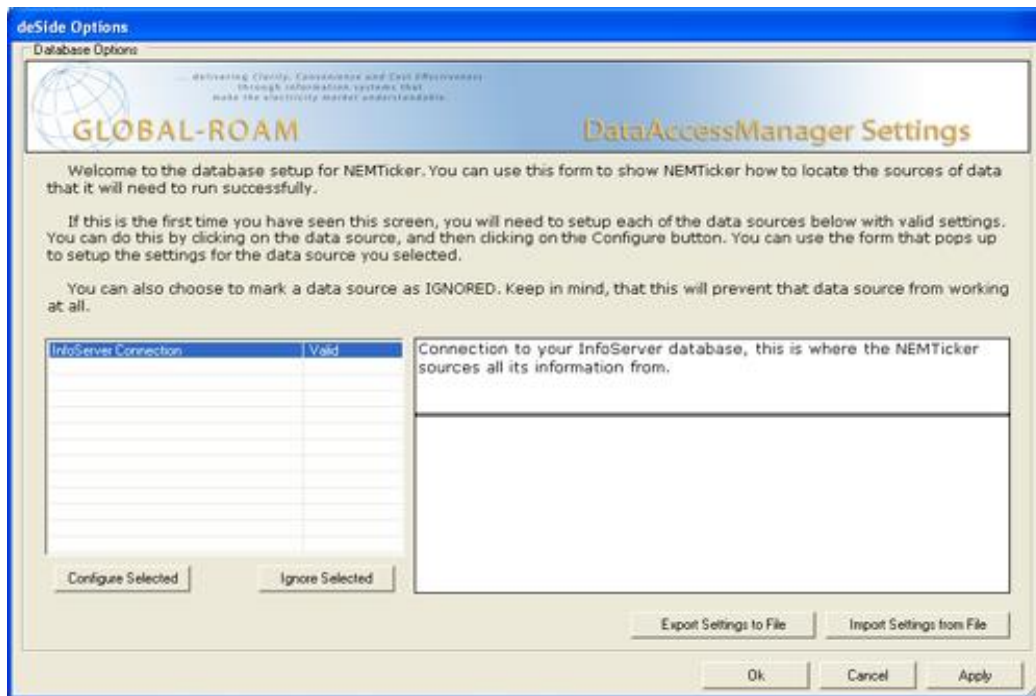
If your internet security does not allow access to those URLs over those ports, then the NEM Ticker will display a database settings screen as soon as you start it up. Note that the InfoServer Connection will be red, indicating it is in error. Errors must be dealt with before you can continue (either by fixing them, or specifically marking the connection as ignored).

If your internet security does allow access to those URLs over those ports, then you will simply see the NEM Ticker interface. Right click on the empty area above the “Top?” button and select the Database Options. This will display the database settings screen.

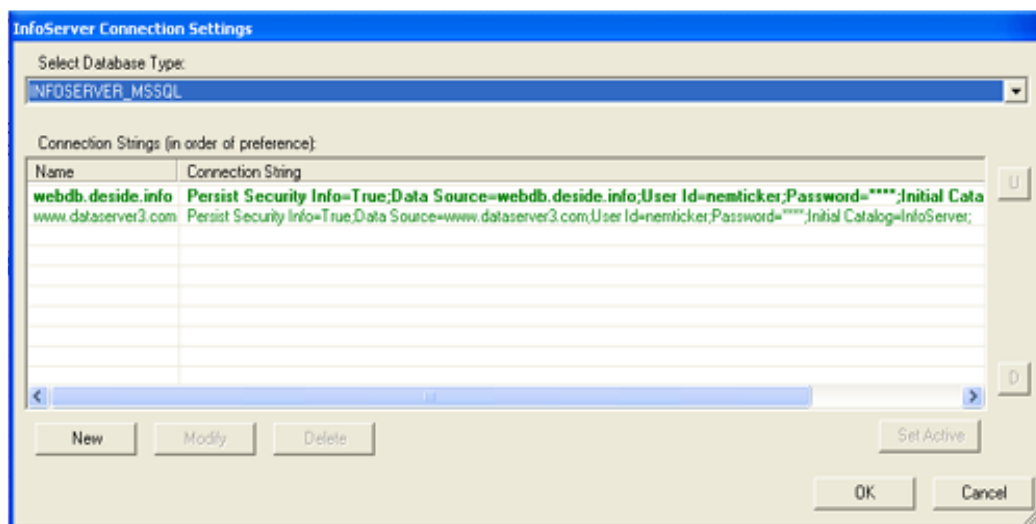
Configuring the InfoServer Connection

The default configuration for this connection accesses data over the internet. If you have a local deSide Database, it's sensible to set this up as the primary connection. This will increase the responsiveness of the NEM Ticker, and won't waste internet bandwidth.

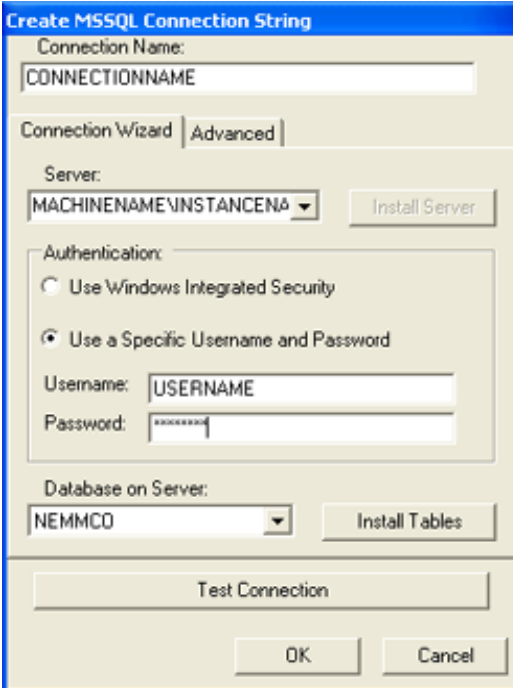
To configure a new database connection, right click on the NEM Ticker icon in the system tray to open the database settings screen:



Select the InfoServer Connection, and click the Configure Selected button.

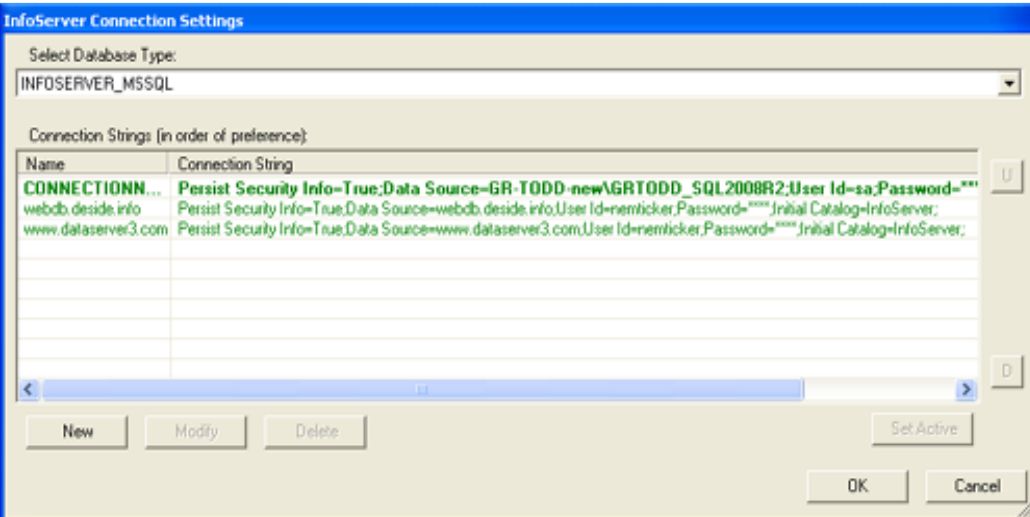


On the next screen click the New button. This will create a new connection for the NEM Ticker to use.



The 'Create MSSQL Connection String' dialog box is shown. It has a 'Connection Name' field with the text 'CONNECTIONNAME'. Below it are tabs for 'Connection Wizard' and 'Advanced'. The 'Server' dropdown shows 'MACHINENAME\INSTANCENAME' with an 'Install Server' button. The 'Authentication' section has two radio buttons: 'Use Windows Integrated Security' (unselected) and 'Use a Specific Username and Password' (selected). Below these are 'Username' and 'Password' fields. The 'Database on Server' dropdown shows 'NEMMCO' with an 'Install Tables' button. At the bottom are 'Test Connection', 'OK', and 'Cancel' buttons.

Fill the next screen in with information about how to connect to the SQL Server with the deSide Database on it. Test the connection to make sure that it works, and when it does, click OK.



The 'InfoServer Connection Settings' dialog box is shown. It has a 'Select Database Type' dropdown set to 'INFOSERVER_MSSQL'. Below is a table titled 'Connection Strings (in order of preference):'.

Name	Connection String
CONNECTIONN...	Persist Security Info=True;Data Source=GR-TODD-new\AGRTODD_SQL2008R2;User Id=sa;Password=***
webdb.deside.info	Persist Security Info=True;Data Source=webdb.deside.info;User Id=nemticker;Password=****;Initial Catalog=InfoServer;
www.dataserver3.com	Persist Security Info=True;Data Source=www.dataserver3.com;User Id=nemticker;Password=****;Initial Catalog=InfoServer;

Below the table are 'New', 'Modify', and 'Delete' buttons. To the right of the table are 'U' and 'D' buttons. At the bottom are 'Set Active', 'OK', and 'Cancel' buttons.

Your new connection will be added into the list of available connections for the NEM Ticker to use. It should appear above the connections webdb.deside.info and www.dataserver3.com.

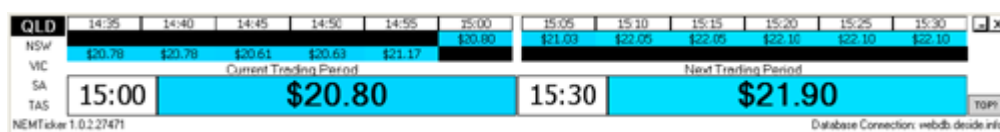
You can freely add additional connections if you have access to other deSide Databases (for example, if you have more than 1 deSide Updater, you'll probably want to add a connection to each deSide Database you have).

The NEM Ticker will use the connections in the order that they appear here (i.e. if the first connection becomes unavailable or out-of-date, then the second connection will be used. If the first connection returns to a good state, it will be used). This is to allow for redundancy. The two connections webdb.deside.info and www.dataserver3.com should always be the last in the list.

Done with the NEM Ticker

You're done with the NEM Ticker.

It should look something like this:



Done Installing for the First Time

If you got to this point, then everything probably went well, and you're all set up. Awesome!

You're pretty much done. You can repeat from the section [Installing the deSide Client](#) if you need to install the desktop applications (deSide Client and NEM Ticker) on additional machines.

You could repeat from the section [Installing the deSide Updater](#) if you want to install an additional updater (for redundancy). You can then go add that database connection to each of the clients as an extra backup.

Upgrading an Existing Installation

This section describes the steps for upgrading an existing installation of deSide. Where a database upgrade is required you will need to re-download historical data from the global-roam servers, and these instructions include steps to address this.

Question:

Do you have a version of SQL Server that is no longer supported by the deSide Suite? Any version not on the list of [Supported Platforms](#) on page 6 needs to be upgraded.

If you have a non-supported version of SQL Server AND the SQL Server is not being used for anything else, go to the section [Upgrading from an Unsupported Database](#) on page 46.

If you have a non-supported version of SQL Server that is being used for something else and you don't want to remove it, go straight to the section [Installing SQL Server](#) on page 47.

If you have a supported version of SQL Server, go straight to the section [Upgrading from a Supported deSide Database](#) on page 57.

Upgrading from an Unsupported Database

Removing Old Versions of SQL Server

Go to Add/Remove Programs and uninstall any of the unacceptable versions of Microsoft SQL Server.

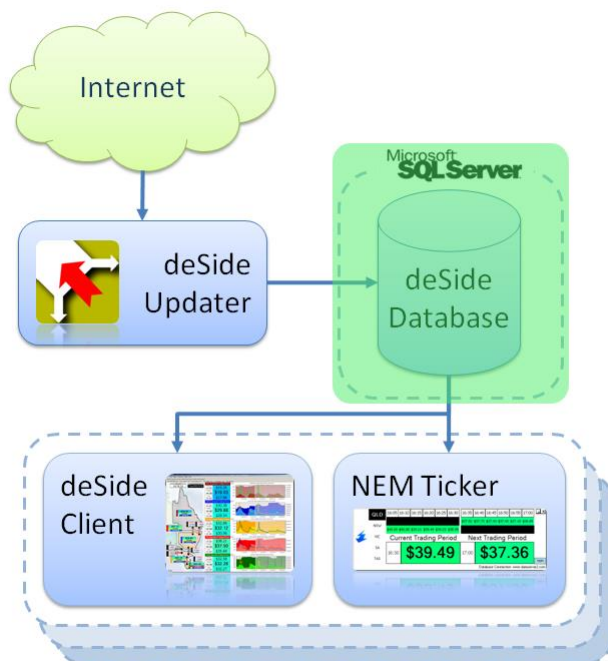
Navigate to C:\Program Files\Microsoft SQL Server\ and delete its contents.

This will remove all deSide historical data, which can be replaced (if necessary) by contacting global-roam.

Go to the next section - [Installing SQL Server](#).

Installing SQL Server

You're about to install the component highlighted in green in the following diagram.



We recommend that you install **SQL Server 2008 R2 Express**. SQL Server 2008 R2 Express is a free database server provided by Microsoft.

Download SQL Server 2008 R2 Express from

<https://www.microsoft.com/en-au/download/details.aspx?id=30438>

Make sure you download version appropriate for your operating system (32 bit for 32 bit operating systems, 62 bit for 64 bit operating systems).

Also, make sure that you download both the database and the management tools.

Run the installer for SQL Server Express. You may be prompted to install .NET Framework v3.5 as a prerequisite.

- These instructions assume you use the default name for the database instance which is "SQLEXPRESS".
- During the install of SQL Server Express, you will be prompted an authentication mode. We recommend that you select "SQL Authentication Mode". You will also be prompted to create an account for connecting to the database. We recommend that you create an account specifically for deSide to access the database. This account must have read/write access to the database.

Run the installer for the SQL Server Management Tools.

Having run the installers, run the "SQL Server Configuration Manager" to check that the install worked. You can find the SQL Server Configuration Manager through the Windows Start menu under [Programs - Microsoft SQL Server 2008 R2 - Configuration Tools].

Use the SQL Server Configuration Manager to make the SQL Server instance accessible over the network. To do this, select [SQL Server Network Configuration -> Protocols for SQLEXPRESS] from the panel on the left hand side of the screen, and enable at least TCP/IP.

Note:

To make the SQL Server instance accessible over your network you may also need to open up TCP ports appropriately on the host machines firewall. The default SQL Server port is 1433.

Deleting the State of the deSide Updater

The state of the deSide Updater is how it remembers what files it has downloaded, validated and processed, from the global-roam dataservers.

We're installing a brand new database, so we don't want to keep any of the old state information.

To clear the deSide state information on Windows XP or below:

- Navigate to "C:\Documents and Settings\All Users\Application Data\global-roam\deSideV2 Data Updater\"
- Delete everything from that directory EXCEPT the file "deSideV2 Data Updater.grlic" (that's your license, don't delete that).

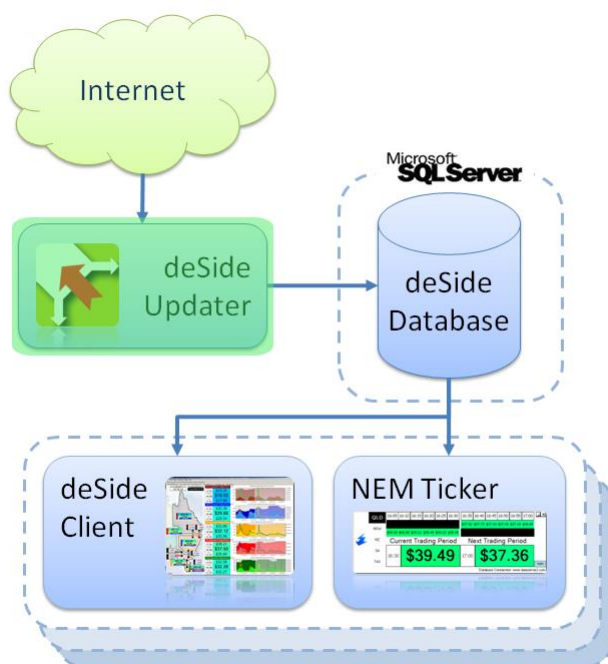
To clear the deSide state information on Windows Vista or above:

- Navigate to "C:\ProgramData\global-roam\deSideV2 Data Updater\"
- Delete everything from that directory EXCEPT the file "deSideV2 Data Updater.grlic" (that's your license, don't delete that).

You can now go to the next section - [Upgrading the deSide Updater \(with a blank database\)](#) on page 50.

Upgrading the deSide Updater (with a blank database)

You're about to upgrade the component highlighted in green in the following diagram.



The deSide Updater connects to the SQL Server and so you will need to have the details for this connection. These details are:

- The address for this SQL Server instance (machine name and SQL server instance name).
- The account details for connection to the database. Make sure you have an account with write permissions, because you will be using the deSide Updater to create the necessary database and tables. The deSide Updater also requires write permissions to the database in general, as it will be constantly writing to the database as part of its normal operation.

The deSide Updater should be installed on a stable machine, one with high availability (on all the time, does not regularly get restarted). Desktops and laptops are not usually acceptable for the deSide Updater (there's nothing stopping you from installing the deSide Updater on them, but do it at your own peril).

Installation

Download the install file for the deSide Updater from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

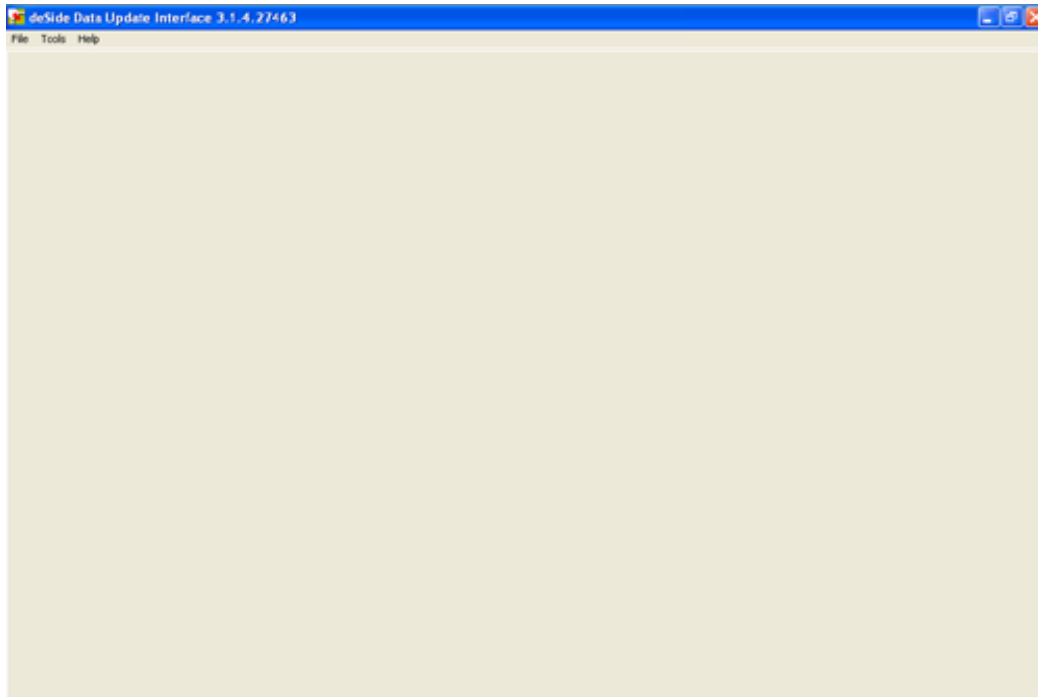
If you do not already have the .NET Framework 4.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the deSide Updater on your desktop. Additionally, there will be a Windows Service installed with a service name of “deSideDataUpdateService”.

The Windows Service will be installed with default login details. Following the install, confirm that these logon details are set to a user who has access to the internet and to the SQL Server instance that you have chosen (the deSide Updater requires access to the internet and to its database).

Configuration

Double-click on the deSide Update Service shortcut on the desktop. This is the deSide Updater interface when it's not doing anything:



Go to File -> Application -> Start.

Database Setup

On first startup, the deSide Updater may display a screen called “Data Source Setup”. If it does not, then it has loaded your previous database settings. If this is the case, skip forward to [Done with the deSide Updater](#) on page 56.

This screen is the database settings screen. It will allow you to point the deSide Updater at the database that it needs to update. On first startup, it will look something like this:

Data Source Setup

... delivering Clarity, Convenience and Cost Effectiveness through information systems that make the electricity market understandable

GLOBAL-ROAM

DataAccessManager Settings

Welcome to the database setup for deSideV2 Data Updater. You can use this form to show deSideV2 Data Updater how to locate the sources of data that it will need to run successfully.

If this is the first time you have seen this screen, you will need to setup each of the data sources below with valid settings. You can do this by clicking on the data source, and then clicking on the Configure button. You can use the form that pops up to setup the settings for the data source you selected.

You can also choose to mark a data source as IGNORED. Keep in mind, that this will prevent that data source from working at all.

AEMO Database Connection	Error

This is the AEMO database. This Data Source is where all of the data obtained from the AEMO regarding the NEM will be stored. This database is actually a cut down version of the InfoServer database.

This Data Source has not yet been configured. Please configure this Data Source with appropriate settings.

Configure Selected Ignore Selected

Export Settings to File Import Settings from File

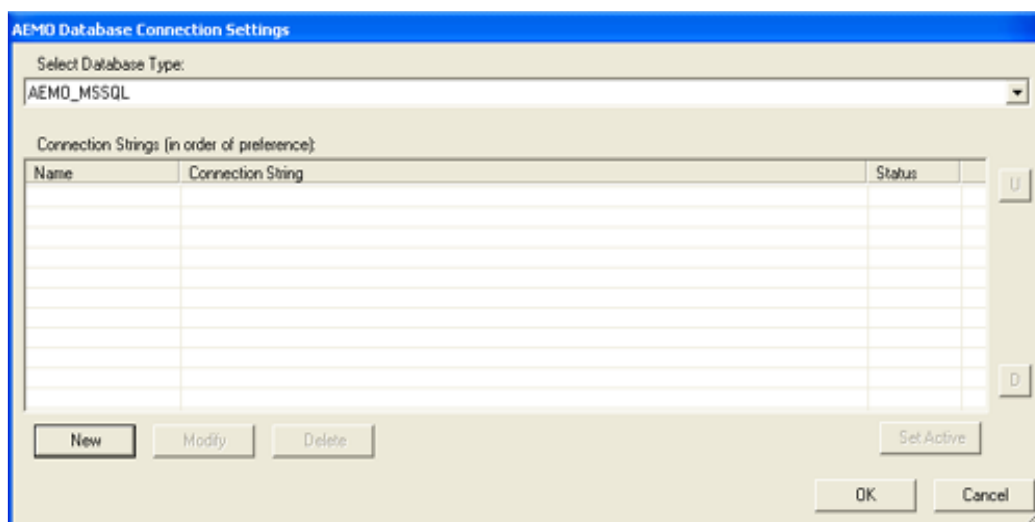
Done Ignore and Continue

Configuring the AEMO Database Connection

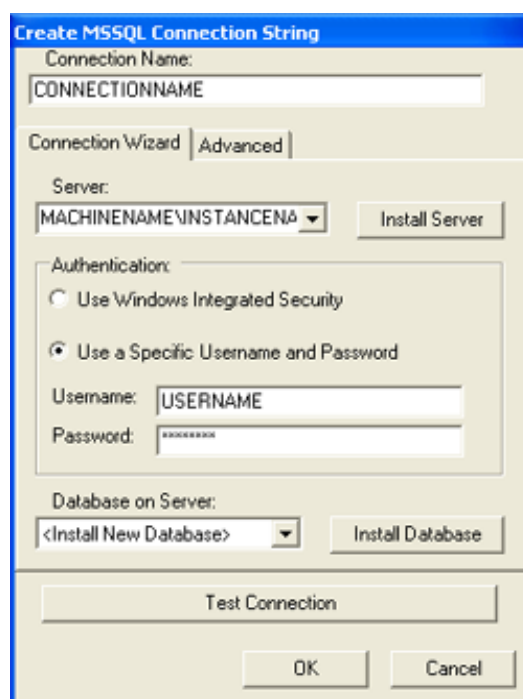
This database is where the deSide Updater stores all of the data that it downloads. To configure the AEMO Database Connection, from the database settings screen

- Select the AEMO Database Connection
- Click the Configure Selected button.

On the next screen, select AEMO_MSSQL in the drop-down box at the top, and click the New button.



Fill the next screen in with information about how to connect to an SQL Server where you want to install the deSide Database.



Note: If you cannot find your SQL Server in the server drop down box, you can simply type in the name of the machine that it is on, followed by a “\” character, followed by the instance name. e.g. MACHINE_NAME\INSTANCE_NAME.

Once you have filled out the name, server and authentication, use the “Database on Server” drop down box to select the “<Install New Database>” option.

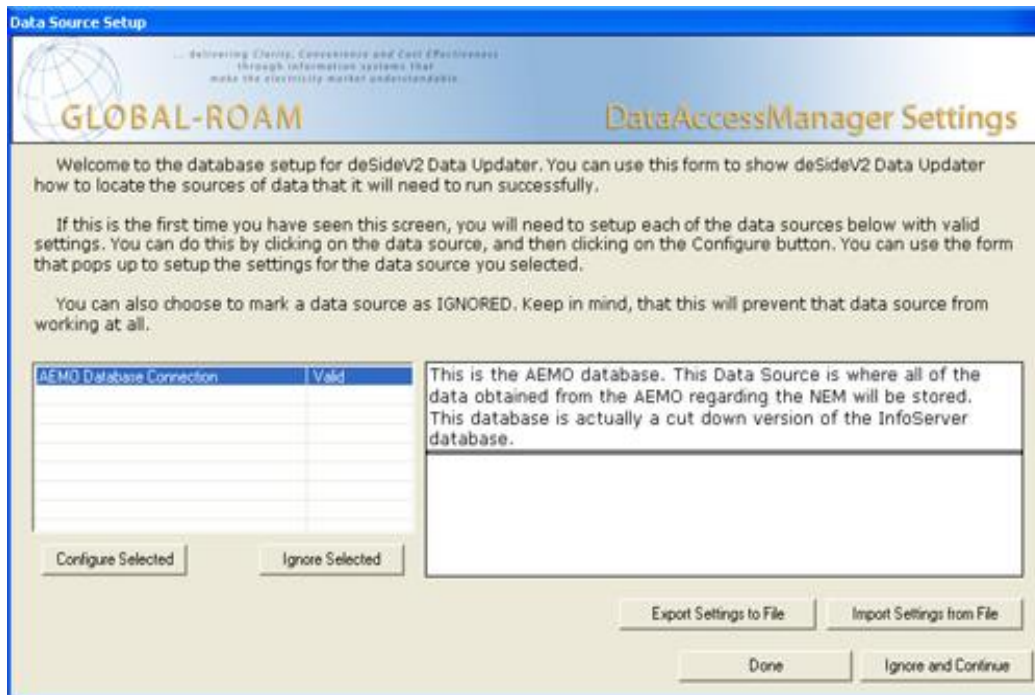
Click on the “Install Database” button.

Enter the name for the deSide Database. If the default name is fine, simply click OK. If you enter something different write it down for later.

Enter the confirmation word at the bottom of the next screen and click “Confirm” to execute the installation script. If you wish to check the script, or run it in some other way, feel free to extract it from the text box (or save it using the Save button).

Once the script has finished executing, the database you just installed will be selected in the “Database on Server” drop down box. Click Test Connection to verify that everything is okay. If it is, click OK.

Keep clicking OK until you get back to the main database settings screen. It should now look like this:



Note that the AEMO Database Connection says “Valid” next to it (this means it’s all set up and ready to go).

Click Done.

Note:

If you need to change your database settings after setting them up initially, stop the deSide Updater, go to “C:\Documents and Settings\All Users\Application Data\global-roam\deSide Data Updater\” (on Windows Vista and above, C:\ProgramData\global-roam\deSide Data Updater\”) and delete the file “deSideDataUpdater_DataAccessManager.settings.xml”. Restart the deSide Updater in application mode (File -> Application -> Start) and it will prompt you for database settings again.

Done with the deSide Updater

At this point your updater should be showing a list of file types, and the last times that a file of that type was downloaded and processed.

Please leave the deSide Updater to run until it has finished populating the database for the first time. This may take an hour or so, depending on the speed of your machine.

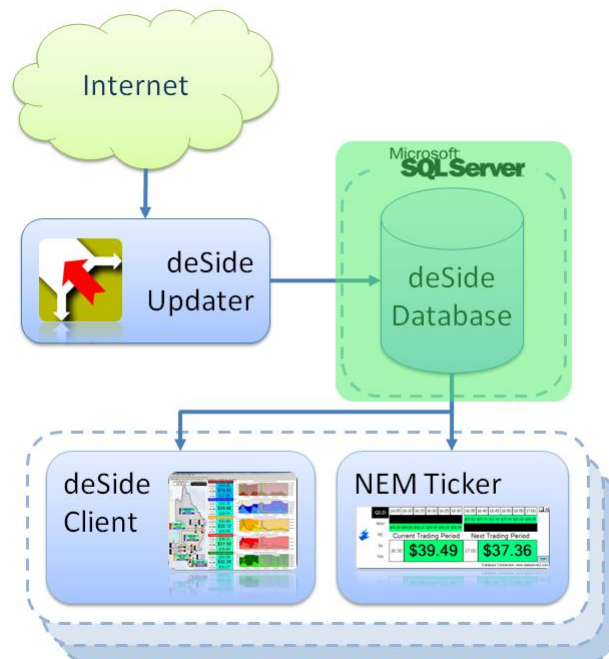
Once the population has run for about an hour, you can safely go to File -> Application -> Stop, and then go to File -> Service -> Start in order to set the deSide Updater to run completely autonomously. You can safely close the Updater Interface at this point, and it will continue to work in the background as a Windows Service.

If you cannot see at least some activity, or if you do not have any files appearing at all, or you see red errors, something is wrong, and the deSide Updater is probably not working. If this is the case, please contact global-roam.

Go to the section [*Installing the Database Maintenance Scripts*](#) (the Reaper on page 66).

Upgrading from a Supported deSide Database

You're about to upgrade the component highlighted in green in the following diagram.



Since you supported version of SQL Server, but an old version of the deSide Database, you will need to upgrade it to the latest version.

All of the upgrade scripts are stored in a file called Database_Scripts.zip that you can download from the downloads section of the deSide website (go to <http://install.deside.info> and follow the links to the Download page).

Go to [Upgrading the NEMMCO/AEMO Tables](#), on page 58.

Upgrading the NEMMCO/AEMO Tables

The structure of the tables relating to the NEMMCO/AEMO data has changed since the last time deSide was released.

Navigate to the directory where you extracted the Database_Scripts.zip file, navigate to the NEMMCO directory, and then navigate to the MSSQL directory.

Run all scripts labeled with a version greater than the highest version found in your NEMMCO_Version table (if you do not have a NEMMCO_Version table, assume the version is 1), in order of smallest to largest.

To clarify, if there are 6 scripts in the directory, labeled 2, 3, 4, 5, 6, 7, and your local database version is 3, then you should run the scripts 4, 5, 6 and 7 in that order on your database.

You can run scripts through whatever interface to your database you have available, but we suggest using Microsoft SQL Server Management Studio for MSSQL Server.

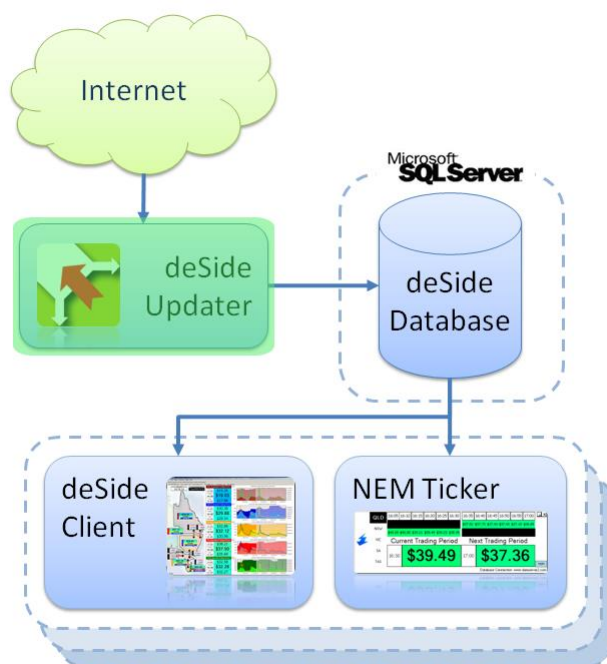
Note – SQL Management Tools

If you do not have any tools for managing your SQL Server, then you can download and install Microsoft SQL Server Management Studio from the [Microsoft website](#) (you're looking for the installer for SQL Server 2008 R2 Express Edition, it will allow you to install the Management Tools by themselves).

Go to [Upgrading the deSide Updater \(with an upgraded database\)](#), on page 59.

Upgrading the deSide Updater (with an upgraded database)

You're about to upgrade the component highlighted in green in the following diagram.



The deSide Updater connects to the SQL Server and so you will need to have the details for this connection. These details are:

- The address for this SQL Server instance (machine name and SQL server instance name).
- The account details for connection to the database. Make sure you have an account with write permissions, because you will be using the deSide Updater to create the necessary database and tables. The deSide Updater also requires write permissions to the database in general, as it will be constantly writing to the database as part of its normal operation.

The deSide Updater should be installed on a stable machine, one with high availability (on all the time, does not regularly get restarted). Desktops and laptops are not usually acceptable for the deSide Updater (there's nothing stopping you from installing the deSide Updater on them, but do it at your own peril).

Installation

Download the install file for the deSide Updater from the download section of the deSide web site (go to <http://www.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

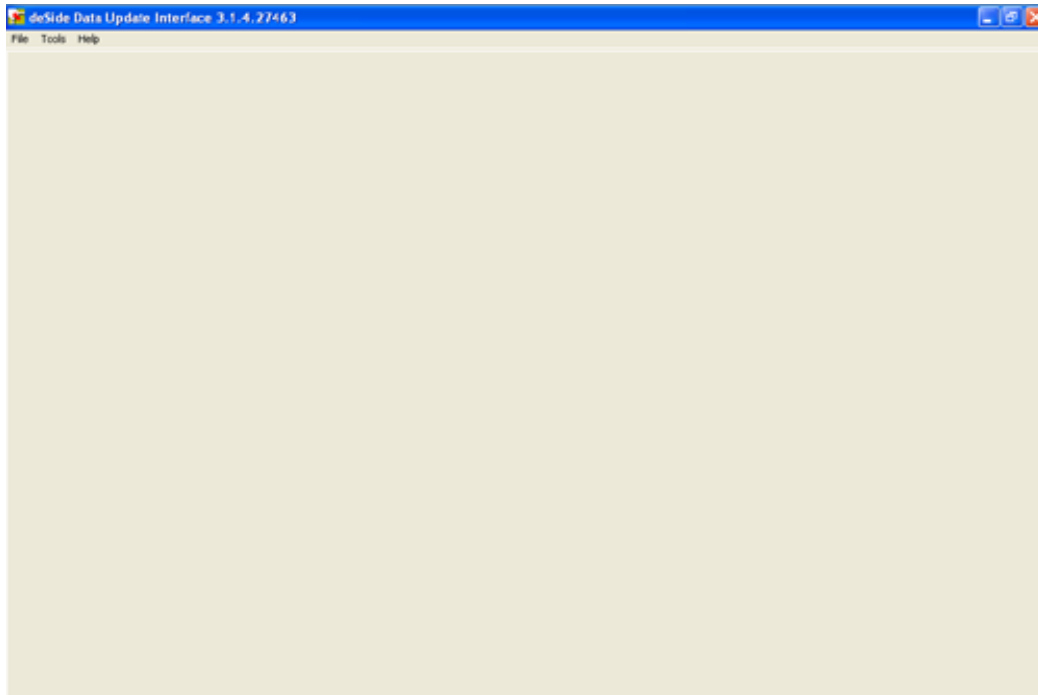
If you do not already have the .NET Framework 4.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the deSide Updater on your desktop. Additionally, there will be a Windows Service installed with a service name of “deSideDataUpdateService”.

The Windows Service will be installed with default login details. Following the install, confirm that these logon details are set to a user who has access to the internet and to the SQL Server instance that you have chosen (the deSide Updater requires access to the internet and to its database).

Configuration

Double-click on the deSide Update Service shortcut on the desktop. This is the deSide Updater interface when it's not doing anything:



Go to File -> Application -> Start.

Database Setup

On first startup, the deSide Updater may display a screen called “Data Source Setup”. If it does not, then it has loaded your previous database settings. If this is the case, skip forward to [Done with the deSide Updater](#).

This screen is the database settings screen. It will allow you to point the deSide Updater at the database that it needs to update. On first startup, it will look something like this:

Data Source Setup

... delivering Clarity, Convenience and Cost Effectiveness through information systems that make the electricity market understandable

GLOBAL-ROAM

DataAccessManager Settings

Welcome to the database setup for deSideV2 Data Updater. You can use this form to show deSideV2 Data Updater how to locate the sources of data that it will need to run successfully.

If this is the first time you have seen this screen, you will need to setup each of the data sources below with valid settings. You can do this by clicking on the data source, and then clicking on the Configure button. You can use the form that pops up to setup the settings for the data source you selected.

You can also choose to mark a data source as IGNORED. Keep in mind, that this will prevent that data source from working at all.

AEMO Database Connection	Error

This is the AEMO database. This Data Source is where all of the data obtained from the AEMO regarding the NEM will be stored. This database is actually a cut down version of the InfoServer database.

This Data Source has not yet been configured. Please configure this Data Source with appropriate settings.

Configure Selected Ignore Selected

Export Settings to File Import Settings from File

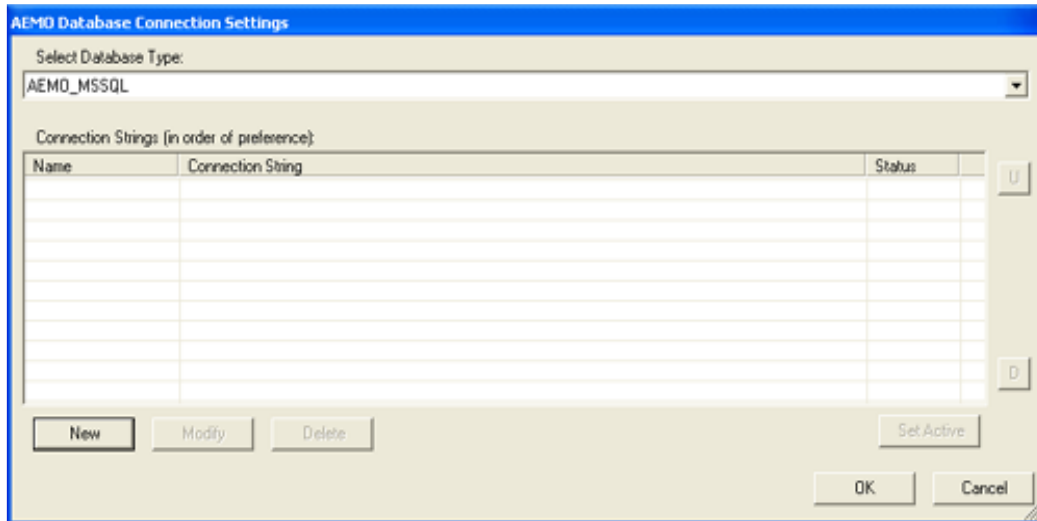
Done Ignore and Continue

Configuring the AEMO Database Connection

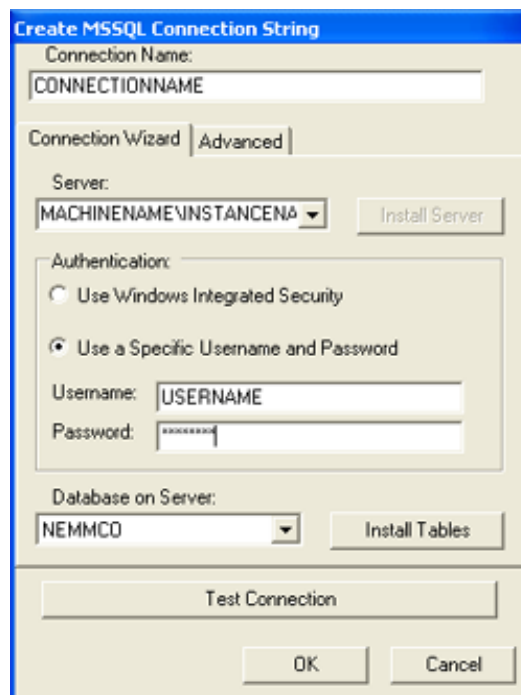
This database is where the deSide Updater stores all of the data that it downloads. To configure the AEMO Database Connection, from the database settings screen

- Select the AEMO Database Connection
- Click the Configure Selected button.

On the next screen, select AEMO_MSSQL in the drop-down box at the top, and click the New button.



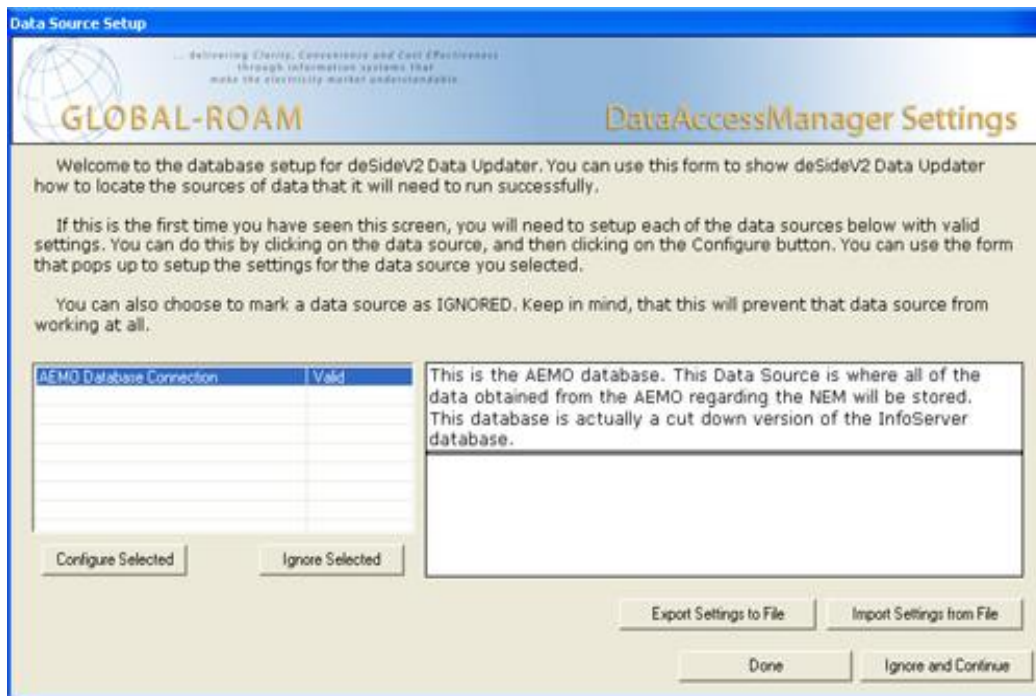
Fill the next screen in with information about how to connect to the SQL Server with the deSide Database on it. Test the connection to make sure that it works, and when it does, click OK.



Note:

If you cannot find your SQL Server in the server drop down box, you can simply type in the name of the machine that it is on, followed by a “\” character, followed by the instance name. e.g. MACHINE_NAME\INSTANCE_NAME.

Keep clicking OK until you get back to the main database settings screen. It should now look like this:



Note that the AEMO Database Connection says “Valid” next to it (this means it’s all set up and ready to go).

Click Done.

Note:

If you need to change your database settings after setting them up initially, stop the deSide Updater, go to “C:\Documents and Settings\All Users\Application Data\global-roam\deSideV2 Data Updater\” (on Windows Vista and above, C:\ProgramData\global-roam\deSideV2 Data Updater\”) and delete the file “deSideV2DataUpdater_DataAccessManager.settings.xml”. Restart the deSide Updater in application mode (File -> Application -> Start) and it will prompt you for database settings again.

Done with the deSide Updater

At this point your updater should be showing a list of file types, and the last times that a file of that type was downloaded and processed.

After a few minutes, you can safely go to File -> Application -> Stop, and then go to File -> Service -> Start in order to set the deSide Updater to run completely autonomously. You can safely close the Updater Interface at this point, and it will continue to work in the background as a Windows Service.

If you cannot see at least some activity, or if you do not have any files appearing at all, or you see red errors, something is wrong, and the deSide Updater is probably not working. If this is the case, please contact global-roam.

Go to the section *Installing the Database Maintenance Scripts (the Reaper Script)* on page 66.

Installing the Database Maintenance Scripts (the Reaper Script)

The reaper is a small SQL Script set to run automatically at regular intervals, to keep the size of the deSide Database relatively small. This section provides instructions for setting up a Windows Scheduled task to run this Reaper Script at regular intervals. You will need to download the script and place it in a well known folder that is accessible to the Scheduled Task.

Download the Reaper Script for the deSide Updater from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

Set up a new Windows Scheduled Task – if you need to, please consult the Windows Help system to find out how to establish a Scheduled Task on your operating system.

The Scheduled Task should be set up to run a command line as follows:

```
sqlcmd.exe -S [SERVER_NAME] -U [USERNAME] -P [PASSWORD] -i [PATH TO SCRIPT]
```

where the following are the arguments:

- SERVER_NAME is the fully qualified address of the SQL Server that the deSide Database is installed on (MACHINENAME\INSTANCENAME)
- USERNAME is a user account in the specified SQL Server with delete permissions on the deSide Database
- PASSWORD is the SQL Server password for the above USERNAME
- PATH_TO_SCRIPT is the full path to the Reaper script file that you downloaded above

Note that sqlcmd.exe is typically located in

```
C:\Program Files\Microsoft SQL Server\[VERSION]\Tools\Binn.
```

Pick the latest version if there are multiple.

Schedule this task to occur every day (once every 24 hours) at midnight.

Example [brackets not to be included]:

```
"C:\Program Files\Microsoft SQL Server\100\Tools\Binn\SQLCMD.EXE" -S  
examplemachine -U sa -P letmein -i "C:\Program Files (x86)\global-  
roam\deSide Update Service\deSide_Maintenance.sql"
```

Note:

The Reaper Script relies on the fact that the database name is correct in the script. By default this name is "NEMMCO", but it may be different if:

- You chose a different name for the database when you installed it while configuring the deSide Updater above.
- You upgraded an existing deSide Database to the latest version.

If your deSide database is NOT named “NEMMCO” you will need to slightly change the downloaded script file.

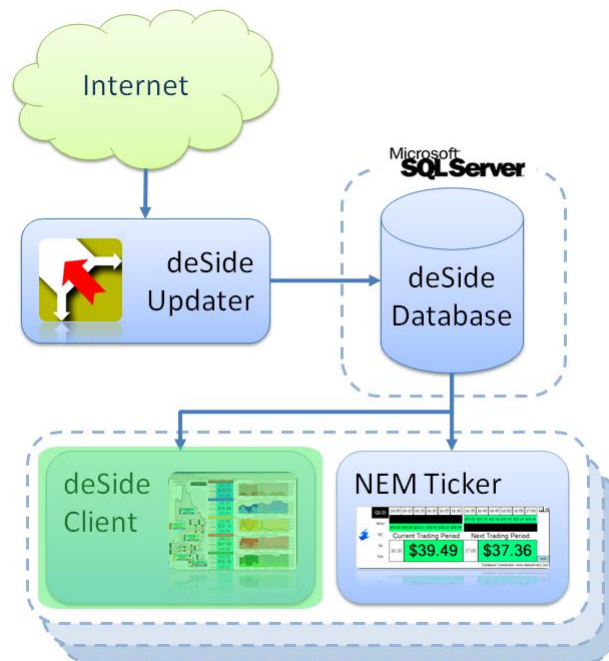
The section you need to modify is at the top of the file. It looks like this:

```
USE NEMMCO  
GO
```

Change the word “NEMMCO” to [YOUR_DATABASE_NAME] (make sure you include the square braces), and save the script.

Upgrading the deSide Client

You're about to upgrade the component highlighted in green in the following diagram.



You should have an SQL Server instance available, with the deSide Database installed on it. You will need access credentials to the deSide Database (read-only is acceptable, as deSide does not need to write data into the deSide Database).

You will also need access credentials to the SQL Server instance with write/create permissions, to install the deSide Settings database.

Installation

Download the deSide Client from the download section of the deSide web site (go to <http://www.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

If you do not already have the .NET Framework 2.0 installed, the installer will install it. This may take quite a while.

Once the installation has completed, you should be able to see an icon for the deSide Client on your desktop.

Configuration

Double-click on the deSide Client shortcut on the desktop to begin configuration.

Database Setup

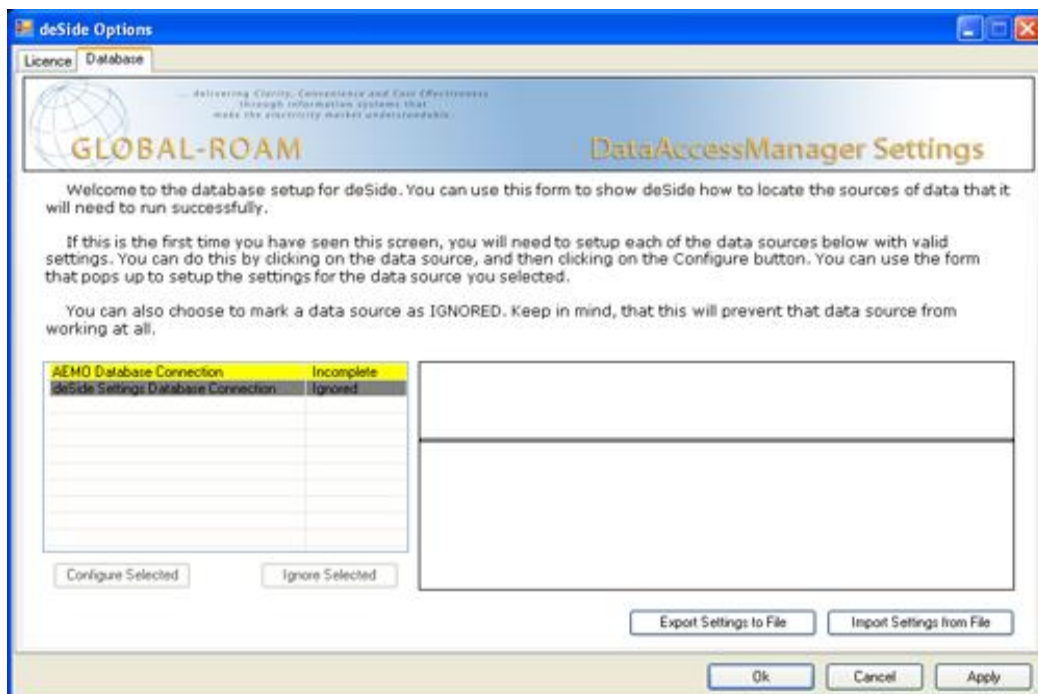
In this section we establish connectivity from the deSide Client to your local database.

Question:

Did the deSide Client start up normally, and start displaying data?

If “Yes”, click on the large title bar that says “You are currently using a backup database provided by Global-Roam. Please check your database settings”. This will display the database settings screen.

If “No” (the deSide Client did not start up normally), then you will see a database settings screen as soon as you start it up. The database settings screen will look similar to the following:



Note that the AEMO Database Connection on this screen will be either:

- Red, indicating it is in error. Errors must be dealt with before you can continue (either by fixing them, or specifically marking the connection as ignored).
- Yellow, indicating that it is incomplete, and only contains the backup connection provided by us.

The deSide Settings Database Connection will appear grey by default, indicating that it is ignored.

The following instructions assume that you already have a deSide database (installed/created during the installation and configuration of the deSide Updater), but do not have a deSide Settings database. If you do have a deSide Settings database, skip the part that deals with how to install it.

Note: If you have previously exported your database settings, you can import them by clicking on the Import Settings From File button. Importing settings is a much quicker way of configuring the database settings, especially if you are dealing with multiple installations of the deSide Client.

Read on to the next section.

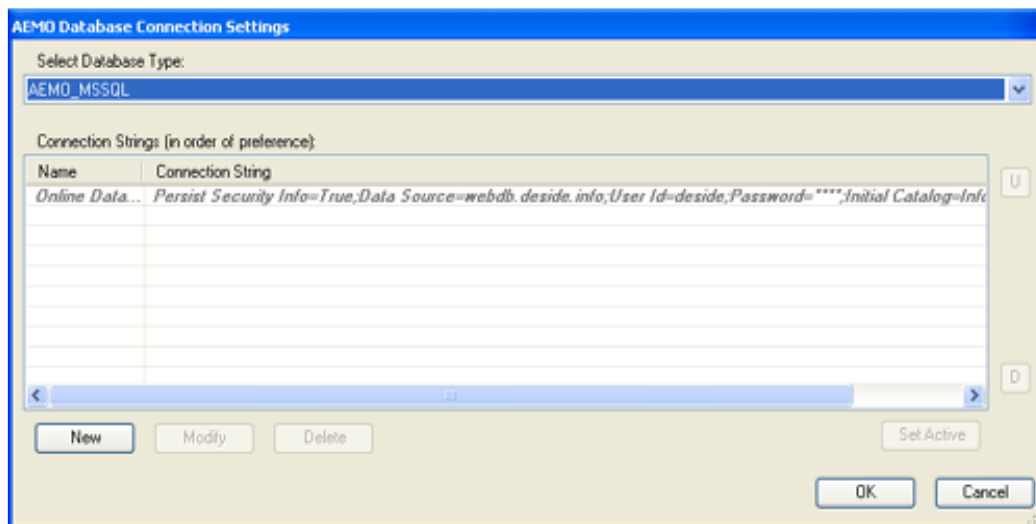
Configuring the AEMO Database Connection

Configuring the AEMO Database Connection is NOT optional.

This database is where the deSide Client obtains all of the data that it displays.

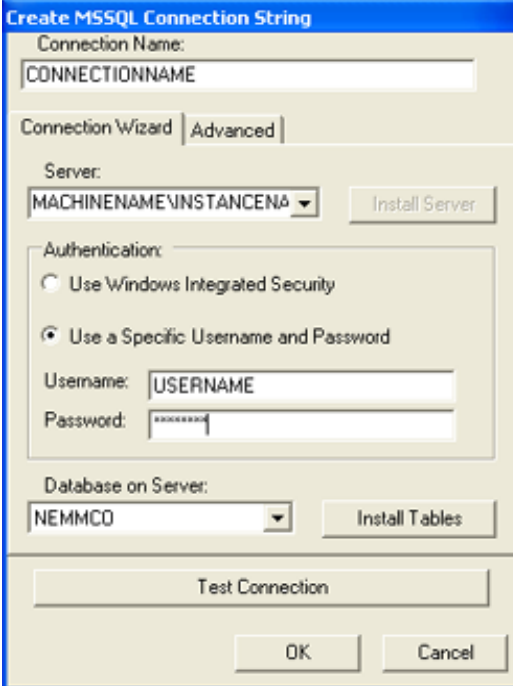
To configure the AEMO Database Connection, on the database settings screen, select the AEMO Database Connection, and click the Configure Selected button.

You will see:



On this screen click the New button. This will create a new connection for the deSide Client to use.

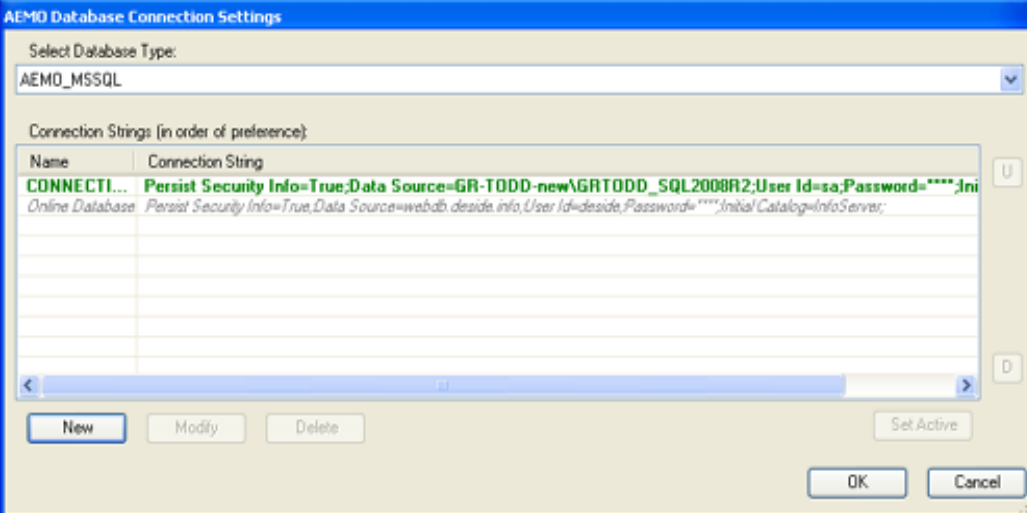
You will see:



The 'Create MSSQL Connection String' dialog box is shown. It has a 'Connection Name' field with the text 'CONNECTIONNAME'. Below it are tabs for 'Connection Wizard' and 'Advanced'. The 'Server' dropdown shows 'MACHINENAME\INSTANCENAME' with an 'Install Server' button. The 'Authentication' section has two radio buttons: 'Use Windows Integrated Security' (unselected) and 'Use a Specific Username and Password' (selected). Below these are 'Username' and 'Password' fields. The 'Database on Server' dropdown shows 'NEMMCO' with an 'Install Tables' button. At the bottom is a 'Test Connection' button, and at the very bottom are 'OK' and 'Cancel' buttons.

Fill this screen in with information about how to connect to the SQL Server with the deSide Database on it. Test the connection to make sure that it works, and when it does, click OK.

You will see:



The 'AEMO Database Connection Settings' dialog box is shown. It has a 'Select Database Type' dropdown set to 'AEMO_MSSQL'. Below is a table titled 'Connection Strings (in order of preference):'. The table has two columns: 'Name' and 'Connection String'. The first row has 'CONNECTI...' in the Name column and 'Persist Security Info=True;Data Source=GR-TODD-new\GR-TODD_SQL2008R2;User Id=sa;Password=****;Ini...' in the Connection String column. The second row has 'Online Database' in the Name column and 'Persist Security Info=True;Data Source=webdb.deSide.info;User Id=deside;Password=****;Initial Catalog=InfoServer;' in the Connection String column. Below the table are 'New', 'Modify', and 'Delete' buttons. To the right of the table are 'U' and 'D' buttons. At the bottom right is a 'Set Active' button. At the very bottom are 'OK' and 'Cancel' buttons.

Your new connection has been added into the list of available connections used by the deSide Client. It should appear above the connection named "Online Database".

You can freely add additional connections if you have access to other deSide Databases (for example, if you have more than 1 deSide Updater, you'll probably want to add a connection to each deSide Database you have).

The deSide Client will use the connections in the order that they appear here (i.e. if the first connection becomes unavailable or out-of-date, then the second connection will be used. If the first connection returns to a good state, it will be used). This is to allow for redundancy. The Online Database connection should always be the last in the list.

Configuring the deSide Settings Database Connection

The deSide Settings Database Connection is optional, but it is recommended that you set one up.

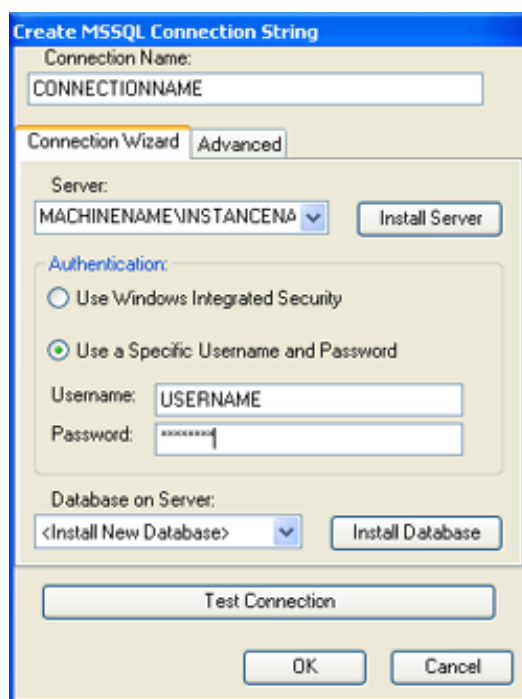
This database is where all of the user configurable settings for the deSide Client are stored (price thresholds, graph settings, price scales etc). If you want all of your copies of the deSide Client across your entire organization to share the same settings, you will need to setup one of these databases.

To configure the deSide Settings Database Connection, on the database settings screen:

Select the deSide Settings Database Connection, and click the Unignore Selected button. Follow the instructions on the screen (Click Yes). Click Configure Selected.

On the next screen, select deSide_Settings_MSSQL from the drop-down box at the top, then click the New button. This will create a new connection for the deSide Client to use for its settings.

Fill the next screen in with information about how to connect to an SQL Server where you want to install the deSide Settings Database.



Note:

If you cannot find your SQL Server in the drop down box, you can simply type in the name of the machine that it is on, followed by a “\” character, followed by the instance name. e.g. MACHINE_NAME\INSTANCE_NAME.

Note:

If you have previously installed a deSide Settings database, simply select it in the drop down, click Test Connection, then click OK. You don’t have to install it again.

Once you have filled out the name, server and authentication section, use the "Database on Server" drop down box to select the "<Install New Database>" option.

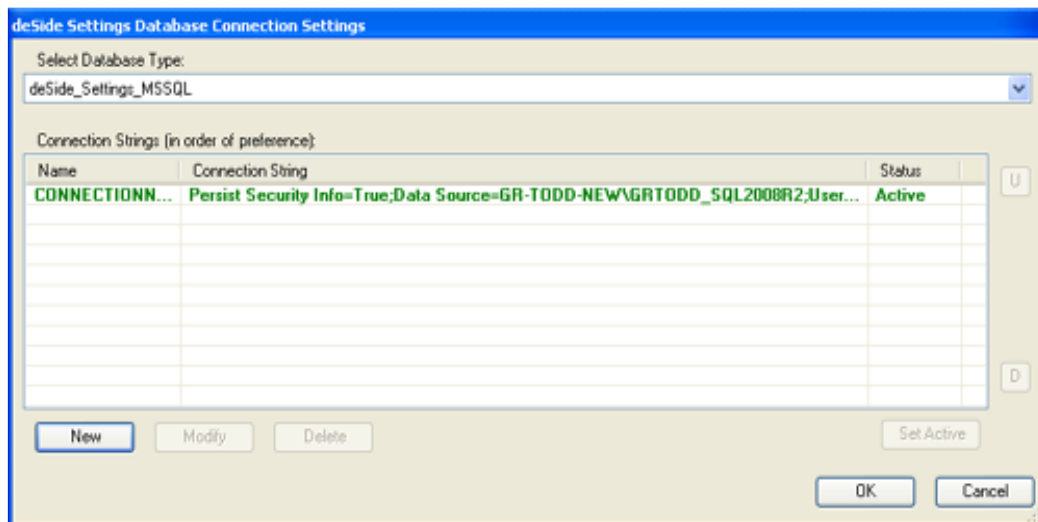
Click on the "Install Database" button.

Enter the name for the deSide Settings Database. If the default name is fine, simply click OK.

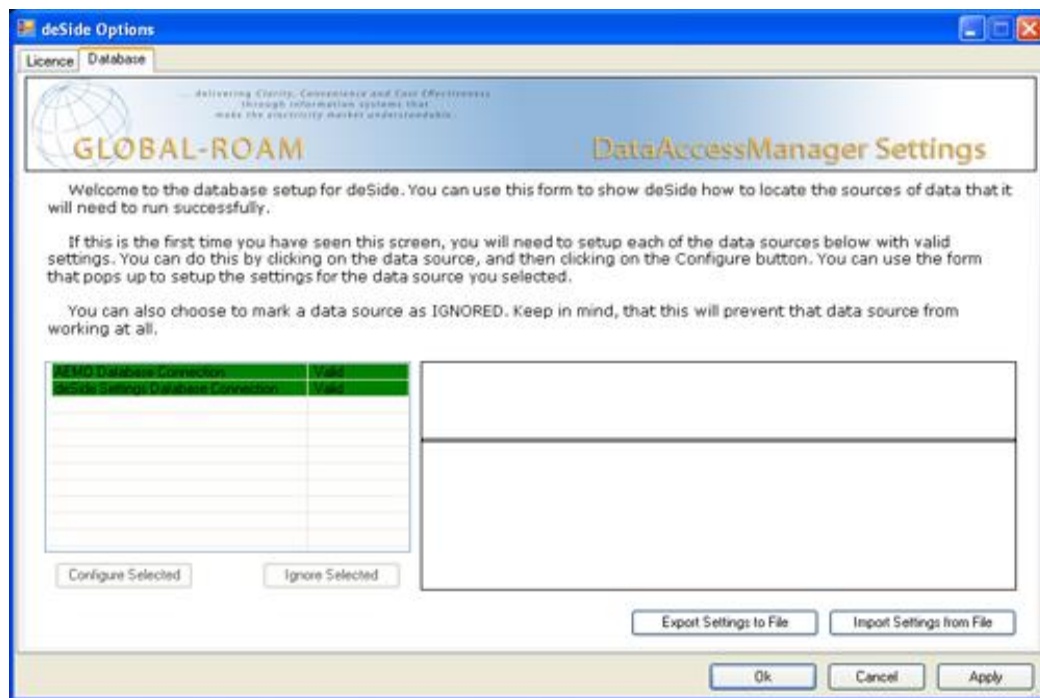
Enter the confirmation word at the bottom of the next screen and click "Confirm" to execute the installation script. If you wish to check the script, or run it in some other way, feel free to extract it from the text box (or save it using the Save button).

Once the script has finished executing, the database you just installed will be selected in the "Database on Server" drop down box. Click Test Connection to verify that everything is okay. If it is, click OK.

Your new connection will be added into the list of available connections for the deSide Client to use. Click OK.



Both of your database connections (AEMO Database Connection and deSide Settings Database Connection) should now be green, with a status of Valid. If not, you will need to investigate why (likely involving reconfiguring the connections, like in the instructions above).



Note:

At this point, when all your databases are configured to be Valid, you may want to export the settings to file, so you can easily import them again later. This can save you time, and reduce the likelihood of errors while entering connections manually. Very handy if you plan on installing the deSide Client on another machine or machines.

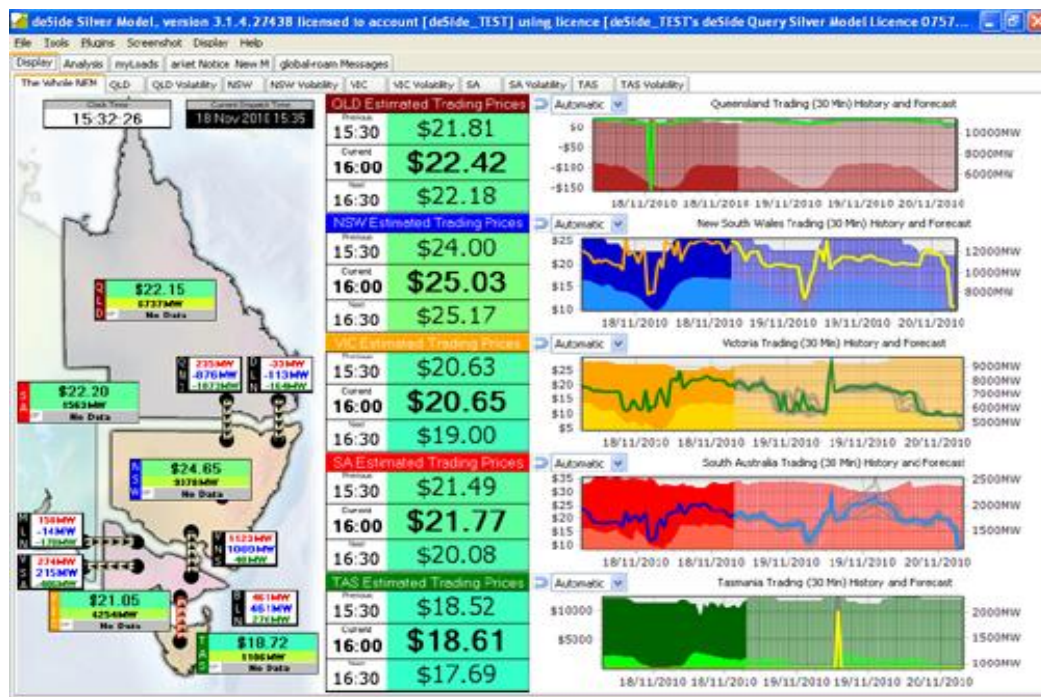
Simply click on the Export Settings To File button to do this, and save the settings in some easily accessible place.

Exit the database connection screen, saving your changes.

Done with the deSide Client

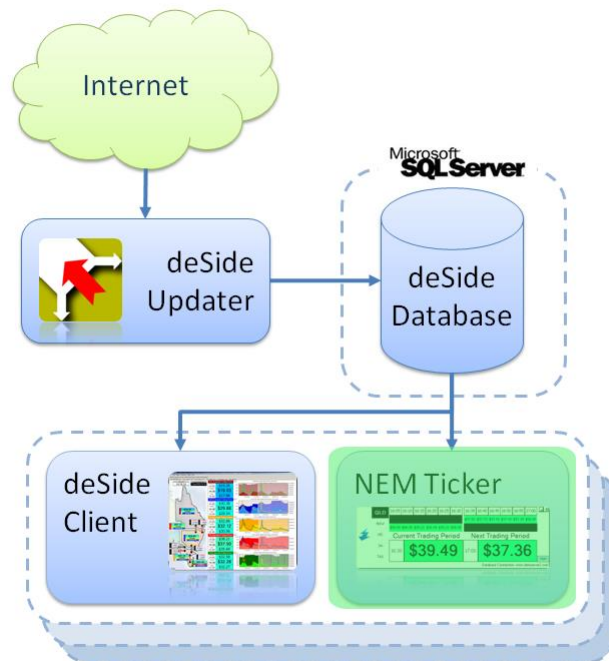
You're done with the deSide Client.

It should look something like this:



Installing the NEM Ticker

You're about to install the component highlighted in green in the following diagram.



You should have an SQL Server instance available, with the deSide Database installed on it. You will need access credentials to the deSide Database (read-only is acceptable, as the NEM Ticker does not need to write data into the deSide Database).

Installation

Download the install file for the NEM Ticker from the download section of the deSide web site (go to <http://install.deside.info> and follow the links to the Download page).

If you are using Windows XP or below, simply double click the install file, and then follow the prompts until it has completed.

If you are using Windows Vista or above, right-click the install file and choose the “Run As Administrator” option, then follow the prompts until the installation has completed.

If you do not already have the .NET Framework 2.0 installed, the installer will install it. This may take some time.

Once the installation has completed, you should be able to see an icon for the NEM Ticker on your desktop.

Configuration

Double-click on the NEM Ticker shortcut on the desktop.

Proxy Setup

Since you have already setup the deSide Client, the NEM Ticker requires no additional proxy setup (it piggybacks off the deSide Client settings).

License Activation

On first startup, the NEM Ticker may display a screen saying that “This machine does not have a license for NEMTicker”.

Simply follow the instructions on the screen to configure a license for the NEM Ticker (it mostly involves entering information/selecting options and clicking next).

If you do not have any licenses to select on Step 3, and you should have a full commercial license, then you will need to go to <http://www.global-roam.com/secure> to manage your licenses before you can go any further. After you login to the Secure website, click on My Licenses (top-right corner). On this page you can manage your licenses. If you didn't have a license available in Step 3, you may need to deactivate one of your existing licenses to free it up for use.

You cannot start the NEM Ticker without a valid license.

Database Setup

By default the NEM Ticker attempts to access 2 database connections. In priority order they are:

- webdb.deside.info:1433
- www.dataserver3.com:1433

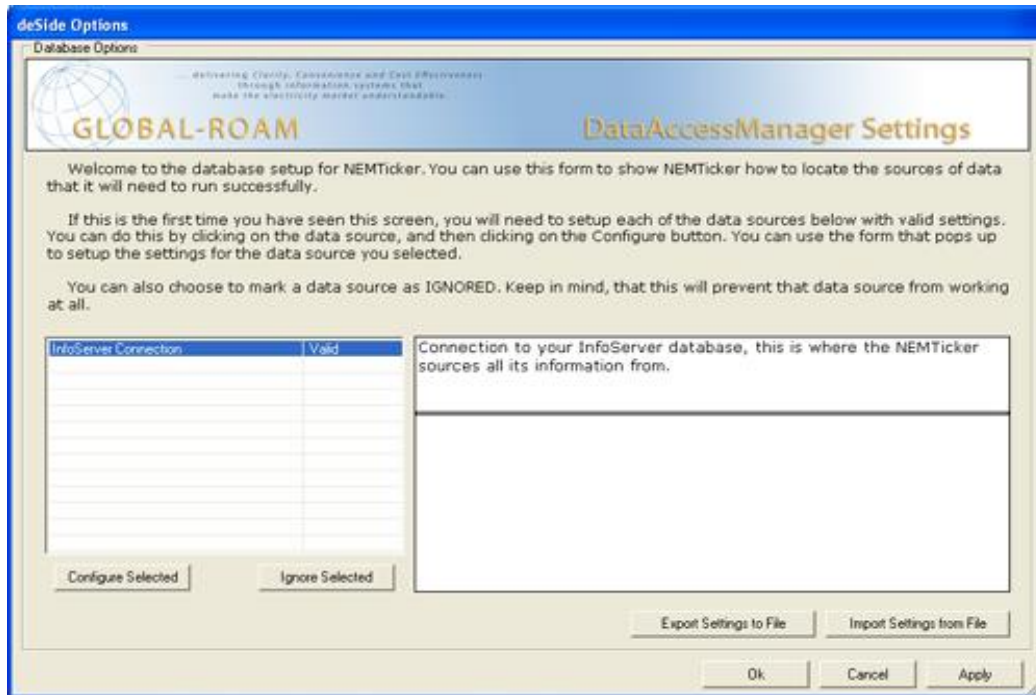
If your internet security does not allow access to those URLs over those ports, then the NEM Ticker will display a database settings screen as soon as you start it up. Note that the InfoServer Connection will be red, indicating it is in error. Errors must be dealt with before you can continue (either by fixing them, or specifically marking the connection as ignored).

If your internet security does allow access to those URLs over those ports, then you will simply see the NEM Ticker interface. Right click on the empty area above the “Top?” button and select the Database Options. This will display the database settings screen.

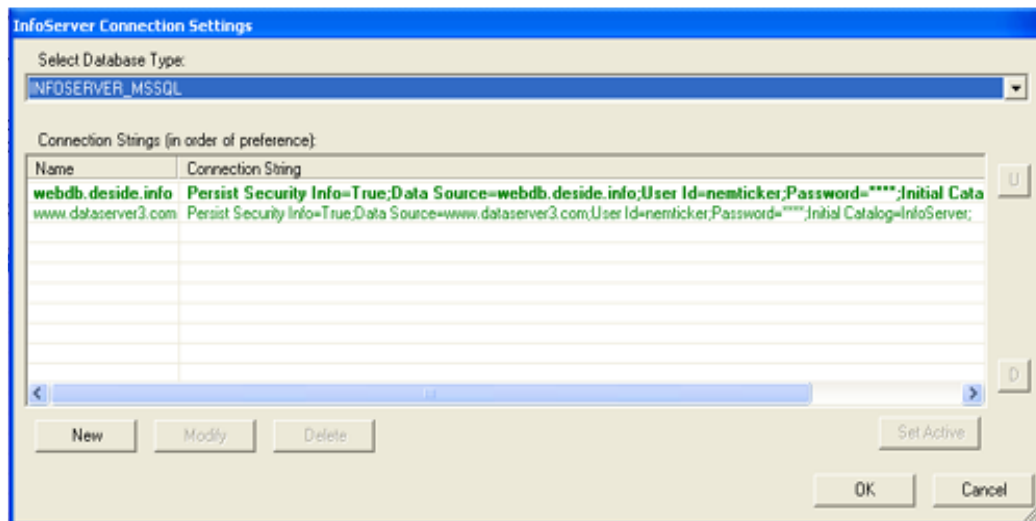
Configuring the InfoServer Connection

The default configuration for this connection accesses data over the internet. If you have a local deSide Database, it's sensible to set this up as the primary connection. This will increase the responsiveness of the NEM Ticker, and won't waste internet bandwidth.

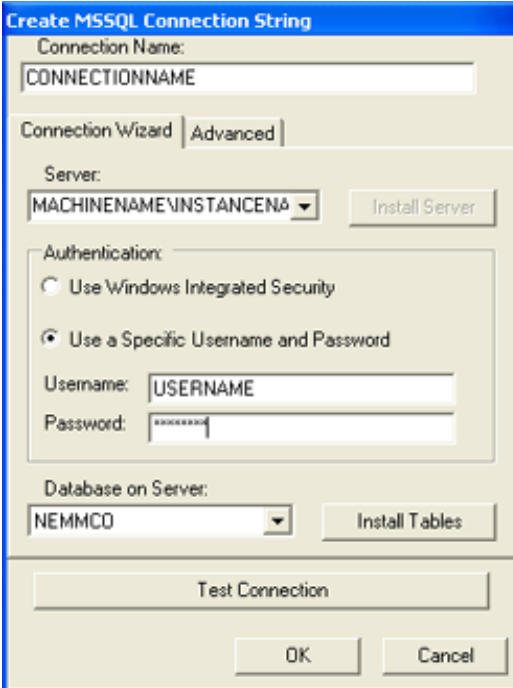
To configure the InfoServer Connection, on the database settings screen:



Select the InfoServer Connection, and click the Configure Selected button.

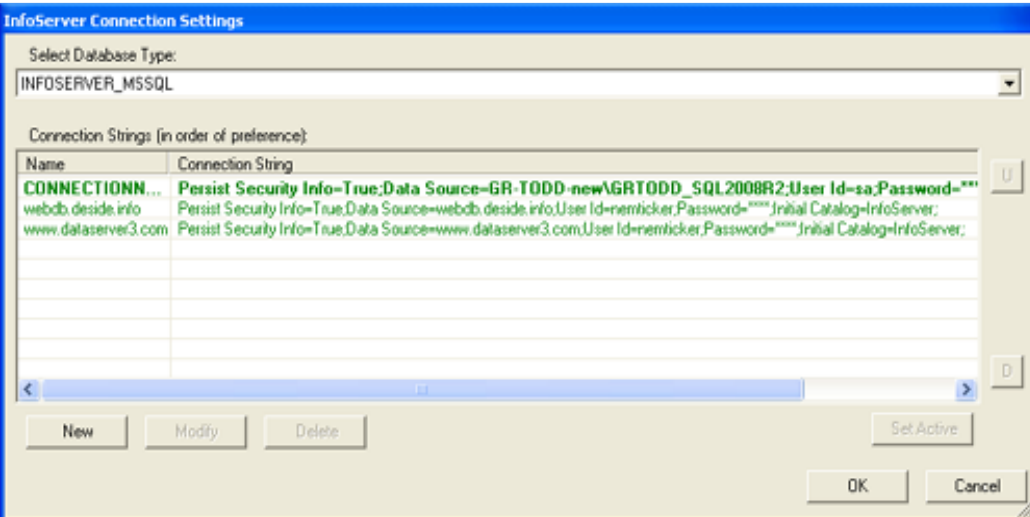


On the next screen click the New button. This will create a new connection for the NEM Ticker to use.



The 'Create MSSQL Connection String' dialog box is shown. It has a title bar with the same text. Below the title bar, there is a 'Connection Name' field with the text 'CONNECTIONNAME'. Below that, there are two tabs: 'Connection Wizard' and 'Advanced', with 'Advanced' being the active tab. Under the 'Advanced' tab, there is a 'Server' dropdown menu with the text 'MACHINENAME\INSTANCENAME' and an 'Install Server' button to its right. Below the server information, there is an 'Authentication' section with two radio buttons: 'Use Windows Integrated Security' (unselected) and 'Use a Specific Username and Password' (selected). Below the radio buttons, there is a 'Username' field with the text 'USERNAME' and a 'Password' field with masked characters. Below the password field, there is a 'Database on Server' dropdown menu with the text 'NEMMCO' and an 'Install Tables' button to its right. At the bottom of the dialog, there is a 'Test Connection' button, and below that, 'OK' and 'Cancel' buttons.

Fill the next screen in with information about how to connect to the SQL Server with the deSide Database on it. Test the connection to make sure that it works, and when it does, click OK.



The 'InfoServer Connection Settings' dialog box is shown. It has a title bar with the same text. Below the title bar, there is a 'Select Database Type:' dropdown menu with the text 'INFOSERVER_MSSQL'. Below that, there is a section titled 'Connection Strings (in order of preference):' which contains a table with two columns: 'Name' and 'Connection String'. The table has three rows of data. The first row has the name 'CONNECTIONNN...' and the connection string 'Persist Security Info=True;Data Source=GR-TODD-new\AGRTODD_SQL2008R2;User Id=sa;Password=***'. The second row has the name 'webdb.deside.info' and the connection string 'Persist Security Info=True;Data Source=webdb.deside.info;User Id=nemticker;Password=****;Initial Catalog=InfoServer;'. The third row has the name 'www.dataserver3.com' and the connection string 'Persist Security Info=True;Data Source=www.dataserver3.com;User Id=nemticker;Password=****;Initial Catalog=InfoServer;'. To the right of the table, there are 'U' and 'D' buttons. Below the table, there are 'New', 'Modify', and 'Delete' buttons. To the right of these buttons, there is a 'Set Active' button. At the bottom of the dialog, there are 'OK' and 'Cancel' buttons.

Name	Connection String
CONNECTIONNN...	Persist Security Info=True;Data Source=GR-TODD-new\AGRTODD_SQL2008R2;User Id=sa;Password=***
webdb.deside.info	Persist Security Info=True;Data Source=webdb.deside.info;User Id=nemticker;Password=****;Initial Catalog=InfoServer;
www.dataserver3.com	Persist Security Info=True;Data Source=www.dataserver3.com;User Id=nemticker;Password=****;Initial Catalog=InfoServer;

Your new connection will be added into the list of available connections for the NEM Ticker to use. It should appear above the connections webdb.deside.info and www.dataserver3.com.

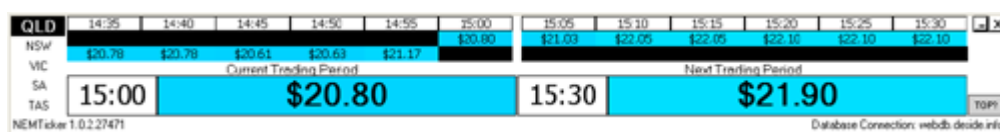
You can freely add additional connections if you have access to other deSide Databases (for example, if you have more than 1 deSide Updater, you'll probably want to add a connection to each deSide Database you have).

The NEM Ticker will use the connections in the order that they appear here (i.e. if the first connection becomes unavailable or out-of-date, then the second connection will be used. If the first connection returns to a good state, it will be used). This is to allow for redundancy. The two connections webdb.deside.info and www.dataserver3.com should always be the last in the list.

Done with the NEM Ticker

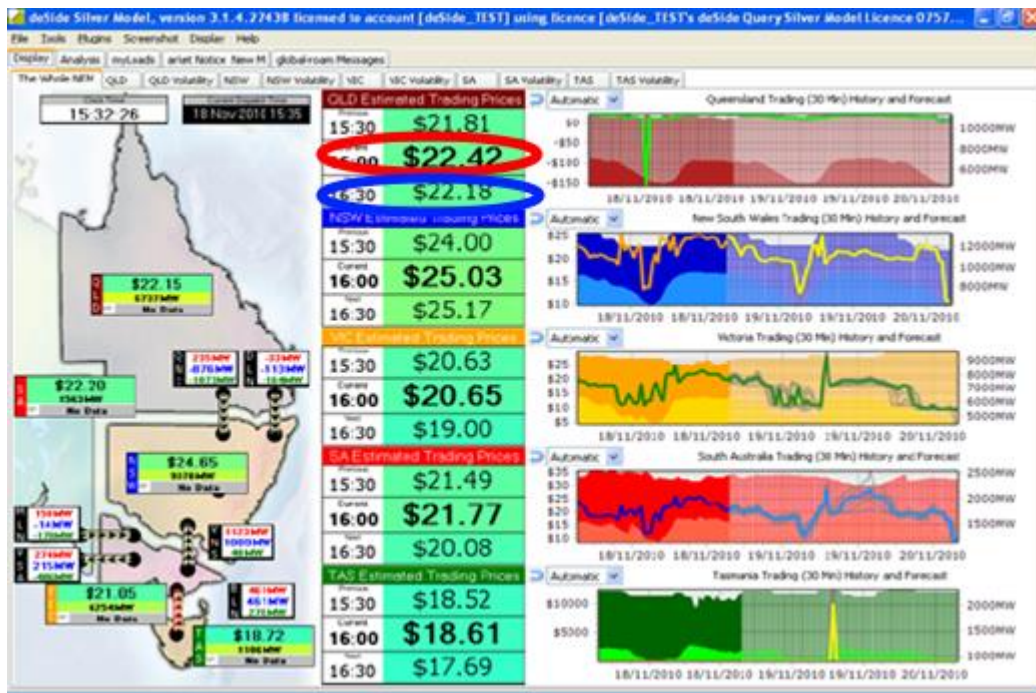
You're done with the NEM Ticker.

It should look something like this:



Current and Next trading interval calculations

The values displayed in deSide for the current trading interval and the next trading interval (circled in red and blue respectively) are actually calculated values and so do not map directly to a field you can query from the database. We understand that many people find these to be of great value outside of deSide as well so we have included some SQL scripts here that reflect the logic that deSide is using to calculate the numbers shown on the screen.



The reason we calculate these values rather than using a number directly from the database is that the predispatch estimate for the current and next trading intervals as published by the AEMO are only updated once every 30 minutes and so do not account for any 5 minute price spikes that were not anticipated before the trading interval.

To combat this, we calculate the current and next trading prices by using the 5-minute dispatch and predispatch data.

Current Trading Interval Calculation

For the current trading price, we take the actual 5 minute dispatch prices that have already occurred in the current trading interval and average these with the remaining 5-minute predispach prices. This in effect gives an estimate for the current trading interval that changes up to 12 times during the interval that will converge to the final actual trading price.

```
DECLARE @REGIONID varchar(5) = 'QLD1' --Change this to the region you are interested in
DECLARE @CurrentDispatchInterval DATETIME
DECLARE @CurrentPredispachRun DATETIME
DECLARE @CurrentTradingInterval DATETIME

SET @CurrentDispatchInterval = (SELECT MAX(SETTLEMENTDATE) FROM DISPATCHPRICE)
SET @CurrentPredispachRun = (SELECT MAX(RUN_DATETIME) FROM P5MIN_RegionSolution)

--Calculate the current trading interval based on the current dispatch interval
SELECT @CurrentTradingInterval =
CASE
    WHEN @CurrentDispatchInterval = DATEADD(HOUR, DATEDIFF(HOUR,0, @CurrentDispatchInterval), 0)
        THEN @CurrentDispatchInterval
    WHEN @CurrentDispatchInterval <= DATEADD(MINUTE, (DATEDIFF(HOUR,0, @CurrentDispatchInterval) *
60) + 30, 0)
        THEN DATEADD(MINUTE, 30 - DATEPART(MINUTE, @CurrentDispatchInterval) ,
@CurrentDispatchInterval)
    ELSE DATEADD(HOUR, 1, DATEADD(HOUR, datediff(HOUR,0, @CurrentDispatchInterval), 0))
END

SELECT @CurrentTradingInterval AS XValue, AVG(RRP) AS YValue
FROM
(
    SELECT SETTLEMENTDATE, REGIONID, RRP
    FROM DISPATCHPRICE
    WHERE REGIONID = @REGIONID AND SETTLEMENTDATE > DATEADD(MINUTE, -30, @CurrentTradingInterval)
    AND SETTLEMENTDATE <= @CurrentTradingInterval AND INTERVENTION = 0
    UNION
    SELECT INTERVAL_DATETIME AS SETTLEMENTDATE, REGIONID, RRP
    FROM P5MIN_RegionSolution
    Where REGIONID = @REGIONID AND INTERVAL_DATETIME > @CurrentDispatchInterval AND
    INTERVAL_DATETIME <= @CurrentTradingInterval AND RUN_DATETIME = @CurrentPredispachRun
) t1
```

Next Trading Interval Calculation

For the next trading interval, we average the 5-minute predispatch numbers to arrive at our estimate for the trading price for the next trading interval.

```
DECLARE @REGIONID varchar(5) = 'QLD1' --Change this to the region you are interested in
DECLARE @CurrentDispatchInterval DATETIME
DECLARE @CurrentTradingInterval DATETIME
DECLARE @NextTradingInterval DATETIME

SET @CurrentDispatchInterval = (SELECT MAX(SETTLEMENTDATE) FROM DISPATCHPRICE)

--Calculate the current trading interval based on the current dispatch interval
SELECT @CurrentTradingInterval =
CASE
    WHEN @CurrentDispatchInterval = DATEADD(HOUR, DATEDIFF(HOUR,0, @CurrentDispatchInterval), 0)
        THEN @CurrentDispatchInterval
    WHEN @CurrentDispatchInterval <= DATEADD(MINUTE, (DATEDIFF(HOUR,0, @CurrentDispatchInterval) *
60) + 30, 0)
        THEN DATEADD(MINUTE, 30 - DATEPART(MINUTE, @CurrentDispatchInterval) ,
@CurrentDispatchInterval)
    ELSE DATEADD(HOUR, 1, DATEADD(HOUR, datediff(HOUR,0, @CurrentDispatchInterval), 0))
END

SELECT @NextTradingInterval = DATEADD(MINUTE, 30, @CurrentTradingInterval)

SELECT @NextTradingInterval as XValue, avg(RRP) as YValue
FROM P5MIN_RegionSolution
Where REGIONID = @RegionID
AND RUN_DATETIME = (SELECT MAX(RUN_DATETIME) FROM P5MIN_RegionSolution)
AND INTERVAL_DATETIME > @CurrentTradingInterval AND INTERVAL_DATETIME <= @NextTradingInterval
```