

Pcounter Web Report User's Guide Version 3.1

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Overview

This document describes the operating instructions of Pcounter Web Report 3.x, the reporting add-on product for Pcounter.

PWR 3.x supports a browser based interface running a Rich Internet Application (RIA). The PWR 3.x installer application deploys several components to the server including an embedded web server, a Pcounter Log file scanner, and an application to manage the server settings. For client access, the main reporting application requires the Microsoft Silverlight platform. Client web browsers must have the Silverlight Plug-in installed in order to access the main PWR 3.x reporting features. Other application features can be used without requiring the Silverlight plug-in, such as the User and Administrative portals.

PWR 3.x supports three distinct applications as described in the table below :-

Application Feature	Purpose
PWR 3.x Reporting	Detailed analysis of Print & Copy activity as recorded by Pcounter. Aggregated summaries, charts, grouped dimensions and metrics as formatted exportable reports.
PWR 3.x Administration Portal	Allows administrators to examine job history for Users and devices, facilitate instant job cost refund to a Pcounter account, and view user balance reporting.
PWR 3.x User Portal	Allows printing users to access and view their print history, view their current Pcounter account balance, and change their Short ID or PIN number

Installation Prerequisites and Requirements

For Pcounter Windows, the PWR 3.x server must be installed on the same computer that hosts the Pcounter data server service, and where log files are written. For Pcounter Netware, PWR 3.x server must be installed on a PC with the Netware Client connectivity components installed and be able to connect to the Netware Server hosting the Pcounter data folder (given the appropriate logon credentials).

PWR 3.x requires Pcounter 5.21e for NetWare or Pcounter 2.10a for Windows, or newer.

PWR 3.x can be installed as a 60-day evaluation version, or with a valid license key, either obtained from your local reseller or from Pcounter Europe at sales@pcounter-europe.com.

Minimum Hardware Specifications

Server

Windows XP SP3, Windows 2003 Server or later, Windows Vista, Windows 7.

Minimum 150 MB free disk space.

A CPU fast enough and sufficient RAM to run the OS efficiently.

PWR 3.x requires the .NET Framework version 3.51 or greater.

Performance Considerations

PWR 3.x runs both a database server and a Web server. The performance of these components is greatly influenced by the following factors :-

1. The number of concurrent users (User Portal Features)
2. The volume of print data generated by Pcounter.

For smaller deployments it is acceptable to deploy PWR 3.x on a multi-purpose server, for example the Pcounter print server. For larger deployments a dedicated server is recommended to experience efficient operation of the software.

The following recommendation is a guideline only, based on the volume of print data :-

Pcounter log files of 50-100 mb per month or greater.

Minimum dual core processor.

Between 4-8GB RAM (8GB preferred).

Please see section 'Installing PWR 3.x on a dedicated server' for more details.

For advice on tuning the database server for increased performance, see Appendix D of the User Guide 'Increasing the Database memory cache'.

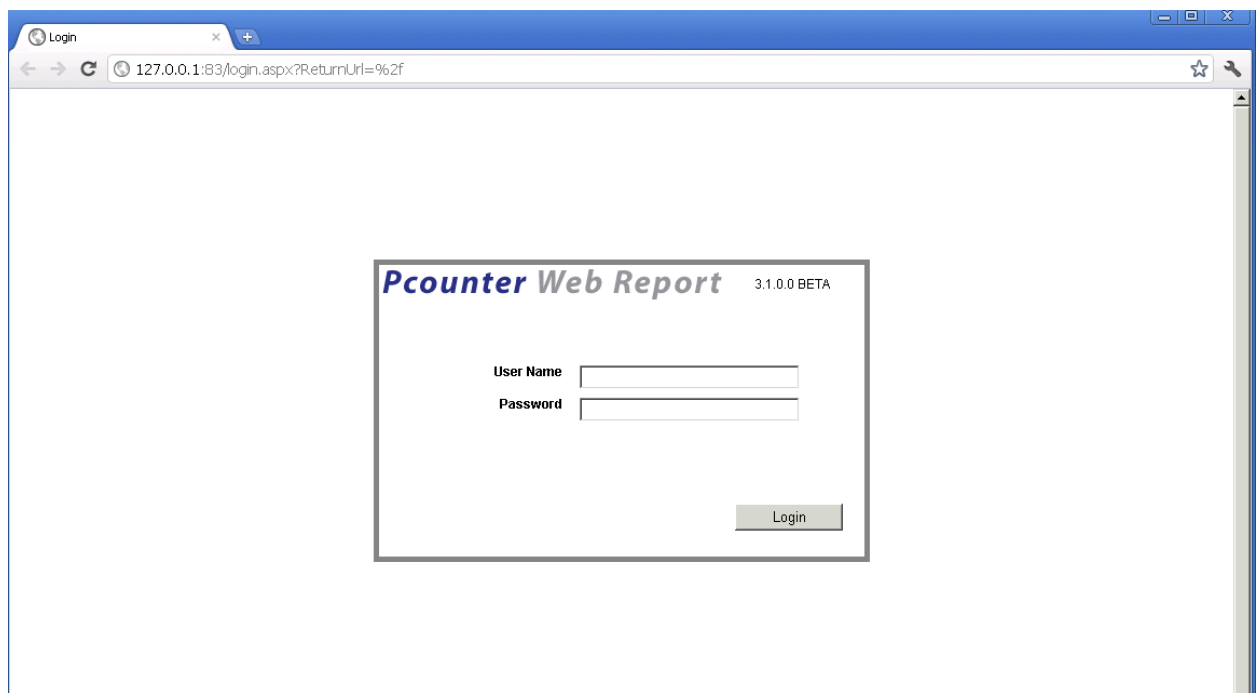
1. Getting Started

Open a browser to the URL of the PWR 3.x server, also specifying the port number as configured on your server i.e.

<http://MYPWRSERVER:83>

If your server is configured to use SSL security, then `Https://` should be used in the URL.

If the application does not start, or a licence error is displayed, then check that the PWR 3.x server software has been installed and configured correctly in accordance with the PWR 3.x Installation Guide.



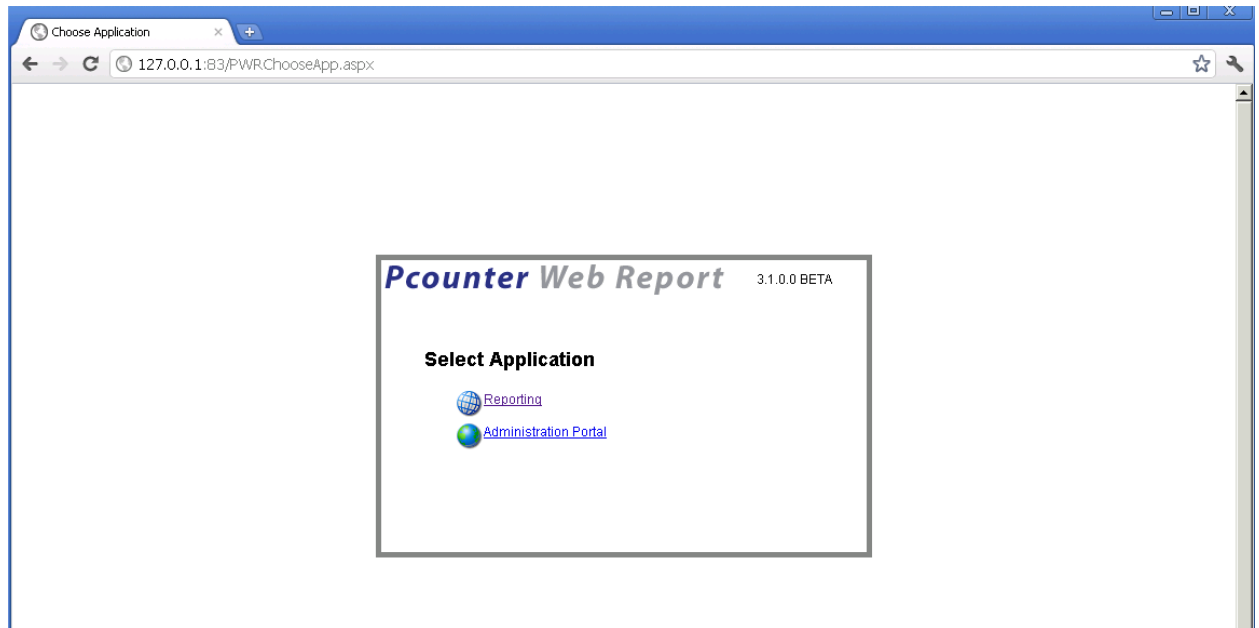
On start up the application will display the login screen. Access to the application is granted after a successful login, PWR 3.x comes pre-configured with the following default login :

UserName: **admin**

Password: **admin**

Depending on the security permissions for the login account, the next screen may ask the user to select an application to continue:-

Pcounter Web Report



2. Reporting

On start up the reporting application the Dashboard will be displayed.



1. Navigation Menu

This area of the screen is the navigation menu. Items are arranged in a hierarchical manner under the main report categories and major features.

2. Timeline Chart

The Timeline chart shows print history (page volume) spread over the previous 30 days. Note the timespan reflected is calculated based on the last active data in the database.

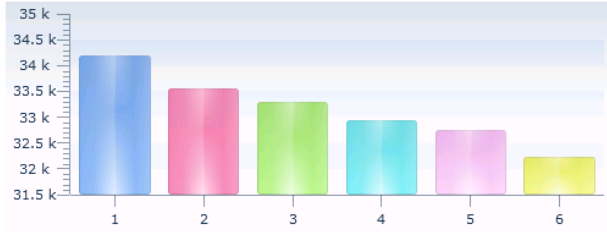
3. System Totals

This panel shows the current all-time system totals for all activity monitored by Pcounter.

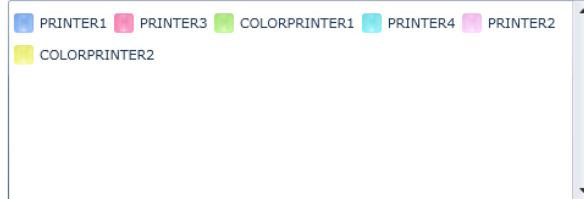
Dashboard Charts

The Dashboard charts show the top 10 Printers, Users and Copiers in the system and are displayed under the system totals panel.

Top 10 Printers



Legend

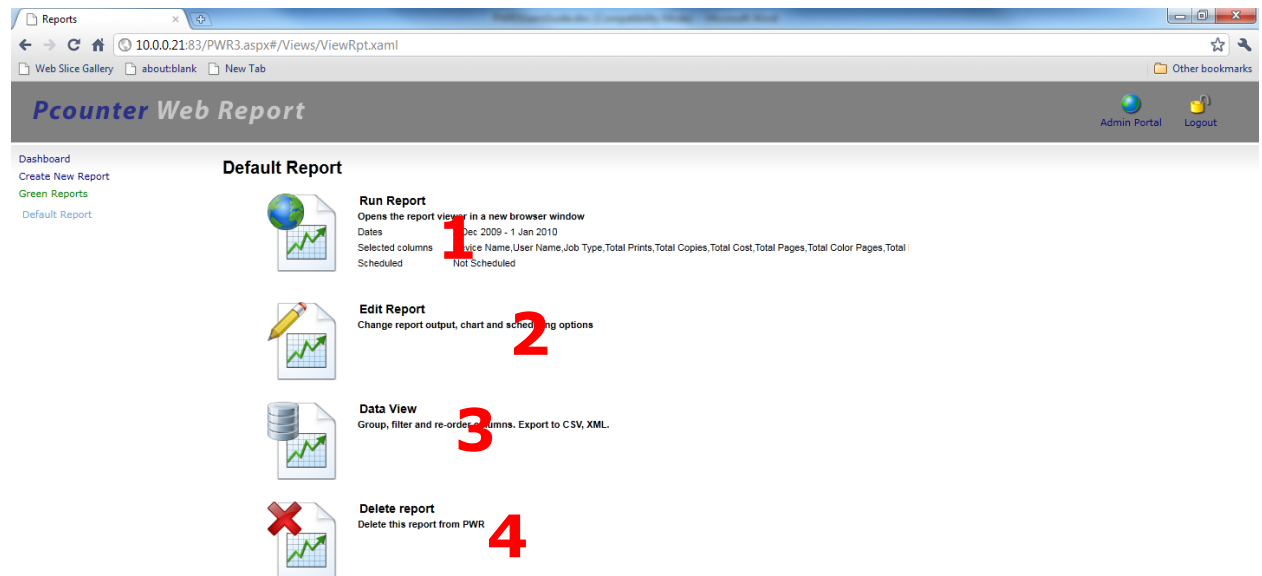


Printer Name	Jobs	Color	BW	Total Pages	Cost
> PRINTER1	6,845	13,131	21,071	34,202	£17,578.00
PRINTER3	6,730	12,773	20,787	33,560	£17,189.53
COLORPRINTER1	6,658	12,351	20,938	33,289	£16,751.89
PRINTER4	6,630	12,131	20,822	32,953	£16,806.43
PRINTER2	6,520	12,353	20,390	32,743	£16,555.74
COLORPRINTER2	6,502	12,072	20,166	32,238	£16,537.84

Each table shows several aggregate totals for the User or Device. The table can be sorted by clicking on the column header.

2. Running Reports

Selecting a report from the navigation menu displays the Run Report screen.



The Report homepage screen is displayed for all standard reports in the system. The report description and selectable options change depending on the type of report selected.

1. Run Report

This area displays a description of the Report and gives an indication of what data the report will contain and how it is presented. Clicking on the Run Report link, or on the icon will start the report viewer in a new browser window for the current report.

2. Edit report

Clicking the Edit report button executes the report editor.

3. Data view

Clicking Data View executes the report in a table where it can be dynamically manipulated with in-line sorting, and grouping.

4. Delete Report

Clicking Delete Report will remove the report from the PWR database.

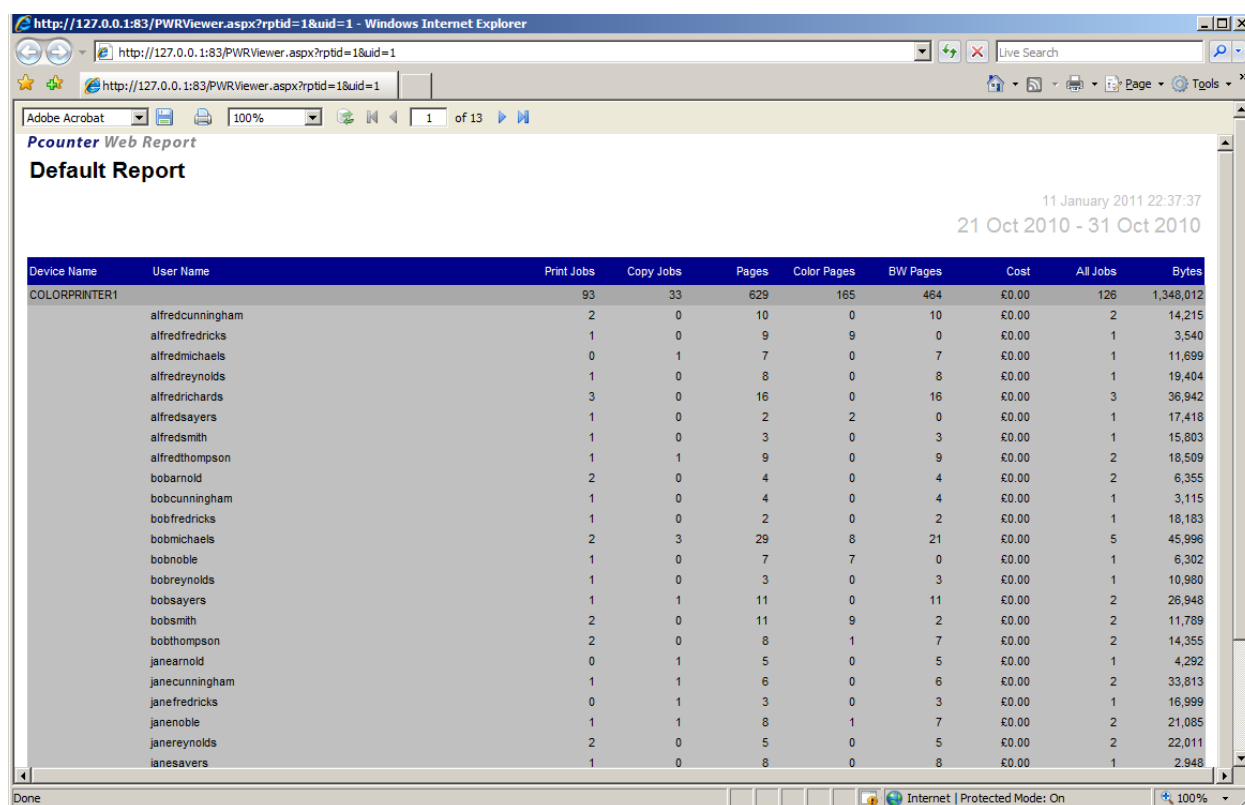
Pcounter Web Report

Run Report

When a report is executed, PWR 3.x opens a new browser window with the HTML report viewer. A message is displayed whilst the report is generated and displayed to the user.

The Report is executed with the parameters specified in the Run Report option. To edit the report parameters it is necessary to open the Edit Report screen.

NOTE: If clicking Run Report does not open a new browser window, it may be necessary to enable pop-up windows for the URL of the PWR 3.x server. Some browser pop-up blockers will prevent this operation by default.



11 January 2011 22:37:37
21 Oct 2010 - 31 Oct 2010

Device Name	User Name	Print Jobs	Copy Jobs	Pages	Color Pages	BW Pages	Cost	All Jobs	Bytes
COLORPRINTER1		93	33	629	165	464	£0.00	126	1,348,012
	alfredcunningham	2	0	10	0	10	£0.00	2	14,215
	alfredfredricks	1	0	9	9	0	£0.00	1	3,540
	alfredmichaels	0	1	7	0	7	£0.00	1	11,699
	alfredreynolds	1	0	8	0	8	£0.00	1	19,404
	alfredrichards	3	0	16	0	16	£0.00	3	36,942
	alfredsayers	1	0	2	2	0	£0.00	1	17,418
	alfredsmith	1	0	3	0	3	£0.00	1	15,803
	alfredthompson	1	1	9	0	9	£0.00	2	18,509
	bobarnold	2	0	4	0	4	£0.00	2	6,355
	bobcunningham	1	0	4	0	4	£0.00	1	3,115
	bobfredricks	1	0	2	0	2	£0.00	1	18,183
	bobmichaels	2	3	29	8	21	£0.00	5	45,996
	bobnoble	1	0	7	7	0	£0.00	1	6,302
	bobreynolds	1	0	3	0	3	£0.00	1	10,980
	obsayers	1	1	11	0	11	£0.00	2	26,948
	obsmith	2	0	11	9	2	£0.00	2	11,789
	obthompson	2	0	8	1	7	£0.00	2	14,355
	janearnold	0	1	5	0	5	£0.00	1	4,292
	jane cunningham	1	1	6	0	6	£0.00	2	33,813
	jane fredricks	0	1	3	0	3	£0.00	1	16,999
	jane noble	1	1	8	1	7	£0.00	2	21,085
	janereynolds	2	0	5	0	5	£0.00	2	22,011
	ianesavers	1	0	8	0	8	£0.00	1	2,948

Paging

When a report is finished executing, the first page will be shown in the browser. It is then possible to page forwards and backwards through the report pages using the paging toolbar at the top of the report.

Export\Print Options

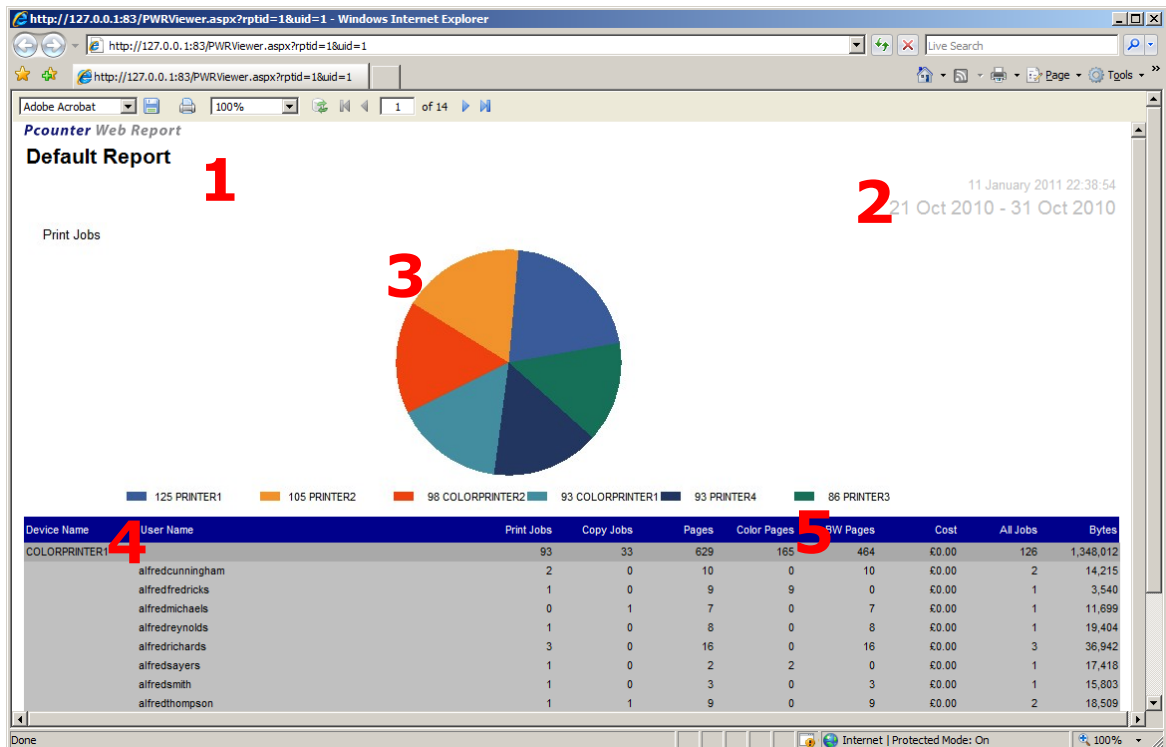
From the HTML viewer it is possible to export the generated report to several formats. To export, select the option from the menu and click the Export link on the toolbar. To print, click the printer icon on the toolbar.

Pcounter Web Report

Report Layout Described

Each report in PWR 3.x follows the same basic layout. Reports are in landscape format, with data headings displayed horizontally, data and group headers are displayed vertically in a tabular layout.

The following figure describes the parts of a typical report:-



1. Report Name
2. Date in smaller text is the run date\time of the report. Date in larger text is the date range parameters for the report.
3. Chart. A chart can be selected and displayed on the first page of the report. The chart can be based on a single metric for a dimension included in the report (see below).
4. Report Dimensions. A dimension is the term used to describe an object that can be recorded as part of the activity in Pcounter, for example, a user, a device, the type of document and so on. PWR 3.x can report on these Dimensions often in hierarchical groups such as users by device, or Paper type by client code.
5. Report Metrics. A metric is the term used to describe a measurement of value as recorded by Pcounter. For example, the total number of pages, total cost, total jobs and so on.

When combined with grouped Dimensions, the metric values are aggregated at the group level and displayed horizontally under the metric column names.

3. Editing Reports

In PWR 3.x all standard reports can be modified using the Edit Report option. To Edit a report, first open the report homepage by clicking on the report name in the left hand navigation menu. From the report homepage click Edit Report. After a few seconds, the Edit Report dialog will be shown.

Edit Report Dialog

Edit Report

Select Fields 1 | Sort and Filter | Dates | Chart | Schedule | Report Title

Print Jobs | Copy Jobs | Pages | Color Pages | BW Pages | Cost | All Jobs | Bytes

Device Name
User Name
[Select]

5 Show extra columns (CSV Export Only)

Pcounter Web Report
Default Report

29 September 2011 09:31:30
29 Sep 2011 - 29 Sep 2011

Print Jobs

4

2 Preview
Reset Zoom
3 Save and Run
Save as New
Save and Close
Cancel

Device Name	User Name	Print Jobs	Copy Jobs	Pages	Color Pages	BW Pages	Cost	All Jobs	Bytes
COLORPRINTER1	pcounteruser1	0	1	6	0	6	£3.47	1	4,025

Report preview uses example data for illustration purposes

1. Report definition

The edit report dialog allows modification of every aspect of the report. Each part of the report definition is categorised by the tabs displayed along the top of the dialog.

1. Selecting Fields
2. Adding sort and filter conditions
3. Setting report date parameters
4. Adding a chart
5. Scheduling a report for automated execution and email.
6. Setting report name

2. Preview Control

The preview control can be used to refresh the report preview and also reset the zoom level.

3. Save Report

There are several options to save the modified report definition.

1. Save and Run saves the report and automatically opens the HTML report viewer.
2. Save as New saves the report as a new report definition.
3. Save and close saves the report and returns the report homepage.

Pcounter Web Report

4. Report Preview Viewer

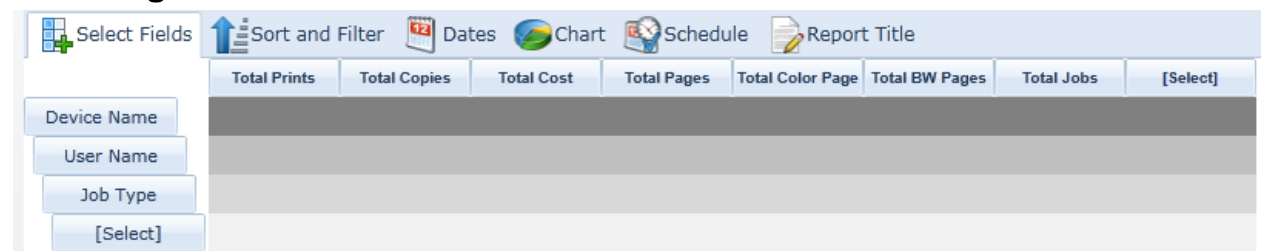
The Report preview viewer shows the first page of the report as a preview based on the selections made in the edit report dialog. The preview supports pan and zoom using the mouse wheel.

5. Show Extra Columns

Four additional columns may be added to a report when exporting to CSV format. These extra columns are not displayed in a normal report view or other export formats.

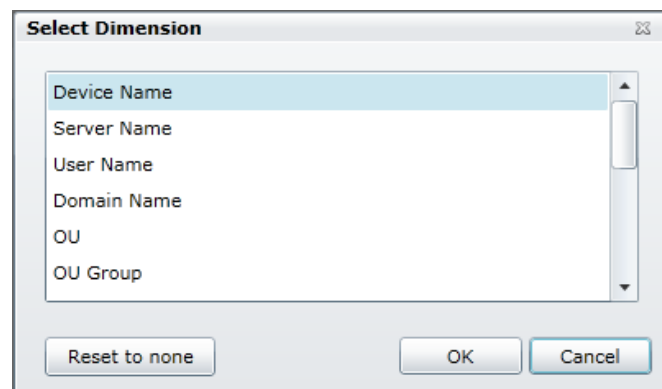
NOTE: The report preview uses sample data rather than actual data from the PWR database to illustrate the report layout.

Selecting fields



The select fields tab displays selector options for each column\row in the report. A report has a maximum of 4 nested Dimensions and 8 Metrics.

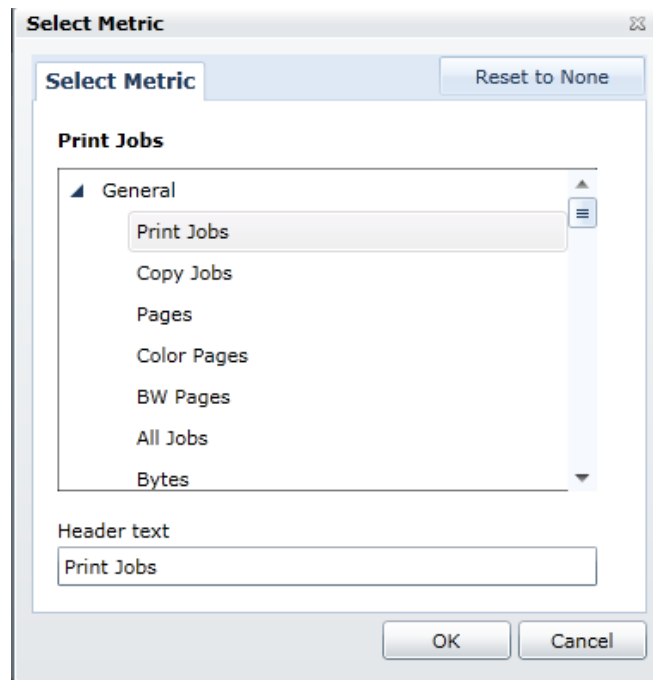
To add or modify a dimension in a report, click the row button at the next available slot in the hierarchy.



The select Dimension dialog will be displayed, highlight the dimension to add and click OK. The dimension may be removed from the report by clicking 'Reset to None'.

To add a metric in the report click the column header button.

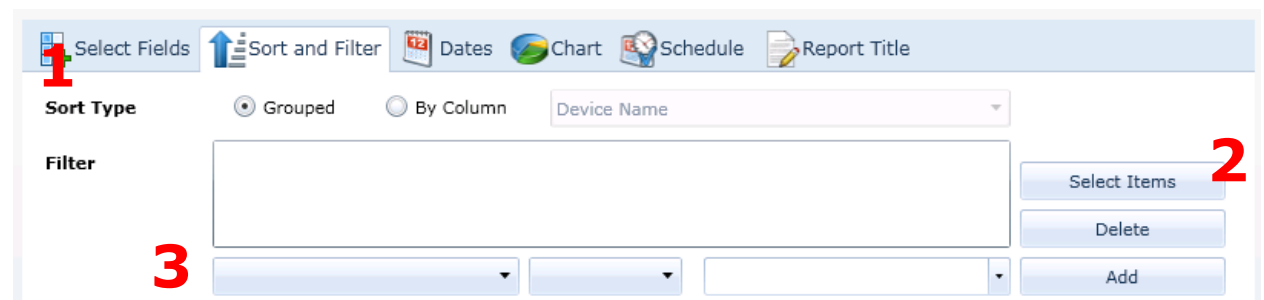
Pcounter Web Report



To select a metric, highlight the metric name and click OK. The metric may be removed from the report by clicking 'Reset to None'. It is also possible to change the text displayed for the metric in the report column header.

Metrics are categorised into various groups depending on the type of metric and the base condition applied to the value from the Pcounter log file.

Sort and Filter



1. Sort type

'Grouped' sorting means that dimension data will be displayed in hierarchical groups and sorted alphabetically.

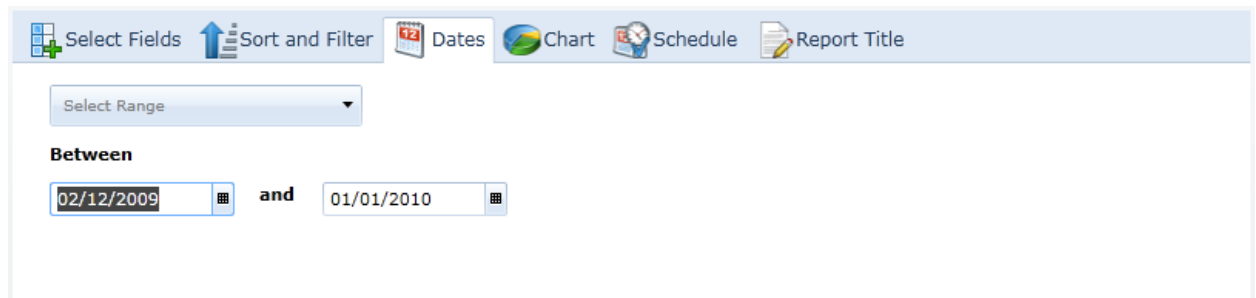
'By Column' sorting means that dimension data will be displayed sorted by the column specified in the drop down list.

2. Select Items

A filter can be specified against any dimension. Click Select Items to specify what Dimension values to filter on.

3. You may specify a free text filter on a Dimension. From the list, the list of dimension values is loaded from the server. Select a condition using the second list, finally in the third list select a known value, or enter a custom value string to filter on. To apply the filter to the report click add.

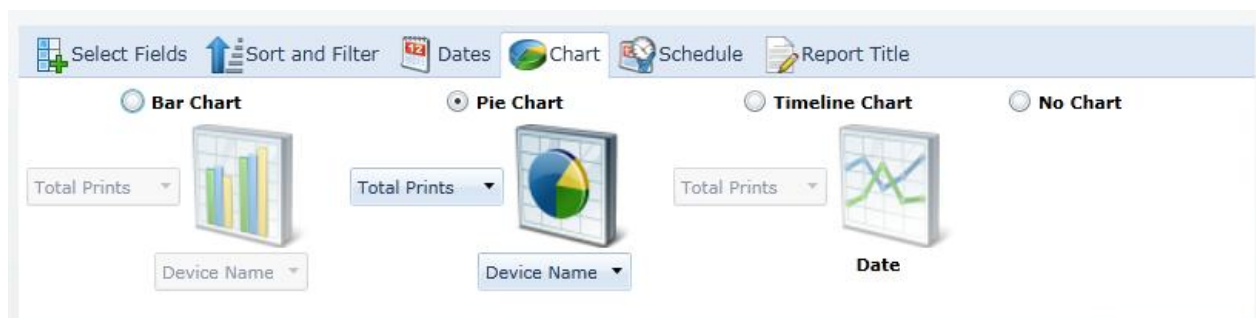
Dates



The screenshot shows the 'Dates' tab in the Pcounter Web Report interface. At the top, there are navigation icons for 'Select Fields', 'Sort and Filter', 'Dates', 'Chart', 'Schedule', and 'Report Title'. Below these, there is a 'Select Range' dropdown menu. Underneath, the word 'Between' is displayed, followed by two date input fields. The first field contains '02/12/2009' and the second field contains '01/01/2010', with the word 'and' positioned between them.

The Date parameter option defaults to all dates, meaning that the report will run from the first recorded date to the most recent date in the Pcounter Log. To specify a different date range for the report select a new range from the date selectors, or select a pre-defined time period from the list.

Chart



The screenshot shows the 'Chart' tab in the Pcounter Web Report interface. At the top, there are navigation icons for 'Select Fields', 'Sort and Filter', 'Dates', 'Chart', 'Schedule', and 'Report Title'. Below these, there are four radio button options: 'Bar Chart', 'Pie Chart', 'Timeline Chart', and 'No Chart'. Each option has a corresponding chart preview and a dropdown menu for 'Total Prints'. The 'Bar Chart' and 'Pie Chart' options also have a dropdown menu for 'Device Name'. The 'Timeline Chart' option has a dropdown menu for 'Date'.

Three types of chart are supported in the reports. Bar, Pie and Timeline.

1. Bar

For a Bar chart select the option and specify the metric value as the Y Axis and the Dimension as the X axis.

2. Pie

For a Pie chart select the option and specify the metric as the value and the Dimension as the subject.

3. TimeLine

For a timeline chart select the option and specify the metric. The timeline chart is based on date as the X axis. The date range is based upon the dates specified for the report.

4. No Chart

Select this option for no chart.

Note that for all charts, only dimensions and metrics specified in the report definition can be selected.

Schedule

A report can be scheduled to automatically generate and be saved to disk or sent via email. From the Schedule dropdown list, select the recurrence period for the scheduled report.

To Disk :-

The screenshot shows the 'Schedule' tab selected in the top navigation bar. The 'Schedule' checkbox is checked. The recurrence is set to 'Daily' with a dropdown menu showing 'Every Day'. The time is set to '10:00'. The 'Save To' field contains 'Server File Export folder (C:\Exports)'. The 'Format' section has radio buttons for PDF, CSV, and XLS, with XLS selected. The 'File Name' field is empty, with a note below it: 'Leave blank to generate unique file name'. The 'To Disk' radio button is selected, and 'To Email' is unselected.

Specify the schedule time, File name and export format. The location for the saved file is the Server File Export folder as specified in the PWR server configuration.

To Email :-

The screenshot shows the 'Schedule' tab selected. The 'Schedule' checkbox is checked. The recurrence is set to 'Daily' with a dropdown menu showing 'Every Day'. The time is set to '10:00'. The 'Send To' field contains 'a@a.com'. The 'Subject' field contains 'Report'. The 'Description' field contains 'Reportfile'. The 'Format' section has radio buttons for PDF, CSV, and XLS, with XLS selected. The 'To Email' radio button is selected, and 'To Disk' is unselected.

Specify the schedule time, Email address, File name and export format. You can set the name of the report file attached to the email by specifying a value in the description field.

Report Title

The screenshot shows the 'Report Title' tab selected in the top navigation bar. The 'Report name' field contains 'Default Report'. There are two checkboxes: 'Show report totals in the report header' (unchecked) and 'Exclude Accounting operations (Setbal, Deposit, Charge etc)' (checked). The 'Report ID' is displayed as '1'.

Enter the name for the report.

Show Totals In Report Header:

This option will display a totals header in the report.

Exclude Accounting Operations

This option will filter out all accounting operations done in Pcounter against the user accounts, (for example SetBal, Deposit, Charge etc).

4. Report Data View

The report data view enables manipulation of data in a dynamic table.

Click Data View on the Report homepage. After a few seconds the data grid will be loaded with the columns and group definitions as defined in the report.

Device Name	User Name	Job Type	Total Prints	Total Copies	Total Cost	Total Pages	Total Color Pages	Total BW Pages	Total Jobs
COLORJET1			299	52	917.43	1836	0	1836	351
alfredarnold			29	3	75.10	165	0	165	32
Copy			0	3	10.64	10	0	10	3
COLORJET1	alfredarnold	Copy	0	3	£10.64	10	0	10	3
Print			29	0	64.46	155	0	155	29
COLORJET1	alfredarnold	Print	29	0	£64.46	155	0	155	29
alfredcunningham			21	5	68.22	119	0	119	26
Copy			0	5	16.07	15	0	15	5
COLORJET1	alfredcunningham	Copy	0	5	£16.07	15	0	15	5
Print			21	0	52.15	104	0	104	21
COLORJET1	alfredcunningham	Print	21	0	£52.15	104	0	104	21
alfredfredricks			32	5	95.29	204	0	204	37
Copy			0	5	13.56	14	0	14	5
COLORJET1	alfredfredricks	Copy	0	5	£13.56	14	0	14	5
Print			32	0	81.73	190	0	190	32
COLORJET1	alfredfredricks	Print	32	0	£81.73	190	0	190	32
alfredmichaels			36	7	102.22	223	0	223	43
Copy			0	7	22.07	30	0	30	7
COLORJET1	alfredmichaels	Copy	0	7	£22.07	30	0	30	7
Print			36	0	80.15	193	0	193	36
COLORJET1	alfredmichaels	Print	36	0	£80.15	193	0	193	36
alfrednoble			26	2	83.98	172	0	172	28
Copy			0	2	5.56	13	0	13	2
COLORJET1	alfrednoble	Copy	0	2	£5.56	13	0	13	2

It is possible to reshape the data in the grid to provide additional analysis. The view in the data grid can then be exported to Excel, PDF, HTML or printed.

NOTE: changes made to grouping and filtering in the data grid are not saved back the report definition.

Grouping

Grouping data is achieved by dragging a column header onto the grouping panel at the top of the grid. Groups can be removed from the view by clicking the close icon on the group item in the grouping panel.

Sorting

Columns can be sorted by clicking the column header.

Filtering

Filtering is achieved by placing the mouse over the column header and clicking the down arrow icon. A Filter box is shown for the column where a filter can be specified.

Reordering columns

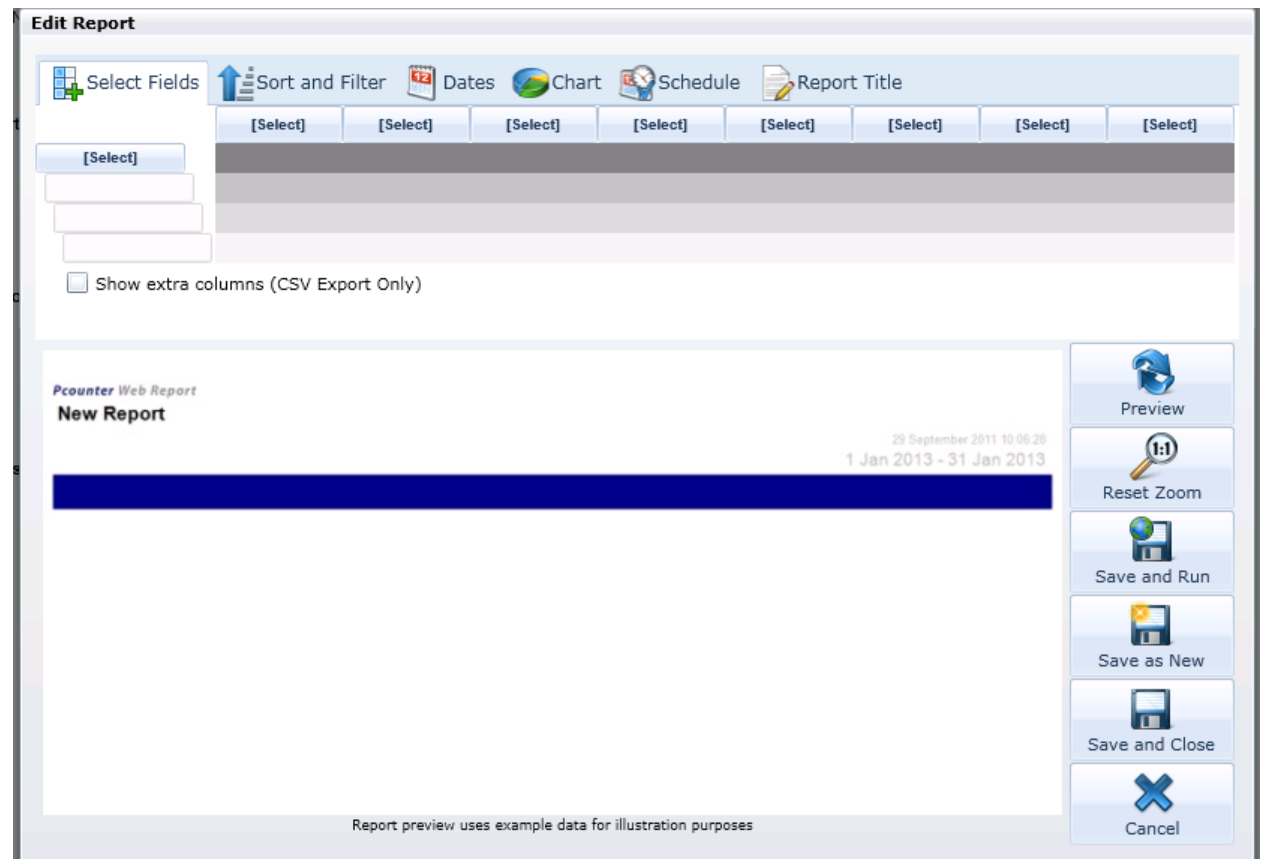
Columns can be reordered, by dragging the column header to the new position with the mouse.

5. Deleting Reports

A report can be deleted from the system using the Delete report option on the report homepage. The default report that ships with PWR 3.x cannot be deleted.

6. Create New Report

A new report can be created by clicking the 'Create New Report' option from the main navigation bar. The new report option opens the Edit Report dialog, defaulted to a new report definition:-



From here, Dimensions, Metrics, Charts etc. can be added as per the Edit Report features.

7. Administration Portal

The Administration Portal can be accessed from an icon in the reporting header, or via the application selection page displayed after login.

NOTE: Access to the Admin portal will only be available if the user profile permits it.

Upon opening the Admin portal shows Pcounter activity from the last week of data recorded in the PWR 3.x database.



<input type="checkbox"/>	User Name	Device Name	Date\Time	Type	Pages	Cost	Deposit	Balance	FQ Cost	FQ Deposit	FQ Balance	Document	Workstation
<input type="checkbox"/>	tomfredricks	PRINTER2	03/01/2013 11:44:18	Print	1	£0.00	£0.00	£1.85	£1.05	£0.00	£4.28	M245F4.TXT	\\TFredricksXP
<input type="checkbox"/>	bobmichaels	PRINTER2	03/01/2013 11:20:18	Print	3	£0.00	£0.00	£1.46	£2.39	£0.00	£2.15	4LPJFT.XLS	\\BMichaelsXP
<input type="checkbox"/>	johnsayers	COLORPRINTER1	03/01/2013 11:18:18	Print	1	£0.00	£0.00	£2.09	£2.13	£0.00	£4.71	8HV8EB.TXT	\\JSayersXP
<input type="checkbox"/>	juliesayers	PRINTER4	03/01/2013 11:02:18	Copy	6	£0.00	£0.00	£4.04	£2.84	£0.00	£1.51	M8JMTJ.XLS	\\JSayersXP
<input type="checkbox"/>	alfredrichards	COLORPRINTER2	03/01/2013 10:51:18	Print	8	£0.00	£0.00	£4.84	£1.80	£0.00	£3.94	3XR5Z9.TXT	\\ARichardsXP
<input type="checkbox"/>	janenoble	PRINTER3	03/01/2013 10:26:18	Print	2	£0.00	£0.00	£0.41	£3.65	£0.00	£2.64	YVTZTG.PDF	\\JNobleXP
<input type="checkbox"/>	bobfredricks	COLORPRINTER2	03/01/2013 10:18:18	Copy	7	£0.00	£0.00	£2.08	£2.90	£0.00	£2.98	89Y6EN.DOC	\\BFredricksXP
<input type="checkbox"/>	mikethompson	COLORPRINTER1	03/01/2013 10:13:18	Print	8	£0.00	£0.00	£0.82	£0.99	£0.00	£2.62	KVQ6LV.PDF	\\MThompsonXP
<input type="checkbox"/>	johnthompson	PRINTER3	03/01/2013 09:47:18	Print	9	£0.00	£0.00	£2.62	£1.27	£0.00	£1.99	X4GZCC.PDF	\\JThompsonXP

Search

Enter a text string to search for in the database and click Go. User names and Device names will be searched for compatible matches and displayed in the grid. The grid can be paged to scroll through the results.

Column Sorting

Click on the column header in the grid to sort the column.

Shortcut Links

Clicking on the User name or Device name in the grid will return all results for that item.

Job Refunds

NOTE: The job refund feature may only be visible if it is enabled in the application settings specified on the Server.

Jobs may be refunded back the user account balance via Pcounter PRO. Refunds are credited back to the user account balance only. Jobs to be refunded can be selected by checking the box in the first column and clicking the 'Refund Selected Jobs' button.

Pcounter Web Report

When the refund process is complete a message will be displayed against each row for which a refund was selected :

<input type="checkbox"/>		User Name	Device Name	Date\Time	Type	Pages	Cost	Balance
<input checked="" type="checkbox"/>	Job cost refunded successfully	alfredthompson	LASERJET1	01/01/2010 17:35:38	Print	7	£2.17	
<input type="checkbox"/>		tommichaels	COLORJET2	01/01/2010 17:35:36	Copy	6	£2.03	
<input type="checkbox"/>		mikenoble	LASERJET3	01/01/2010 17:35:34	Print	9	£3.02	

If A job has been already refunded then a message will be shown to inform the user containing the date\time of the refund :

<input type="checkbox"/>		User Name	Device Name	Date\Time	Type	Pages	Cost	Balance
<input checked="" type="checkbox"/>	Job was refunded on Monday, September 13, 2010 12:09:46 PM	alfredthompson	LASERJET1	01/01/2010 17:35:38	Print	7		
<input type="checkbox"/>		tommichaels	COLORJET2	01/01/2010 17:35:36	Copy	6		
<input type="checkbox"/>		mikenoble	LASERJET3	01/01/2010 17:35:34	Print	9		

If PWR 3.x was unable to refund the job cost to the Pcounter account balance the following message will be displayed. Check the server logs for a detailed description of the error.

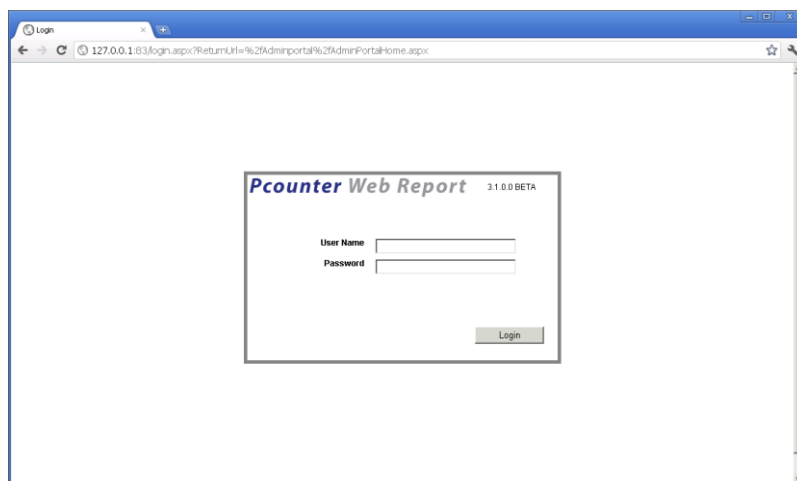
<input checked="" type="checkbox"/>	Error refunding job to Pcounter balance. Check server logs for details	tommichaels	COLORJET2	01/01/2010 17:35:36	Copy	6	£2.03	
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6. User Portal

The user portal is accessed via a web browser and is designed to show an end user their print history and enable self-service management of their personal ID number and PIN.

To access the User Portal open a web browser to the server running PWR 3.x on the port number specified at the time of install. The default port value is 83.

Users will be presented with the PWR 3.x login page and should enter their Pcounter login and password. These values are verified by Pcounter Pro against the network where Pcounter Pro is configured.



Upon Successful login the user will be taken to the portal home page.

Date/Time	Device Name	Type	Document Name	Pages
27/09/2011 20:12:18	PRINTER2	Print	SSFQV.PPS	1
26/09/2011 13:57:18	PRINTER4	Print	WTMR02.TXT	6
25/09/2011 18:24:18	COLORPRINTER2	Print	WJ9N2K.PPS	2
25/09/2011 12:20:18	PRINTER1	Print	NL9JML.PPS	8
24/09/2011 07:16:18	PRINTER2	Copy	FM6M38.XLS	9
24/09/2011 00:04:18	COLORPRINTER1	Print	ZLF3G3.XLS	1
23/09/2011 14:29:18	PRINTER3	Print	ZH3MGP.DOC	6
21/09/2011 08:06:18	PRINTER1	Print	ZT7FFF.DOC	5
21/09/2011 06:43:18	COLORPRINTER1	Print	HQD558.PPS	9
20/09/2011 09:56:18	PRINTER1	Print	3A4PZC.PDF	1

User Report Tab

The User may select the view of data to display in the report. The Report grid is paged to scroll through the user history. Columns may be sorted by clicking on the column header.

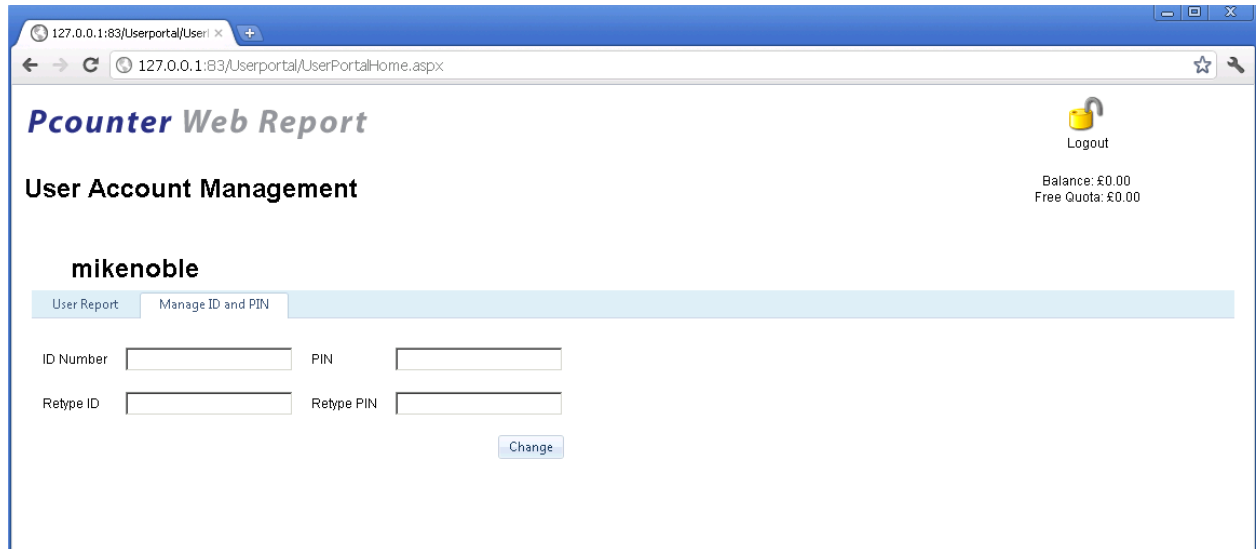
Pcounter Web Report

Log Out

This option logs the user out of the web portal and returns to the login page.

Manage ID and PIN

This option will be displayed if the option is enabled in the PWR 3.x User portal administration. Selecting the Manage Short ID \PIN tab shows the ID Management page.



The screenshot shows a web browser window displaying the 'Pcounter Web Report' user portal. The page title is 'User Account Management' and the user is logged in as 'mikenoble'. The 'Manage ID and PIN' tab is selected. The form contains four input fields: 'ID Number', 'PIN', 'Retype ID', and 'Retype PIN'. A 'Change' button is located below the 'Retype PIN' field. In the top right corner, there is a 'Logout' button and account information: 'Balance: £0.00' and 'Free Quota: £0.00'.

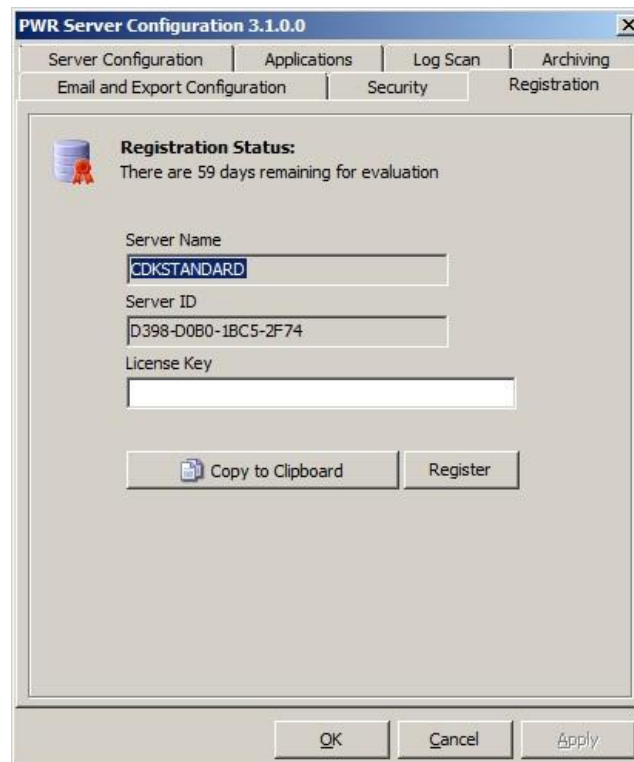
Users may enter their Short ID number and PIN (if enabled). To change the Short ID and/or PIN, the values must be verified and then saved by clicking the 'Change' button.

7. Administrative Functions

The next section describes the server side applications of PWR 3.x

PWR Server Configuration

The Server configuration application runs on the PWR 3.x server and holds the server side properties for the system.

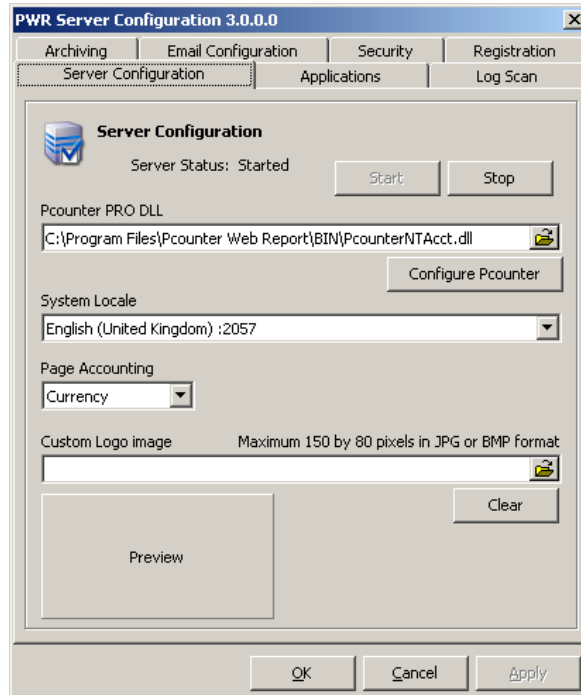


Registration Tab

The Registration tab holds the license and registration information and displays status for the current server. If you have obtained a license key enter it in the box provided and click Register. To obtain a valid license key, supply the Server name and Server ID values to your Pcounter representative. The PWR 3.x software will operate for a period 60 days without a valid License key.

Copy to Clipboard

This function copies the Server Name and Serial number to the Windows Clipboard where the information can be easily pasted into an email or text document.



Server Configuration Tab

Pcounter PRO DLL

This value will be defaulted according to the selection made during the install procedure. Click 'Configure Pcounter' to launch the Pcounter Pro accounting DLL configuration screen. Consult the Pcounter documentation or help files for more information on the Pcounter Pro configuration dialogs.

System Locale

Select the locale of the Pcounter system from the list. This setting is used to format the currency and date values in the application and automated email reports.

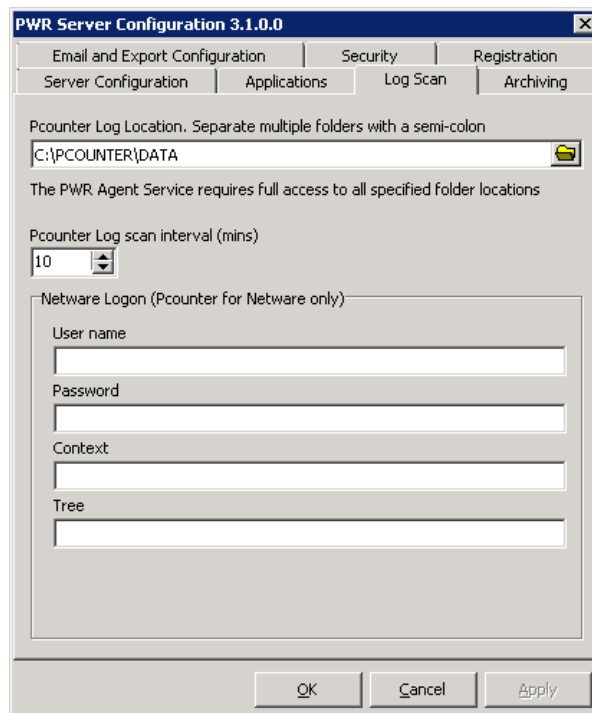
Page accounting

Pcounter supports 2 types of accounting modes, pages and currency. Select the option that reflects the Pcounter log files being imported into PWR 3.x. After changing this setting, the application must be restarted to apply the formatting changes.

Report Custom Logo Image

A custom logo can be added to the left hand side of the report header. To set a custom logo, select a BMP or JPG from disk using the browse file button. The image will be loaded into the preview panel below the file name. The image must be a maximum of 150 x 80 pixels in size.

Pcounter Web Report



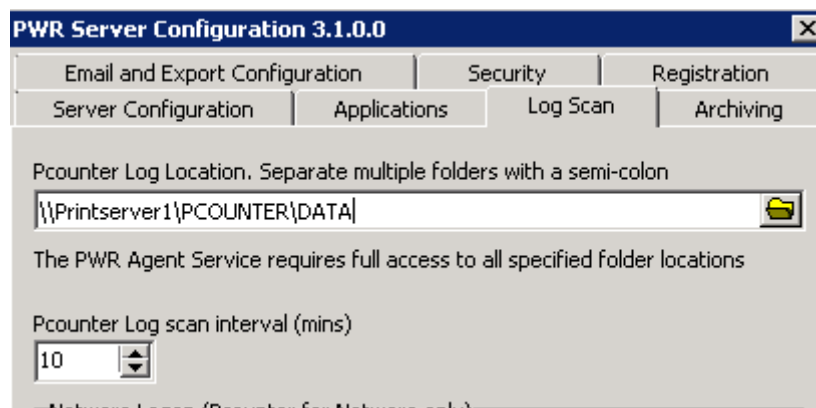
Log Scan Tab

Pcounter Log Location

For Pcounter Windows, specify a valid directory path or use the browse directory button by clicking on the folder icon. You can specify multiple folder locations separated by a semi-colon. The PWR Agent Service requires full access to the folder locations specified.

If the specified folders are on the local machine, then the default LocalSystem account will be sufficient. If a folder listed is from a network drive or UNC path then specific configuration is required as follows :-

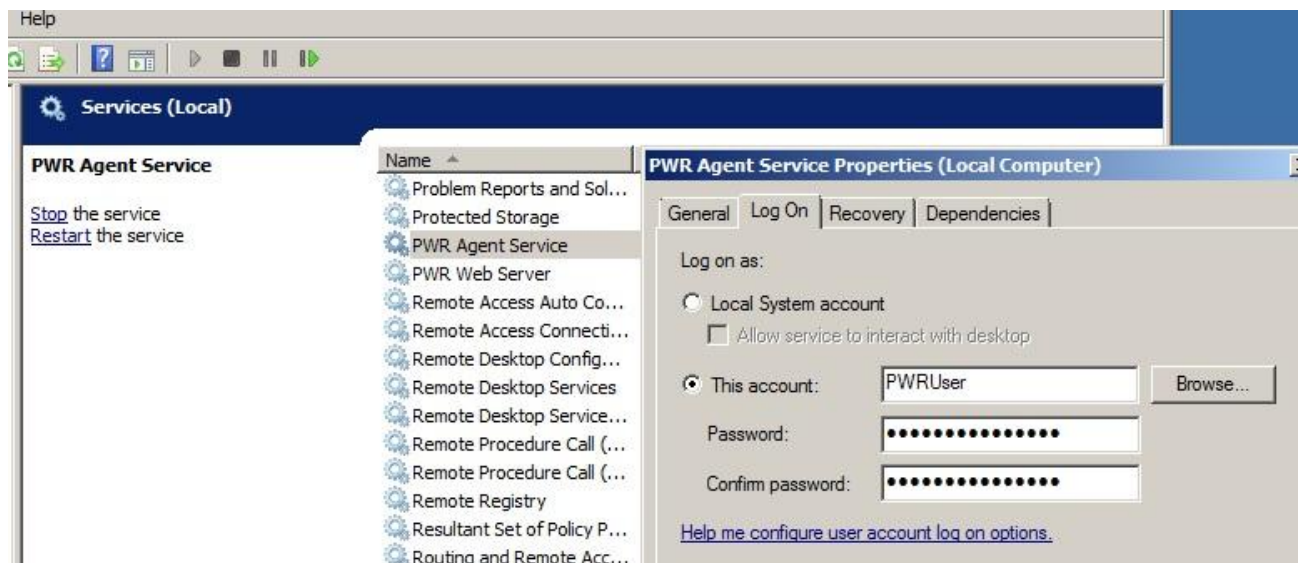
- The Pcounter log folder must be shared on the network, and reachable by the PWR3 server. Any valid Windows file path is accepted, including UNC paths:-



- Full access must be granted to the username running the log scan process. Without 'full control' on the remote share the log scanner will be unable to create the necessary temporary files during the scan process.

Pcounter Web Report

- The service login name for the 'PWR3 Agent Service' needs to be changed from localsystem to an actual username with full access to the shared folder (as above). This is done using the Windows Service control manager

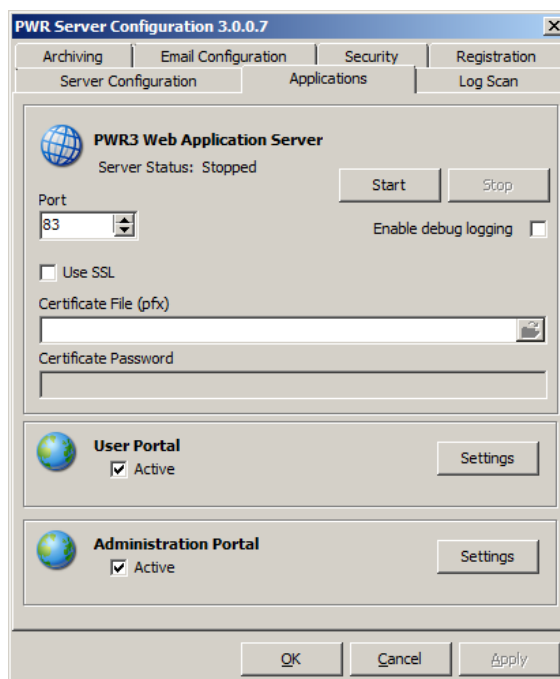


For Pcounter Netware, specify the UNC path of the Pcounter log location on the Netware file server. It will be necessary to include a valid Netware logon account to access this location. In the fields provided, enter the User name, Password, Context and Tree of the Netware logon account that has permissions to copy the Pcounter log files from this location to the PWR 3.x server. Please note this function requires the Netware client software installed on the PWR 3.x server.

Pcounter log scan interval

Select the number of minutes between each scan of the Pcounter Log files. The default value is 10 minutes.

Pcounter Web Report



Applications Tab

Port

Select the port to use for the Web applications. The default value is 83.

Enable debug logging

Check this option to enable additional logging options for troubleshooting.

Use SSL

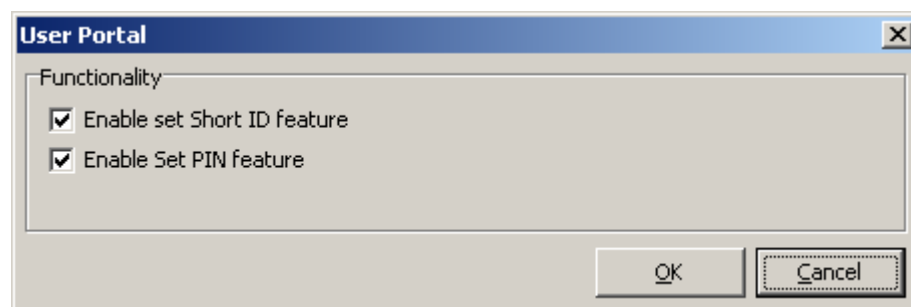
The PWR 3.x Web Server can use SSL secured connections for all applications (Reporting, Admin Portal and User Portal). To enable SSL specify a valid PFX certificate and certificate password.

User Portal

Activate or deactivate the User portal.

User Portal Settings

From the User portal settings it is possible to enable and disable the Short ID and PIN management features.



Enable Set Short ID Feature

Check this option enable end users to change their Short ID number via the User portal. Note that changes will be applied next time a user logs into the portal application.

Enable Set PIN Feature

Check this option enable end users to change their PIN number via the User portal. Note that changes will be applied next time a user logs into the portal application.

NOTE:

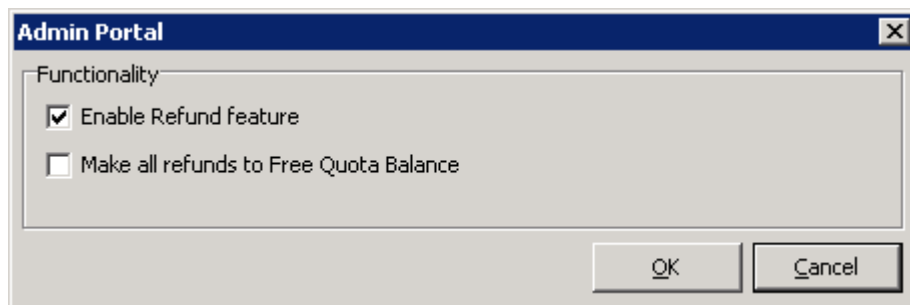
Setting the Short ID\PIN from the Portal is supported only if the Short Ids and PIN codes are maintained in the Pcounter Database, not in AD/NDS.

Admin Portal

Activate or deactivate the Administration portal.

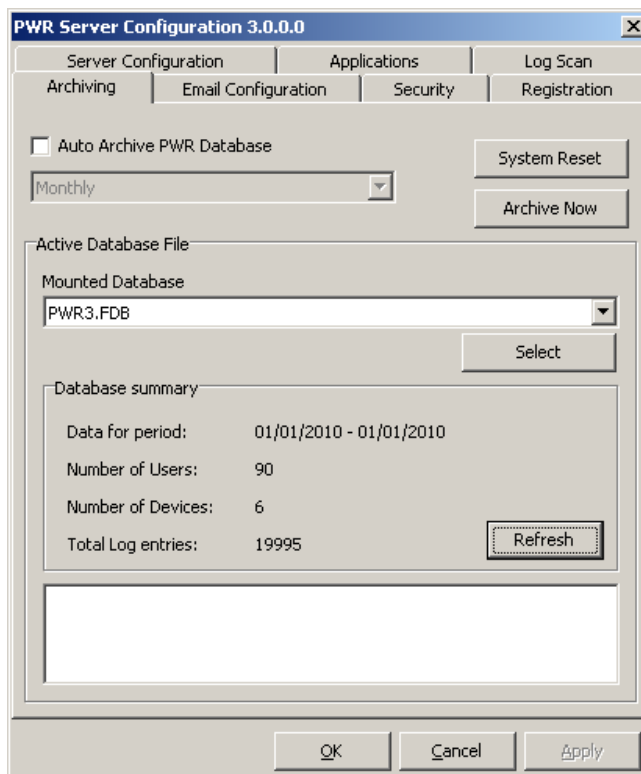
Admin Portal Settings

From the Admin portal settings it is possible to enable and disable the refund feature.



Make all refunds to Free Quota Balance

This option forces all refunds via the Admin Portal to be applied to the Free Quota balance.



Archiving Tab

PWR 3.x may auto-archive data to back up old files and maintain performance levels.

Auto Archive

The auto archive function enables the user to select an archive recurrence.

System Reset

The system reset function removes all print history data from the PWR 3.x database.

Mounted Database

Select the current database in use by the PWR 3.x applications. A Database can be selected from a list of available archives.

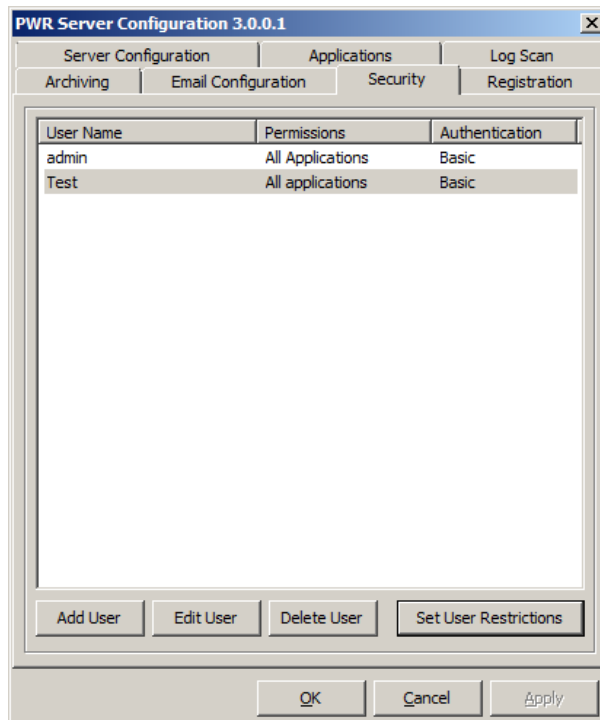
NOTE: Please ensure all PWR 3.x client connections are closed or inactive before performing a system reset or changing the mounted database. Existing connections to the database are forcibly removed and may cause timeout errors in client applications that are using the system during a reset operation.

Database summary

Click refresh to review a summary of the currently mounted database.

Reporting on Archived Data

In order to report on archived data, select the archive file from the list under 'Mounted Database'. Archived files are named according to the date range of data within the database at the time of archive. When the correct file is selected, click select and restart the PWR applications. **NOTE: mounting an archived database file means that all PWR applications will use this database as the current database. Care should be taken to avoid scanning new Pcounter log data into an archive file. Stop the PWR Agent service in this case, to disable log scanning.**



Security Tab

A built in administrator login account is included called 'admin'. Additional users can be added by clicking the 'Add User' button.



The Add button displays the add user dialog. A username and password must be specified and a user permission group must be selected from the permissions dropdown list. Current user groups are 'Access Administrator Portal' and 'Access Reporting' and 'All Applications'.

Pcounter PRO Authentication

A PWR 3.x user can be authenticated by Pcounter PRO by checking the 'Authenticate with Pcounter PRO' option. In this case the PWR 3.x password value is ignored, as the password is authenticated via the network. The username supplied must match an existing network account.

NOTE: Authentication for User Portal Users.

It is not necessary to add users to PWR 3.x for User Portal access. Authentication for the user portal always uses Pcounter PRO to validate users. If a user name is also a PWR 3.x user, then their permissions will be elevated to include application access based on their permissions group.

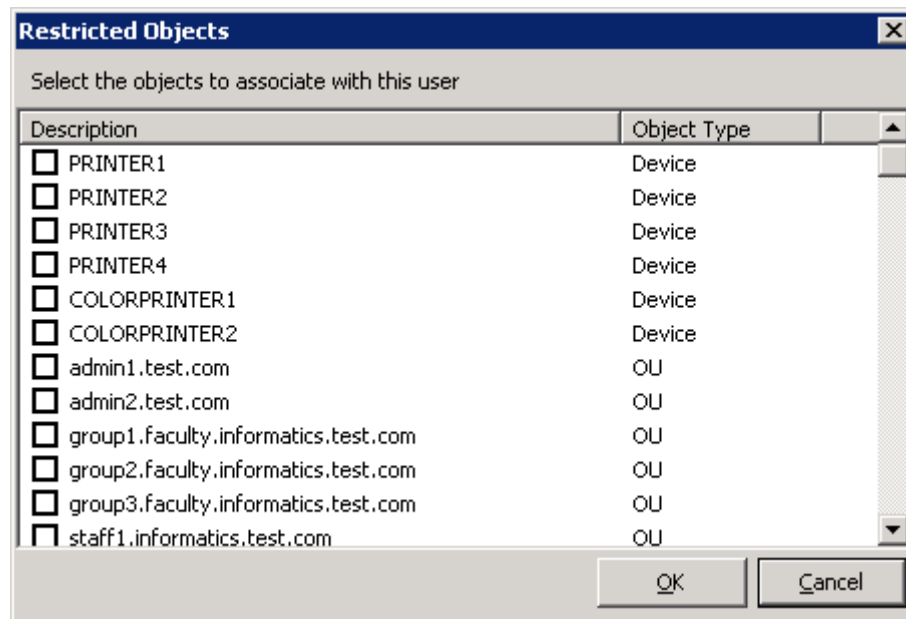
Pcounter Web Report

Edit\Delete User

Used to manage users created within the system. The Admin user may not be deleted.

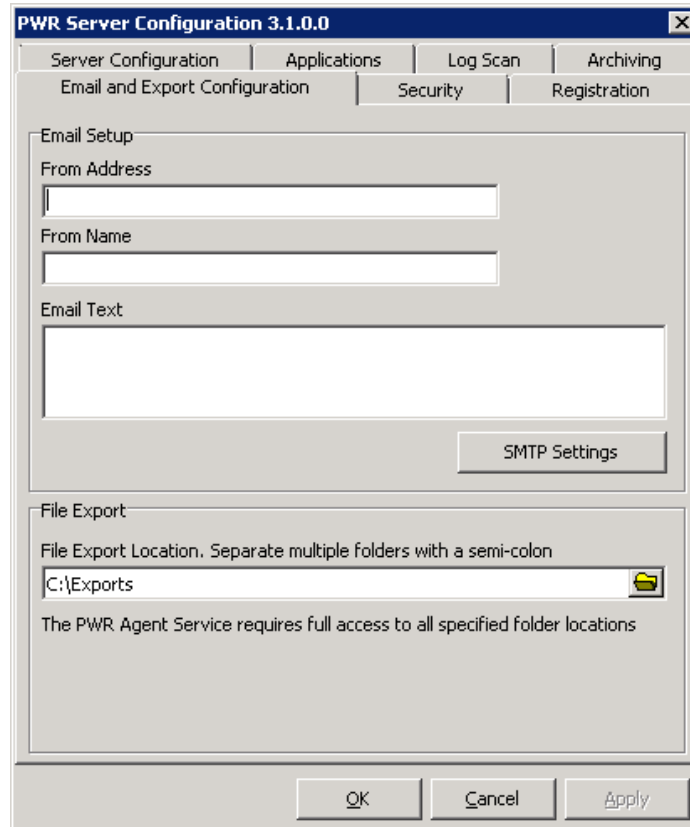
Set User Restrictions

Certain users may be restricted from viewing data within the system. The User restrictions feature enables the Administrator to block specific devices, Users or OU values for the selected user.



Placing a check beside the object will permit that object for the selected user.

Pcounter Web Report



Email and Export Configuration Tab

The Email and Export Configuration tab is used to configure the email and export features of PWR 3.x.

Email Setup

From Address

The from address field is used to specify the email address that PWR 3.x uses to send automated email reports.

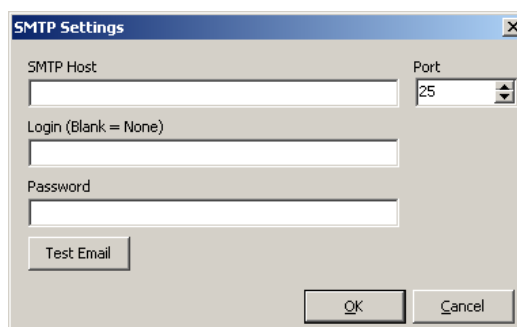
From Name

The From name field is the name that will appear in the 'from' field of the emails sent by PWR 3.x.

Email Text

The email text field is the text that will be included in the body of the email sent by PWR 3.x.

SMTP Settings



Pcounter Web Report

PWR 3.x uses SMTP to send outgoing emails. To send emails using SMTP, it is necessary to specify an SMTP Server and any account username or password for that server.

SMTP Host

The field holds the DNS name of the SMTP Server.

SMTP Port

This value is the port number on the server specified. The default is 25.

Login

This field holds the SMTP login for the server specified. Leave this value blank if the server does not require authentication for sending emails.

Password

This field holds the password that corresponds to the login name specified.

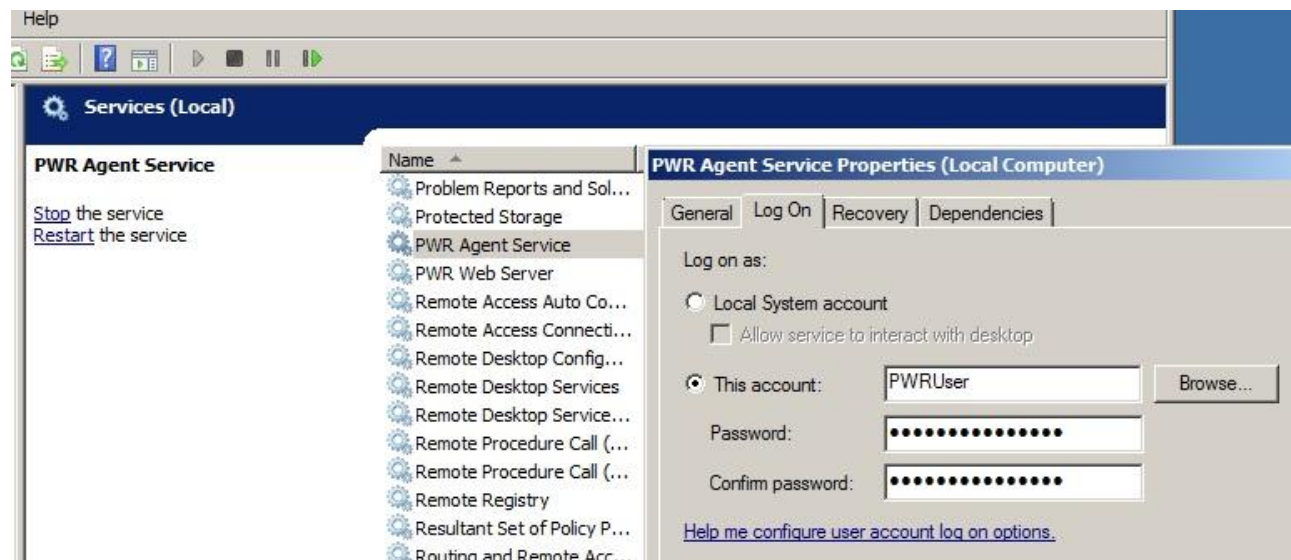
Send Test Email

It is possible to test the current email settings by clicking the 'Test Email' button. If the email is sent successfully, then a success message will be displayed. If PWR 3.x was unable to send the email, then an error dialog will be displayed with a description of the problem.

File Export

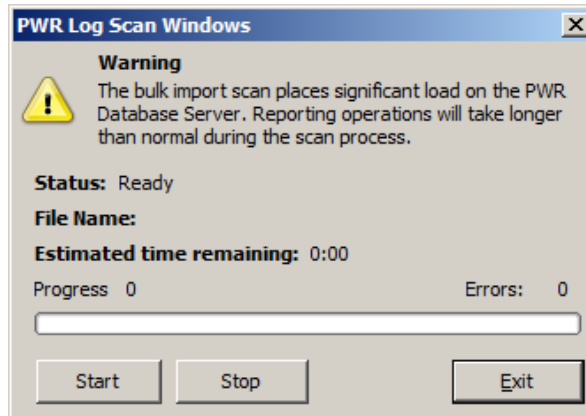
You may specify one or more folders to use when running scheduled file exports by separating each path with a semi-colon.

- Full write access to each folder in the list must be granted to the PWR3 Agent Service.
- The service login name for the 'PWR3 Agent Service' needs to be changed from localsystem to an actual username with full access to the shared folder (as above). This is done using the Windows Service control manager



8. Log Scan utility

The log scan utility reads the Pcounter log files on the server and runs automatically to update the PWR 3.x database. The application can also be run manually from the Program Group on the PWR 3.x server.



Start\Stop

These buttons start and stop the scan process.

Exit

Shut down application.

NOTE: It is important to close the Log Scan application if it has been executed manually, otherwise the interval scan will not run. The interval scan will not execute a second instance of the application if it is already running.

Document Types

PWR 3.x registers document types by examining the file name of the Print Job in the Pcounter log. A number of common document types are built in based on the document name containing one of the following values :-

File name contains :-

"HTTP", "HTTPS", "HTML" = WEB

File extension is :-

"PDF" = PDF Document

"DOC" = Office Word Document

"XLS" = Office XLS Document

"XML" = XML Document

"TXT" = Text Document

This list can be customised by adding to the PWRDocTypes.txt file in the application install folder on the server. The format is :-

<Identifier>=<type> i.e. PDF=Adobe PDF Document

The file extension is checked first, if it does not match then the document name is checked for the presence of the identifier string. For example, the rule :-

http://StudentServer=Student Email Server

Will tag all job names containing the string "http://studentserver" as being a Student Email Server document type.

Missing Domain names in Reject.log

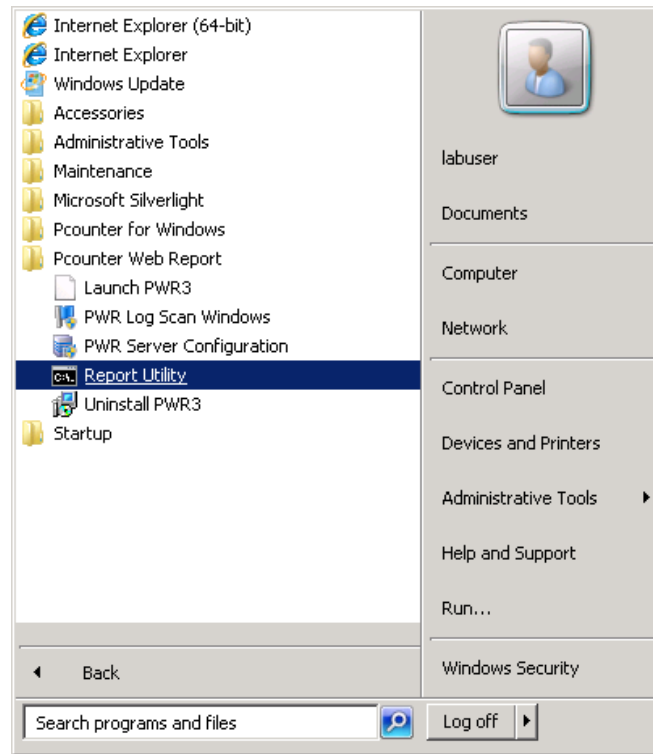
For cases where the Reject.log file does not include the full user name, a text file can be created in the <PWR>Bin\ folder called 'NoDomain.txt'. The first line of this file should contain the domain name to be substituted should the domain name be missing from the Reject.log file.

9. Report Definition Import\Export

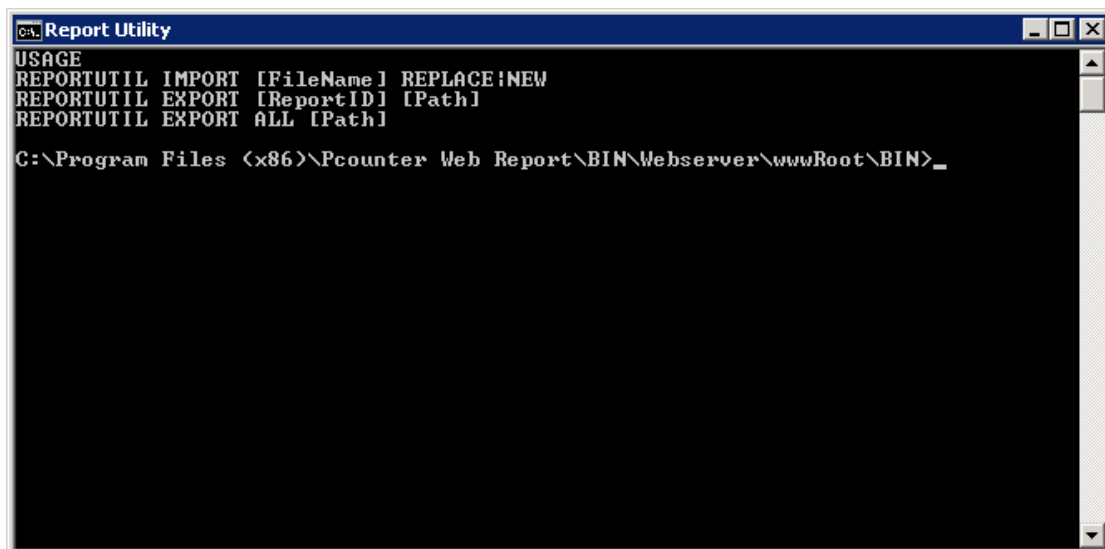
PWR 3.x comes with a utility application for importing or exporting report definitions. Reports can be configured on one system and exported to another system, either replacing the current report with the same ID, or creating a new report.

Report Import

1. From the PWR3 program group, run the Report Utility:-



2. The command window will open.



3. Type the either the command line :-

REPORTUTIL IMPORT [report full path] NEW

This command will create a new report in the PWR database using the report definition file.

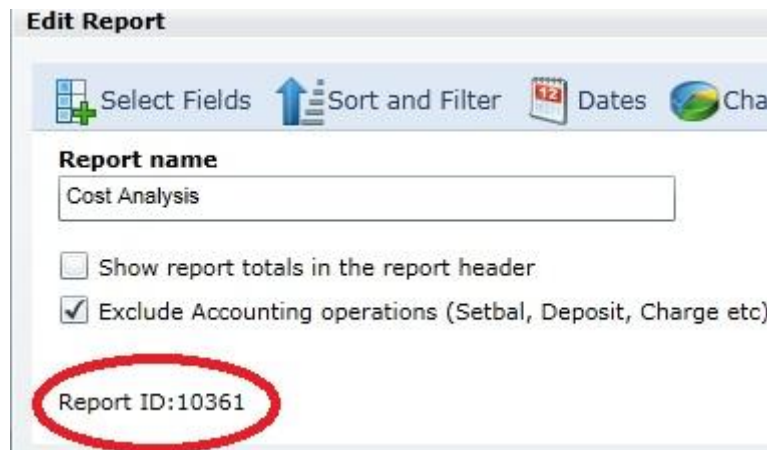
REPORTUTIL IMPORT [report full path] REPLACE

This command will replace a report in the PWR database using the report definition file.

Reports with the same report ID will be replaced.

Report Export

You may export an individual report using the report id. The report id is displayed after the report is saved and opened on the 'Report Title' tab.



The following commands can be used to export a report :-

REPORTUTIL EXPORT [report id] [report folder]

This command will export a report from the PWR database to a pwr definition file. Supply the ID of the report and the file path. Supply only the file path for export, the file name is generated from the report name.

REPORTUTIL EXPORT ALL [reports folder]

This command will export all reports from the PWR database to pwr definition files. Supply only the file path for export, the file name is generated from the report name.

Appendix A – Log Files

PWR 3.x maintains a number of log files containing status information and error tracking during normal operation.

The logs are held in the PWR 3.x application folder in the \BIN\Loggs subfolder. Each log is capped to a maximum 2mb in size to conserve disk space and has a .LOG file extension. Logs can be opened in any text editor application such as Notepad.exe.

When a log reaches 2mb in size it is archived to an .ARC file, and a new log is created. Archived logs are overwritten; this means that up to a maximum of 4mb log data is saved at any one time.

Log Name	Description
PWRAgent.log	Contains logging information about the PWR 3.x Scheduler service application.
PWRLogScanNT.log	Contains statistics and error information about the scanning of each Pcounter.log file
UnknownDocType.log	Contains logging information about document types that could not be identified in the Pcounter log file.
Exceptions.log	Contains logging information about the Pcounter jobs rejected by PWR 3.x because the page count was 0, or if a log entry has an invalid number of columns.
Archive.log	Contains information on the System Archive activity
ProNetBridge.log	Contains error messages received from calling the Pcounter PRO DLL

Appendix B – Port Numbers

PWR 3.x client uses the following network ports and protocols to communicate with the PWR 3.x server :-

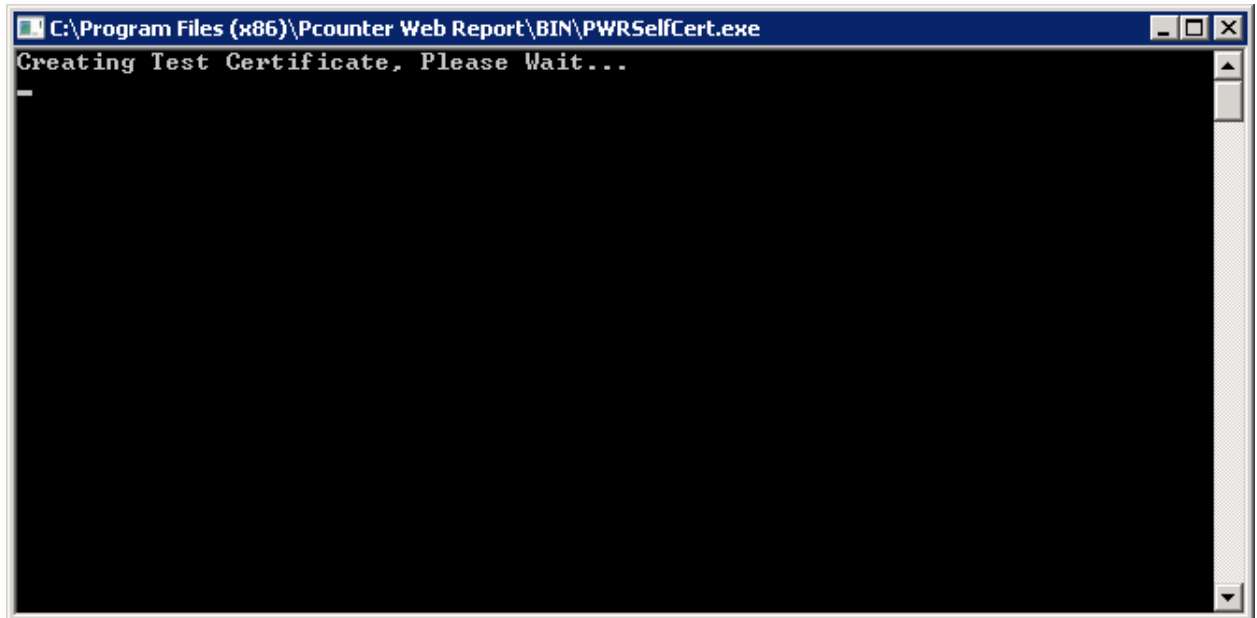
Database Server Port: TCP 3050 (connects Localhost only)

Application HTTP\HTTPs Port: 83 (default, can be changed in settings)

Appendix C – Generating a Self Signed SSL Certificate

PWR Ships with a utility for generating a basic self-signed SSL certificate. This certificate is not suitable for use in production environments as it will generate certificate warnings and errors in the browser, however it is suitable for demonstration and testing of the SSL capabilities.

In the \BIN folder run the executable PWRSelfCert.exe



When complete a PFX file will be created in the same folder

File Name: PWRTestCert.pfx
Password: password

Use this PFX file and password to configure the SSL settings for PWR.

Appendix D – Increasing the Database Memory Cache

If you are experiencing poor performance in running reports in PWR 3.x, then you may increase the amount of memory that is allocated to the database cache. This will ensure that more data pages are loaded into memory over time, hence any subsequent queries will be more responsive.

NOTE: this adjustment should only be considered for PWR databases that are running greater than 1GB in size (\Data\PWR.FDB file).

In the \FDBMS folder of the PWR install, locate and open the file Firebird.conf using notepad or similar text editor.

Locate the section as shown below :-

```
# -----  
# Number of cached database pages  
#  
# This sets the number of pages from any one database that can be held  
# in cache at once. If you increase this value, the engine will  
# allocate more pages to the cache for every database. By default, the  
# SuperServer allocates 2048 pages for each database and the classic  
# allocates 75 pages per client connection per database.  
#  
# Type: integer  
#  
#DefaultDbCachePages = 2048
```

Modify the DefaultDbCachePages value according to the following guideline:-

Systems with 4GB RAM – 4096
Systems with 8GB RAM – 8192

Delete the # symbol. The setting should look similar to this :-

```
# -----  
# Number of cached database pages  
#  
# This sets the number of pages from any one database that can be held  
# in cache at once. If you increase this value, the engine will  
# allocate more pages to the cache for every database. By default, the  
# SuperServer allocates 2048 pages for each database and the classic  
# allocates 75 pages per client connection per database.  
#  
# Type: integer  
#  
DefaultDbCachePages = 8192
```

Save the file, and then restart the 'FireBird – Default Instance' service.