

Pcounter Web Report Installation Guide Version 3.4

Table of Contents

Table of Contents	2
Installation Overview	3
Installation Prerequisites and Requirements	3
Minimum Hardware Specifications	4
Installing Pcounter Web Report 3.x	5
Upgrading from PWR 2.x versions	5
Upgrading from PWR 3.1 version	5
Pre-installation notes	5
Installation procedure	5
Installing the .NET Framework	8
Enabling ASP.NET	10
Upgrading from PWR 3.1	11
Installing PWR 3.x on a dedicated server	13
Scanning Pcounter Log Data	13
Running the User and Administrative Portal applications	14
Configuring the Pcounter Server for Remote Access	15
PWR 3.x Server Configuration	16
Step 1 – Registration	16
Step 2 – Server Configuration	17
Step 3 – Pcounter Log Settings	18
Step 4 – Configure Applications	19
Step 5 – Save changes	20
Step 6 – Initial Pcounter Log Scan	20
Step 7 – Open Application	21
Step 7 – Enable Logging of OU Data in Pcounter	24
Troubleshooting	25

Installation Overview

This document describes the installation procedure 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 application can be installed on the same computer that hosts the Pcounter data server service, and where log files are written. To install PWR3 on a dedicated server, see the section entitled 'Installing PWR3 on a dedicated server' later in this document for more details.

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

Pcounter PRO Licenses: Certain features of these applications require Pcounter PRO features within Pcounter, either a Pcounter PRO license must be installed on the PWR3 server, or the PWR3 server must be connected to the Pcounter Data Server that has a valid Pcounter PRO license.

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'.

Installing Pcounter Web Report 3.x

Upgrading from PWR 2.x versions.

Existing PWR 2.x server installations must be removed before installing PWR 3.x on the same operating system. To upgrade an existing PWR 2.x installation, it is necessary to re-scan Pcounter logs into PWR 3.x for the historical reporting period.

Upgrading from PWR 3.1 version.

Upgrading from PWR 3.1 to 3.2 requires an additional database upgrade step. See the section entitled 'Upgrading from PWR 3.1'.

Pre-installation notes

- PWR 3.x requires the .NET Framework 3.51. If required, the .NET framework will be installed during the PWR 3.x install process, and depending on your operating system a server restart may be required. See the section entitled 'Installing the .NET framework' for more details. NOTE: If your operating system requires the .NET framework 3.51 then internet access will be required by the installer to download the correct components from the Microsoft downloads site.
- PWR 3.x requires that ASP.NET is enabled. If you are installing on a Server operating system this may require the activation of the Application Server role. On non-server operating systems, certain Windows features will be enabled. The PWR 3.x installer attempts to enable these components automatically.

Installation procedure

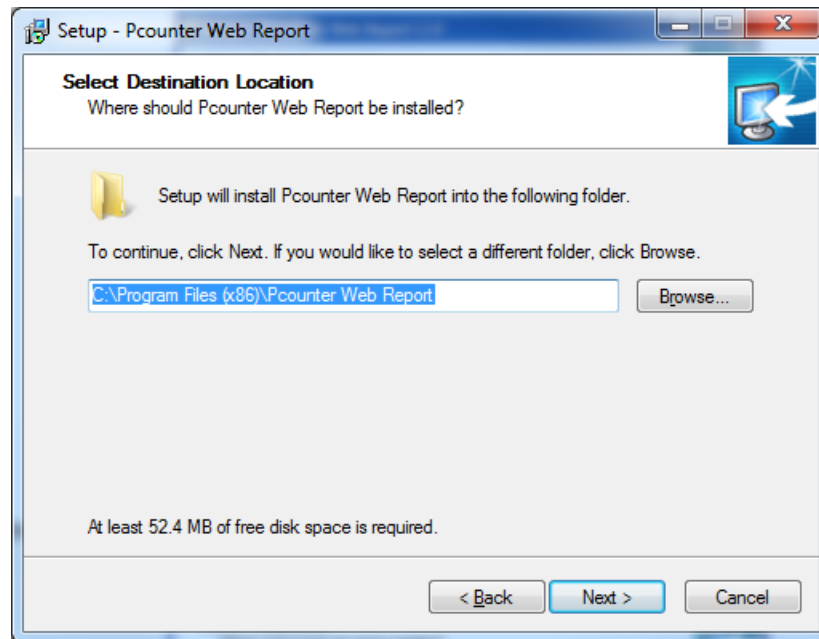
Execute the Setup installer on the target PC.



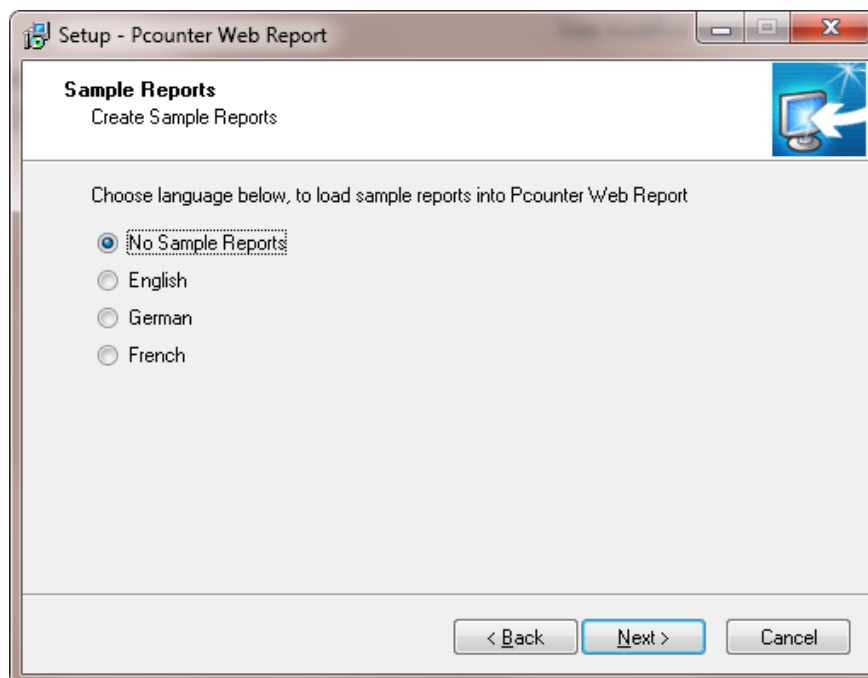
Click Next. Accept the licence agreement, click next.

Pcounter Web Report

Specify the install directory for PWR 3.x and click next.



An option is presented to install the sample reports.

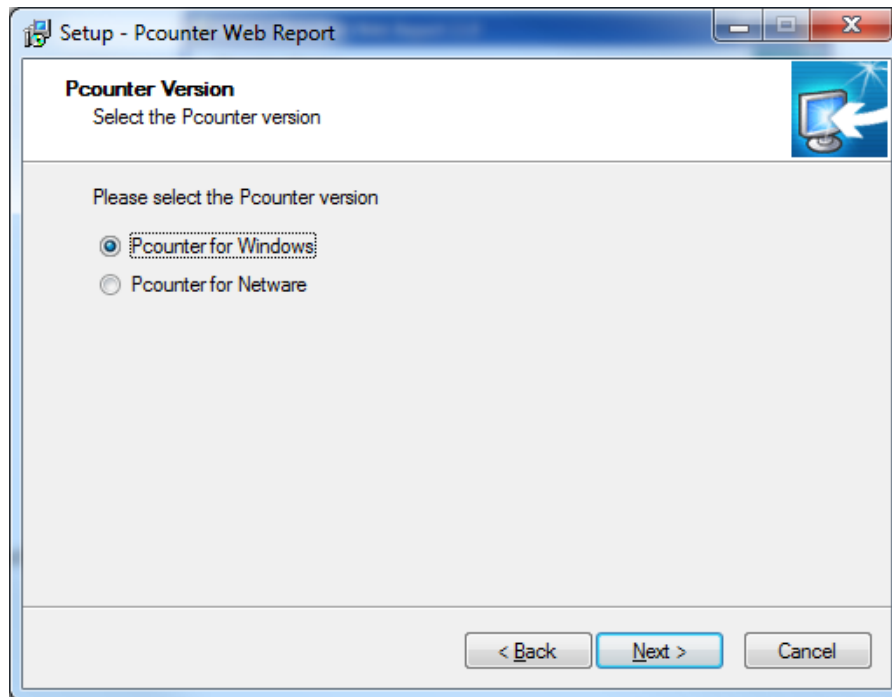


Select an option and click Next.

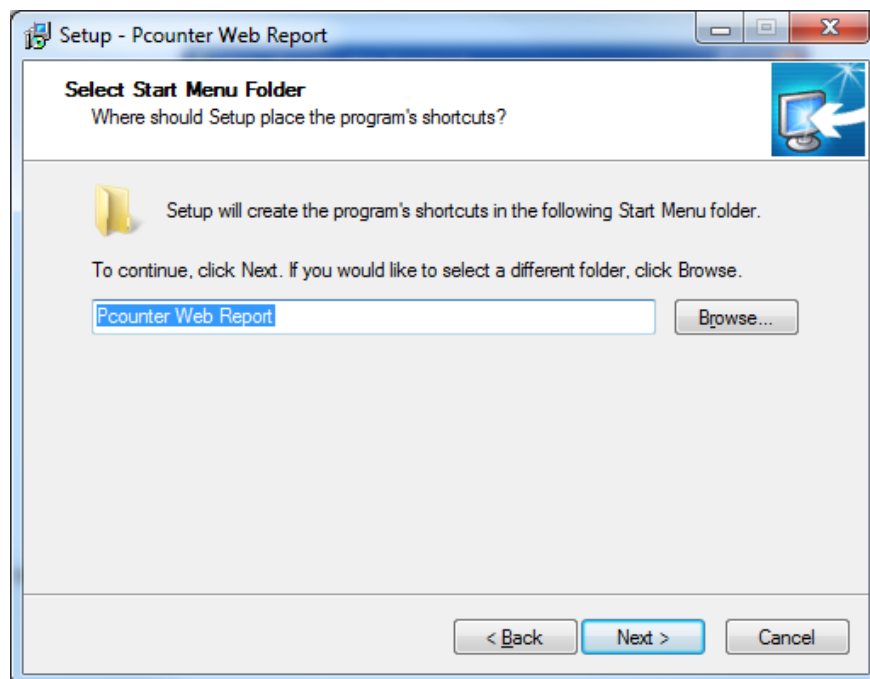
UPGRADE NOTE: Sample reports are always created as new reports. Running the installer as part of an upgrade to an existing PWR 3.1 database will create duplicate copies. If this is not desired then select 'No Sample Reports'.

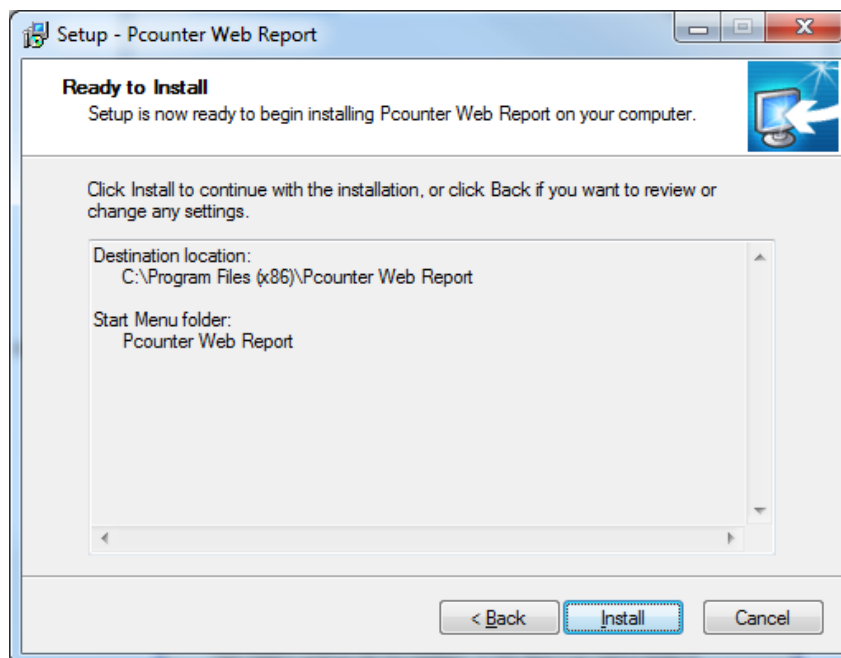
Pcounter Web Report

The next screen will prompt for the version of Pcounter that PWR 3.x will integrate with. Select the type of Pcounter and click Next.



The setup will create start menu shortcuts for PWR 3.x. Click next when done.





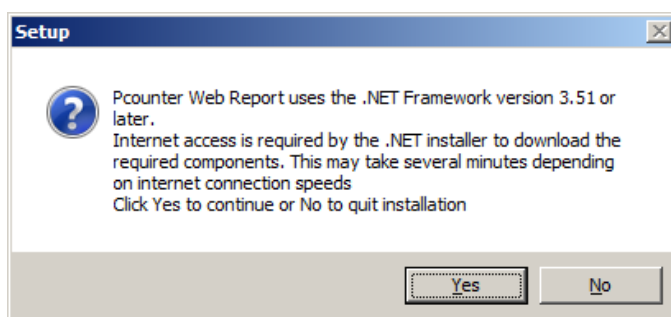
Review the setup tasks and click install.

Installing the .NET Framework

If required, the PWR 3.x installer will launch the .NET 3.51 installer application. The .Net installer application is a tool provided by Microsoft that automatically downloads and installs the correct .NET components to upgrade your operating system to version 3.51. The table below shows which operating systems may require the .NET framework 3.51.

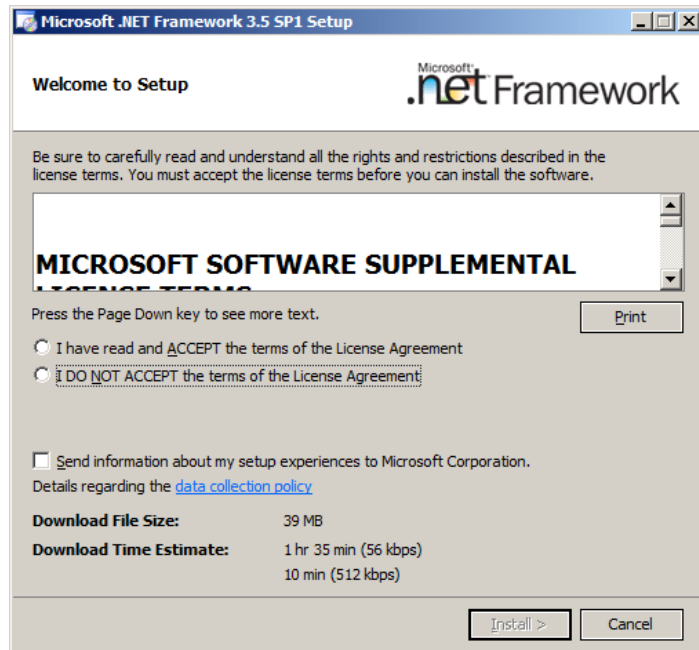
Operating System	Requires .NET 3.51	Possible Restart Required
Windows XP SP3	Yes	Yes
Windows Server 2003	Yes	Yes
Windows Vista	Yes	Yes
Windows Server 2008	Yes	Yes
Windows Server 2008 R2	No	No
Windows 7	No	No

The .Net installer requires internet access to download the correct components from the Microsoft downloads site. If .NET is required then the following message will be displayed by the installer :-

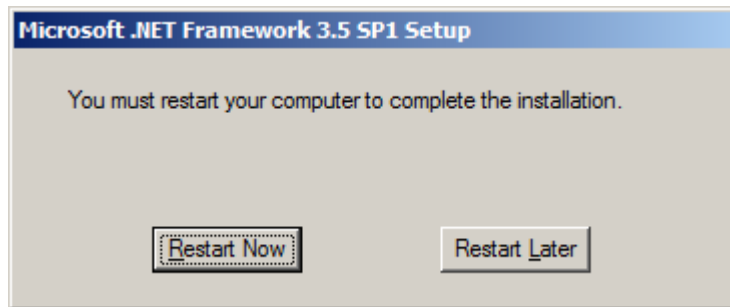


Click Yes.

Pcounter Web Report



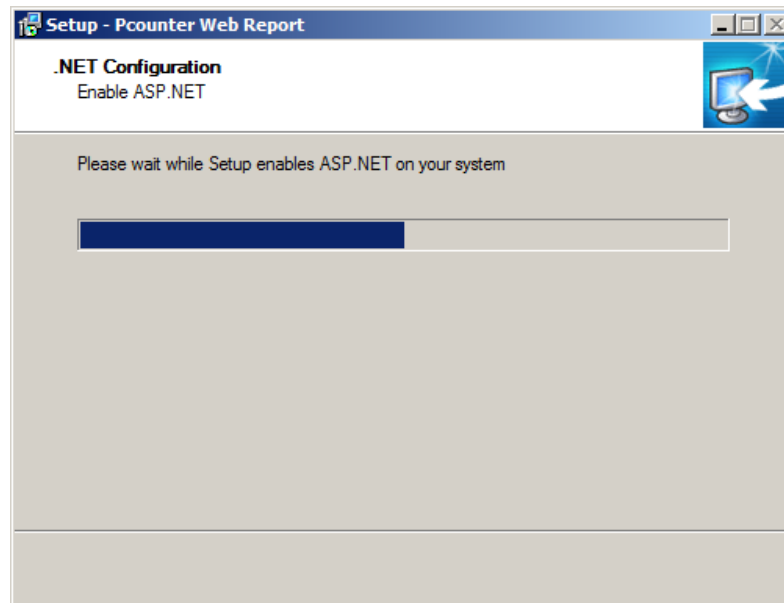
The .Net installer will display a separate installation dialog showing download and installation progress during the deployment of the .NET components.



Once the .NET installer completes, a restart may be required to complete the deployment. In the event of a restart, the PWR 3.x installer will launch on system start up to complete the remaining installation steps.

Enabling ASP.NET

Once your server is upgraded to .NET Framework 3.51, then the setup application attempts to enable ASP.NET.



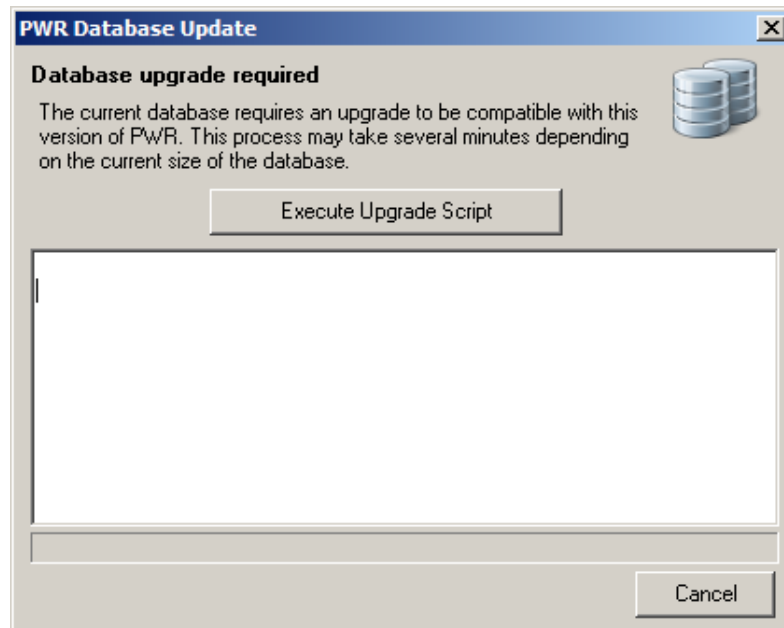
This may take a few moments depending on your operating system version and pre-installed Windows components.

Upgrading from PWR 3.1

PWR 3.2 includes a major database upgrade, therefore when the PWR Server settings application is run for the first time it checks if the currently attached database requires and upgrade. The upgrade procedure takes a backup copy of the current database before commencing.

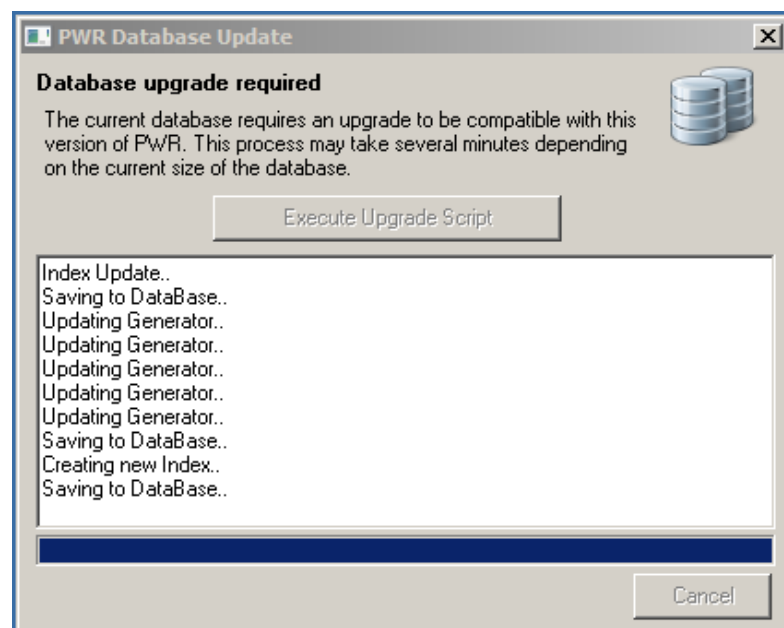
NOTE: The upgrade procedure can take between 5-20 mins depending on the size of the database file.

If an upgrade is required, the follow dialog will be shown :-



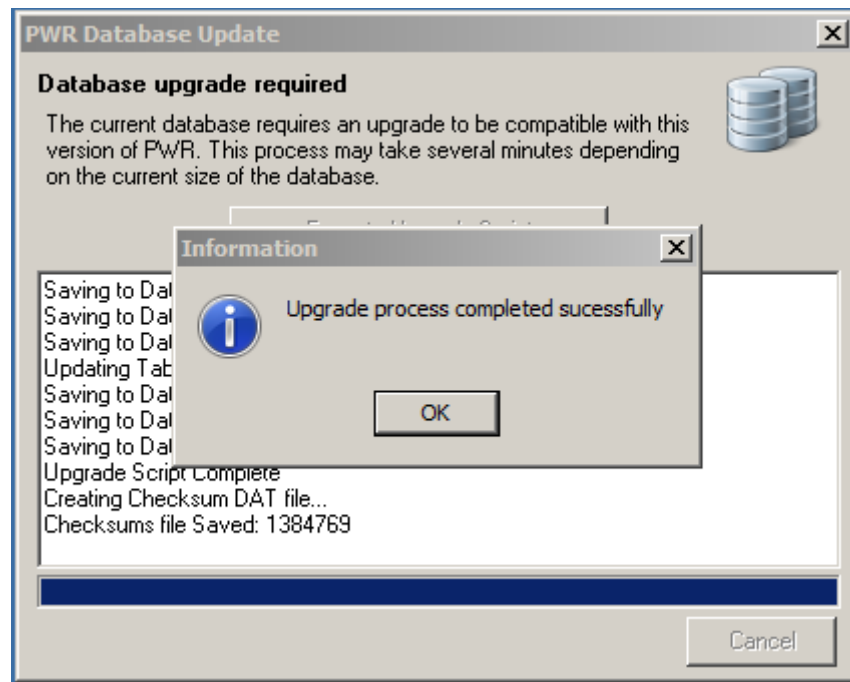
If you choose not to upgrade, the server settings application will close and the system will continue to prompt for the upgrade each time the server settings application is started.

Clicking 'Execute Upgrade Script' will begin the upgrade procedure.



Pcounter Web Report

The upgrade will proceed until all required steps are complete.



When the upgrade has completed, the PWR 3.2 server settings application will be shown.

If the upgrade procedure does not complete successfully, then the current database will be restored from the backup file.

A log of the upgrade steps is recorded in the <PWR>\BIN\Logs folder.

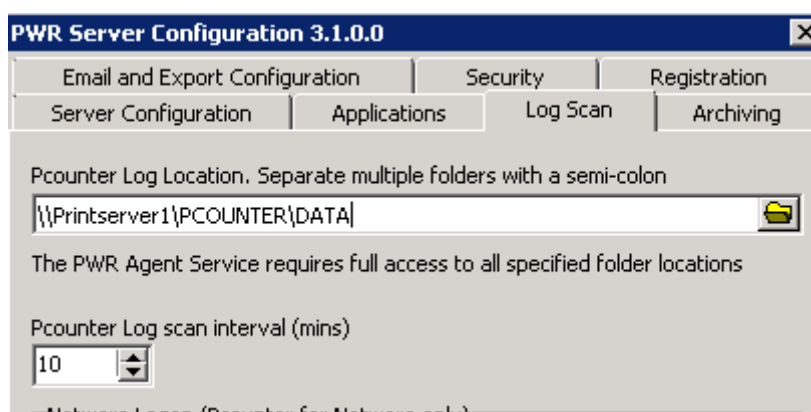
Installing PWR 3.x on a dedicated server

PWR3 may be installed independently on a dedicated server. It is necessary to configure specific security settings so that the PWR3 log scanner application can retrieve data from the Pcounter Data Server. If the PWR3 user portal application is used, then the PWR3 server requires a remote connection configured to the Pcounter Data Server.

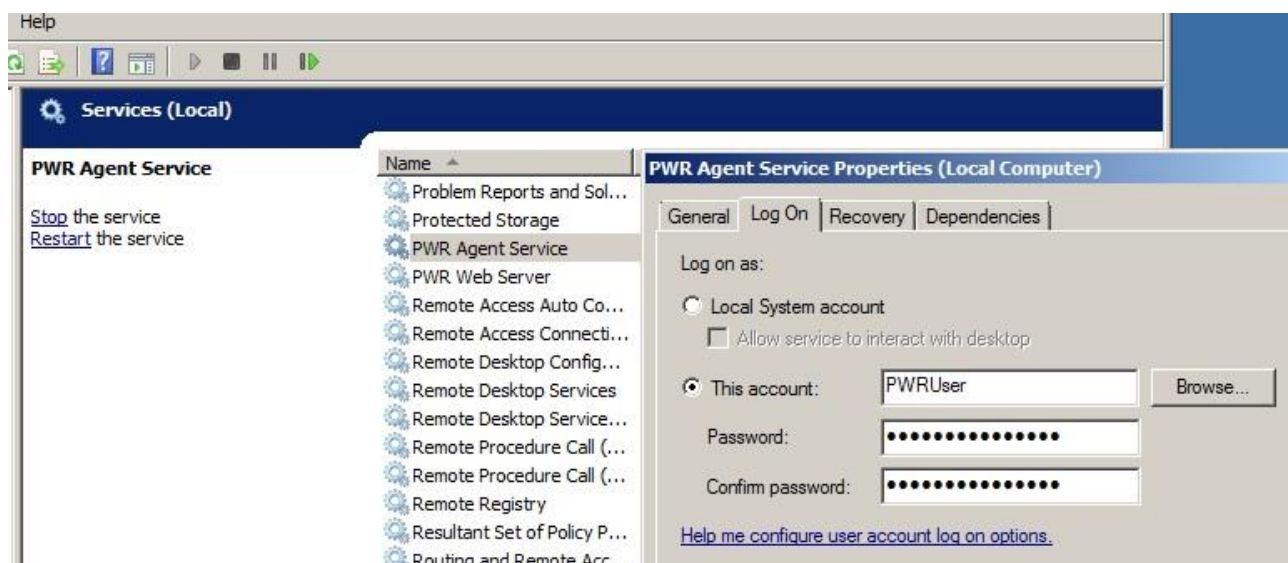
Scanning Pcounter Log Data

The PWR3 Log scanner can scan log files from a remote location given the following :-

- 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.
- 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



Running the User and Administrative Portal applications

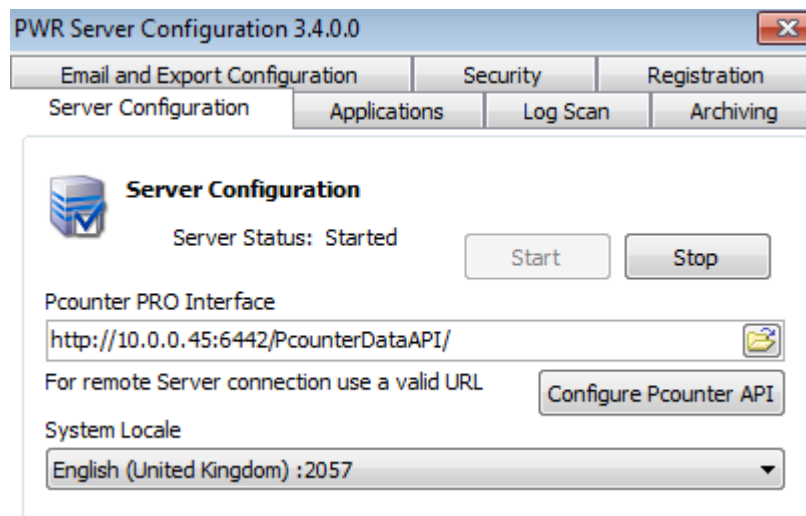
Certain features of these applications require Pcounter PRO features within Pcounter.

If the User and Administrative Portal applications are not used, a Pcounter license is not needed on the dedicated PWR3 server.

PWR must be configured to connect to a Pcounter Data Server that has a valid Pcounter PRO license.

On the Server configuration tab, Pcounter PRO Interface section enter the URL of the Pcounter server in the following form :-

<protocol>://<Data Server Host>:<Data Server Port>/PcounterDataAPI/



For example : <https://10.0.0.1:6443/PcounterDataAPI/>

You can click 'Configure Pcounter API' to test the interface connection and get some feedback on any connection errors or messages.

Configuring the Pcounter Server for Remote Access

The Pcounter data server needs to be configured to support a remote connection from PWR.

Access to the Data Server is allowed only if the client IP address is entered in the local registry.

x86: HKEY_LOCAL_MACHINE\SOFTWARE\Pcounter\DataServer

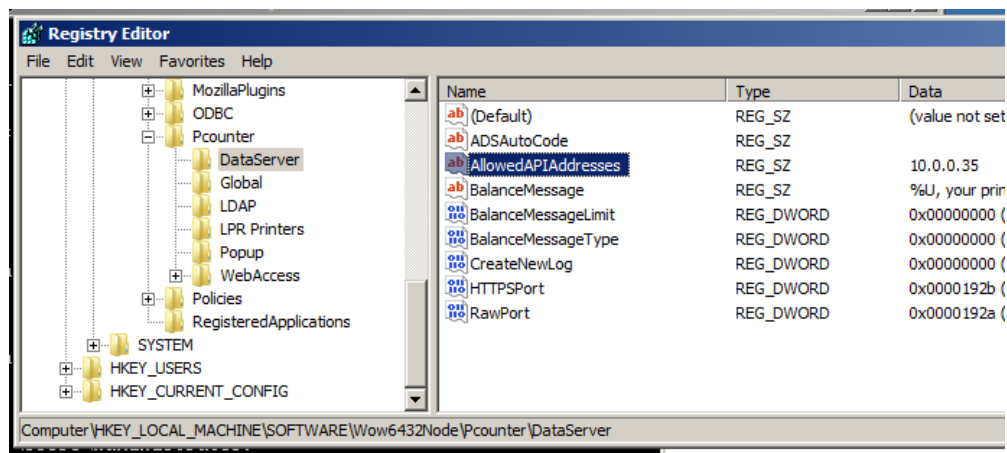
x64: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Pcounter\DataServer

Create string value: AllowedAPIAddresses

Edit the value so that each allowable IP address is separated by commas with no spaces.

Example, localhost only: 127.0.0.1

Example, 2 addresses: 192.168.2.3,192.168.1.2



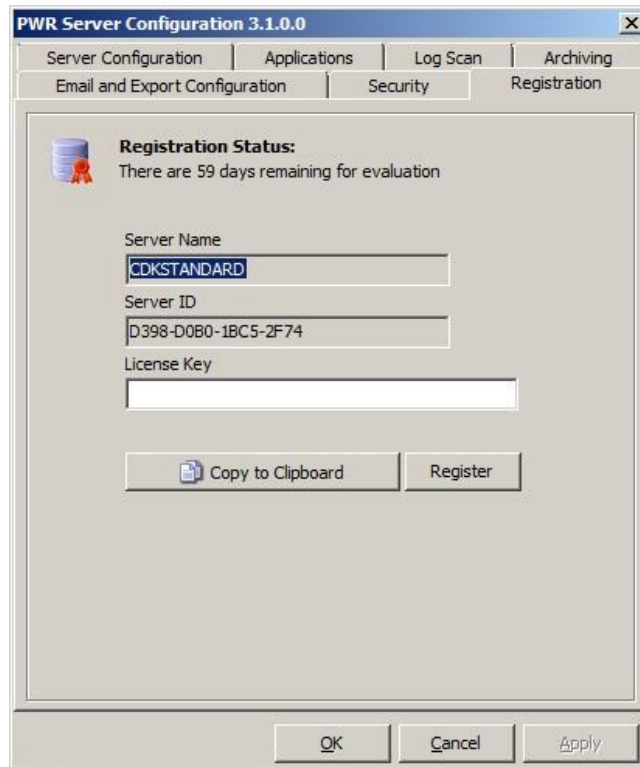
Note: The Pcounter Data Server service must be restarted after modification of the registry key.

PWR 3.x Server Configuration

The next section applies to the final configuration steps required to set up the PWR 3.x server application and import the Pcounter Log data.

On the PC where the PWR 3.x Server components are installed, go to the 'Pcounter Web Report' Program Files group and select 'PWR Server Configuration'.

Step 1 – Registration



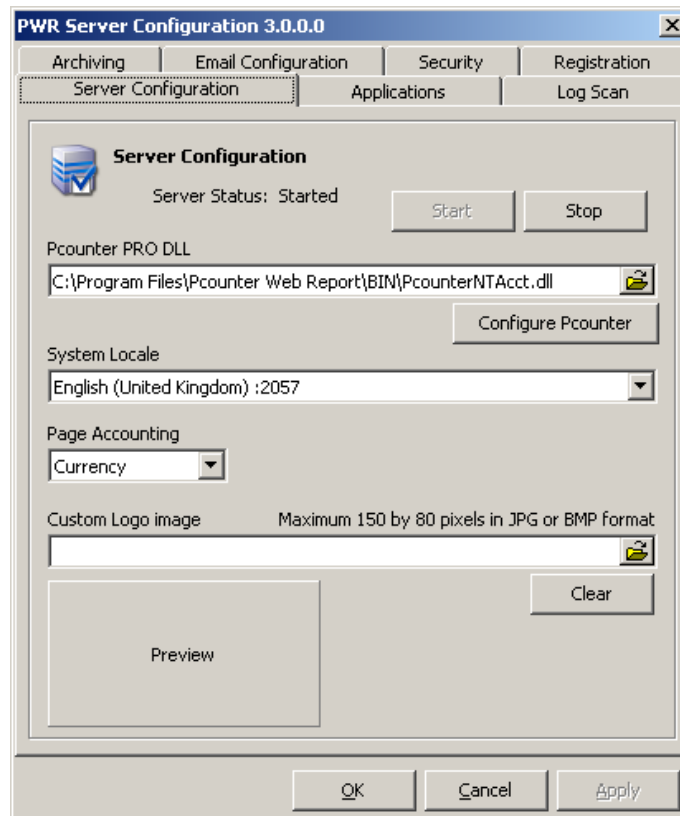
Registration Tab

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.

Step 2 – Server Configuration



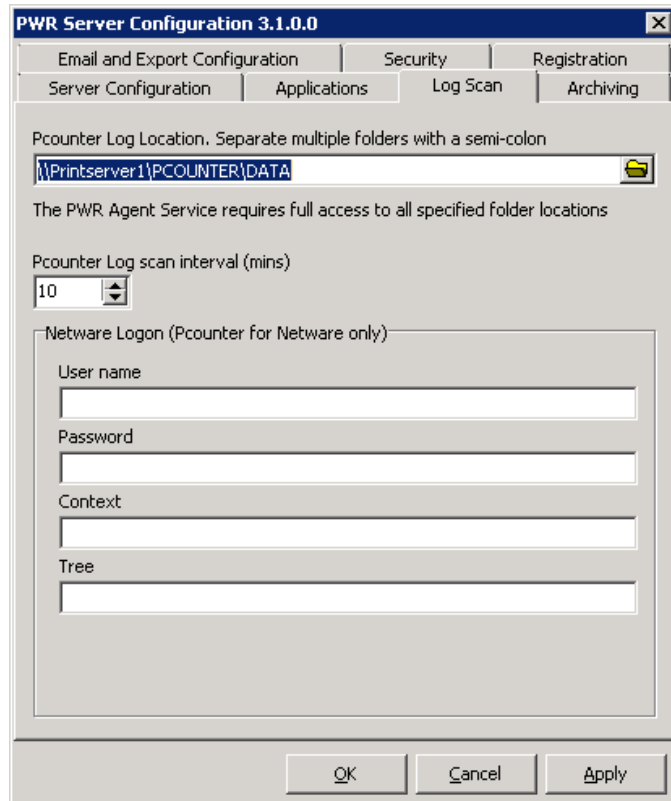
2.1 Specify Pcounter Accounting DLL and Configure Pcounter Pro.

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.

2.2 Specify 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 User Portal application and automated email reports.

Step 3 – Pcounter Log Settings



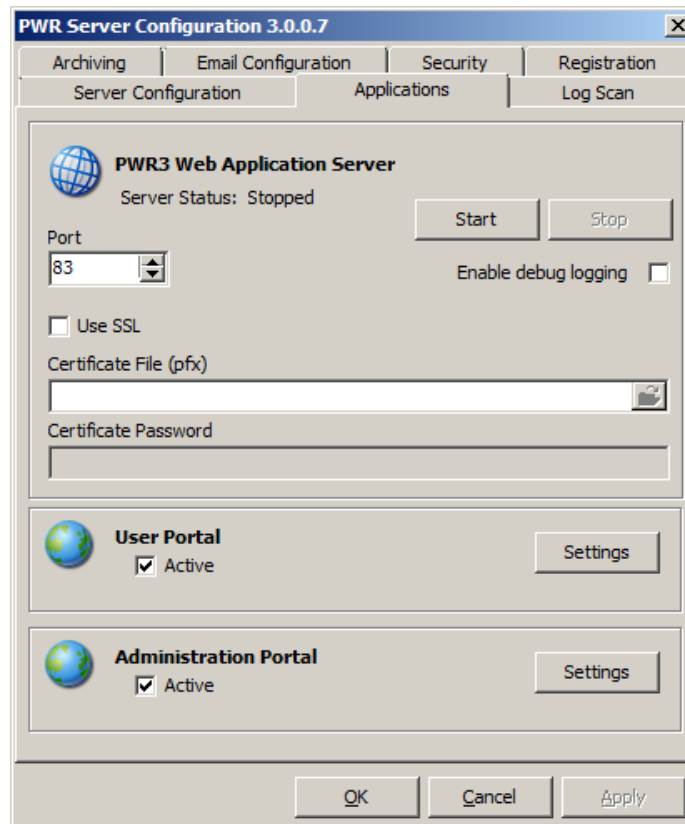
3.1 Specify the Pcounter Log Location

For Pcounter Windows, specify a valid directory path or use the browse directory button by clicking on the folder icon.

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.

Step 4 – Configure Applications

Note: The Application server functionality requires that the Pcounter Data server is installed with a valid Pcounter Pro license.



4.2 Specify the Web Server Port

Select the port to use for the Application server. The default value is 83.

Step 5 – Save changes

Click Apply or OK to save the changes. You may be prompted to restart one or more of the PWR 3.x services. Click Yes to confirm each message.

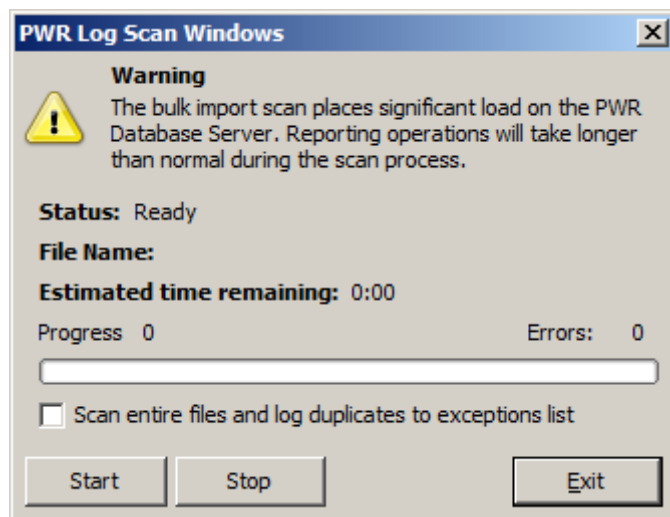
Step 6 – Initial Pcounter Log Scan

The Pcounter Log Scan will automatically check for new Pcounter data. However, the initial scan of the Log information is necessary to prime the PWR 3.x database with existing and legacy Pcounter log files.

Performance Warning:

Scanning multiple existing log files into PWR 3.x places considerable load on the PWR Database and system resources. This bulk import is specifically designed to import large amounts of data as quickly as possible and will disable indices on the internal data tables. It is not recommended that the PWR client is used for reporting or report management during a bulk scan, as performance will be severely impaired. Regular periodic scanning of the log files to capture new print data does not affect performance.

From the PWR 3.x Program Files group select the Pcounter log scan application.



Click Start to begin scanning all files in the Pcounter log location into the PWR 3.x database. The Log scan application will begin the scan process.

Option : Scan entire files and log duplicates to exceptions list.

This option is useful if the current set of Pcounter logs require removal of duplicate entries before importing into the PWR database. If a file in the log scan folder has been detected for changes, then it will be fully scanned and duplicate entries will be logged to the exceptions list.

Unchecking this option (Default), means that the PWR log scanner will stop scanning a file if it detects more than 5 consecutive duplicate records.

Pcounter Web Report

When the scan has completed, the PWR 3.x database will be primed with data. The interval scan will then process all new Pcounter log data.

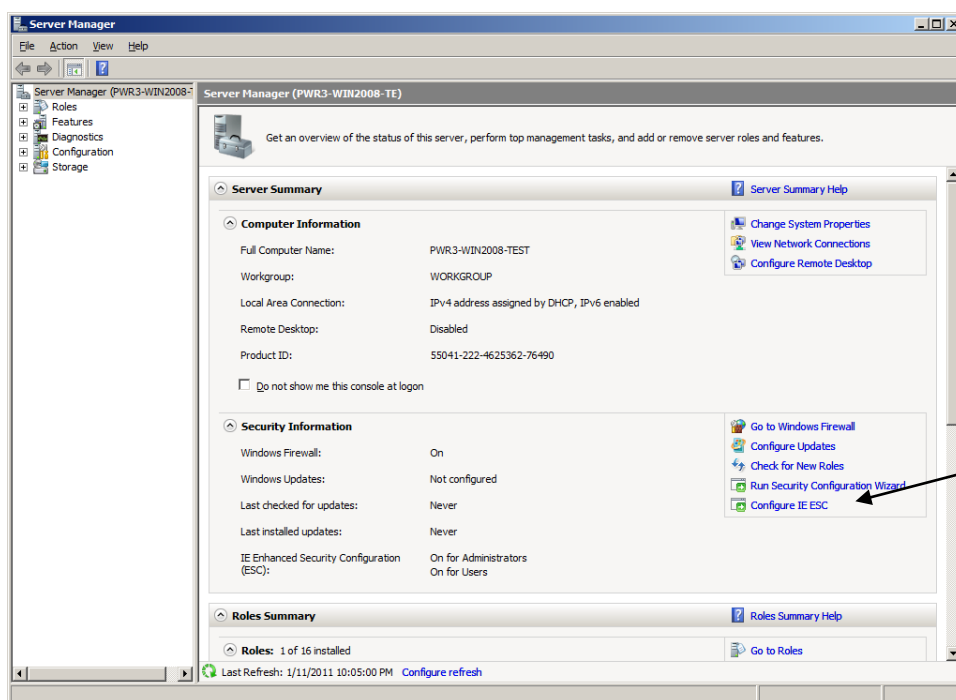
After the initial scan is complete you may start the PWR 3.x client application to begin using Pcounter Web Report 3.x. A shortcut is provided in the program group on the server for convenience.

Step 7 – Open Application

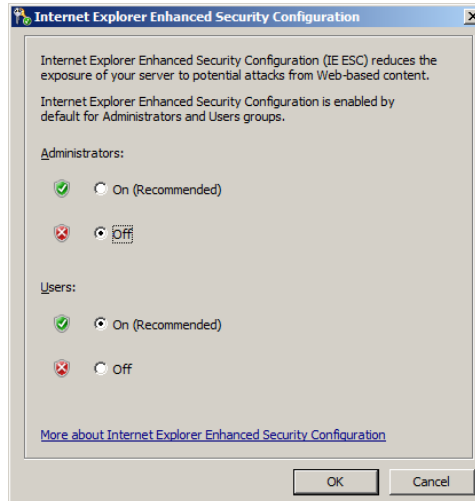
NOTE: Internet Explorer Enhanced Security Configuration

On Windows Server Operating systems the default browser (IE) is restricted by default and cannot run browser plug-ins such as Silverlight. If you require access to the PWR 3.x client application on the server using the Internet Explorer browser, you must disable IE ESC for the current user (Administrator).

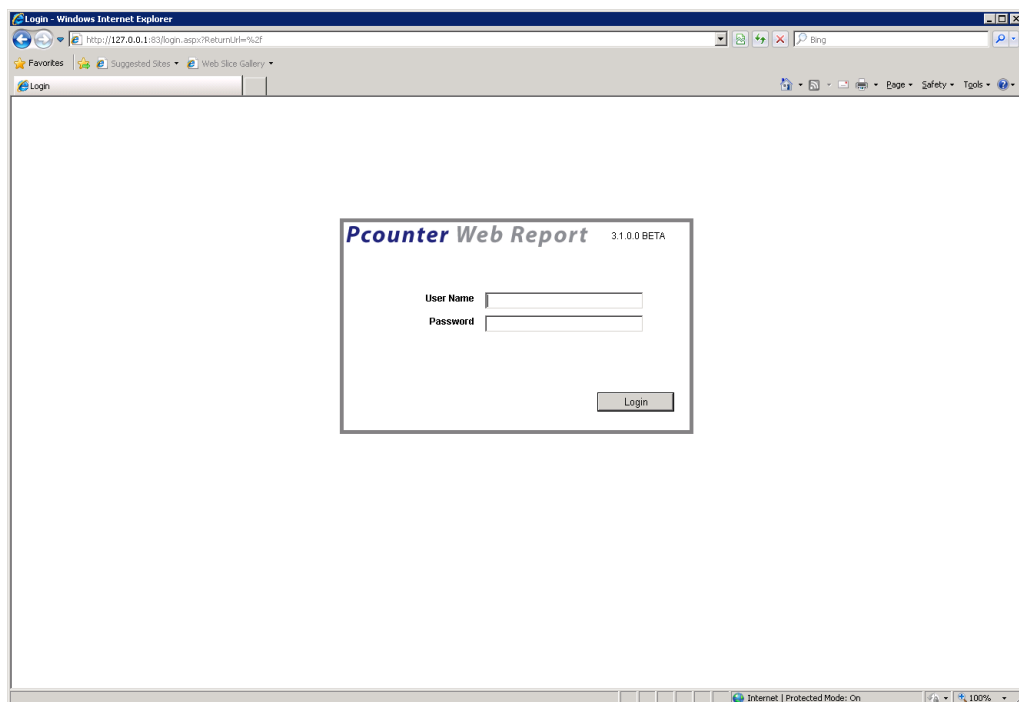
- On Windows Server 2003 IE ESC is disabled from the Add\Remove Windows components option in Control Panel.
- On Windows Server 2008 or later IE ESC is disabled from the Server Manager utility :-



Pcounter Web Report



From the Pcounter Web Report application group, select Launch PWR3. This will open a web browser to the PWR 3.x server and the following login page is presented:-



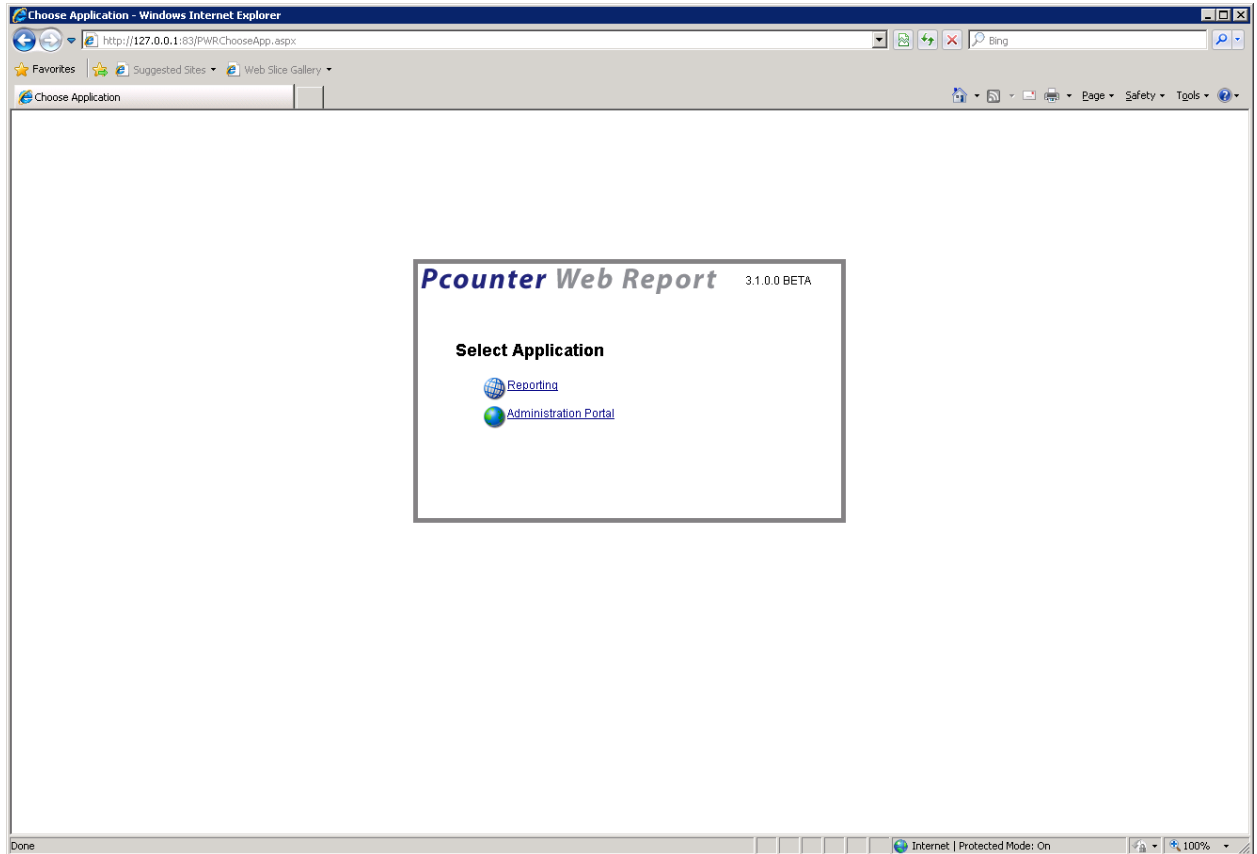
NOTE: Appearance of UI elements may vary based upon your chosen OS\Browser platform.

PWR 3.x is a Web based application and therefore requires a logon account to access the application features.

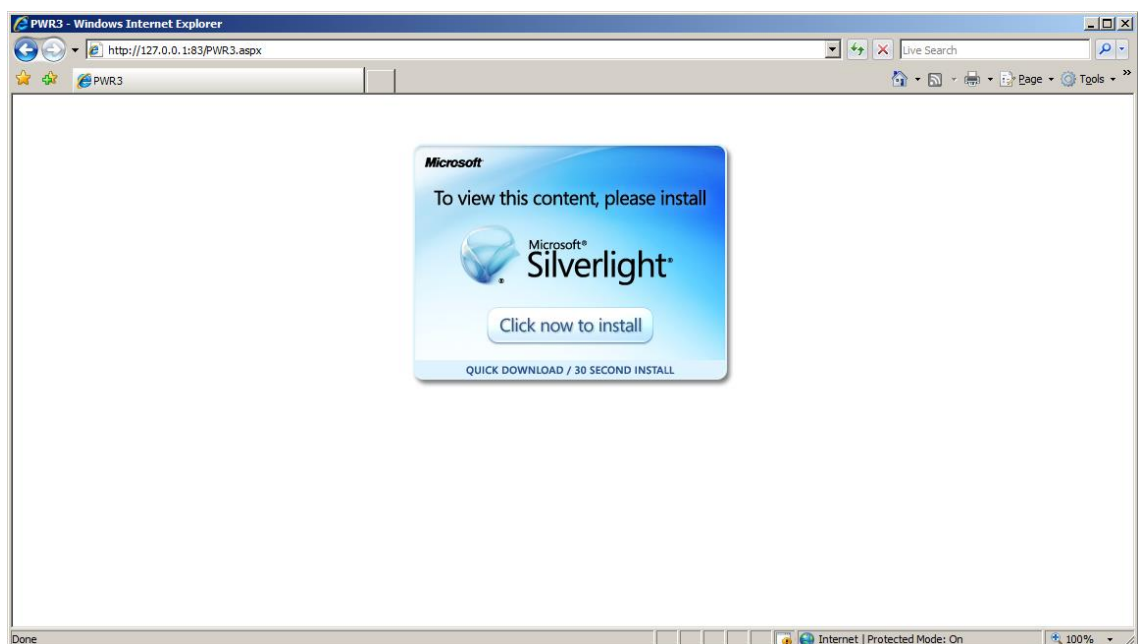
The default logon is UserName: **admin**
 Password: **admin**

When using the Admin account, you have access to all the administrative portal and the full reporting client. The next screen prompts for the application to run :

Pcounter Web Report

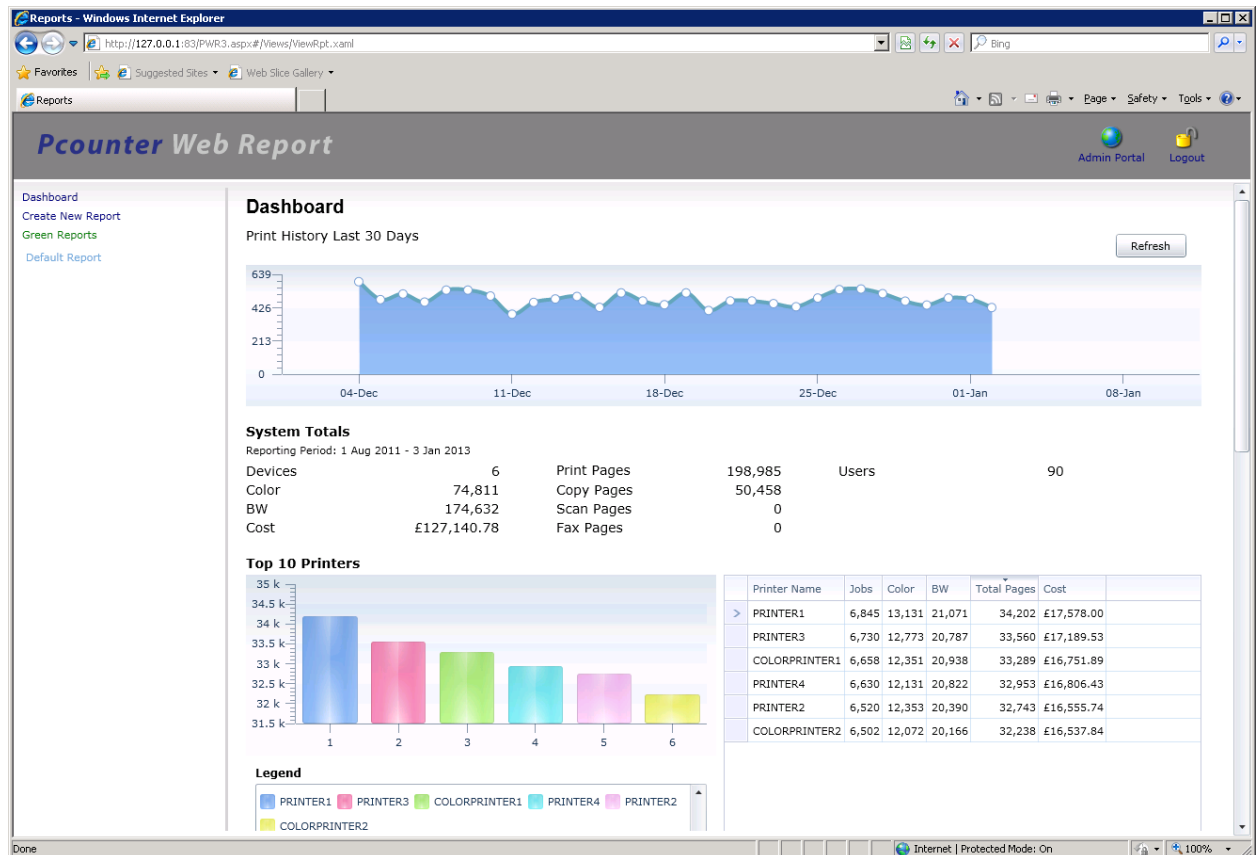


Select 'Reporting'. The Reporting module is a Silverlight Application and requires the Silverlight run-time plugin for your selected browser. If you see the following screen (or similar based on your browser choice) then you must install the Silverlight plug-in to continue.



Pcounter Web Report

After the Silverlight installation is complete you may be required to restart the browser. Log in using the default login/password and select Reporting. You should see the PWR 3.x reporting homepage and Dashboard.



Step 7 – Enable Logging of OU Data in Pcounter

To activate OU logging in Pcounter do the following :-

Use Regedit and browse to this registry branch :-
HKEY_LOCAL_MACHINE\SOFTWARE\Pcounter\DataServer

Create a DWORD value: RecordOU and set this to 1.

Restart Pcounter Data Server service.

Troubleshooting

PWR 3.x is inaccessible (404 Error)

In the event of a 404 Error in the browser when trying to access the PWR 3.x URL, check the following :-

- Ensure the browser URL is pointing to the correct server address and port number.
- Ensure that the PWR Web server is running by checking the run state in the PWR Configuration application.
- Check that the .NET framework 3.51 has been successfully installed and that the ASP.NET runtime is enabled correctly by uninstalling and reinstalling using the PWR 3.x setup application. Monitor the installation process for any errors during the install procedure.

PWR 3.x shows a .NET runtime error in the browser instead of the Login page.

- Check that the .NET framework 3.51 has been successfully installed and that the ASP.NET runtime is enabled correctly by uninstalling and reinstalling using the PWR 3.x setup application. Monitor the installation process for any errors during the install procedure.

Enable debug logging

- From the Applications tab in PWR Server Configuration, check the option 'Enable debug logging'. Log files from the Web Server activity will be logged in the following locations :-

<Install Folder>\BIN\Webserver\Logs

<Install Folder>\BIN\Logs

Please provide these logs in a zip file if requested by your support agent.