



INTOACCESS
THE INTEGRATORS



Net2Query

Manual 1.9



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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

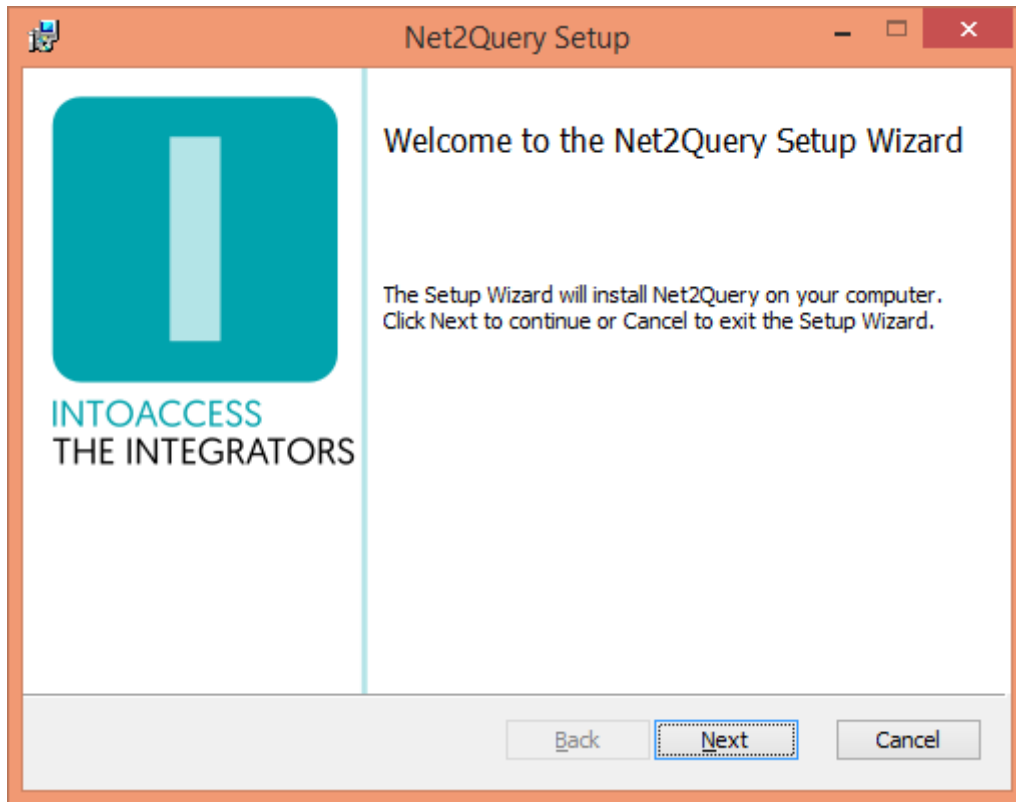
The program (V2.x and up) requires a recent Windows version, DotNet V4.0 and the Paxton Net2 software V5.1 or higher.

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.



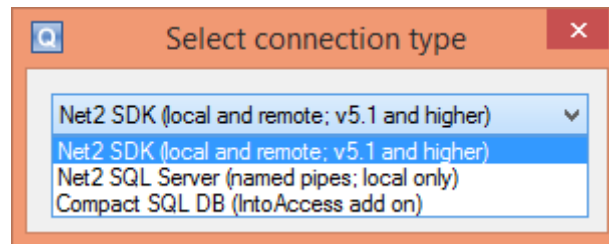




The installation process will end with opening the readme file in your default editor, which you can just close if you are not interested.

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 privilege 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.





Net2Query V3.0

Disconnect About

Queries

query 1 query 2

[AllTables]

Prefab

Do Query

Go Back

Load query

Save query

< > Browse previous queries

Multi query separator

Result

	TABLE_CATALOG	TABLE_SCHEMA	TABLE_NAME	TABLE_TYPE
▶	Net2	sdk	AccessLevelMe...	VIEW
	Net2	sdk	AccessLevels	VIEW
	Net2	sdk	ActionEvents	VIEW
	Net2	sdk	Actions	VIEW
	Net2	sdk	AirBridges	VIEW
	Net2	sdk	AlarmConfiguration	VIEW
	Net2	sdk	AntiPassback	VIEW
	Net2	sdk	AntiPassbackQu...	VIEW
	Net2	sdk	ApplicationSettings	VIEW

Row count: 111

Fit columns

Export data

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

The screenshot shows the Net2Query V3.0 application window. The interface is divided into several sections:

- Queries:** A text area containing the SQL query `select * from UsersEx`. Above it are tabs for 'query 1' and 'query 2'. To the right are buttons for 'Prefab', 'Do Query', 'Go Back', 'Load query', and 'Save query'.
- Navigation:** Below the query editor are arrow buttons for 'Browse previous queries' and a dropdown menu for 'Multi query separator'.
- Result:** A table displaying the results of the query. The table has columns: UserID, UserGUID, FirstName, MiddleName, Surname, Username, and ExpiryDate. The first row is selected.
- Summary:** At the bottom left, it says 'Row count: 6'. At the bottom right, there are checkboxes for 'Fit columns' and an 'Export data' button.

	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...
*							

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 two instances of the Net2Query V3.0 application. The top instance shows a context menu for 'Query formatting' with options 'Strip whitespace' and 'Strip code fragments'. The bottom instance shows the application after applying these options, with a clean query and a filtered result set.

Net2Query V3.0 - Top Instance

Queries: query 1, query 2

```
"select *"  
" from Users"  
" where "
```

Query formatting options:

- Strip whitespace
- Strip code fragments

Result:

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,

Net2Query V3.0 - Bottom Instance

Queries: query 1, query 2

```
select *  
from UsersEx  
where FirstName='Teun'
```

Result:

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

Row count: 1

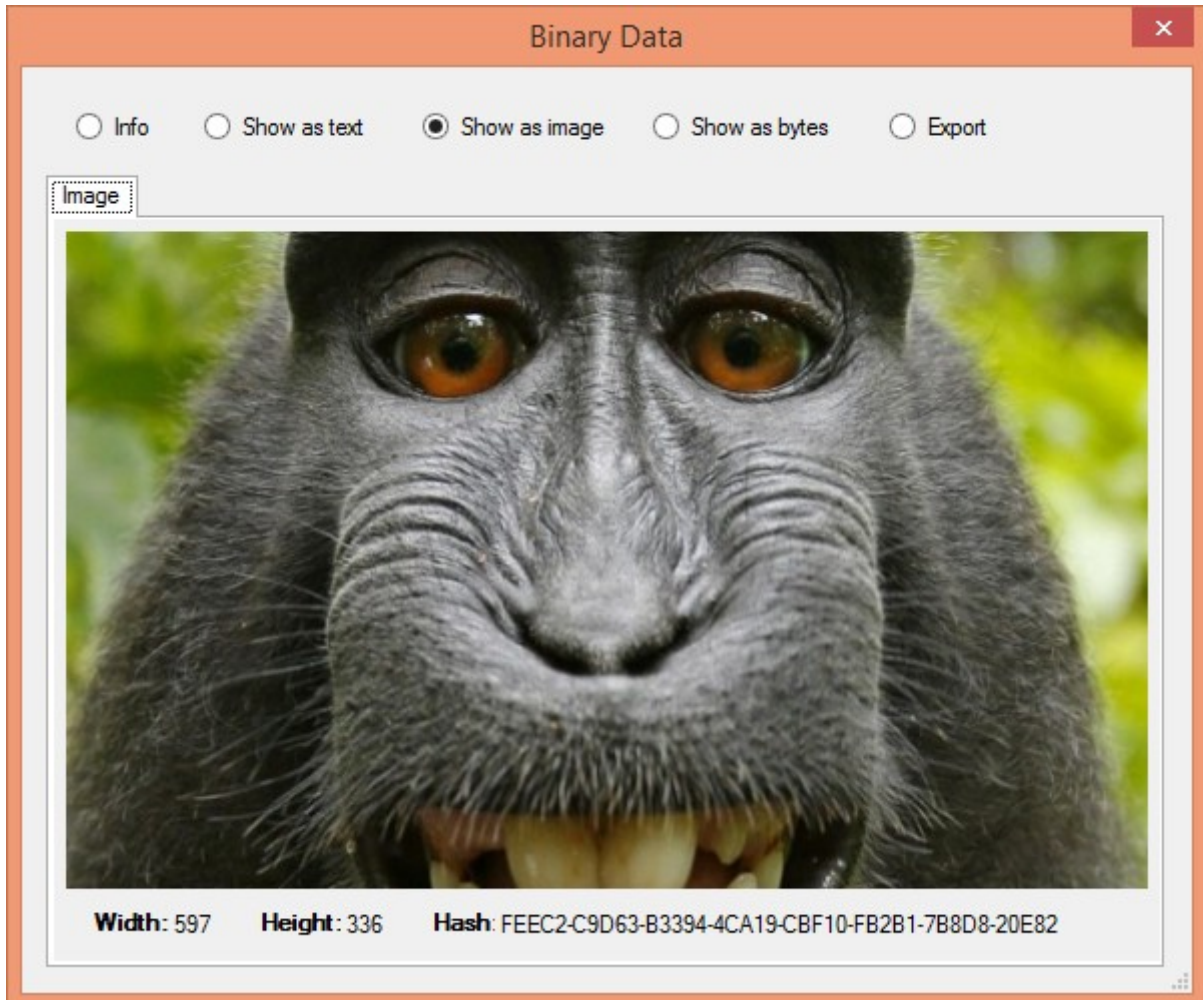
Buttons: Prefab, Do Query, Go Back, Load query, Save query, Export data





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 command line parameters

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

Long version	Short version	Value	Default value
/queryFile	/qf	The file containing the quer(y)(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 this 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\





Uninstalling

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





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Version 1.9

