

Net2Query



Manual

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Introduction

This manual describes the use of the NetQuery tool, which allows you to query the database of a Paxton Net2 access control system.

Its typical users would be developers, who need to take frequent peeks into the database to see if their code works or data miners, who need to extract one thing or another from the Net2 database.

The program is written in C#, on top of the Net2 SDK, which exposes the Net2 data by SDK method calls as well as standard queries on a number of database views. With a small exception, it is a 'non-destructive' program, that allows you to read but not write data.

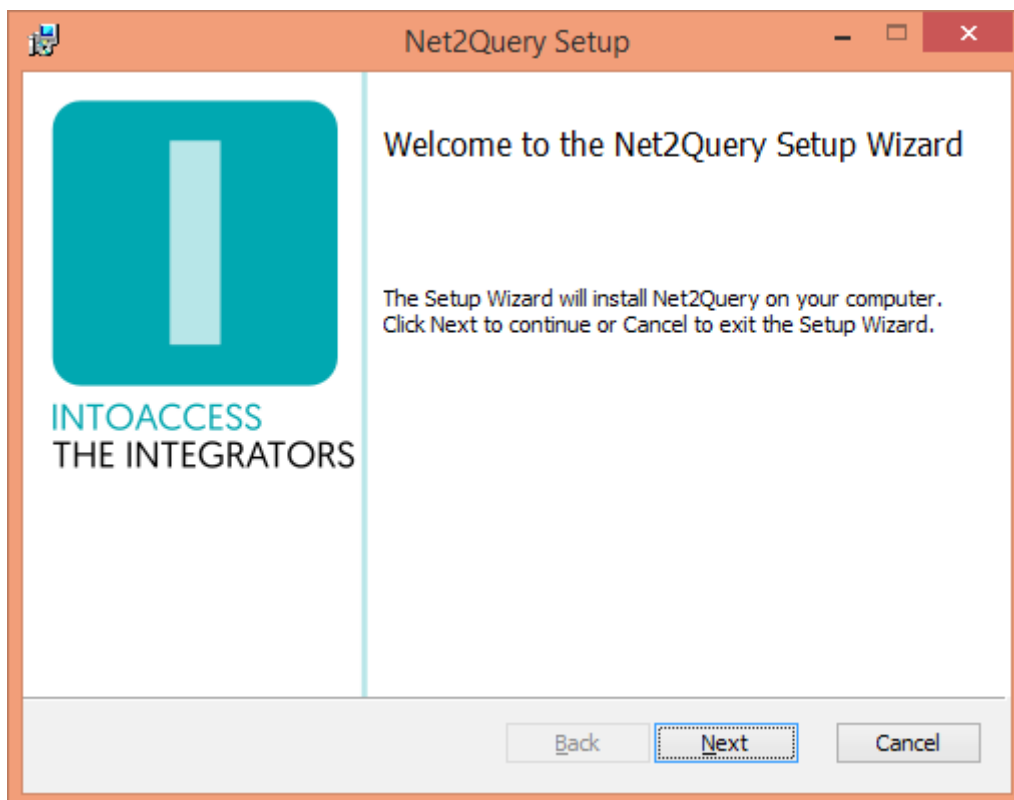
System requirements

The program (V2.x and up) requires a recent Windows version, DotNet V4.0 and the Paxton Net2 software V5.1 or higher.

Installation

Please download the latest version from the <https://www.intoaccess.com> website. It is a Microsoft installer file, which you can simply run after the download finishes. You will need administrator rights to install the program.

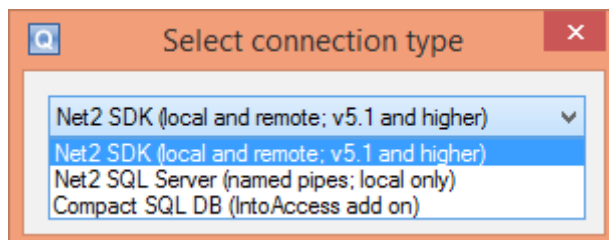
The installation options are minimal. You can define an alternative installation directory if you like.



The installation process will end with opening the readme file in your default editor, which you can just close if you are not interested.

Executing

The program will end up in your programs menu, in the IntoAccess section. If your installation was successful, it should contain the Net2Query program shortcut which you can click to start it.



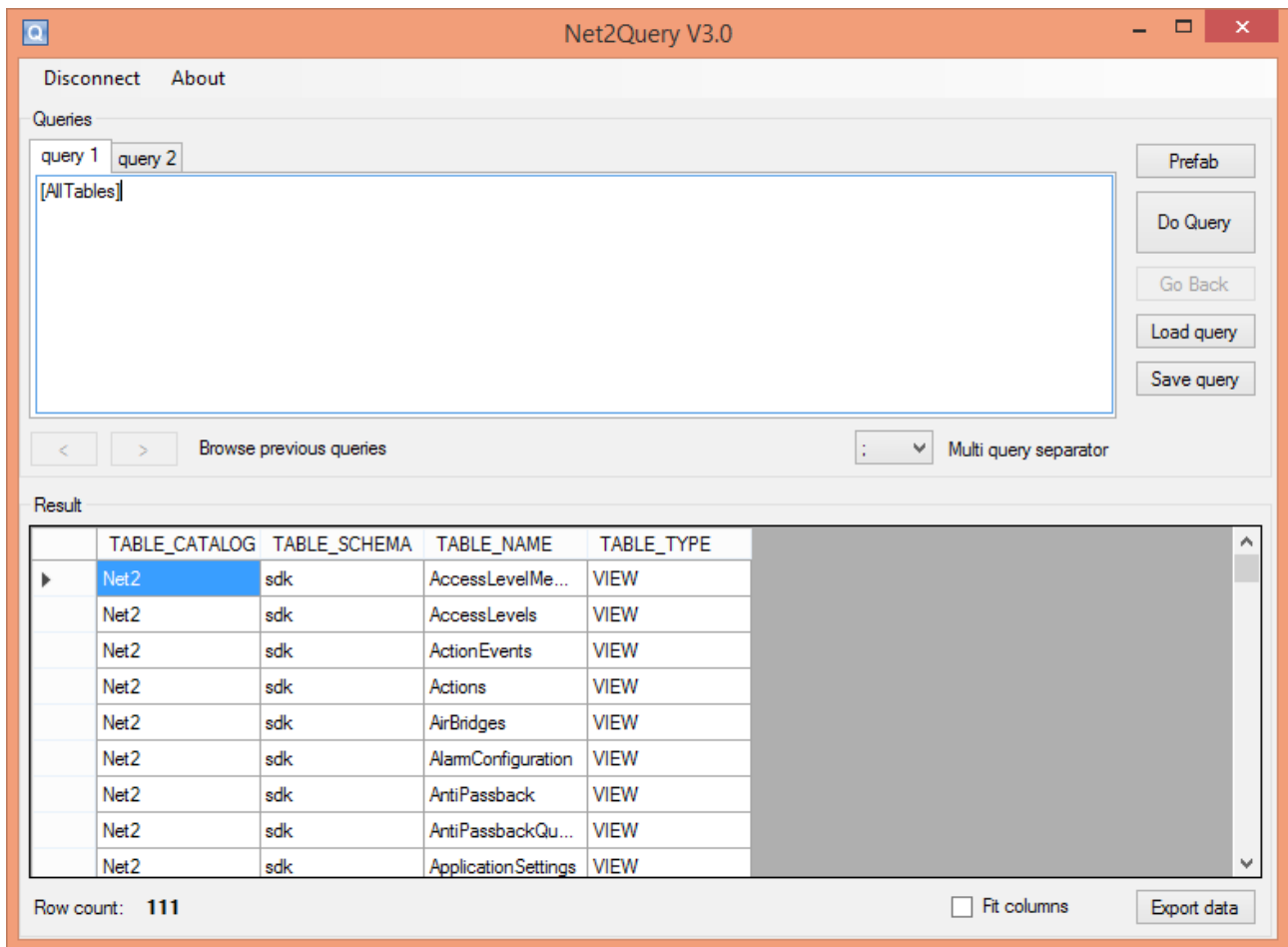
The initial popup, should look something like the print above. Before you can query anything, you first need to connect to a database and authenticate against it.

Options:

- Net2SDK: connect through the SDK. This will work both on the system where the Net2 server is installed as well as with a remote Net2 server, providing no firewalls are blocking this (tcp/ip port 8025).
- Net2 SQL Server: connect straight to the Net2 database using named pipes. This will only work on the Net2 server. If you have a priviledge account, it is also possible to perform update and insert queries. By default a non-priv account **sdk_user** is made available.
- Compact SQL DB: connect to a compact sql database. This is not a database type used by Net2, but sometimes by us for custom implementations.

If the authentication succeeds, the query part will be enabled.

One 'prefab' query is always supplied, to display all available views/tables. If you connected using the Net2 SDK, additional prefab queries are available, which all translate to SDK method calls.



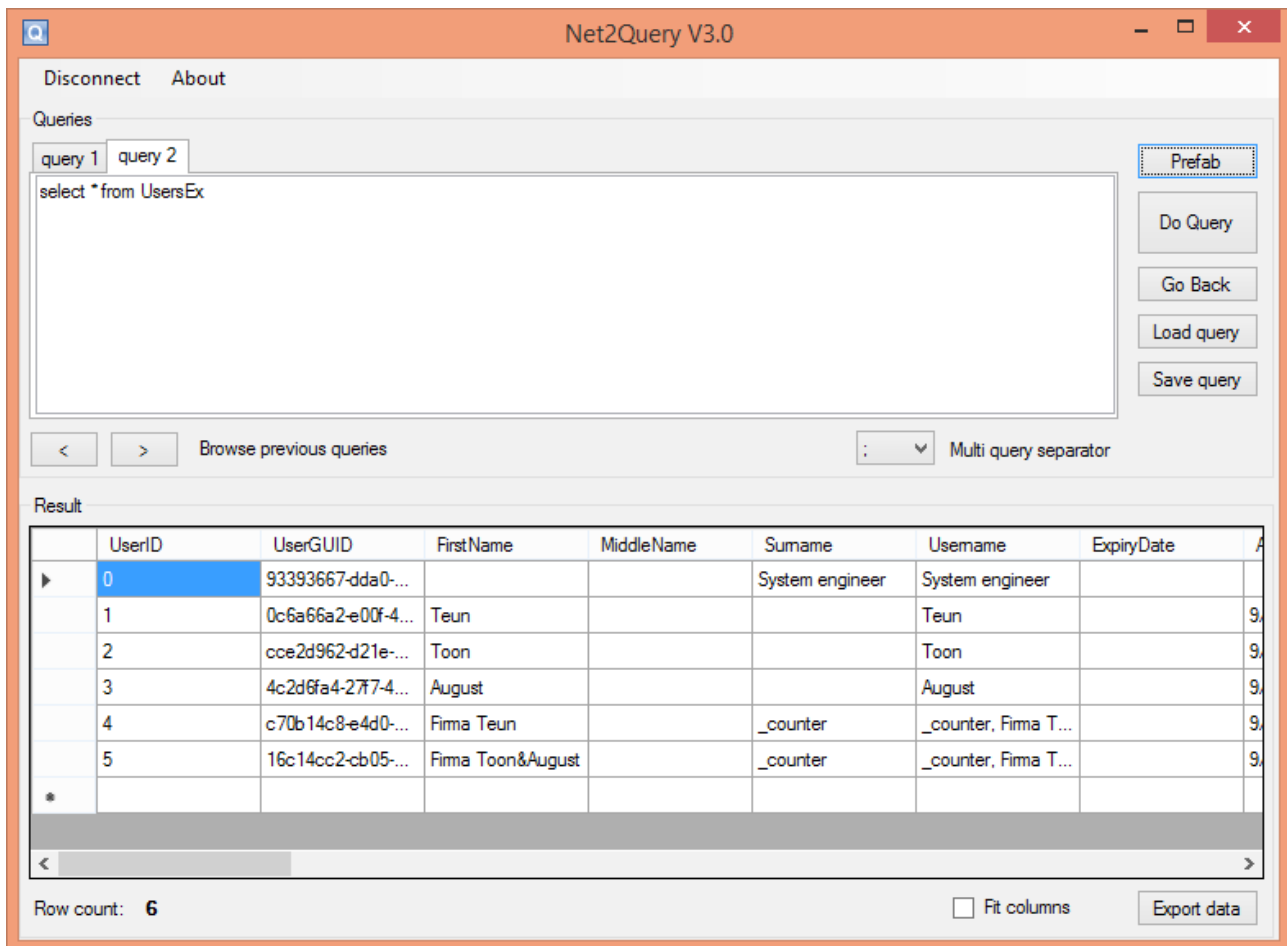
The [AllTables] query will return all views that are exposed by the Net2 SDK. Notice the **Fit columns** checkbox, which will fit the displayed columns into the available space. If the number of columns is large, unchecking is usually better, since the column data is otherwise unreadable. In the unchecked state, there will be a horizontal scrollbar available.

If you click onto one of the table names, the program will automatically create a generic select statement for that particular table and execute it.

If you click onto the TABLE_TYPE column of a particular table row, the query for fetching the table meta information is executed.

You can choose how to divide your available screen space, by pulling a divider between the query and the result section up or down.

Queries



By right clicking on an existing query tab, a menu is displayed which allows you to add or remove query tabs.

The arrow buttons at the bottom of the query panel, allow you to browse formerly executed queries, without actually executing them again. (unlike the **Go back** button)

Queries can be loaded and saved from/to file by pressing the appropriately named buttons in the query section. Pressing such a button will result in a file dialog for either opening or saving a query file, which typically has the **.sql** extension.

You can recall and execute earlier (successful) queries, by pressing the **Go Back** button

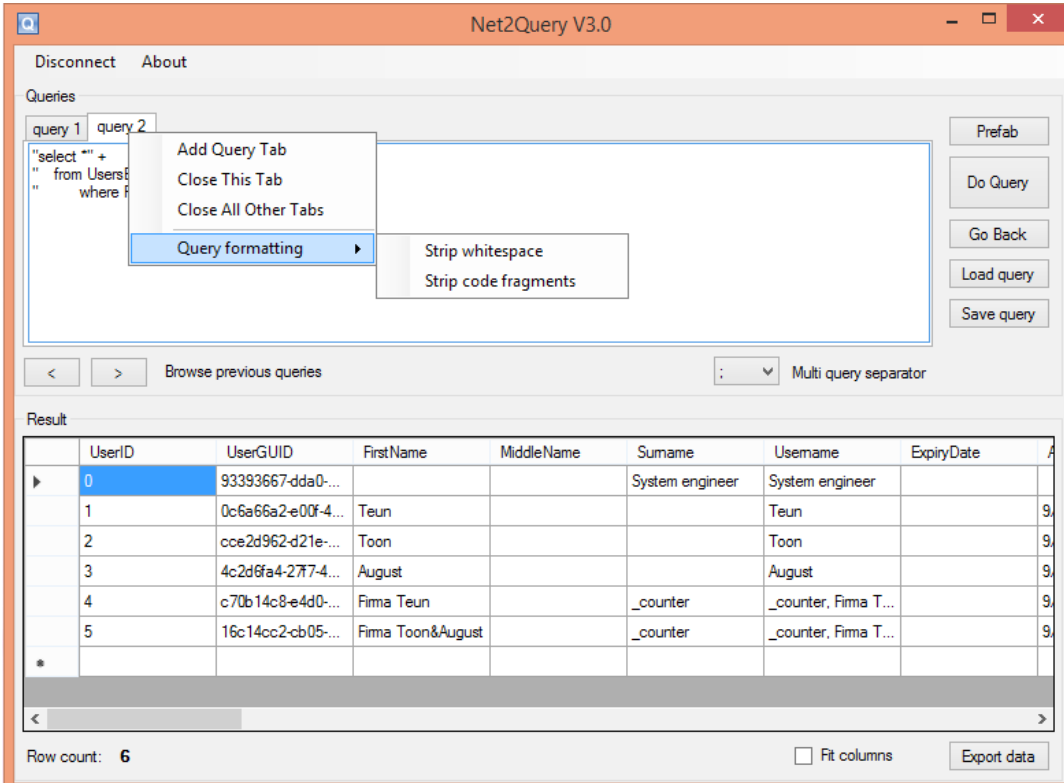
Exporting results

The query results can be exported to a CSV file by performing the query and then pressing the **Export Data** button. The following column separators are available:

Comma, Semicolon, Pipe and Tab

Query stripping

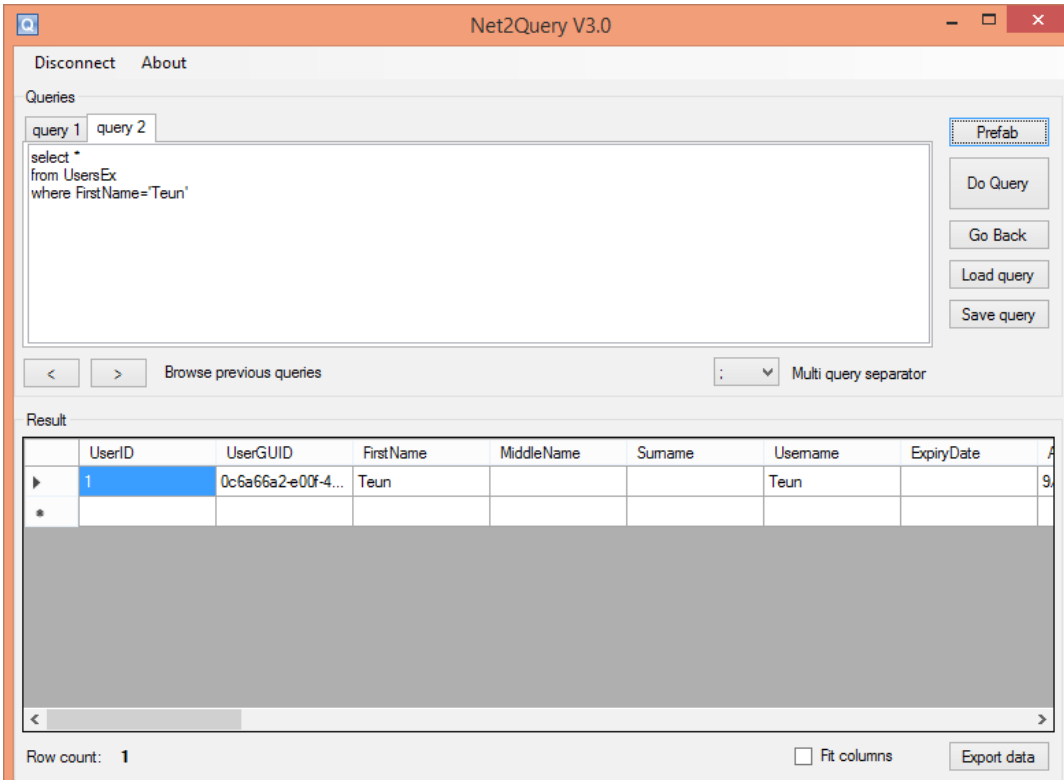
For those cases where you copy & paste queries from elsewhere (e.g. code), you can have the query stripped of any undesired whitespace or code fragments, as the sample below displays:



The screenshot shows the Net2Query V3.0 interface. The 'Queries' tab is active, showing a query editor with a context menu open over the text. The menu includes options: 'Add Query Tab', 'Close This Tab', 'Close All Other Tabs', 'Query formatting', 'Strip whitespace', and 'Strip code fragments'. The 'Query formatting' option is selected, and its sub-menu is visible. The 'Result' table below shows 6 rows of data.

	UserID	UserGUID	FirstName	MiddleName	Surname	Username	ExpiryDate
▶	0	93393667-dda0-...			System engineer	System engineer	
	1	0c6a66a2-e00f-4...	Teun			Teun	9,
	2	cce2d962-d21e-...	Toon			Toon	9,
	3	4c2d6fa4-277-4...	August			August	9,
	4	c70b14c8-e4d0-...	Firma Teun		_counter	_counter, Firma T...	9,
	5	16c14cc2-cb05-...	Firma Toon&August		_counter	_counter, Firma T...	9,
*							

Row count: 6 Fit columns



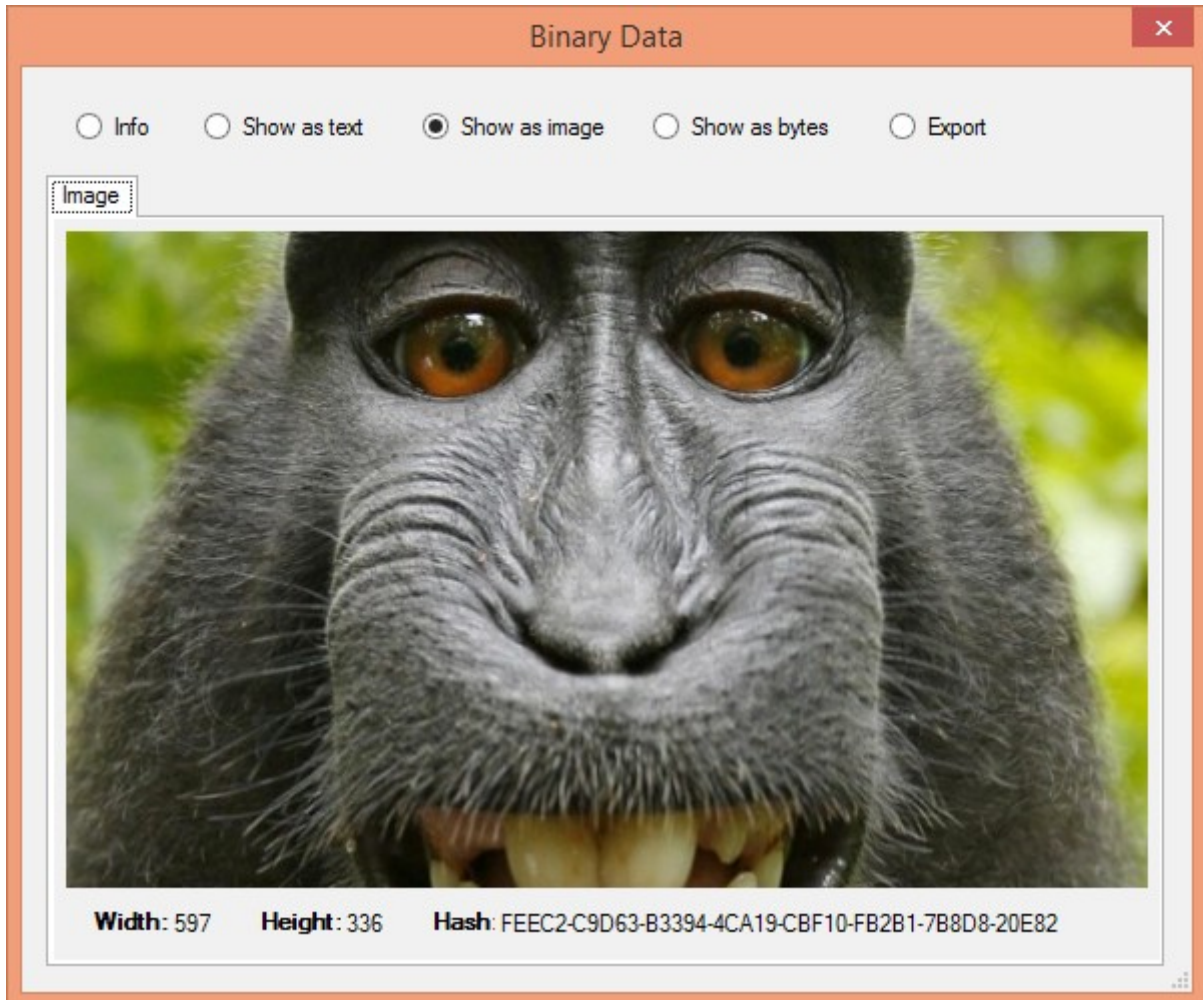
The screenshot shows the Net2Query V3.0 interface after applying the 'Strip whitespace' and 'Strip code fragments' options. The query editor now contains a clean SQL query: `select * from UsersEx where FirstName='Teun'`. The 'Result' table below shows 1 row of data.

	UserID	UserGUID	FirstName	MiddleName	Surname	Username	ExpiryDate
▶	1	0c6a66a2-e00f-4...	Teun			Teun	9,
*							

Row count: 1 Fit columns

Binary data

If you click on a cell containing binary data, a pop-screen appears that allows you to select the proper presentation. If required, you can also export the contents to a file.



Controlling the application by means of commandline parameters

The application can be controlled by means of the following commandline parameters ^{(*)1}:

Long version	Short version	Value	Default value
/queryFile	/qf	The file containing the query(ies) to be executed. ^{(*)2}	
/exportFile	/ef	The name of the export file. This file will be overwritten if it already exists.	
/operatorName	/on	The name of the operator used to log on to the Net2 server	System engineer
/password	/pw	The password of the operator.	net2
/net2Host	/nh	The network name or IP address of the machine the Paxton server is running on.	localhost
/closeOnSuccess	/cs	Close the application immediately when the query is successfully performed.	false ^{(*)3}
/separatorChar	/sc	The separator char to be used in the export file.	';
/addHeaderLine	/ah	Add the column names to the first line of the output file.	true ^{(*)3}

^{(*)1} Please note that all parameters and values are case sensitive.

^{(*)2} The query file may contain multiple queries. The results of these queries will be appended to the same export file. Multiple queries must be separated by either the text 'GO' or a semi colon

^{(*)3} The following values will be considered as a 'true' value: "y, yes, 1, t, true, j, ja", all other values are considered as a 'false'.

Examples:

```
"C:\Program Files (x86)\IntoAccess\Net2Query\Net2Query.exe"
/qf "C:\Net2Query\Query.sql"      Read the query from file: 'c:\Net2Query\Query.sql',
/ef "C:\Net2Query\Result.csv"     Write the result in file : 'c:\Net2Query\Result.csv',
/on "System engineer"             Use the 'System engineer' credentials to log in,
/pw net2                          Use 'net2' as password,
/cs t                             Close the application after the export file is written,
/nh "192.168.1.11"               IP Address to connect to,
/ah f                             Don't add a header line to the export file,
/sc ";"                          Use a semi colon as separator in the export file.
```

Just supply the following commandline parameters if you want the application to automatically log on to net2:

```
/operatorName, /password and (optional) /net2Host
```

The application will log the cause of the error, in case something goes wrong in the applications log file. This file can be found in the folder: C:\intoaccess\logging\Net2Query\

Uninstaling

To uninstall the program, go to the windows software configuration screen, select the Net2Query entry and press the Uninstall/Remove button.