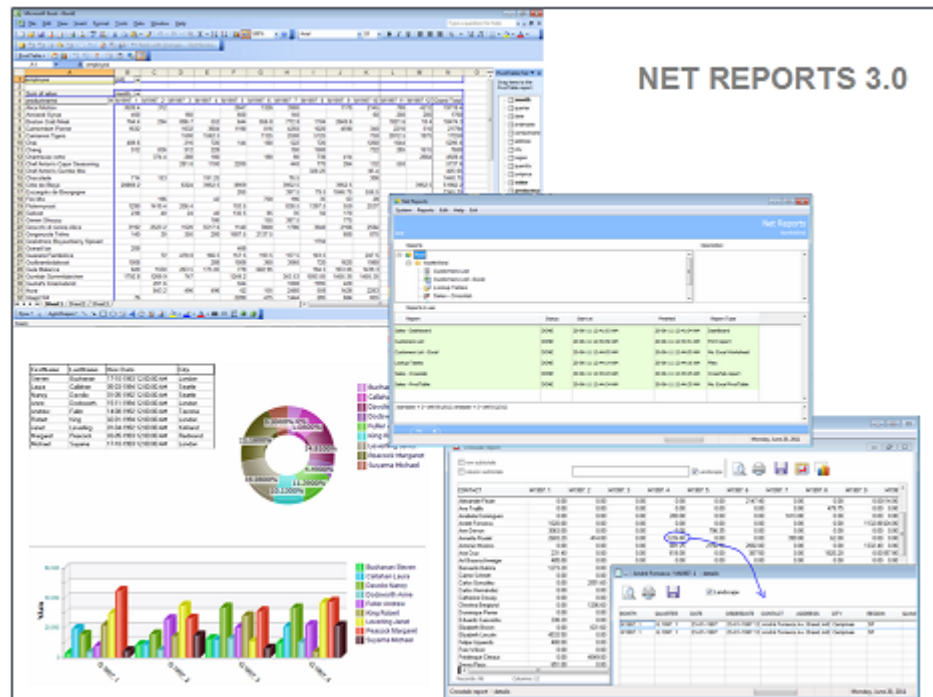


# NET Reports 3.0



# NET Reports 3.0

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Printed: March 2012 in (wherever you are located)

## **Publisher**

*psgsdk.com*

## **Production**

*psgsdk.com*

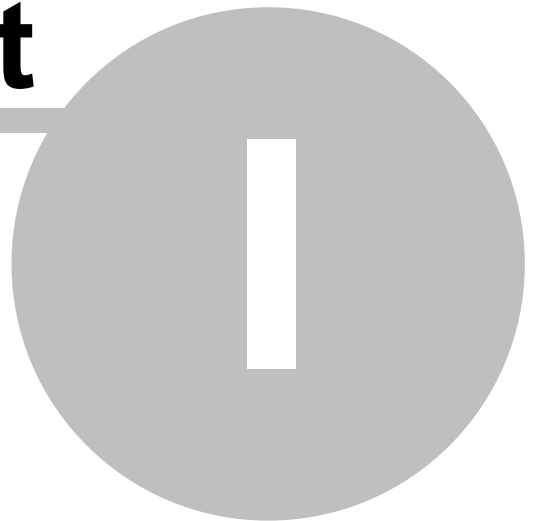
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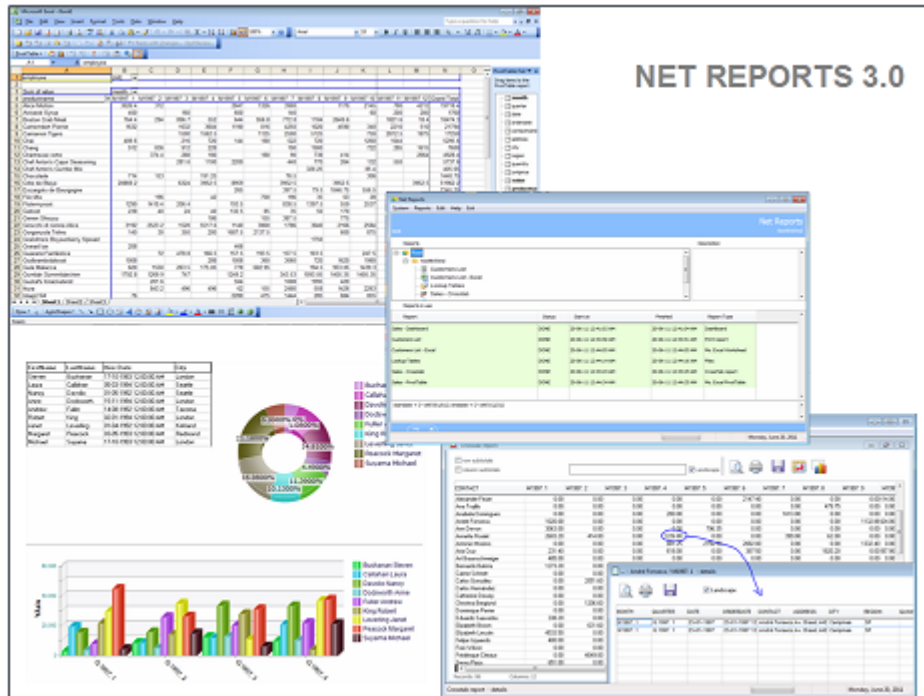
# Introduction

## Part

---



# 1 Introduction



NET Reports 3.0 provides a client/server solution for generating powerful reports. It is developed for databases like *MS. Sql*, *Oracle*, *Postgress*, *MySql*, but can also be used for other database server. Generated reports can be used from *virtually anywhere*.

Copyright © PSGSDK.COM

## 1.1 Overview

NET Reports provides easy access to data from different sources by offering the right tools for:

- queries
- reports layouts
- reports access management

The software generates integrated reports from all enterprise databases such ERP, HR, CRM and more.

[Dynamic reports](#) and a modern style [dashboard](#) reports are now just one click away.



NET Reports 3.0 uses an advanced client server multi tier architecture based on PSG [RESTful](#) services.

The system is build using [PSG](#) 2.0 software development platform.

The robust architecture based on HTTPS for data communication creates a solution that can be used on Intranet as well as on Internet.



With NET Reports you have high flexibility, allowing you access to the server from virtually anywhere in the world.

Technical requirements:

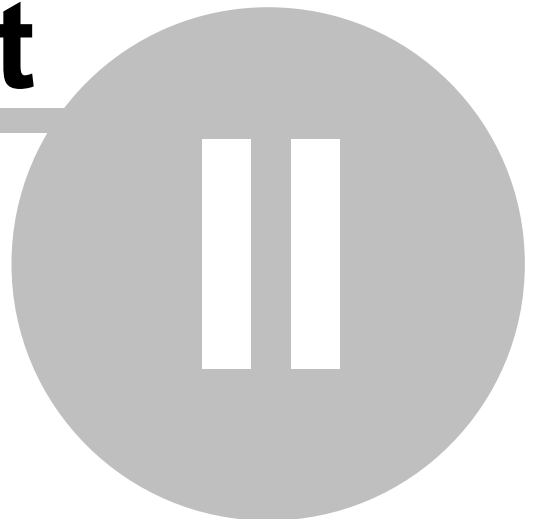
- Operating system: Windows XP or later (Windows 2000,2003,Vista,7)
- Microsoft Office and Ms.Query (Office setup) to run PivotTables reports (can only be used with Microsoft Office 32 bit releases only).



# User manual

## Part

---





## 2 User manual

1. [Install and setup](#)
2. [User Interface](#)
3. [Running reports](#)
4. [Report types](#)



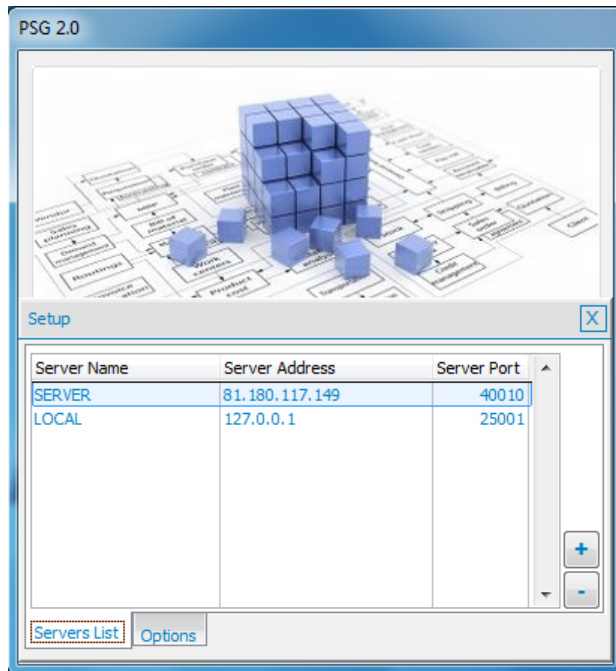
### 2.1 Installation and setup

To start it is necessary to download and install the following client application:

[NET Reports 3.0 setup file](#)

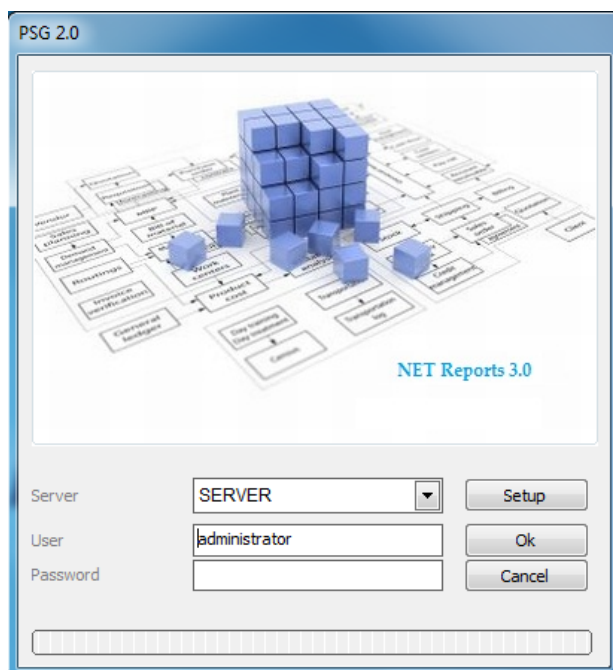
Administrator rights are required as the setup kit needs to properly install components under the system account.

After installation following operations are mandatory: switch to user account, open the program from the desktop shortcut and press "Setup" (this settings are kept on local account profile).



Set the server address here, based upon the details provided by your system administrator.  
Server address (one of next):

- computer name (local network only)
- domain name
- Server IP or NAT router Internet IP

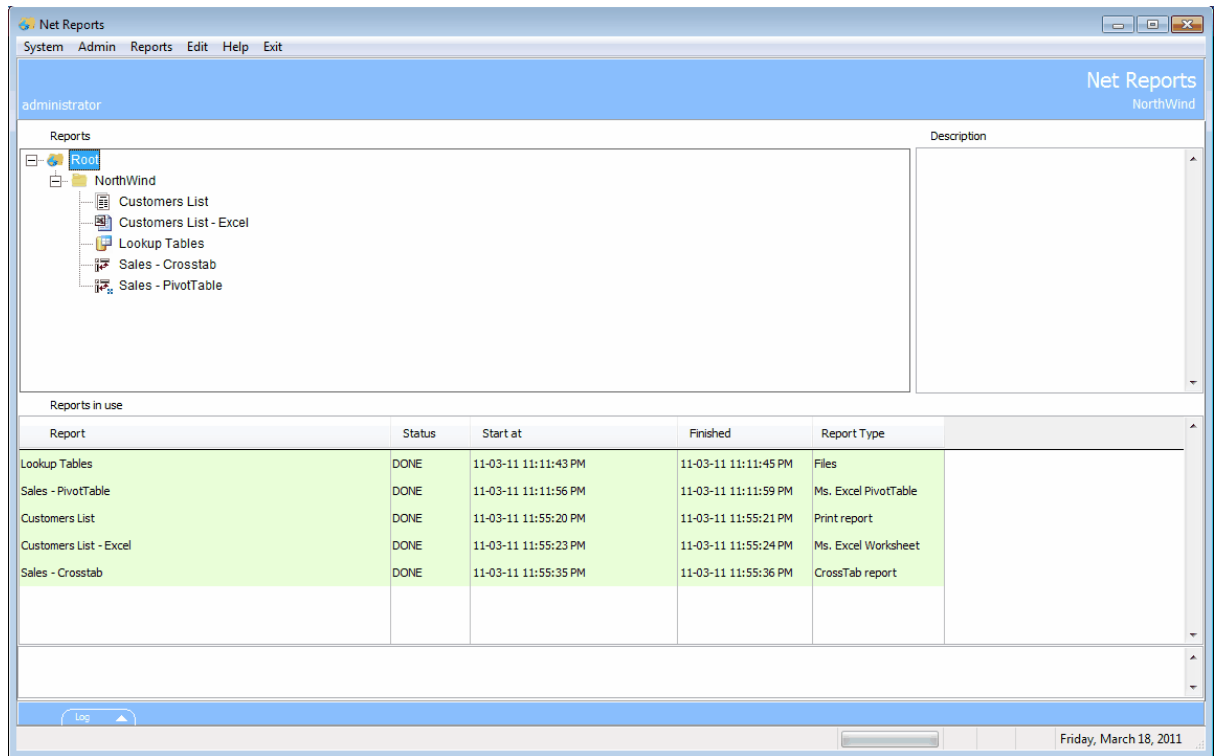


Enter your credits (user and password) and press "Ok" (details to be provided by your system administrator)

## 2.2 User interface

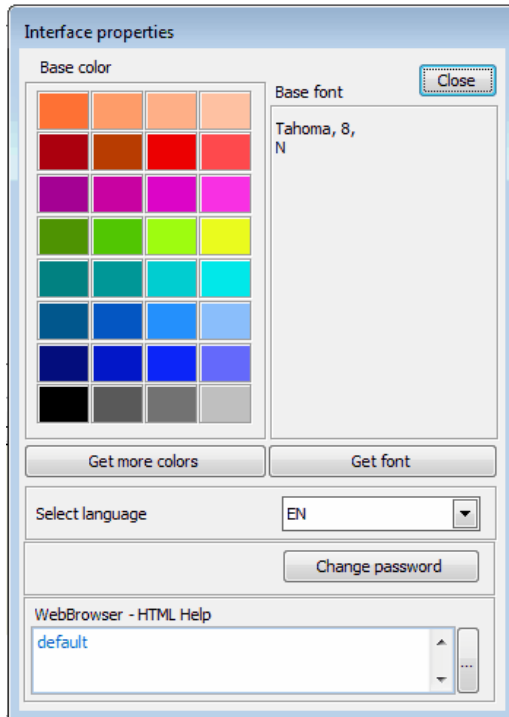
The user interface is a reports explorer containing two main areas:

- Reports that can be used, the tree list on top (see "[Running reports](#)" for details)
- The used reports results, the bottom grid list



Double click will open a report (any from presented list). Right click opens a short menu with option to delete the report result.

System menu:



Base color - represents the color used into the interface

Font - a system feature, not used here

Select language - enables the interface labels to be translated if available

Change password - allows to change the login password

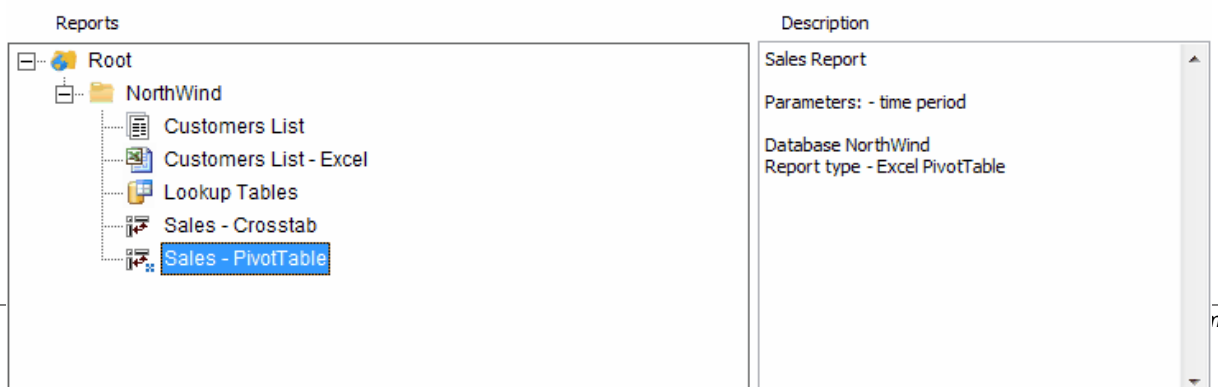
WebBrowser - HTML Help - The interface uses a small and simple IE based web browser to present the help file. If, for any reason, you may want to change this, you have to set the path and the executable file of the new browser.

Help file is available with F1 or from the help menu. HTML pages are used to present the help file.

## 2.3 Running report

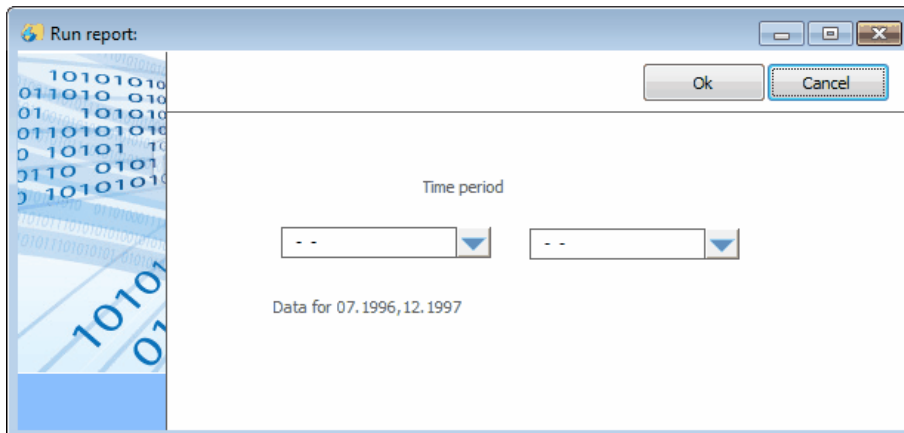
There are several report types used by NET Reports.

To run a report, first identify the report into the tree list



Right text box is providing information on the reports.

Double click on the report, will open the report parameter interface:



Enter the parameters and press "Ok".

Each report may have a different interface and controls like: textbox, datebox, listbox, combobox, checkbox. All the controls have a large usage.

All parameters are required to be set up for running a report.

By pressing Ok, the request is sent to the server and a new row will appear into the bottom list:

Reports in use					
Report	Status	Start at	Finished	Report Type	
Lookup Tables	DONE	11-03-11 23:11:43	11-03-11 23:11:45	Files	
Sales - PivotTable	DONE	11-03-11 23:11:56	11-03-11 23:11:59	Ms. Excel PivotTable	
Customers List	DONE	11-03-11 23:55:20	11-03-11 23:55:21	Print report	
Customers List - Excel	DONE	11-03-11 23:55:23	11-03-11 23:55:24	Ms. Excel Worksheet	
Sales - Crosstab	DONE	11-03-11 23:55:35	11-03-11 23:55:36	CrossTab report	
Sales - PivotTable	NEW	18-03-11 12:33:59	18-03-11 12:33:59	Ms. Excel PivotTable	
startdate = {^1997/01/01}; enddate = {^1997/12/31}					

The STATUS is "NEW", the text below shown the chosen report parameters.

When the report is ready the status changes to "DONE"

Sales - PivotTable	DONE	15-02-11 08:21:14 PM	15-02-11 08:21:16 PM	Ms. Excel PivotTable	
startdate = {^1997/01/01}; enddate = {^1997/12/31}					

For opening a report it is requested a double click. With a right click a command to open or delete will be available.

Check [Reports Types](#) for more details

## 2.4 Report types

1. [Files](#)
2. [Print report](#)
3. [CrossTab report](#)
4. [Ms. Excel PivotTable](#)
5. [Ms. Excel WorkSheet](#)
6. [Dashboard report](#)

## 2.4.1 Files

Used to return flat files, this report can return many files at once.  
The file browser interface is presented here.

Lookup Tables from 10-02-11 04:16:08 PM

Productname	Supplierid	Categoryid	Quantityperunit	Unitprice	Unitsinstock	Unitsonorder	Reorderlevel	Discontinued
Alice Mutton	7	6	20 - 1 kg tins	39.0000	0	0	0	T
Aniseed Syrup	1	2	12 - 550 ml bottles	10.0000	13	70	25	F
Boston Crab Meat	19	8	24 - 4 oz tins	18.4000	123	0	30	F
Camembert Pierrot	28	4	15 - 300 g rounds	34.0000	19	0	0	F
Carnarvon Tigers	7	8	16 kg pkg.	62.5000	42	0	0	F
Chai	1	1	10 boxes x 20 bags	18.0000	39	0	10	F
Chang	1	1	24 - 12 oz bottles	19.0000	17	40	25	F
Chartreuse verte	18	1	750 cc per bottle	18.0000	69	0	5	F
Chef Anton's Cajun Seas	2	2	48 - 6 oz jars	22.0000	53	0	0	F
Chef Anton's Gumbo Mix	2	2	36 boxes	21.3500	0	0	0	T
Chocolade	22	3	10 pkgs.	12.7500	15	70	25	F
Côte de Blaye	18	1	12 - 75 cl bottles	263.5000	17	0	15	F
Escargots de Bourgogne	27	8	24 pieces	13.2500	62	0	20	F
Filo Mix	24	5	16 - 2 kg boxes	7.0000	38	0	25	F
Flotemysost	15	4	10 - 500 g pkgs.	21.5000	26	0	0	F
Geitost	15	4	500 g	2.5000	112	0	20	F
Genen Shouyu	6	2	24 - 250 ml bottles	15.5000	39	0	5	F
Gnocchi di nonna Alice	26	5	24 - 250 g pkgs.	38.0000	21	10	30	F
Gorgonzola Telino	14	4	12 - 100 g pkgs	12.5000	0	70	20	F
Grandma's Boysenberry	3	2	12 - 8 oz jars	25.0000	120	0	25	F
Gravad lax	17	8	12 - 500 g pkgs.	26.0000	11	50	25	F
Guaraná Fantástica	10	1	12 - 355 ml cans	4.5000	20	0	0	T
Gudbrandsdalsost	15	4	10 kg pkg.	36.0000	26	0	15	F
Gula Malacca	20	2	20 - 2 kg bags	19.4500	27	0	15	F
Gumbär Gummibärchen	11	3	100 - 250 g bags	31.2300	15	0	0	F
Gustaf's Knäckebröd	9	5	24 - 500 g pkgs.	21.0000	104	0	25	F
Ikura	4	8	12 - 200 ml jars	31.0000	31	0	0	F
Inlagd Sill	17	8	24 - 250 g jars	19.0000	112	0	20	F
Ipoh Coffee	20	1	16 - 500 g tins	46.0000	17	10	25	F

PRODUCTS CUSTOMERS EMPLOYEES SUPPLIERS SHIPPERS

By pressing the "Save" button on left top of the page a new form is opened.

Lookup Tables from 10-02-11 04:16:08 PM

Lookup Tables from 10-02-11 04:16:08 PM

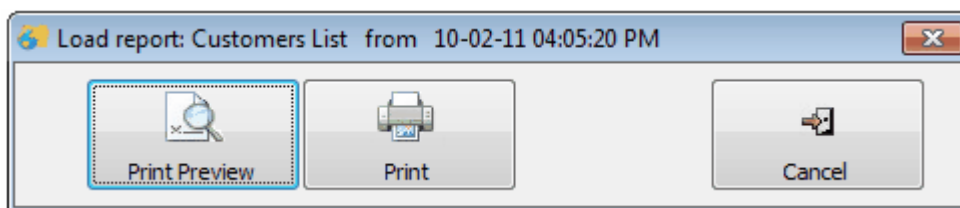
Productnam	Supplierid	Categoryid	Quantity	Unitprice	Unitsinsto	Unitsonord	Reorderlev	Discontin	Productid
Alice Mutton	7	6	20 - 1 kg tins	39.0000	0	0	0 T		17
Aniseed Syrup	1	2	12 - 550 ml bottles	10.0000	13	70	25 F		3
Boston Crab Meat	19	8	24 - 4 oz tins	18.4000	123	0	30 F		40
Camembert Pierrot	28	4	15 - 300 g rounds	34.0000	19	0	0 F		60
Carnarvon Tigers	7	8	16 kg pkg.	62.5000	42	0	0 F		18
Chai	1	1	10 boxes x 20 bags	18.0000	39	0	10 F		1
Chang	1	1	24 - 12 oz bottles	19.0000	17	40	25 F		2
Chartreuse verte	18	1	750 cc per bottle	18.0000	69	0	5 F		39
Chef Anton's Cajun Seasoning	2	2	48 - 6 oz jars	22.0000	53	0	0 F		4
Chef Anton's Gumbo Mix	2	2	36 boxes	21.3500	0	0	0 T		5
Chocolade	22	3	10 pkgs.	12.7500	15	70	25 F		48
Côte de Blaye	18	1	12 - 75 cl bottles	263.5000	17	0	15 F		38
Escargots de Bourgogne	27	8	24 pieces	13.2500	62	0	20 F		58
Filo Mix	24	5	16 - 2 kg boxes	7.0000	38	0	25 F		52
Flotemysost	15	4	10 - 500 g pkgs.	21.5000	26	0	0 F		71
Geitost	15	4	500 g	2.5000	112	0	20 F		33
Genen Shouyu	6	2	24 - 250 ml bottles	15.5000	39	0	5 F		15
Gnocchi di nonna Alice	26	5	24 - 250 g pkgs.	38.0000	21	10	30 F		56
Gorgonzola Telino	14	4	12 - 100 g pkgs	12.5000	0	70	20 F		31
Grandma's Boysenberry Spread	3	2	12 - 8 oz jars	25.0000	120	0	25 F		6
Gravad lax	17	8	12 - 500 g pkgs.	26.0000	11	50	25 F		37
Guaraná Fantástica	10	1	12 - 355 ml cans	4.5000	20	0	0 T		24
Gudbrandsdalsost	15	4	10 kg pkg.	36.0000	26	0	15 F		69
Gula Malacca	20	2	20 - 2 kg bags	19.4500	27	0	15 F		44
Gumbär Gummibärchen	11	3	100 - 250 g bags	31.2300	15	0	0 F		26
Gustaf's Knäckebröd	9	5	24 - 500 g pkgs.	21.0000	104	0	25 F		22
Ikura	4	8	12 - 200 ml jars	31.0000	31	0	0 F		10
Inlagd Sill	17	8	24 - 250 g jars	19.0000	112	0	20 F		36

Columns: 10 Rows: 77

This comes with options to save the file to different formats, print or export to CrossTab/ Pivot Table.

## 2.4.2 Print Report

Print Report is a paper based report type. By installing a PDF printer driver like <http://www.bullzip.com/> creating PDF files is fast and easy by printing to the PDF driver.



and

Print Preview

Net Reports

System Admin MyAccount Partners Reports Edit Help Exit

Customers List from 10-02-11 04

Customers List 19-02-2011 19:44:01

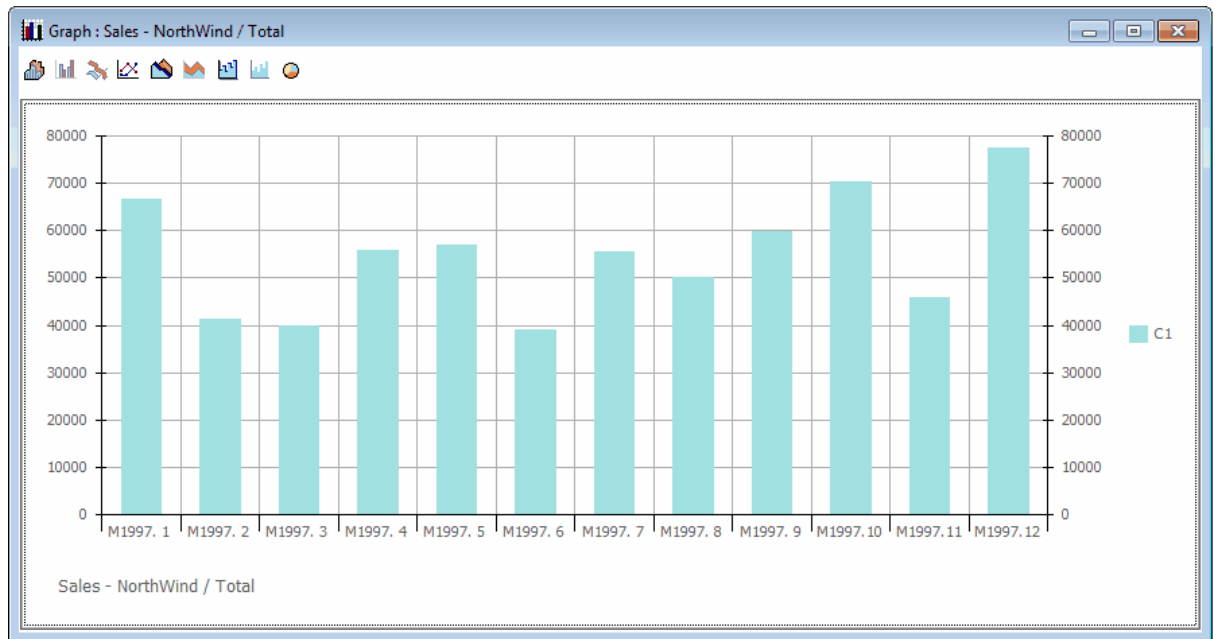
Companyname	Contactname	Contactname	Address	City	Country
Alfreda Tuberlarte	Sales Representative	Maria Anders	Obere Str. 57	Berlin	Germany
Ana Trujillo Emparedados y helados	Owner	Ana Trujillo	Avda. de la Constitución 2222	México D.F.	Mexico
Antonio Moreno Taqueña	Owner	Antonio Moreno	Maladrosos 2512	México D.F.	Mexico
Around the Horn	Sales Representative	Thomas Hardy	120 Hanover Sq.	London	UK
Berglunds snabbköp	Order Administrator	Christina Berglund	Berguvavägen 8	Luleå	Sweden
Brauerei Beck & Co.	Sales Representative	Hanna Moos	Föhrstraße 57	Mannheim	Germany
Bonduelle père et fils	Marketing Manager	Fabrice Bonduelle	24, place Kléber	Strasbourg	France
Bólido comidas preparadas	Owner	Marta Sommer	C/ Aragón, 47	Madrid	Spain
Bon app'	Owner	Laurence Labian	12, rue des Bouchers	Marseille	France
Bottom-Dollar Markets	Accounting Manager	Elizabeth Linch	23 Townsend Blvd.	Toronto	Canada
B's Beverages	Sales Representative	Victoria Ashworth	Fawcettway Circle	London	UK
Cactus Comidas para llevar	Sales Agent	Patricio Simpson	Centro 333	Buenos Aires	Argentina
Centro comercial Modurum	Marketing Manager	Francisco Chang	Sierritas de Granada 9965	México D.F.	Mexico
Chop-suey Chinese	Owner	Yang Wang	Hauptstr. 29	Bern	Switzerland
Comércio Mineiro	Sales Associate	Pedro Afonso	Av. das Ladeiras, 23	Sao Paulo	Brazil
Comolândia Holdings	Sales Representative	Elizabeth Brown	Berkley Gardens 12, Brewery	London	UK
Die Wandermühle	Sales Representative	Rita Müller	Adenauerallee 900	Stuttgart	Germany
Distributeur Delicatessen	Order Administrator	Sven Ottob	Waldweg 21	Aachen	Germany
Du monde entier	Owner	Janine Labrosse	67, rue des Cinquante Otages	Nantes	France
Eastern Connection	Sales Agent	Ann Devon	35 King George	London	UK
Ernst Handel	Sales Manager	Roland Mendel	Kirchgasse 6	Graz	Austria
Familia Arquibaldo	Marketing Assistant	Artur Cruz	Rua Orfe, 82	Sao Paulo	Brazil
FISMA Fabrica Inter. Seichin	Accounting Manager	Diego Roa	C/ Moritzwal, 86	Madrid	Spain
Foies gourmandes S.A.	Assistant Sales Agent	Martine Bonch	104, chaussée de Tournai	Lille	France
Folk och fä HB	Owner	Maria Larsson	Akergatan 24	Björås	Sweden
France restauration	Marketing Manager	Carole Schmitt	54, rue Royale	Nantes	France
Franchi S.p.A.	Sales Representative	Paolo Accorti	Via Monte Bianco 34	Torino	Italy
Frankenversand	Marketing Manager	Peter Franken	Berliner Platz 43	München	Germany
Fruite Biochau e Frutos do Mar	Sales Manager	Uino Rodriguez	Jardim das rosas n. 32	Lisboa	Portugal
Galería del gastronómo	Marketing Manager	Eduardo Saavedra	Rambla de Catalunya, 25	Barcelona	Spain

### 2.4.3 CrossTab Report

CrossTab report is a 3 dimension cube report. It represents a light option for data analysis.

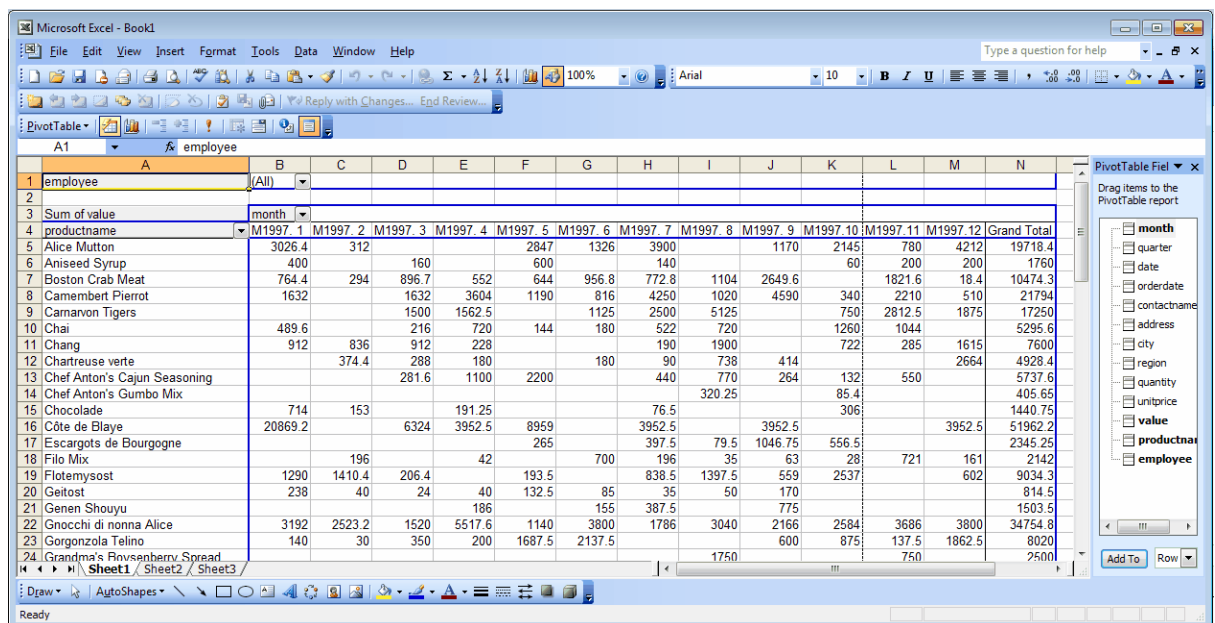






## 2.4.4 Ms. Excel PivotTable

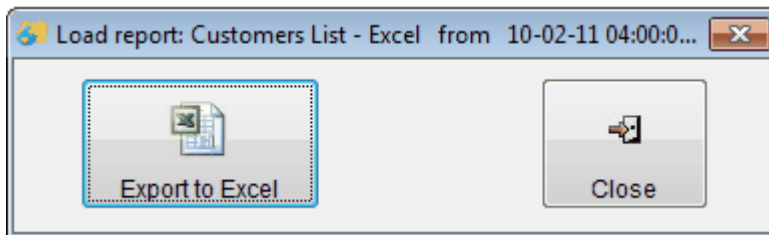
Ms. Excel PivotTable is one of the most advanced data analysis tools available today. It requires Microsoft Office.



The PivotTable is created by automating Ms. Office. Depending on Office release used, available options may vary. For best results it is recommended to have the latest version installed in the system.

## 2.4.5 Ms. Excel WorkSheet

Ms. Excel WorkSheet consists in one list exported to an Excel sheet

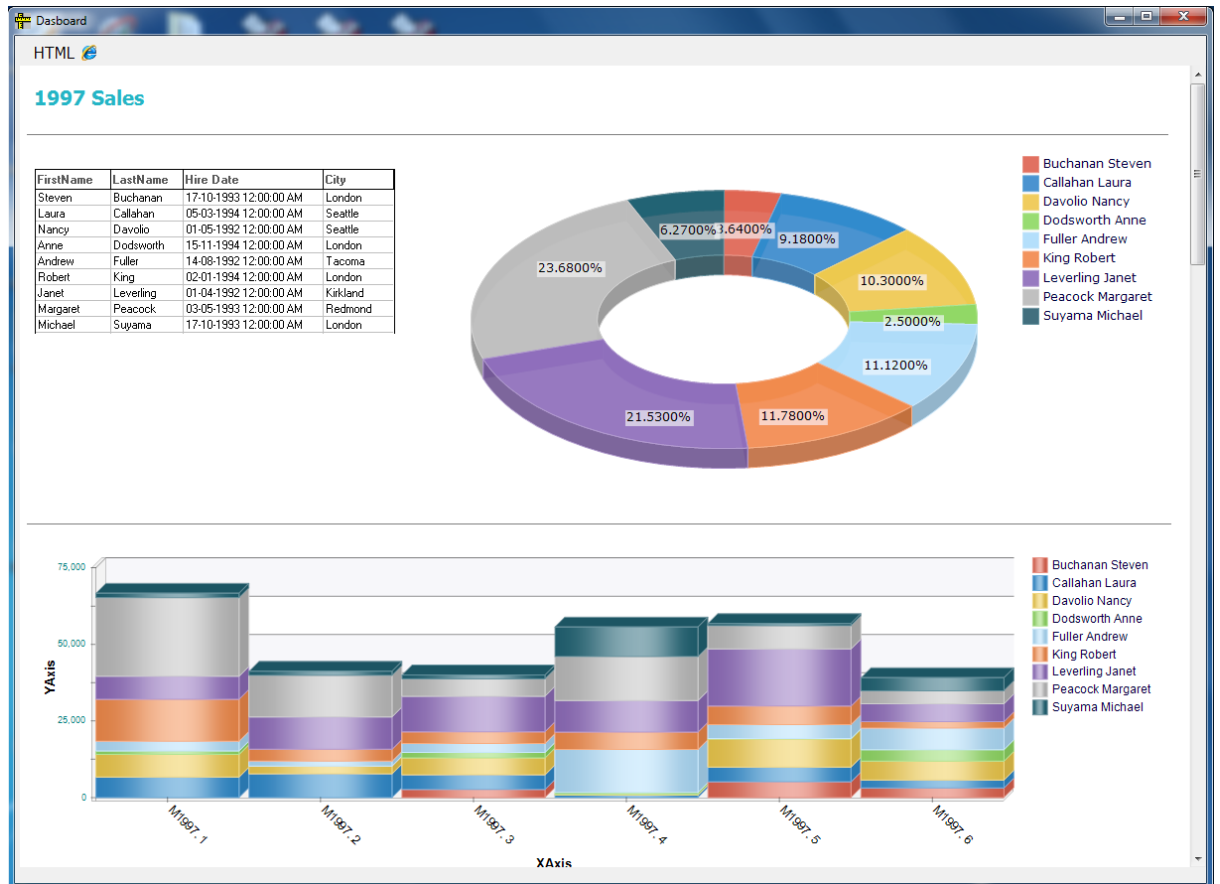


Microsoft Excel - firstQ250.xls

	A	B	C	D	E	F	G	H	I
	Company Name	Contact title	Contact Name	Address	City	Region	Country	Postal Code	Phone
2	Alfreds Futterkiste	Sales Representative	Maria Anders	Obere Str. 57	Berlin		Germany	12209	030-0074321
3	Ana Trujillo Emparedados y helados	Owner	Ana Trujillo	Avda. de la Constitución 2222	México D.F.		Mexico	05021	(5) 555-4729
4	Antonio Moreno Taquería	Owner	Antonio Moreno	Mataderos 2312	México D.F.		Mexico	05023	(5) 555-3932
5	Around the Horn	Sales Representative	Thomas Hardy	120 Hanover Sq.	London		UK	WA1 1DP	(171) 555-7788
6	Berglunds snabbköp	Order Administrator	Christina Berglund	Berguvsvägen 8	Luleå		Sweden	S-958 22	0921-12 34 65
7	Blauer See Delikatessen	Sales Representative	Hanna Moos	Forsterstr. 57	Mannheim		Germany	68306	0621-08460
8	Blondies père et fils	Marketing Manager	Frédérique Citeaux	24, place Kléber	Strasbourg		France	67000	88.60.15.31
9	B'lad Comidas preparadas	Owner	Martín Sommer	C/ Araquil, 67	Madrid		Spain	28023	(91) 555 22 82
10	Bon app'	Owner	Laurence Leblanc	12, rue des Bouchers	Marseille		France	13008	91.24.45.40
11	Bottom-Dollar Markets	Accounting Manager	Elizabeth Lincoln	23 Tsawassen Blvd.	Tsawassen	BC	Canada	T2F 8M4	(604) 555-4729
12	B's Beverages	Sales Representative	Victoria Ashworth	Fauntleroy Circus	London		UK	EC2 5NT	(171) 555-1212
13	Cactus Comidas para llevar	Sales Agent	Patricio Simpson	Cerrito 333	Buenos Aires		Argentina	1010	(1) 135-5555
14	Centro comercial Moctezuma	Marketing Manager	Francisco Chang	Sierras de Granada 9993	México D.F.		Mexico	05022	(5) 555-3392
15	Chop-suey Chinese	Owner	Yang Wang	Hauptstr. 29	Bern		Switzerland	3012	0452-076545
16	Comércio Mineiro	Sales Associate	Pedro Afonso	Av. dos Lusíadas, 23	Sao Paulo	SP	Brazil	05432-043	(11) 555-7647
17	Consolidated Holdings	Sales Representative	Elizabeth Brown	Berkeley Gardens 12 Brewery	London		UK	WX1 6LT	(171) 555-2282
18	Die Wandernde Kuh	Sales Representative	Rita Müller	Adenauerallee 900	Stuttgart		Germany	70563	0711-020361
19	Drachenblut Delikatessen	Order Administrator	Sven Ottlieb	Walsenweg 21	Aachen		Germany	52066	0241-039123
20	Du monde entier	Owner	Janine Labrune	67, rue des Cinquante Otages	Nantes		France	44000	40 67 88 88
21	Eastern Connection	Sales Agent	Ann Devon	35 King George	London		UK	WX3 6FW	(171) 555-0297
22	Ernst Handel	Sales Manager	Roland Mendel	Kirchgasse 6	Graz		Austria	8010	7675-3425
23	Familia Arquibaldo	Marketing Assistant	Aria Cruz	Rua Or's, 32	Sao Paulo	SP	Brazil	05442-030	(11) 555-9857
24	FISSA Fabrica Inter. Salchichas S.A.	Accounting Manager	Diego Roel	C/ Moralzarzal, 86	Madrid		Spain	28034	(91) 555 94 44
25	Foies gourmandes	Assistant Sales Agent	Martine Rancé	184, chaussée de Tournai	Lille		France	59000	20.16.10.16

## 2.4.6 Dashboard report

Dashboard report represents a top management report type, and it may show data from multiple data sources using tables, graphs and text fields. (18 graph types are available here)

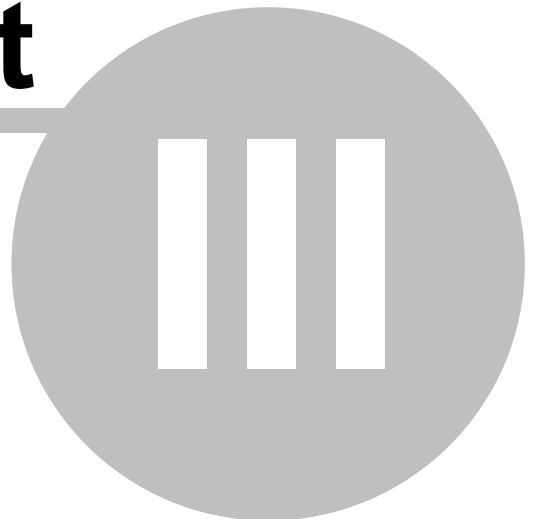


Sample from Ms.SQL Northwind database (1996-1997 data)

# Administrator manual

## Part

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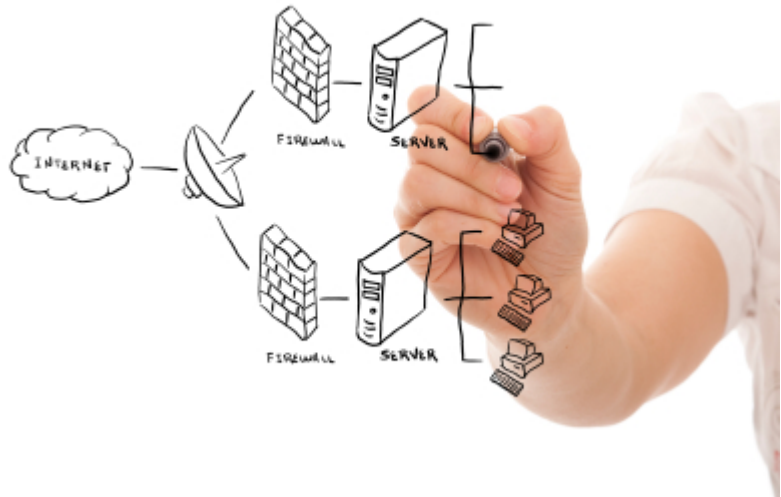


### 3 Administrator manual

The management of the system requires the NET Reports "administrator" password.

Available options are:

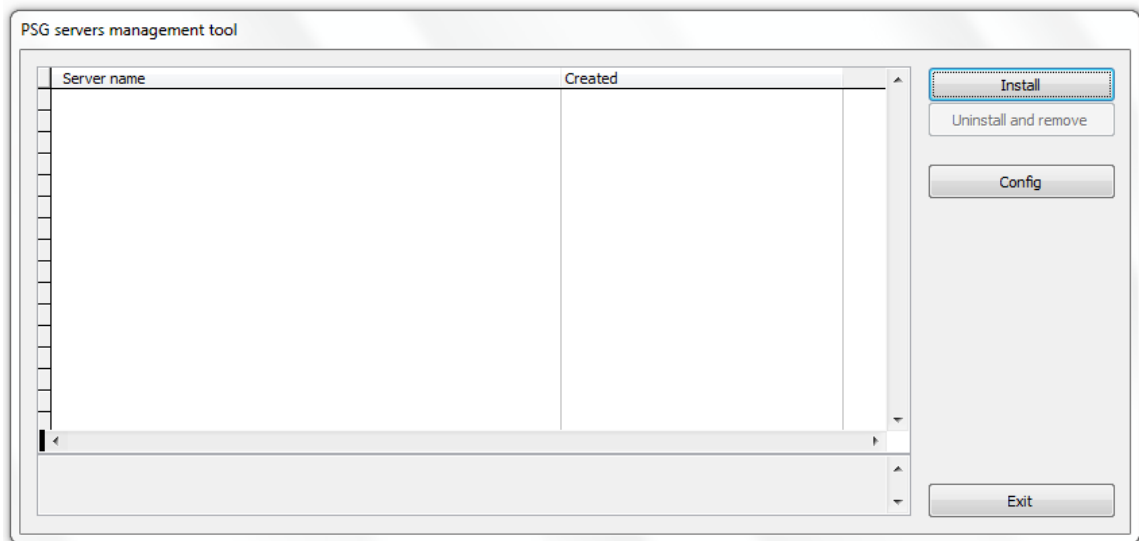
- [user management](#)
- [reports management](#)
- [user access rights](#)



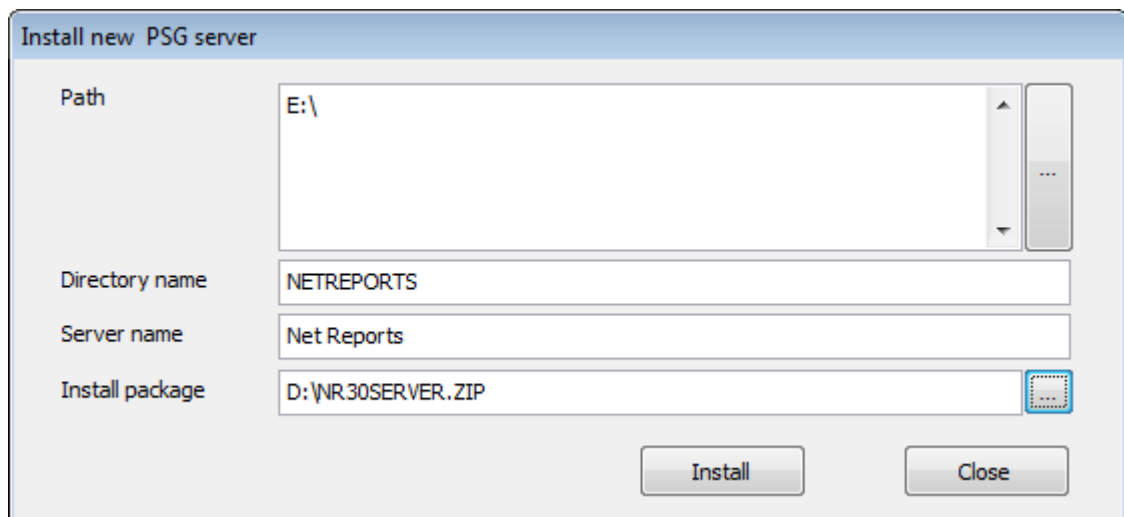
#### 3.1 Server - Installation and setup

NET Reports 3.0 relies on PSG client/server platform.  
First, install the PSG 2.0 server manager.

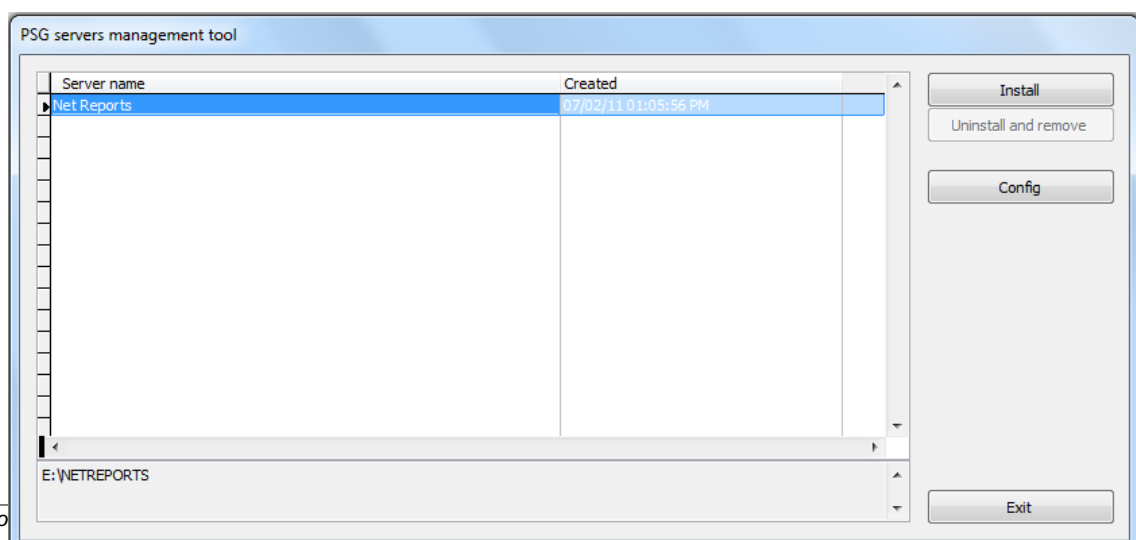
Run the PSG servers manager.



Press Install to install a new PSG server.



Chose the install package (zip file) for NET Reports server and press Install.



Press "Config" to open the new installed server configuration program.

## 3.2 Config

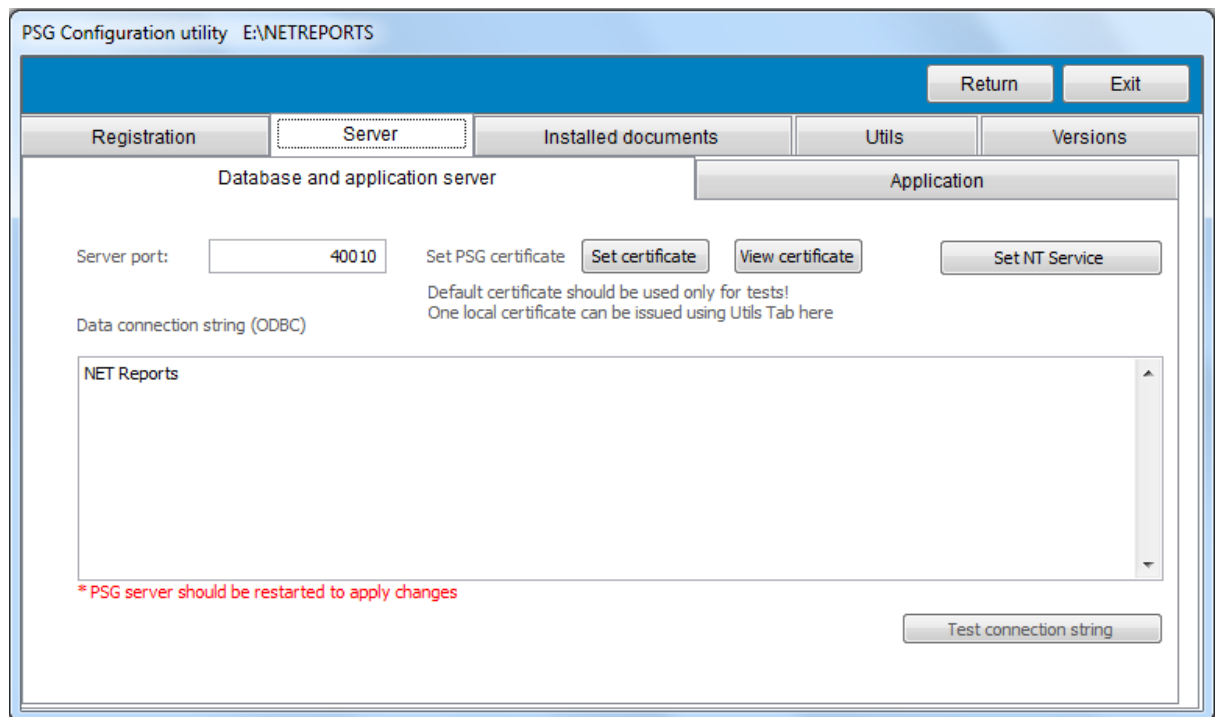
Server configuration utility. Started from PSG server manager application.

Here can be found the basic options used to configure the "NET Reports" server as many others are already pre configured. In case that more options are required please check the PSG server configuration help, where all options are available.

There are two operations to be performed here:

- Windows Service setup
- Server certificate setup

### Windows Service setup



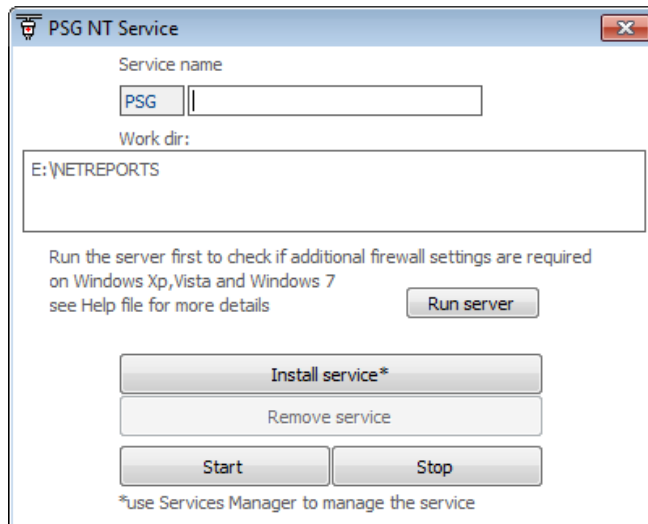
Server port:

- NET Reports uses two ports for data communications
  - one for application communications (server port field in previous screen picture)
  - one for HELP system (server port -10)

For the access of the server from another Intranet network or over the Internet, must be enabled and properly routed the access of the 2 ports through the firewall.

Use "Set NT Service" to set the Windows Service for the PSG server instance.





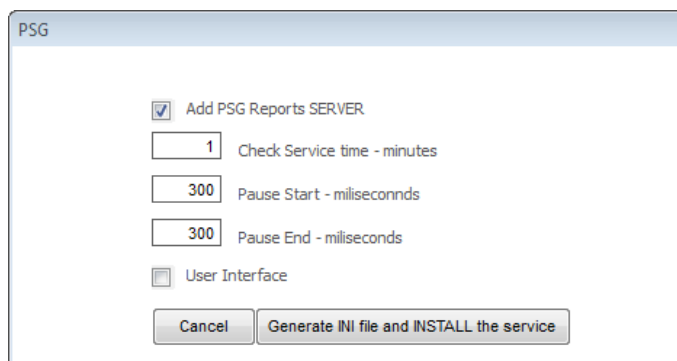
The PSG server opens two ports to offer his services as application server. Traffic on ports will be HTTPS and HTTP.

Most firewalls need to be configured to allow PSG to run as a server.

Press "Run Server" - on Windows XP, Vista and 7 the Microsoft Firewall. When asked if the application should be blocked or not, allow the PSG server to run.

Do the same with any other firewall or security software that may run on the computer. Please refer to the firewall help for more details.

Set the service name here and press "Install service" button.



Press "Generate INI file and INSTALL the service" button.

Next the server can be started from this interface or from operating system service manager.

### Server certificate setup

The PSG server uses HTTPS for data communication. The used encryption is SSL3 and uses public/private key cryptography.

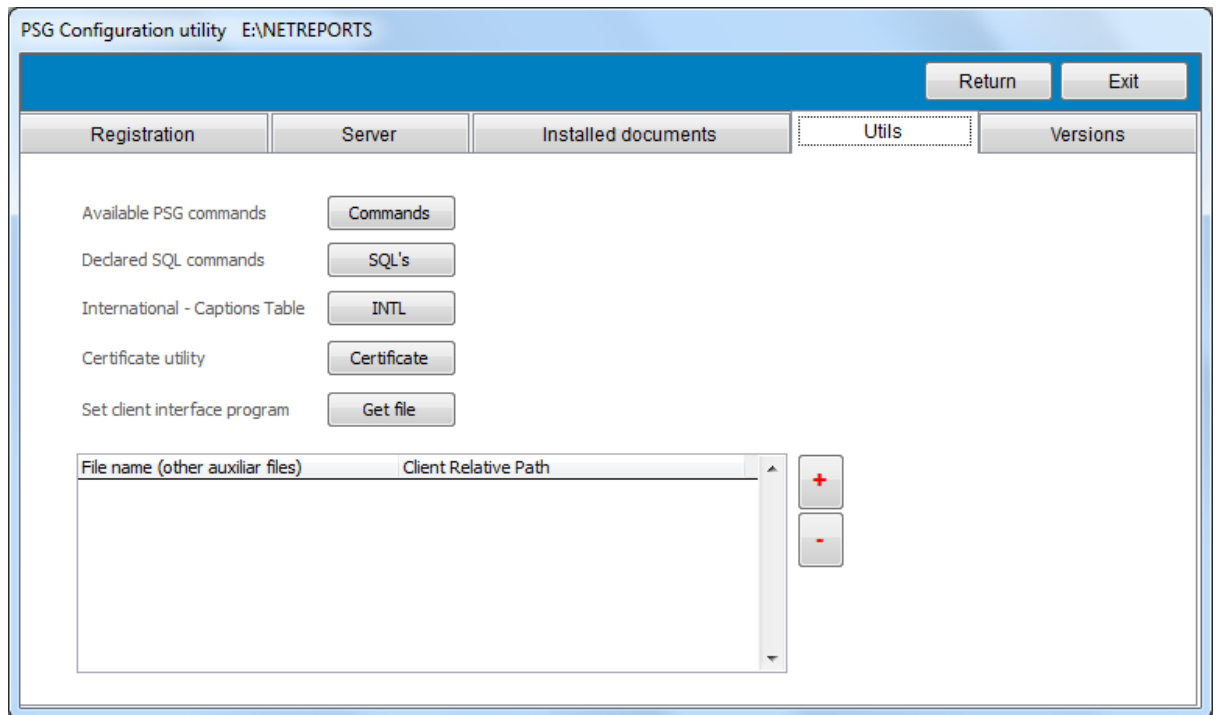
In order to implement the cryptographic key a digital certificate is used. The security is enabled either with a certified certificate (like the ones issued by VeriSign) or a non certified certificate, on the same level.

A certified certificate is generally used when the server is verified by the client if is the correct one, as for the on-line shops. Here the certificate is used first to add good encryption to the system.

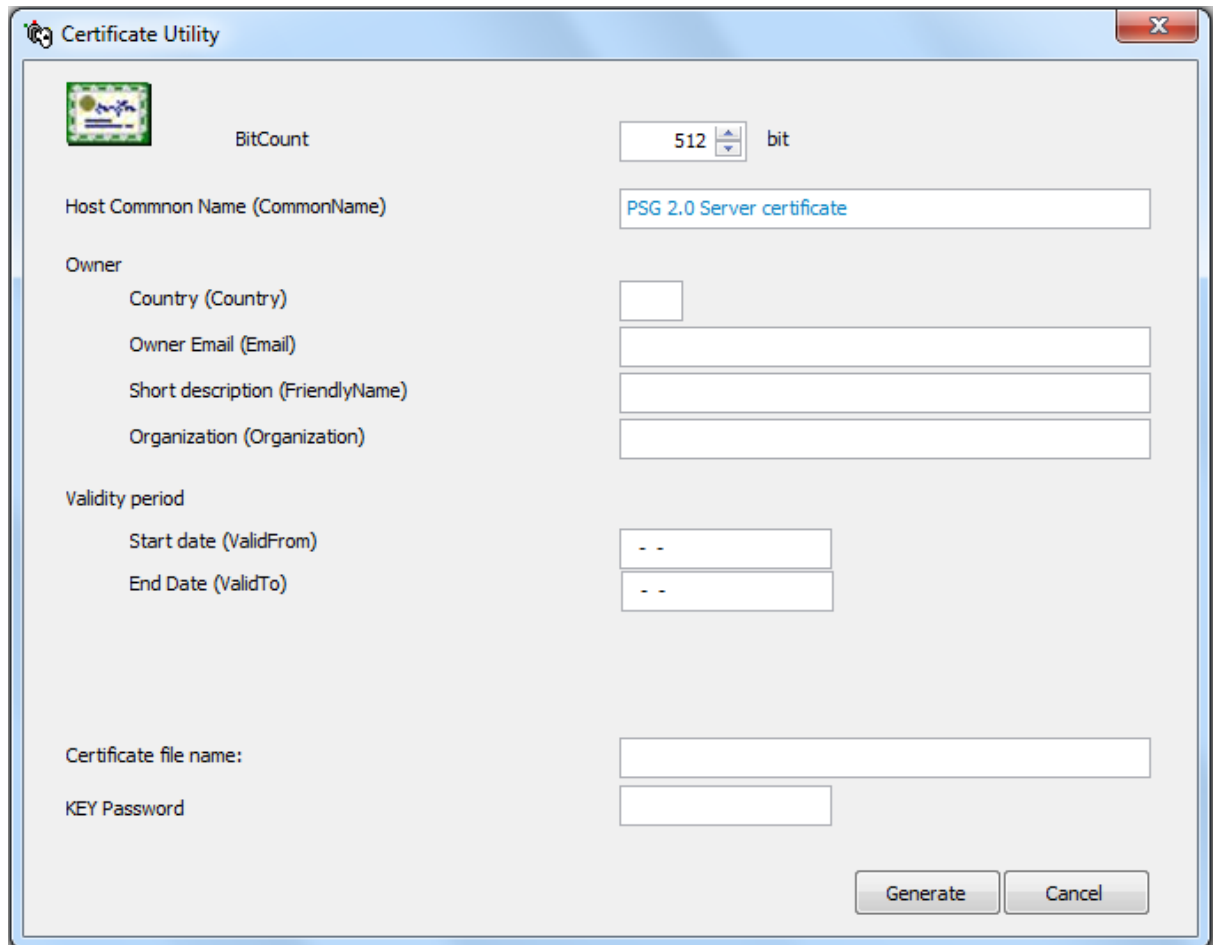
If there is a default certificates installed, this is sufficient for Intranet or local networks. To set a new certificate use "Set certificate" under "Server" tab.

Chose a certificate and set the password in case that the certificate is protected by a password.

In the menu on the "Utils" section, is available a certificate utility. This can be used in order to create a "self-signed" certificate, that is appropriate also for the security of the PSG server.



Use "Certificate" to create a new certificate and go back to the server page to set it as default.



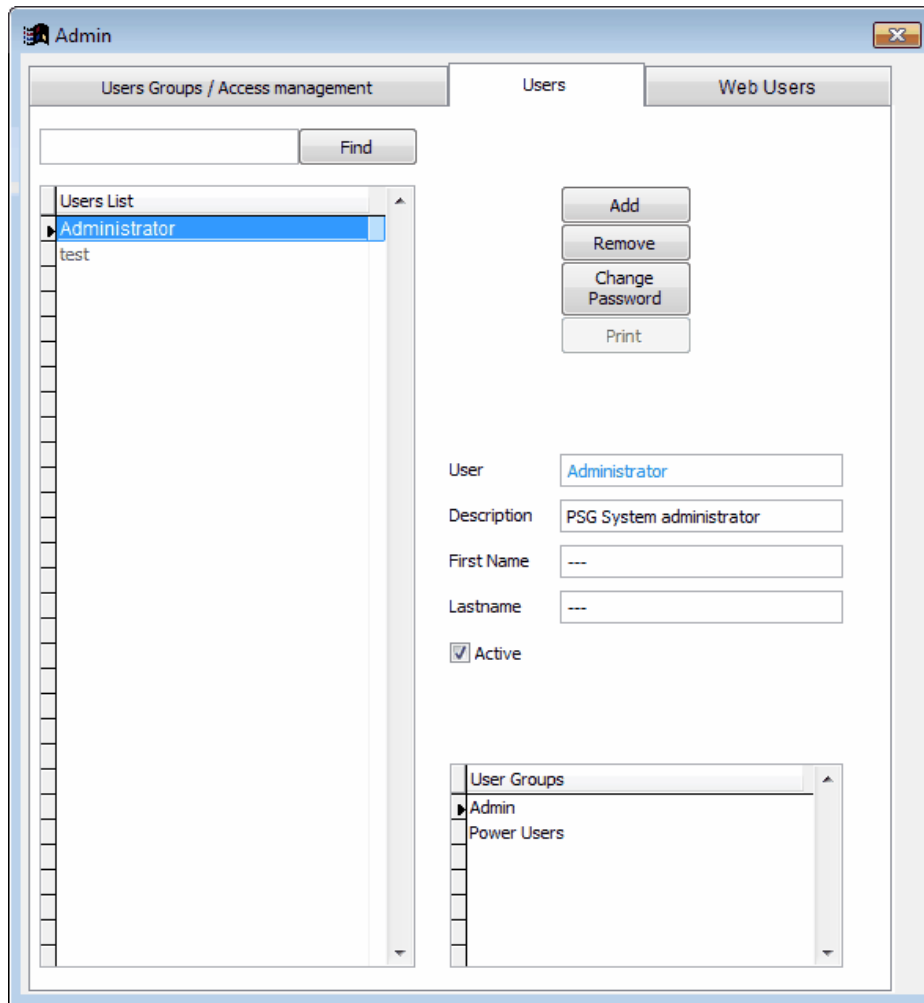
The image shows a Windows-style dialog box titled "Certificate Utility". It contains several input fields and buttons. At the top left is a small icon of a certificate. The fields are: "BitCount" with a value of "512" and a unit of "bit"; "Host Common Name (CommonName)" with the text "PSG 2.0 Server certificate"; "Owner" section with fields for "Country (Country)", "Owner Email (Email)", "Short description (FriendlyName)", and "Organization (Organization)"; "Validity period" section with fields for "Start date (ValidFrom)" and "End Date (ValidTo)"; "Certificate file name:"; and "KEY Password". At the bottom right are "Generate" and "Cancel" buttons.

Fill in all fields and press "Generate" button.  
A bigger Bit Count will provide a better encryption but it will also need more power. Generally 512 is enough, but 2048 can be used as well.

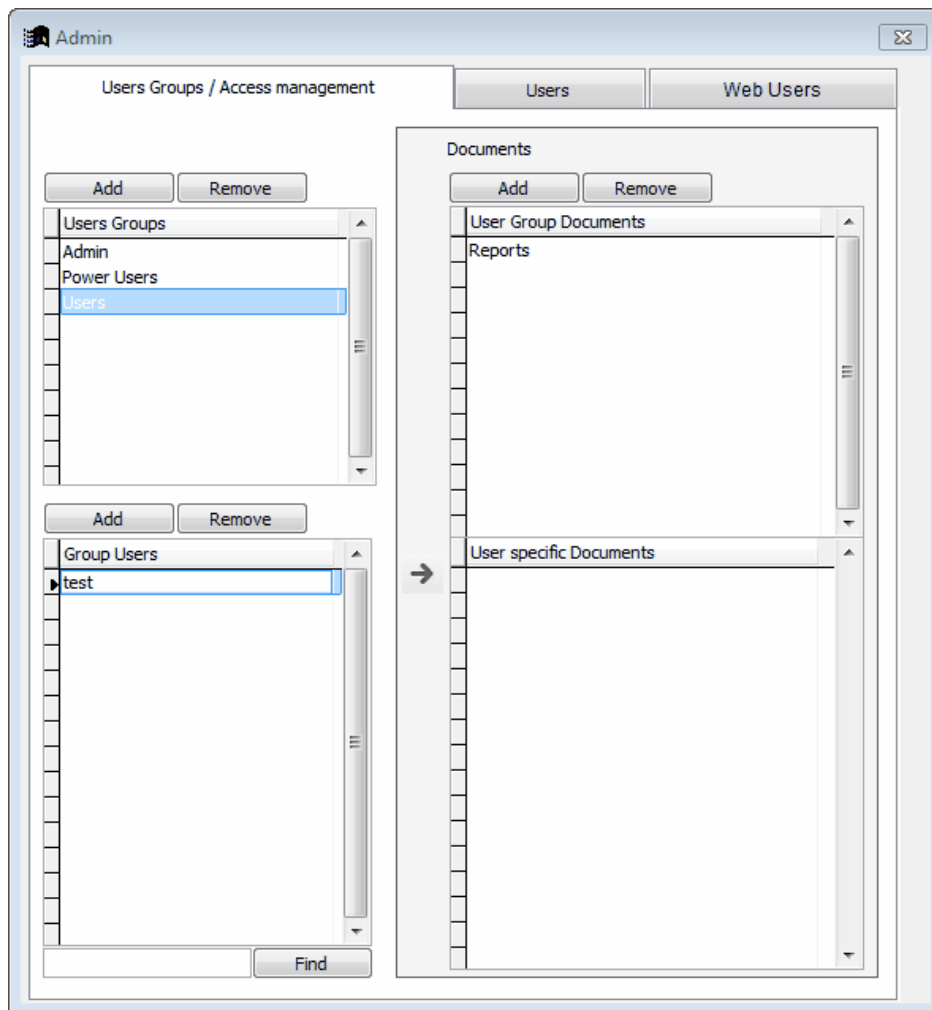
### 3.3 Users management

Available only for administrator in the client interface under "Admin" menu as "Users Management".

First set the users accounts. Please consider that administrator account can not be removed.

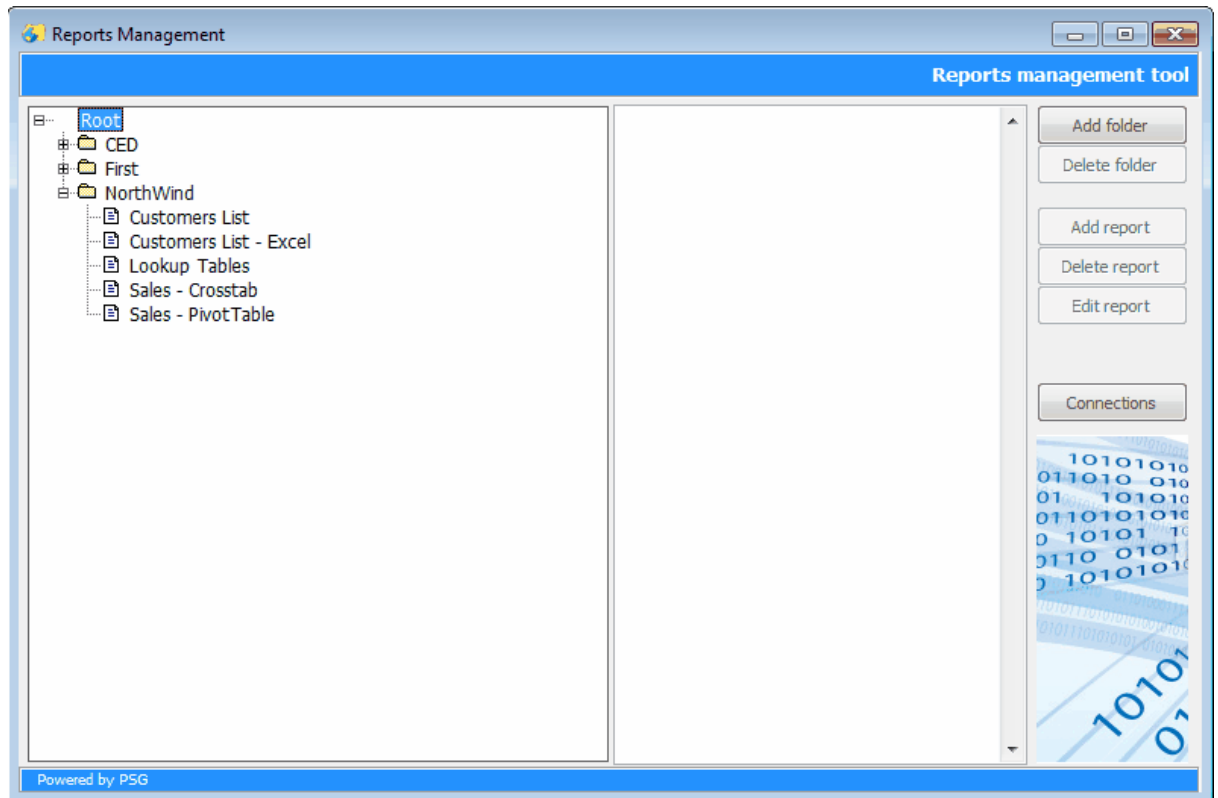


Next set the users groups, add users per groups and add rights to users groups. The "Reports" document should be added to the user group access rights, enabling users to access the reports user interface.



### 3.4 Reports management

This module is used to manage the installed reports (found using the client interface as "administrator" under "Reports" menu).



Tree view explorer:

For a short menu to be opened make right click on a node. One report can be copied using copy/paste option from the short menu.

For editing make a double click on the report. Then use right text box to write the report description.

For using reports the database connections are needed.

The "Connections" button opens the database connections window.

Create the connection string that should link with the database on your server. An ODBC connection string is required.

Press "Test connection" to verify the connection string.

Press "Create XML" to create a metadata XML file of the database to be used later by the reports designer graphic interface.



- Report description
- [Variables Interface](#)
- [SQL Procedures](#)
- [Output](#)

Report description page:

- used to add a description to the report that is considered useful for the end user

The screenshot shows a window titled "Edit report: Test 1". Inside the window, there is a "Report name" field containing "Test 1" and a "Report description" text area containing "Report description HERE". On the right side of the window, there is a vertical toolbar with four buttons: "Report", "Variables - Interface", "SQL's procedures", and "Output". The "Report" button is currently selected, and the "Variables - Interface" button is highlighted in blue.

#### 3.4.1.1 Variables interface

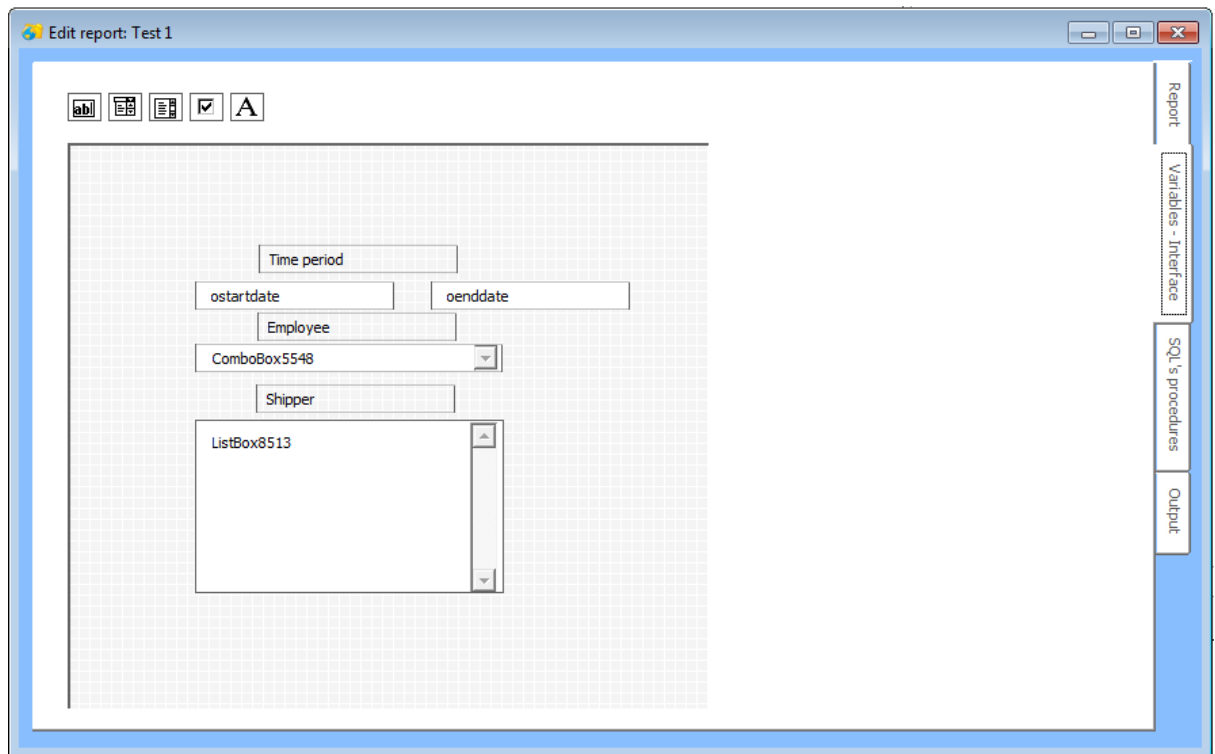
At run time each report present a form to enter variables and run the report.

To define variables, a visual form editor can be used. The form can be filled in at runtime.

- Textbox
- Combobox
- Listbox
- Checkbox
- Label

To use the available elements drag and drop the object on grid shape. A parameters list will be visible on the right side of the page.





## Textbox

Name:

Variable type:

Position:

Top:	<input type="text" value="101"/>
Left:	<input type="text" value="93"/>
Height:	<input type="text" value="22"/>
Width:	<input type="text" value="148"/>

Set the variable name and type.

## ComboBox

Name:

Position:

Top:

Left:

Height:

Width:

Database:

Table:

Fields:

<input checked="" type="checkbox"/>	Title	<input type="text" value="▲"/>
<input type="checkbox"/>	TitleOfCourtesy	<input type="text" value="▼"/>
<input type="checkbox"/>	BirthDate	<input type="text" value="▼"/>
<input type="checkbox"/>	HireDate	<input type="text" value="▼"/>
<input type="checkbox"/>	Address	<input type="text" value="▼"/>
<input type="checkbox"/>	City	<input type="text" value="▼"/>
<input type="checkbox"/>	LastName	<input type="text" value="▲"/>
<input type="checkbox"/>	FirstName	<input type="text" value="▼"/>
<input type="checkbox"/>	EmployeeID	<input type="text" value="▼"/>

Widths

Set the database, table and fields to be used.  
 The last field in the list will be used as the value of the control.  
 Widths - set the width of each field into the combobox (0 - to hide the key value).

## ListBox

Name:

Position:

Top:

Left:

Height:

Width:

Database:

Table:

Fields:

<input type="checkbox"/>	Phone	<input type="text" value="▲"/>
<input type="checkbox"/>	ShipperID	<input type="text" value="▲"/>
<input checked="" type="checkbox"/>	CompanyName	<input type="text" value="▼"/>

Widths

Same as the "combobox" control, the difference is that first field gives the value of the control.

© psgsdk.com

Both, comobox and listbox, do not work properly with integer keys, and therefore it is recommended to avoid using integer fields as key.

All variables declared with textbox, comobox and listbox can be used later in SQL queries.

### Label

Caption

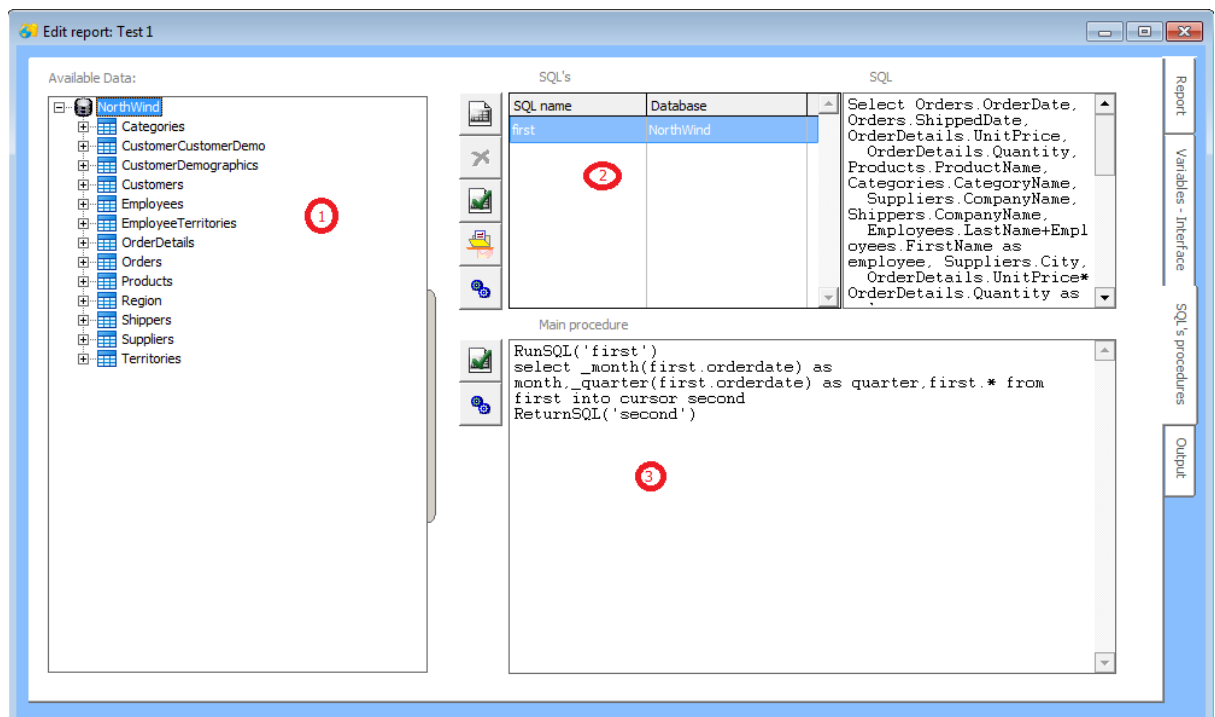
Position:

Top:	<input type="text" value="74"/>
Left:	<input type="text" value="140"/>
Height:	<input type="text" value="22"/>
Width:	<input type="text" value="148"/>

Set the label caption.


### 3.4.1.2 SQL procedures


Here the SQL queries can be set. This part requires SQL language knowledge.

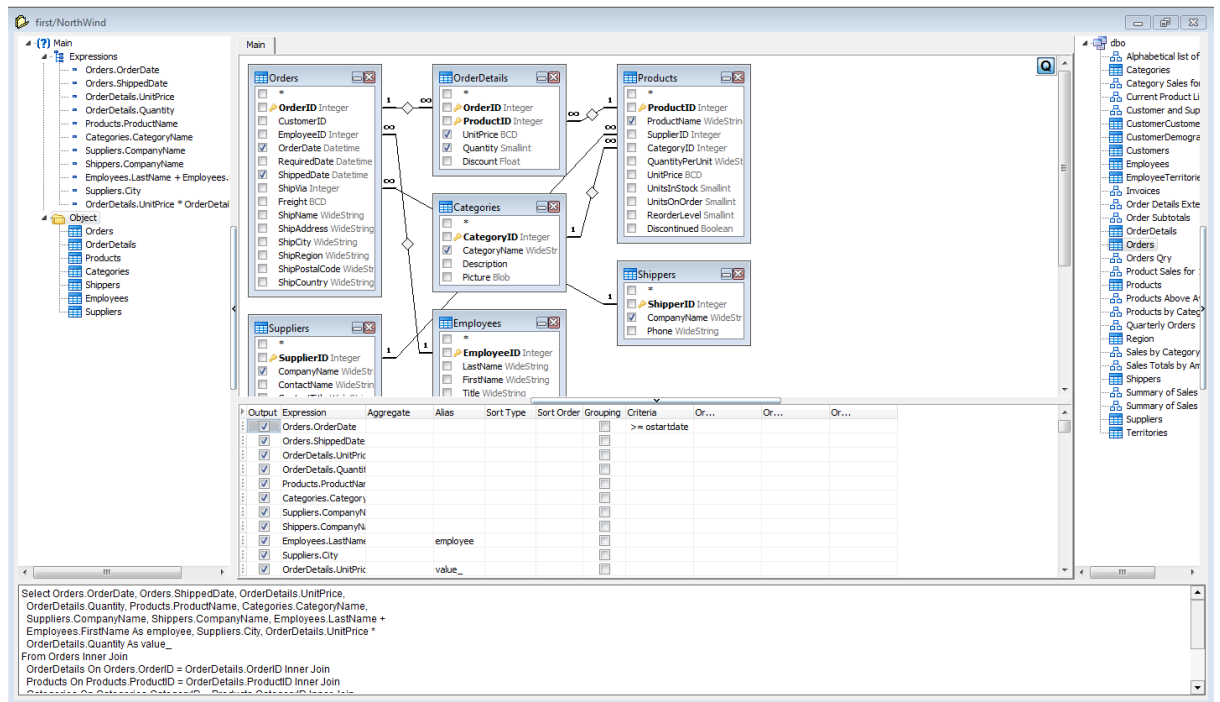



1. The databases used (access the databases structures)
  - only one it is shown here - that can be Northwind, but any other ones can be chosen, if proper connections between them are correctly created.
  - Ex: For a sales & HR database the following data will be required:
    - at least a table codes of employees from;
    - the 2 databases, when is mandatory to integrate;
    - the data, from the 2 databases to the same report.
  - data and structure can be seen
  - this control can be hidden using the vertical shape on right of the control.

- save each query under a name.
- their number may vary and can be as many as needed

- the query can be manually written (right text edit or text editor ) or a visual query editor

can be used .



Each query can be tested by pressing the  button.  
It is recommended to test each query right after creating it.

3. To set up the code that runs last on server:  
**RUNSQL(<sqlname>)** - runs the SQL query named <sqlname>  
**RETURNSQL(<sqlname>)** - return SQL result.

Between those commands, SQL's that collect data from multiple sources can be inserted.

Available new functions:


- `_month (<date field>)` - returns month like "M2011.01" from "2011-01-01"
- `_quarter (<date field>)` - returns quarter from date like "Q2011-01"

Sample:

**RunSQL('first')**

**select \_month(first.orderdate) as month,\_quarter(first.orderdate) as quarter,first.\* from first into cursor second**

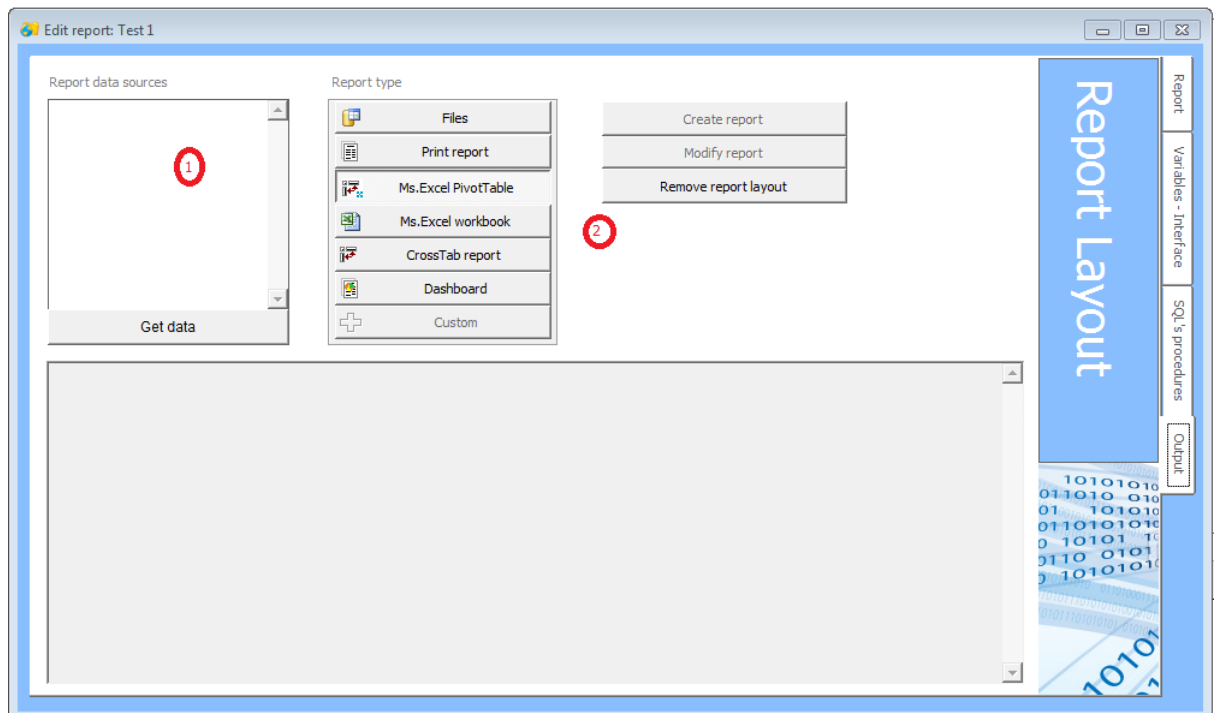
**ReturnSQL('second')**

All queries can be tested at once by pressing  button here.

### 3.4.1.3 Output

Save each report under a correspondent output layout. Different types of results can be set up as output layouts according to the requirements.

- Files
- List - Print
- List - Excel
- CrossTab
- Excel PivotTable
- Dashboard



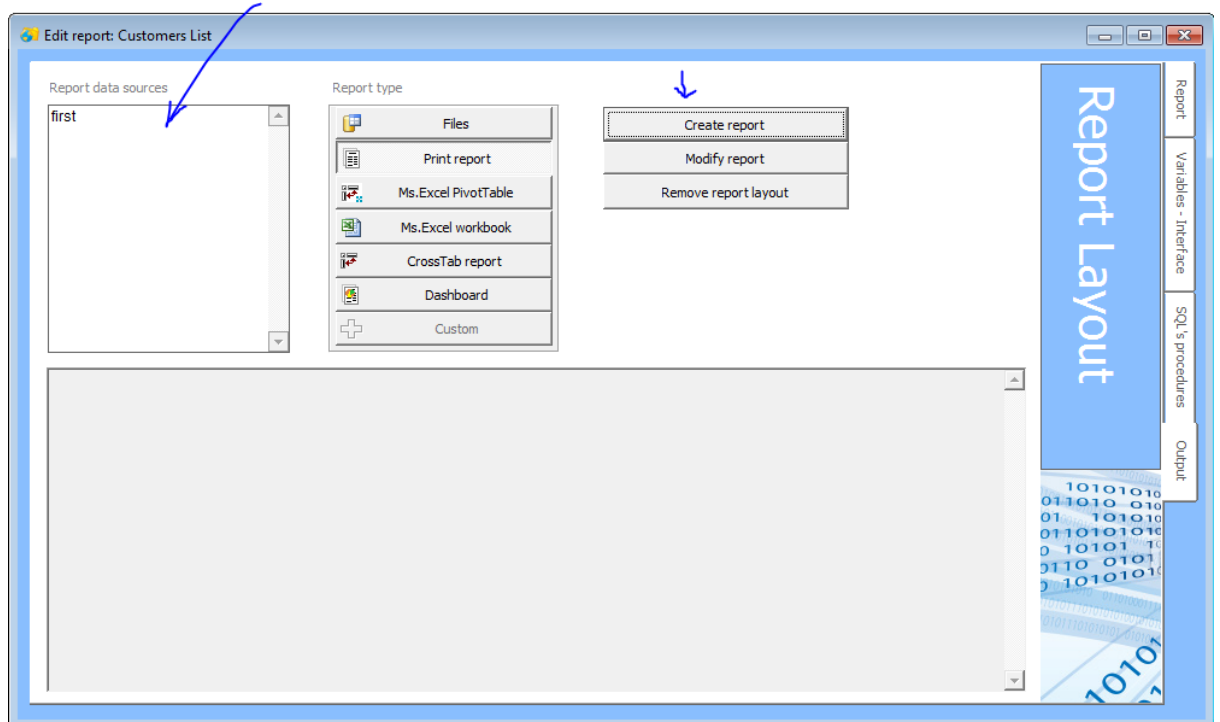
To create or modify a template layout it is first required the records dataset.  
Press "Get data" button to have the queries results (1).

Chose the report type and press "Create report".

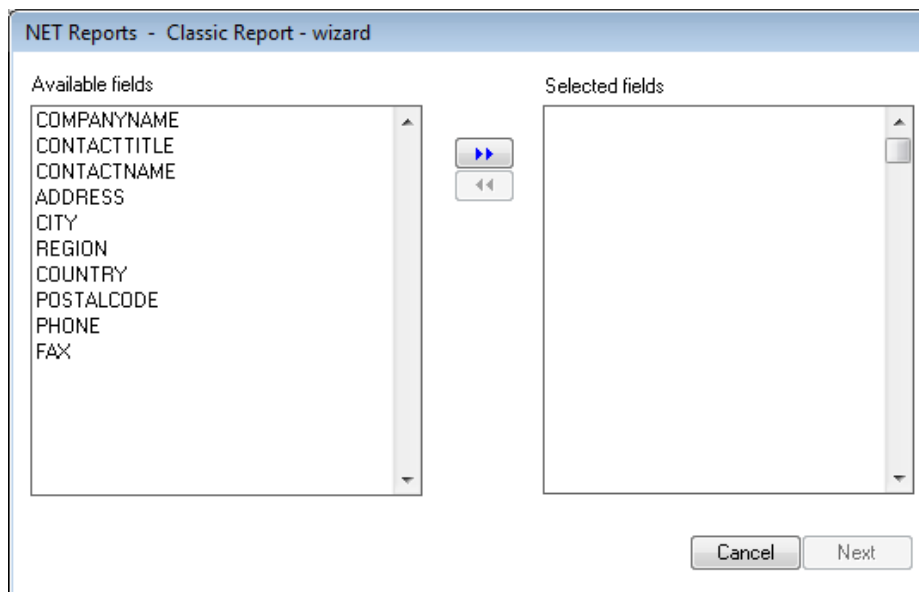
If a report is already set, press "Remove report layout", chose a new output type and press "Create report"

For the "files" report set by default, the queries results will be presented as lists into a tabbed form.  
All others options use easy wizards and visual interfaces to create the layouts.

## 3.4.1.3.1 List - Print



Use the data cursors from the server, chose "Print report" and then "Create report".



Select all needed fields to the list in the right part of the form and press "Next".

NET Reports - Classic Report - wizard

Report Title

☒ Landscape ☐ Portrait

Page A4

Gridlines Both

Gridlines color

Column label

Companyname

Report Header / Detail Band

Companyname	Contacttitle	Contactname	Address
Alfreds Futterkiste	Sales Representative	Maria Anders	Obere
Ana Trujillo Emparedados y	Owner	Ana Trujillo	Avda.
Antonio Moreno Taquería	Owner	Antonio Moreno	Matad

Cancel Previous Next

Set here some reports items as: title, columns names, page type and press "Next".

NET Reports - Classic Report - wizard

Field	Sum	Max	Min	Avg

Totals & Group options

☐ Page footer totals ...

☐ Summary band

Group by

☐ Remove group field from detail line

COMPANYNAME  
CONTACTTITLE  
CONTACTNAME  
ADDRESS  
CITY  
REGION  
COUNTRY

Add max three groups  
Data should be ordered accordingly into the SQL statement

Cancel Previous Finish

The wizard can add page groups and totals, set them here and press "Finish" when ready.

Net Reports

System Admin Reports Edit Help Exit Format Report

Report Designer - first.frx

"Customers List"

Page Header

Companyname	Contacttitle	Contactname	Address	City	Region	Country
Companyname	Contacttitle	Contactname	Address	City	Region	Country

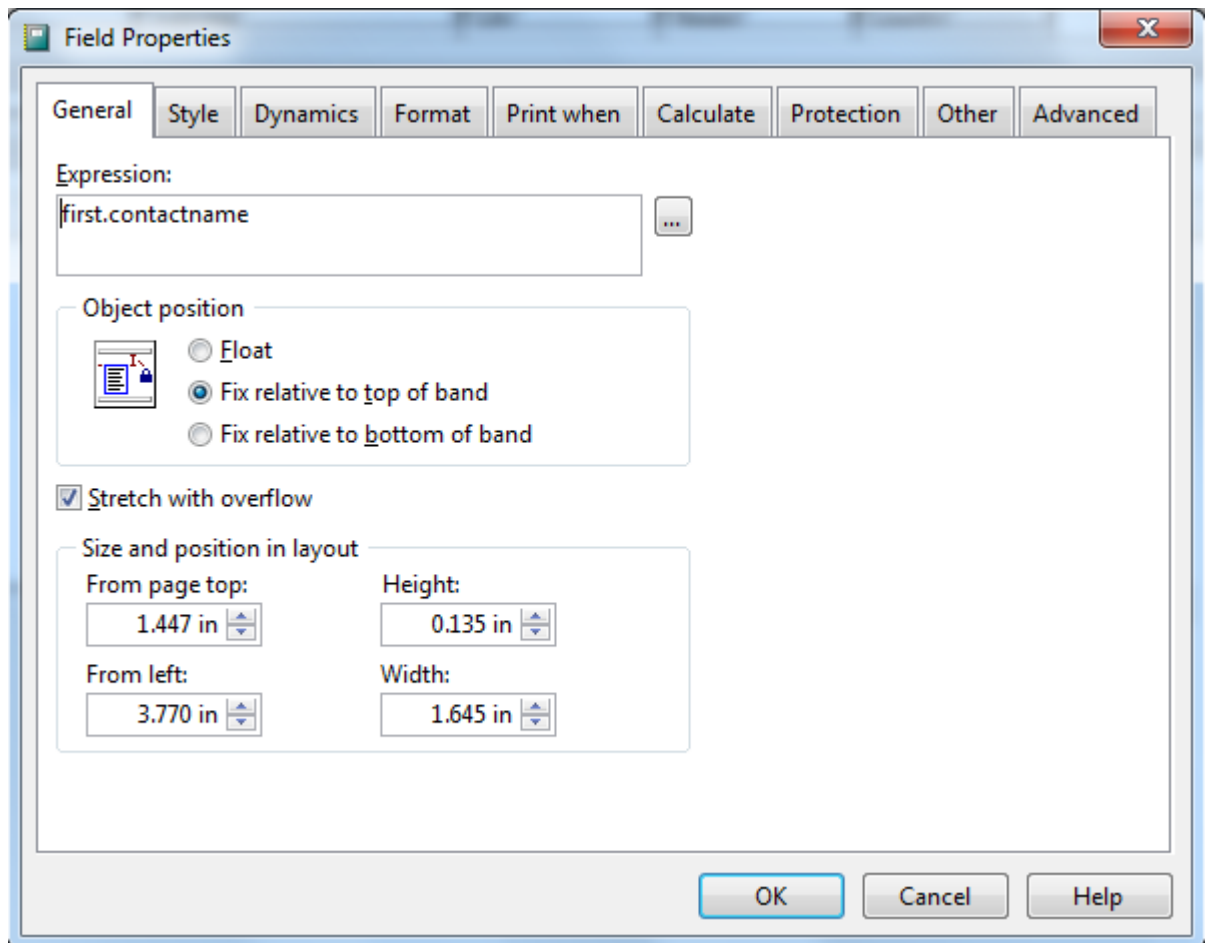
Detail

Page Footer

Page 1 of 1

The reports is created and opened into the report editor.

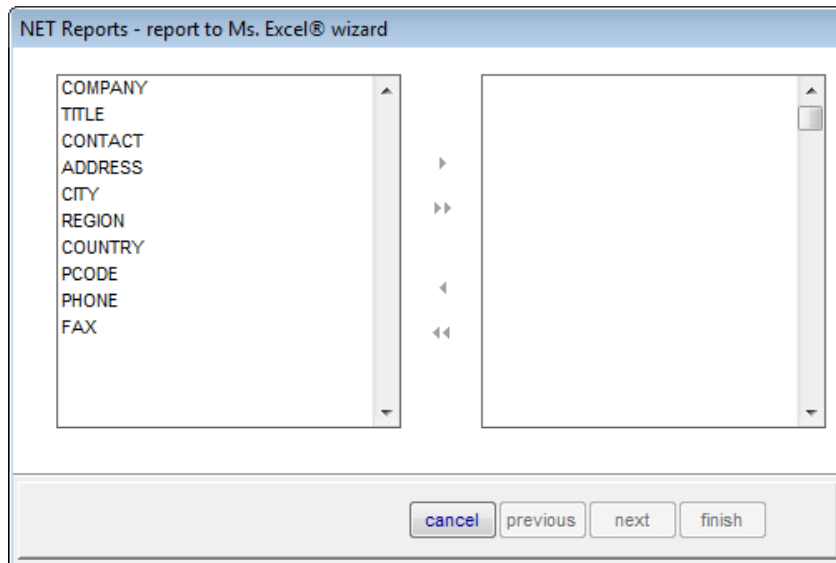
Each field is opened for changes.



#### 3.4.1.3.2 List - Excel

When making the data cursors available, select the "MS. Excel workbook" option and press "Create report".



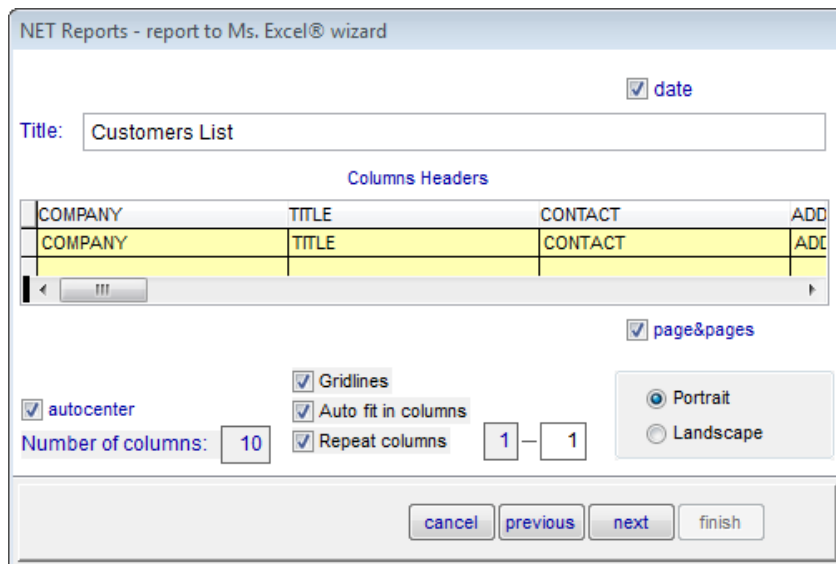


NET Reports - report to Ms. Excel® wizard

COMPANY  
TITLE  
CONTACT  
ADDRESS  
CITY  
REGION  
COUNTRY  
PCODE  
PHONE  
FAX

cancel previous next finish

Select the fields and press "Next".



NET Reports - report to Ms. Excel® wizard

☒ date

Title: Customers List

Columns Headers

COMPANY	TITLE	CONTACT	ADD
COMPANY	TITLE	CONTACT	ADD

☒ page&pages

☒ autocenter

Number of columns: 10

☒ Gridlines

☒ Auto fit in columns

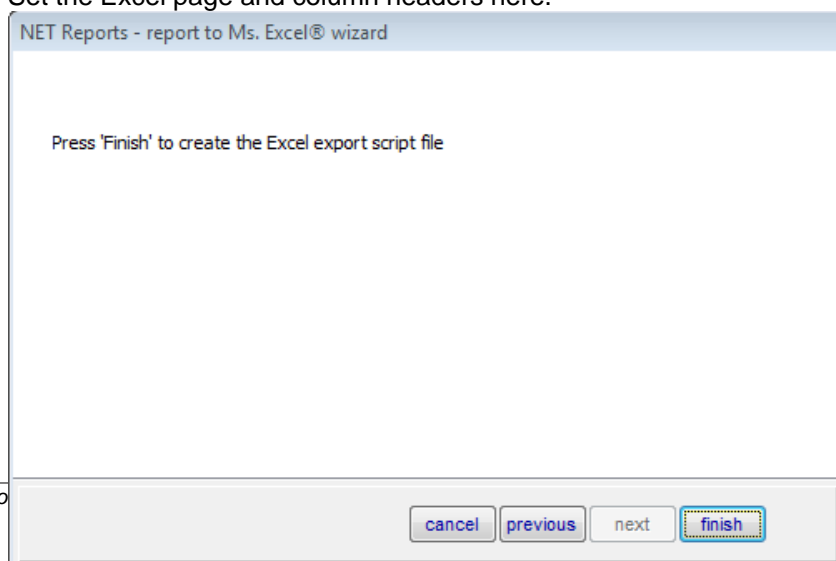
☒ Repeat columns 1 — 1

☒ Portrait

☐ Landscape

cancel previous next finish

Set the Excel page and column headers here.



NET Reports - report to Ms. Excel® wizard

Press 'Finish' to create the Excel export script file

cancel previous next finish

Press "Finish".

#### 3.4.1.3.3 CrossTab

Use the data cursors from the server, chose "CrossTab" and press "Create report" button.

The screenshot shows a 'Wizard - Crosstab Report' dialog box. It has a 'Title' field with the text 'Monthly sales'. Below the title is a list of fields: MONTH ;C, QUARTER ;C, DATE ;D, CONTACT ;C, ADDRESS ;C, CITY ;C, REGION ;C (highlighted), QUANTITY ;I, UNITPRICE ;Y, VALUE ;Y, PRODUCT ;C, and EMPLOYEE ;C. To the right of the list are four containers: 'Page' containing 'REGION ;C', 'Row' containing 'EMPLOYEE ;C', 'Column' containing 'MONTH ;C', and 'Data' containing 'VALUE ;Y'. At the top right are 'Save' and 'Cancel' buttons.

Drag and drop fields to corresponding containers in the right (Page filter, Row, Column, Data).

Press "Save" when ready.

For the report result, please check "[CrossTab report](#)".

#### 3.4.1.3.4 Excel PivotTable

Use the data cursors from the server, chose "Excel PivotTable" and press "Create report" button.

Drag and drop fields to corresponding containers in the right (Page filter, Row, Column, Data).

Press "Save" when ready.

For the report result, please check "[Ms. Excel PivotTable](#)".

#### 3.4.1.3.5 Dashboard

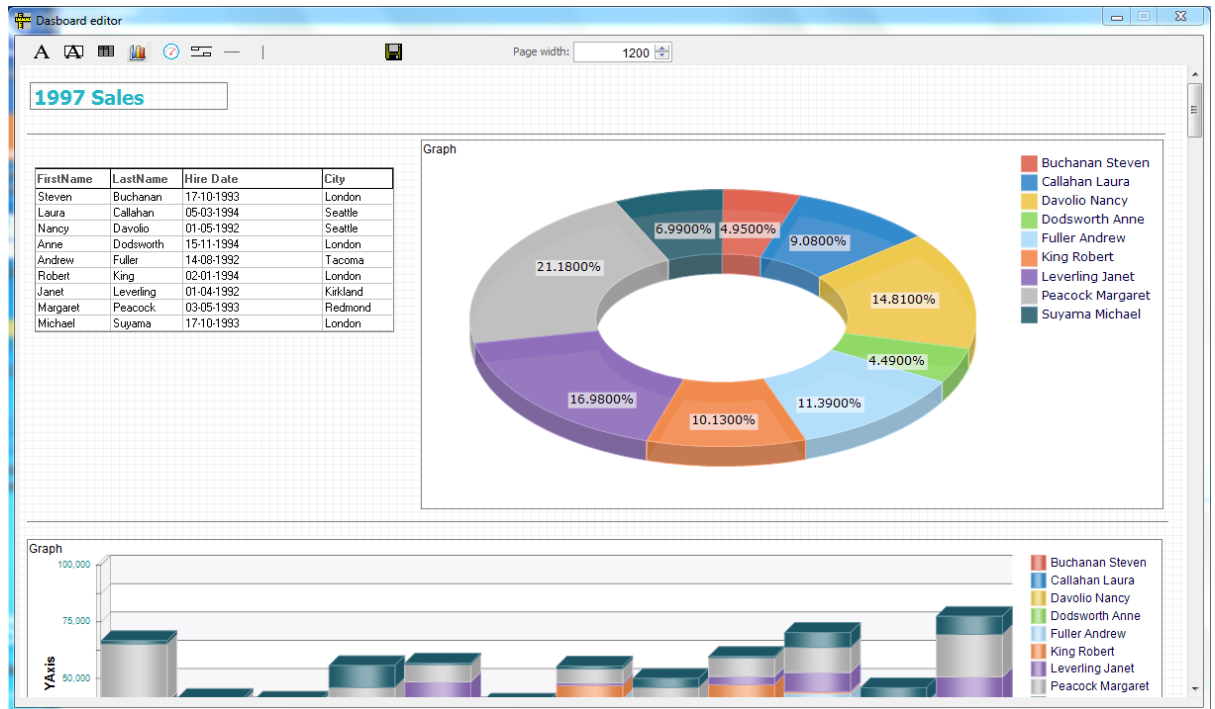
Dashboard report can be edited using a visual editor.

This report is able to use more than one data cursor, when needed.

The following sample shows a report, presenting sales connected to other variables from a list.

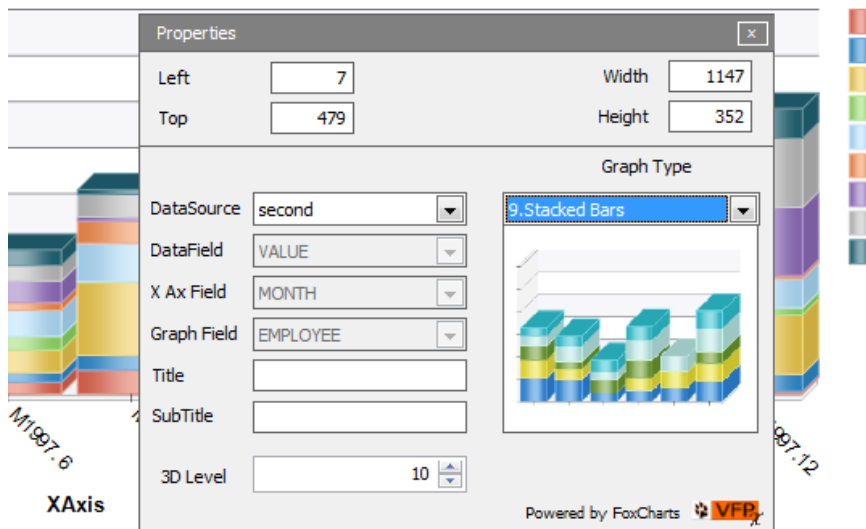
- list of products and stock - products
- sales in a period - second
- list of employees - employees

For opening report editor press "Create report".



- place objects on the page
- move and change size using the mouse
- right click to set the object properties or delete the object.

#### Graph object:



Select the data source, datafield, X Ax field and graph field.  
For Pie reports type (pie and doughnut) the "Graph field" is not required.

It results 3D Level - 0 for plain graph, as chosen.

#### Grid list object:

Product Name	Supplier	Price	Units in stock
Alice Mutton			0
Aniseed Syrup			13
Boston Crab Meat			123
Camembert Pierrot			19
Camembert Tige			42

Properties

Left: 14, Width: 775

Top: 1493, Height: 100

DataSource: products, Columns: 4

Rows Height: 16, Headers Height: 25

Column: Column 1, Width: 200

Header: Product Name

Arial, Bold, Italic, 9

Field: Arial, Bold, Italic, 9

ControlSource: products.PRODUCTNAM

Set the grid parameters, for each column and header you may set properties as: font name and size. The object will be resized vertically at run time to show all items in the list. All objects in the page below the grid will be moved down accordingly.

### 3.5 Users access rights

User's access rights are presented on client interface, under the "Reports" menu. This can be used to set access to reports for users or users groups.

