

PowerMAN Server 5.5

Management Reporting Platform Guide

Release 5.5.4 November 2022



About Data Synergy



Data Synergy is a British company based in Sheffield. We have over fifteen years' experience developing and supporting software solutions for enterprise PC deployment and management. We do not resell other vendors' products and do all of our development, sales and support from our UK base.

Our products have evolved through listening to customer ideas and applying our unrivalled knowledge of PC internals. If you have a suggestion for a new product or feature we would love to talk to you.

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Overview

The PowerMAN reporting platform complements the PowerMAN client software by providing powerful organisation-wide reporting of PC use, estimated energy use, estimated cost and waste. The reporting solution is available in two separate products:

- **PowerMAN Cloud Hosted Reporting** - Running on Data Synergy's servers this solution avoids the need to purchase, configure and maintain your own server. This is ideal for small-medium sized organisations and can be setup in minutes.
- **PowerMAN Enterprise Server** – Running on your own server this product provides your own private reporting system. This is ideal for larger organisations or where use of the hosted service is not practical for privacy or legal reasons.

The reporting solution is optional – the PowerMAN client software will provide effective, centrally controlled, PC power management without it. However, the reports can be extremely useful to monitor the ongoing effectiveness of your power management project and determine if improvements can be made. Whichever solution you select, both provide identical reporting features.

This guide explains how to use and manage the reporting system. It applies to both the hosted and private solutions. The guide is written for both users and site administrators. Separate administrator guides are available which explains how to initially setup and configure the PowerMAN Enterprise Server software and how to deploy the PowerMAN client software.

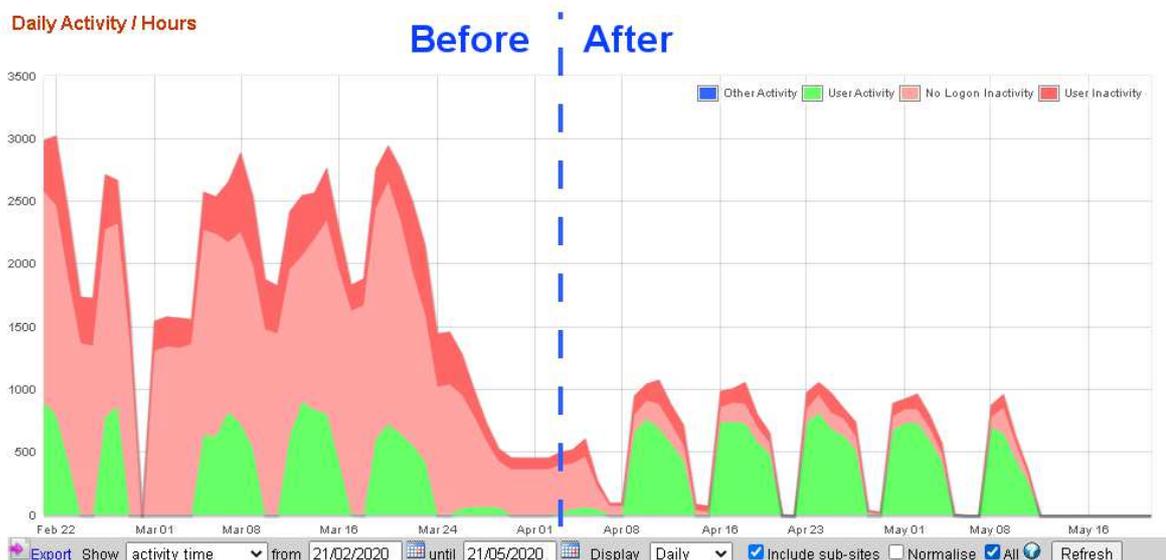
Accessing the demonstration system

The Data Synergy website includes a live demonstration of the PowerMAN reporting system.

The example contains anonymised data from a real organisation. The demonstration is split into two distinct periods:

- **No power management** - before PowerMAN active management
- **Active power management** - after PowerMAN active management

You can access the demonstration and explore the features described in this document at the following link: <https://www.datasynergy.co.uk/demo.aspx>



Reporting sites and sub-sites

PowerMAN can group similar or related computers together into **sites**. The grouping is configured by the system administrator and may be revised at any time without any data loss. Typically computers are organised by location, computer type or business function.

Reporting sites may be created in several different ways:

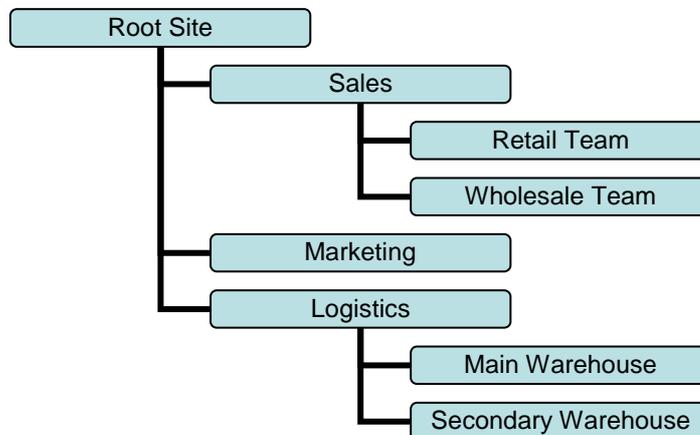
- Manual site created by system administrator on server
- Automatic site creation based upon client-side settings allocated by the system administrator
- Fully automatic site creation based upon computer Active Directory (OU) hierarchy. This feature requires PowerMAN client v5.2.6 or later and is the default.

Each site is identified by a unique identifier called a **SiteGUID**. Unless you are the system administrator you will not need to know the intricate details of how the SiteGUID identity operates – *all you need to remember is that it is unique*. An example SiteGUID:

```
{94818dbc-308c-4a61-a59b-714c047703d5}
```

The system administrator can create as many sites as are required for your organisation. Sites can be nested within each other to reflect the organisation structure or Active Directory hierarchy. PowerMAN calls sites nested below another site “**sub-sites**”.

For instance, an example structure could be:



You can use PowerMAN to report on any site or any hierarchy of sites and sub-sites.

For instance, in the example, a report for **Sales** would typically include **Retail Team** and **Wholesale Team**.

Whilst computers can be moved between sites at any time it is good practice to put some initial thought into the site hierarchy so that it accurately reflects your organisation structure.

Tip: An **ideal site** is a group of similar computers within a defined environment such as an office, department or computer room. A typical site can have anywhere from one to several hundred computers and will be **suitable for managing as a single entity**.

Accessing the reporting system

The system administrator can supply you with a URL (web address) that can be used to access the reporting system. The administrator can configure the system security to:

- Allow anonymous viewing
- Require a login for authenticated viewing
- Require a login for authenticated site administration

System logins may be based upon your email address and a password or Windows user name. Windows-based logins do not require a separate password.

Tip: The PowerMAN hosted (cloud) reporting service is initially configured to permit anonymous viewing. This simplifies access which is especially useful when learning the PowerMAN system. You can request a login if you need a higher level of security. A login is **always** needed to make changes to the system configuration.

The hosted (cloud) reporting system is available here:

<https://secure.pmstats.org>

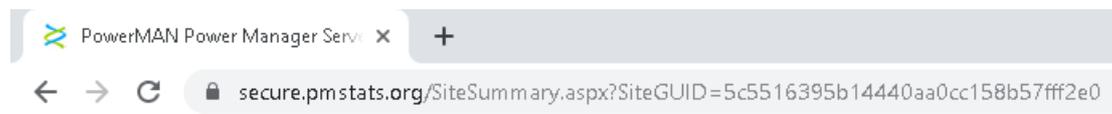
On a stand-alone PowerMAN Enterprise Server system this URL is usually in the following format:

<http://yourserver:8080/> or <https://yourserver/>

However, depending upon configuration, you may need a more complex URL to access the reports. The typical URL format is

<http://yourserver:8080/SiteSummary.aspx?SiteGUID=yoursiteguid>

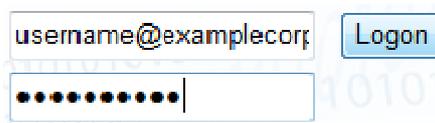
It may be helpful to bookmark the URL in your favourites. To access the URL paste it into your browser address bar:



Login using email address and password

If your system requires you to logon using an email address and password you can enter your credentials using the boxes at the top right of the screen. To login proceed as follows:

1. Enter you email address and password into the login fields (top right)
2. Press the **Logon** button



Login using Windows user account

If your system is configured to permit login using your Windows account then no separate password is necessary. This is known as **Windows integrated authentication**. If anonymous logins are permitted you will initially be logged in anonymously. This level of access can be used to view reports but cannot be used to make any configuration changes.

If necessary, you can login (for instance to perform administration) by clicking the **Logon** button:

1. Press the **Logon** button



2. You will be redirected to your organisation's root (top-level) site. This is the site that contains all other sub-sites.

Online Help System



PowerMAN includes an on-line help system that can be used to complement this guide. To access the system press the question mark icon that is displayed next to some features.

User Interface Tabs

The PowerMAN user interface may be divided into several separate tabs. These are not visible if the live feature set is not enabled or the user does not have configuration rights:



The tabs have the following function:

- **Summary** – Historic power management reports
- **Live** – Instantaneous power management status (if enabled)
- **Devices** – Hardware / capability reporting on managed assets
- **Configuration** – Reporting system configuration (administrators only)
- **Logins** – Reporting system user login configuration (administrators only)
- **Notifications** – Reporting system notification configuration (administrators only)

Reporting System Basics

The PowerMAN reporting suite is designed to show energy management related statistics for computers within your organisation. You can use the reporting system to monitor performance and fine-tune your PC power management policies.

The reporting system uses a common colour coding scheme to show the various types of activity:

Colour / Activity	Meaning
 User Activity	The user was active during the reporting period. This typically means that the user operated the keyboard/mouse.
 Other Activity	A program or other protected activity configured by the system administrator was active during the reporting period. This colour will only be present if this feature has been enabled by the system administrator.
 User Inactivity  No Logon Inactivity	The computer was inactive whilst a user was logged on / off. No other significant activity was detected. Tip: Used correctly, the primary purpose of PowerMAN is to reduce the amount of time spent 'inactive' to a minimum. It is unlikely that you will be able to completely remove all inactive time but you should be able to remove almost all of it without disrupting productivity. In most cases, it is simpler to reduce inactivity when no user is logged on first (pink).

PowerMAN reporting divides the day into small (15 minutes) time slots and records anonymous information about the activity on each computer. For each time slot, PowerMAN collects information such as:

- Was there any user activity?
- Was a user logged on?
- Was the monitor, hard disk or screen saver on or off?
- Did any application prevent sleep or hibernation?

Tip: The information recorded does NOT include the name of the user or what specific programs, websites, keyboard activity they were performing. PowerMAN logs less than 4 bytes of information every 15 minutes. Please contact Technical Support for a detailed explanation of the information collected and the protocol used to transfer it to the PowerMAN reporting system.

Site Summary

The site summary page provides a historical summary of power management performance. The top of the page includes details about the site and is followed by information about recent activity, sub-sites and computers. Depending upon system configuration, some of these reports may not be available for every site.

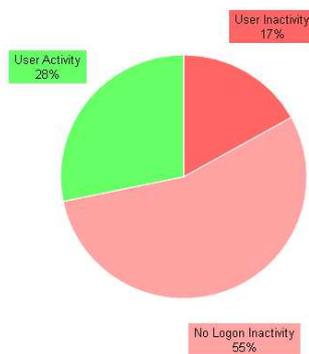
Demonstration

Organisation	Demonstration	OU=Desktop,DC=corp,DC=local
Created	01/01/2018	First Data 14/08/2019
Expires	13/05/2022	Last Data 14/05/2020
Data Retention	1835 days	Total Computers 78 Export / Recent (30 days) 84 Export / All time
		Total Sub-Sites 11 Export

Site Information

Information about the site and site parameters

Activity breakdown by type

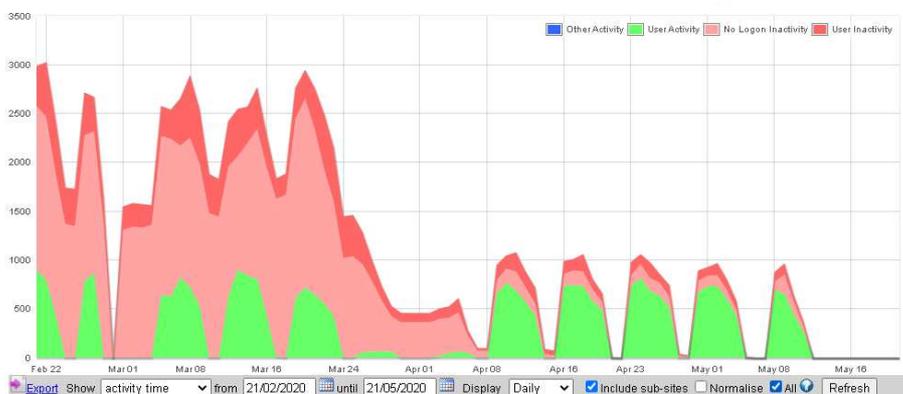


Majority inactive hours 55% due no user logon

Site Summary Chart

This chart shows summary information for the current site and sub-sites broken down by activity type

Daily Activity / Hours



Site Activity History

This chart can show site activity in hours, estimated cost and estimated CO₂

Sub-Sites

Site	Recent/Total Computers	Last Status	Inactive Hours	Active Hours	No Logon	Inactive User	User	Other	Delete
Operations	76/76	14/05/2020	310.25	635.75					
Sales	72/72	14/05/2020	67.50	322.50					
Marketing	13/13	14/05/2020	63.50	111.25					
Administration	15/15	14/05/2020	61.50	150.00					
Management	18/18	14/05/2020	60.00	212.50					
Finance	9/9	14/05/2020	53.25	117.75					
Customer Service	41/41	14/05/2020	52.25	186.50					
Product Development	13/13	14/05/2020	41.00	145.50					
IT	12/12	14/05/2020	28.50	76.25					
Estates	5/5	14/05/2020	26.00	47.75					

Sub-Sites

This area shows sub-sites and their activity statistics for the displayed time period. You can navigate to each sub-site by clicking on the site name. The statistics for each site include all of its sub-sites.

Computers

Computer	Client Version	Last Status	Inactive %	Inactive Hours	Active Hours	No Logon	Inactive User	User	Other	Wake All	Delete Mouse
Workstation094	5.4.0.5932	11/05/2020	47.54	7.25	8.00					Wake	
Workstation318	5.4.0.5932	10/05/2020	36.71	7.25	12.50					Wake	
Workstation204	5.4.0.5932	14/05/2020	48.94	5.75	6.00					Wake	
Workstation141	5.4.0.5932	10/05/2020	52.50	5.25	4.75					Wake	
Workstation171	5.4.0.5932	11/05/2020	33.93	4.75	9.25					Wake	
Workstation261	5.4.0.5932	10/05/2020	59.38	4.75	3.25					Wake	
Workstation232	5.4.0.5932	11/05/2020	19.79	4.75	19.25					Wake	
Workstation198	5.4.0.5932	14/05/2020	64.29	4.50	2.50					Wake	
Workstation074	5.4.0.5932	14/05/2020	32.73	4.50	9.25					Wake	
Workstation098	5.4.0.5932	09/05/2020	39.53	4.25	6.50					Wake	

Site Computers

This area shows the activity statistics for computers in the current site. You can navigate to each computer by clicking on the computer's name

Site Summary Information

The top of the site summary page displays information about the site and its sub-sites. Some of this information is technical data useful to the system administrator:

Demonstration

Organisation	Demonstration	OU=Desktop,DC=corp,DC=local
Created	01/01/2018	First Data 14/08/2019
Expires	13/05/2022	Last Data 14/05/2020
Data Retention 	1835 days	Total Computers 78 Export / Recent (30 days) 84 Export / All time
		Total Sub-Sites 11 Export

The fields have the following meaning:

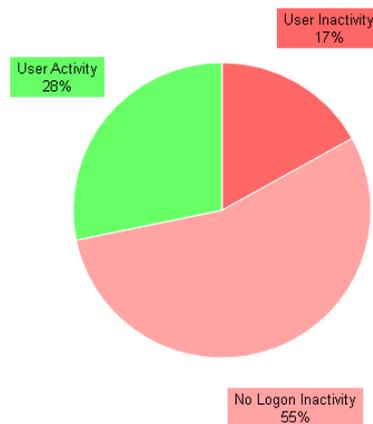
Field	Meaning
Organisation / Site	The name of the site and, if known, the Active Directory distinguished name.
Created/Expires	The date the site was created and will expire. The expiry date is determined by your PowerMAN product license key
Data Retention	The minimum period of time the system will retain the site data. Typically, sites are configured to discard data after 1-3 years. This period of time is primarily dictated by the available server storage capacity.
First/Last Data	The date that data was first and most recently reported for this site
Total Computers	The number of computers within the current site and all sub-sites. For convenience, this is broken down into computers that have reported data recently (last 30 days) and all computers (all time).
Total Sub-Sites	The number of sub-sites within the current site

Site Activity Summary (Pie chart)

The site activity summary pie chart breaks down recent site activity by activity type. This includes all computers in the current site and all sub-sites of the current site. This chart provides a quick overview of site performance:

Activity breakdown by type

Majority inactive hours 55%
due no user logon

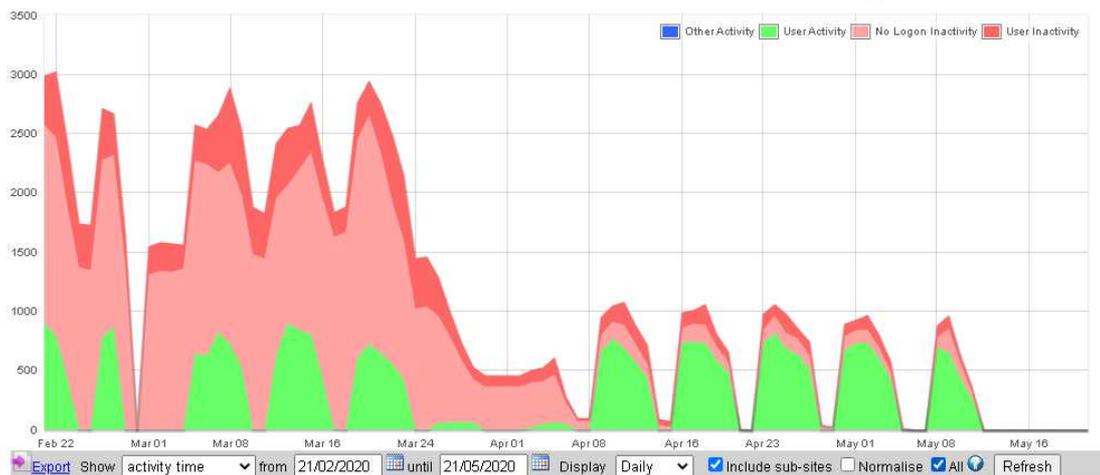


Site Activity History

The site summary chart displays site activity for the selected calendar period. This includes all of the computers in the current site and all sub-sites of the current site by default. This chart is the primary reporting tool provided by PowerMAN and the quickest way to view historic performance:

Daily Activity / Hours

73812 inactive Hrs
Equivalent estimated \$ 885.74



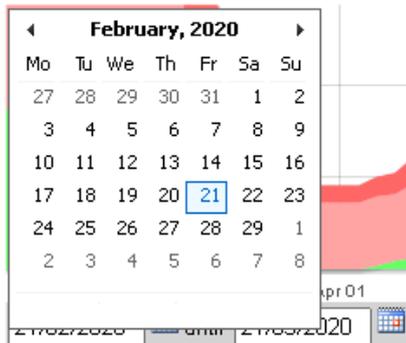
The toolbar beneath the chart can be used to control the information displayed. It is worth spending five minutes to familiarise yourself with the powerful range of reports offered by this toolbar.



The export link can be used to export the displayed data in the industry-standard CSV format. You can open and manipulate this file with Microsoft Excel or a similar.



The drop down box is used to select the information displayed in the chart. Normally PowerMAN displays information as absolute activity time. However, you can also select % activity time, estimates costs, estimated equivalent CO₂, the number of computers active or estimated savings (against a baseline figure)



The date fields are used to control the period used for the chart. All dates are inclusive. To select a date either input it directly into the box or press the calendar icon to display a convenient calendar.

PowerMAN displays dates using the format configured in your web browser. For instance in the UK dates are displayed as dd/mm/yyyy whilst in the US dates are displayed with the month first as mm/dd/yyyy.



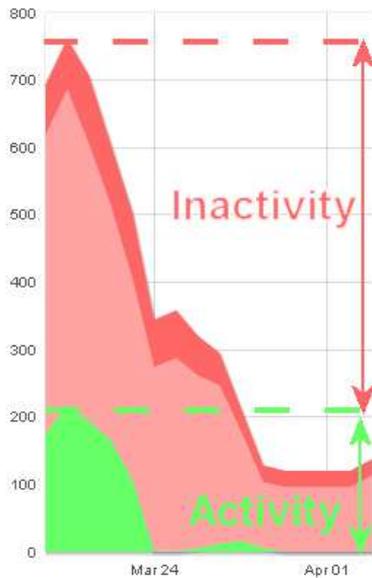
The report type drop down box may be used to display results daily, weekly or monthly. The weekly and monthly options may be especially useful when looking at data over longer periods.



The tick boxes are used to further refine how the information should be displayed in the chart:

- The **Include sub-sites** option includes data from all sub-sites to the current chart. This option is enabled by default.
- The **Normalise** option divides the displayed data by the number of computers active that day (or week or month). This can be used to remove the effect of a fluctuating number of computers and provide a metric that can be used regardless of the number of computers. Please see the section below for further information on this topic.
- The show **All** option can be used to include or exclude the user and other activity fields. This can be useful to simplify the chart and display only the primary 'inactive' data.

Tip: The **Normalise** option can sometimes result in data with periodic spikes. This can especially happen at weekends when the level of activity (and possibly the number of computers) is greatly reduced from the weekday average. You can avoid this phenomenon by using the **weekly** or **monthly** chart options.



When the show **All** option is enabled PowerMAN displays the separate activity classifications in a stacked format. The total activity time is the combination of each of the separate coloured areas as shown in this diagram. You can read the values using the scale on the right-hand side.

Normalisation feature (average PC metrics)

Normalisation is a key statistical technique that averages results for all computers in the site per day, week or month.

This produces a **per-PC metric** that can be compared between periods even when the number of PCs is variable. Normalisation also provides a metric that can be used to compare the performance of sites/reporting groups of different sizes. Normalisation may be performed on either the daily, weekly or monthly data.

Weekly or monthly normalisation may sometimes be useful to extend this process and remove daily fluctuations. These can be especially apparent at weekends when the number of computers may vary significantly. The normalised result is always a fraction of 24 hours (daily) or 168 hours (weekly).

Tip: In some deployments the non-normalised and normalised charts may be almost identical. If this is the case it indicates there is little deviation between specific PCs and the nominal PC.

Estimated costs and CO₂

The data recorded by PowerMAN is based upon the amount of time in each activity state. This time-based data is the most accurate way to measure the effectiveness of your power management policy.

The PowerMAN reporting system also allows you to convert this to estimates of cost and equivalent CO₂. This conversion can allow you to visualise and report on the effectiveness of your power management policy using these alternative measures.

PowerMAN can **only estimate** the cost and CO₂ figures because:

- Each PC has different power requirements. In practice a typical modern desktop PC uses 60-150W (0.06 to 0.15kW). Unfortunately, PCs do not have the hardware necessary to measure this electronically. You can however measure this yourself using a watt-hour meter. The best way to do this is to use a meter that can record a cumulative (not instantaneous) figure and monitor different computers over the full working day cycle. This will produce a figure in kWh.
- The cost of electricity varies from site to site. This value is available from your electricity supplier.
- The nominal amount of CO₂ released per kWh of electricity generated from fossil fuels depends upon the generation method and efficiency. The UK Government currently uses a standard figure of 0.25kg/kWh. The exact amount depends upon the source of electrical generation. This value may be less (or even zero) if non-fossil fuels are used to generate the energy. This value is also available from your electricity supplier.

You can replicate the calculations performed by PowerMAN as follows:

1. Measure the cumulative kWh figure for a PC / 24 hours
2. To calculate cost multiply this figure by the electricity cost per kWh
3. To calculate nominal CO₂ multiply this figure by 0.25kg/kWh (or the figure from your electricity supplier)

Example: A PC consumes 150W. This is equivalent to 0.15kWh. Therefore, for a medium sized site of 350 computers, where the total site wasted hours for a week is 47,040, and the cost of the electricity \$0.15 per kWh the calculation would be:

$$0.15 \text{ kWh} \times 47040 \text{ hours/week} \times \$ 0.15 / \text{kWh} = \$ 705.60 \text{ per week}$$

This is equivalent to a yearly cost of over \$36,000.

A useful **rule of thumb** is that office based computers are used 25% of the time (40 hours per week). If the computers are not power managed at other times the waste period is up to 75%. With suitable configuration PowerMAN can virtually eliminate this waste.

Although the energy figures produced by PowerMAN are only estimates, they will produce useful figures if you use accurate values for electricity consumption, cost and CO₂.

Sub-Sites Overview

PowerMAN displays summary information about the current sub-sites. These are the sites that are nested within the current site. The format used is very similar to the main chart but the graph is displayed horizontally for easy comparison. You can navigate to the sub-site by clicking on the associated link. The sub-site chart includes a separate date range selector. Normally this shows recent activity:

Sub-Sites

Site	Recent/Total Computers	Last Status	Inactive Hours	Active Hours	<input type="checkbox"/> No Logon	<input type="checkbox"/> Inactive User	<input type="checkbox"/> User	<input type="checkbox"/> Other	Delete
Operations	76/76	14/05/2020	310.25	635.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales	72/72	14/05/2020	67.50	322.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marketing	13/13	14/05/2020	63.50	111.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Administration	15/15	14/05/2020	61.50	150.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management	18/18	14/05/2020	60.00	212.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finance	9/9	14/05/2020	53.25	117.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer Service	41/41	14/05/2020	52.25	186.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product Development	13/13	14/05/2020	41.00	145.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT	12/12	14/05/2020	28.50	76.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estates	5/5	14/05/2020	26.00	47.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Export Show sub-sites from until Refresh



The toolbar beneath the chart can be used to control how many records are shown, what order they are displayed in and to specify a particular date range.

Click the **Refresh** button to regenerate the report.

Computers Overview

Similarly, PowerMAN displays the summary information about the current site's member computers in the final chart. The last status field indicates the last day that data was logged. This is typically yesterday. You can navigate to the computer, and see more detailed information, by clicking on the computer name:

Computers

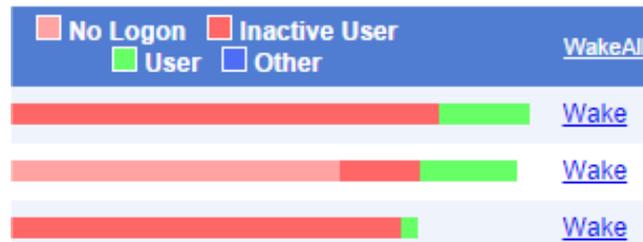
Computer	Client Version	Last Status	Inactive %	Inactive Hours	Active Hours	<input type="checkbox"/> No Logon	<input type="checkbox"/> Inactive User	<input type="checkbox"/> User	<input type="checkbox"/> Other	Wake All	Delete Move
Workstation094	5.4.0.5932	11/05/2020	47.54	7.25	8.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation318	5.4.0.5932	10/05/2020	36.71	7.25	12.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation204	5.4.0.5932	14/05/2020	48.94	5.75	6.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation141	5.4.0.5932	10/05/2020	52.50	5.25	4.75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation171	5.4.0.5932	11/05/2020	33.93	4.75	9.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation261	5.4.0.5932	10/05/2020	59.38	4.75	3.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation232	5.4.0.5932	11/05/2020	19.79	4.75	19.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation198	5.4.0.5932	14/05/2020	64.29	4.50	2.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation074	5.4.0.5932	14/05/2020	32.73	4.50	9.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>
Workstation098	5.4.0.5932	09/05/2020	39.53	4.25	6.50	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wake	<input type="checkbox"/>

Export Show computers from until Include computers in sub-sites Refresh

Tip: The **Wake** and **Wake All** features require Data Synergy's WakeMyPC optional software. The **Delete** and **Move** features are only available to administrative users.

WakeMyPC Integration (Remote Wake)

The system administrator may optionally install the companion [WakeMyPC](#) software. This can be used to remotely wake a specific computer using Wake-On-LAN (WoL) technology. This is useful for scenarios where ad-hoc wake-up is required. If this feature is enabled, a **Wake** link is displayed next to each computer name. An option to **WakeAll** computers is also available. To wake a specific computer, click the associated link.



You can export computer statistics, including the wake using the Export button on the toolbar. This may be useful if you wish to distribute the links to users:



The facility to wake a specific computer is also available on the computer detail page (see below):

Operations / Workstation072

Site	Operations
Computer	Workstation072 Wake
Created	06/02/2020

Computer Detail Report

The computer detail report shows information about a specific computer. This report is similar to the site summary but contains much more technical detail.

Operations / Workstation072

Site	Operations	OU=Operations,OU=Desktop,DC=corp,DC=local
Name	Workstation072 Wake	CN=Workstation072,OU=Operations,OU=Desktop,DC=corp,DC=local
Registered	06/02/2020	Windows® Version 6.1.7601 Service Pack 1
Last Live Status (Local)	14/05/2020 09:44:45	Live Status User Activity
Last Status	11/05/2020	Last startup 11/05/2020 10:05:42
Client Version	5.4.0.5932	Battery No Battery (Desktop)
Platform	x86 (32-bit)	Timezone 0.0 hour(s) UTC

Computer Information
Technical information about the computer, when it was first registered and when it last reported data

Hardware

CPU Sockets/Cores/Logical	1 / 4 / 4 2893 MHz	CPU Model	Intel(R) Core(TM) i5-3470S CPU @ 2.90GHz
System RAM	3476 MB	System Model / Vendor	3398 / Hewlett-Packard
Fixed / Optical Drives	1 / 1	BIOS Vendor	Hewlett-Packard

Hardware and network info (if available)
Hardware and network information about the computer. This feature must be enabled by the system administrator.

Last Updated: 11/05/2020 10:05:42

Power Management Capabilities

Supports States S345	Supports Wake from S1234
Hardware buttons Power	Disk Standby Supported
Hibernation File (S4) Present	System HDD Free 261,601 MB
Hybrid Sleep (Fast S4) Not supported	Fast Startup (Hiberboot) Not supported

Power management info
Power management capabilities of the computer.

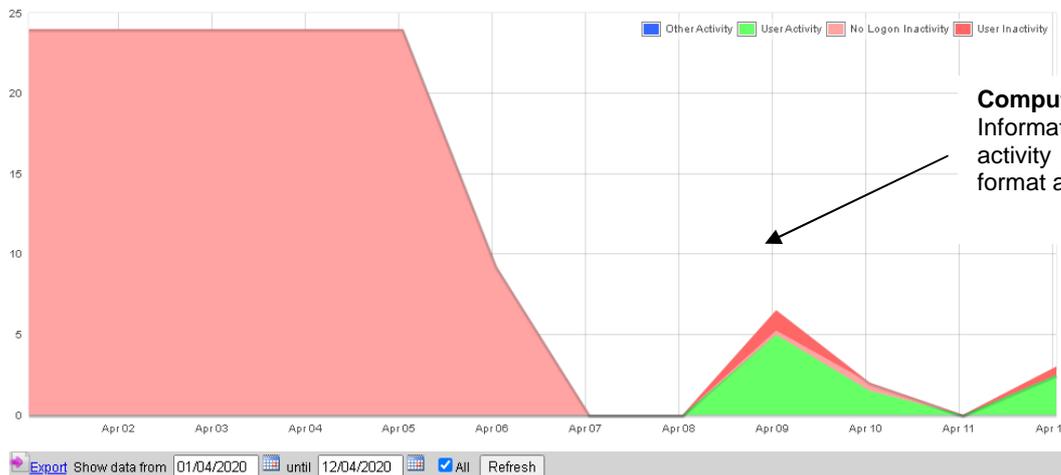
Last Updated: 11/05/2020 10:05:42

Network Information

Description	Physical/MAC	Active	Hardware	Addresses
Realtek PCIe GBE Family Controller	5CE0C52AB072	✓	✓	192.168.200.058/24, FE80:0000:0000:0000:0000:ABCD:1234:0072/64
Intel(R) Dual Band Wireless-AC 7265 WiFi	C860008C1072	✓	✓	192.168.202.058/24

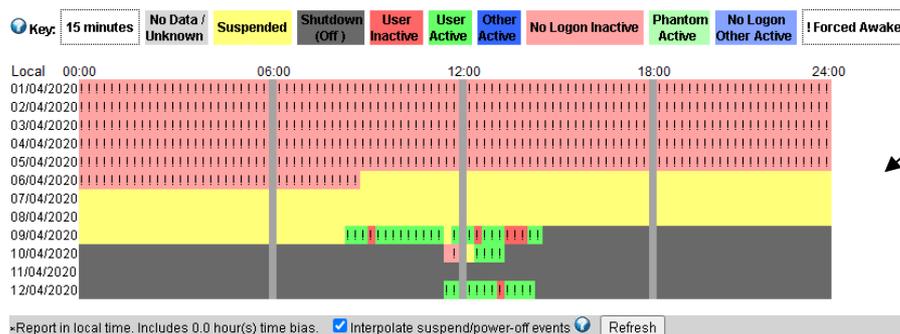
Last Updated: 11/09/2020 16:09:36

Daily Activity Summary / Hours



Computer History
Information about computer activity displayed in the same format as the site summary

Detailed Activity Report



Detailed Activity Report
Very detailed information about the computers status during each 15 minute reporting interval

Computer Information

The top of the page contains useful information about the currently selected computer:

Operations / Workstation072

Site	Operations	OU=Operations,OU=Desktop,DC=corp,DC=local
Name	Workstation072 Wake	CN=Workstation072,OU=Operations,OU=Desktop,DC=corp,DC=local
Registered	06/02/2020	Windows® Version 6.1.7601 Service Pack 1
Last Live Status (Local)	14/05/2020 09:44:45	Live Status User Activity
Last Status	11/05/2020	Last startup 11/05/2020 10:05:42
Client Version	5.4.0.5932	Battery No Battery (Desktop)
Platform	x86 (32-bit)	Timezone  0.0 hour(s) UTC

The information fields have the following meaning:

Field	Meaning
Site	The name of the site containing the computer (and optionally, the Active Directory name)
Name	The name of the computer (and optionally, the Active Directory name).
Registered	The date the computer first registered with the PowerMAN system.
Windows Version	The Microsoft Windows® version installed on the computer
Last Live Status (Local) / Live Status	The current “live” status of the workstation (if known) and the (local) time it was last recorded. Typically, this is updated every few minutes. This feature must be enabled by the System Administrator.
Last Status	The date the computer last reported power management status information. Typically, this happens once per day and starts the day after the PowerMAN client is installed.
Last Startup	The last time the computer was started / restarted. This requires client v5.5.3 or later.
Client Version	The version of PowerMAN installed on the computer. This will be in the format 5.x.y.zzzz where x is the minor revision and y the release level. The zzzz field represents the PowerMAN software build number; this may be useful to technical support.
Battery	If a battery is present e.g. portable computer such as laptop or tablet PC.
Platform	The current operating system platform (32-bit or 64-bit).
Time zone	The time zone relative to UTC (GMT) that the computer is located in. This is used to bias the detailed activity report so that it is displayed using the effective local time. This is helpful when analysing the data for user activity patterns.

Hardware Information (Optional)

PowerMAN may optionally also record hardware information about the computer. If this feature has been enabled by the System Administrator, the following additional information may also be available:

Hardware

CPU Sockets/Cores/Logical	1 / 4 / 4 2893 MHz	CPU Model	Intel(R) Core(TM) i5-3470S CPU @ 2.90GHz
System RAM	3476 MB	System Model / Vendor	3398 / Hewlett-Packard
Fixed / Optical Drives	1 / 1	BIOS Vendor	Hewlett-Packard

The hardware information fields have the following meaning:

Field	Meaning
CPU/Sockets/Cores/Logical	CPU information separated by a slash: <ol style="list-style-type: none"> 1. Number of sockets (typically 1) 2. Number of physical cores 3. Number of logical processors (e.g. hyper-threading) 4. Nominal speed in MHz (if known)
CPU Model	The make and model of the CPU.
System RAM	The available system RAM (less any RAM reserved for video or similar). This is typically slightly less than the amount of physically installed RAM.
System Model / Vendor	The make / model of the PC motherboard.
Fixed / Optical Drives	The number of fixed drives / number of optical drives.
BIOS Vendor	The BIOS make / vendor.

Power Management Capabilities

PowerMAN can also display the detailed power management capabilities of the computer. This information may be used to inform decisions about how to best utilize the available power management features:

Power Management Capabilities

Supports States 	S345	Supports Wake from 	S1234
Hardware buttons	Power	Disk Standby	Supported
Hibernation File (S4)	Present	System HDD Free	261,601 MB
Hybrid Sleep (Fast S4)	Not supported	Fast Startup (Hiberboot)	Not supported

Field	Meaning
Supports States	The power states supported by the computer. The power states are known as S0-S5 (S6 is also unofficially used by some vendors). Each power state requires decreasing levels of energy to maintain at the expense of increased time to become operational again.
Supports Wake	The power states that the computer can be woken from. Most systems support wake from S1-S3. Some systems support wake from S4 (hibernate). It is unusual to find hardware capable of remote wake from S5 (off).
Hardware Buttons	The power related buttons available on the computer (as reported by the system BIOS).
Disk Standby	The power management standby support of the system hard disk.
Hibernate File (S4)	Reports if a hibernation (S4) file is present. This is required for hibernation to correctly operate.
System HDD Free	The amount of free space remaining on the system drive. This feature requires client version 5.2.0 or later.
Hybrid Sleep (Fast S4)	<p>Reports if Hybrid Sleep is supported. When supported, the system will perform a combination of sleep (suspend to RAM) and hibernate (suspend to disk) when suspending. If the power supply is preserved, the system can rapidly resume from RAM. If power supply is lost, the system can safely resume from disk.</p> <p>This mode is recommended for battery power devices and offers the best combination of sleep and hibernation.</p>
Fast Start-up (Hiberboot)	<p>Reports if fast start-up is supported and/or enabled. When enabled, the system will hibernate instead of performing a full shutdown. On many systems, this will result in a faster start-up the next time.</p> <p>See: https://docs.microsoft.com/en-us/windows/win32/power/system-power-states</p>

Network Information (Optional)

PowerMAN may optionally also record detailed network information. If this feature has been enabled by the System Administrator, the following additional information may also be available:

Network Information

Description	Physical/MAC	Active	Hardware	Addresses
 Realtek PCIe GBE Family Controller	5CE0C52AB072	✔	✔	192.168.200.058/24, FE80:0000:0000:0000:ABCD:1234:0072/64
 Intel(R) Dual Band Wireless-AC 7265 WiFi	C860008C1072	✔	✔	192.168.202.058/24

Field	Meaning
Description	Network device name.
Physical/MAC	The hardware address of the network device.
Active	Indicates if the network device is active (connected).
Hardware	Indicates if the network device is physical/hardware or virtual. e.g. Only physical network devices can be used for Wake-on-LAN
Addresses	The IPv4/v6 addresses and subnet mask (in CIDR notation).

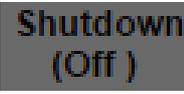
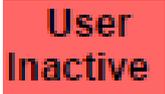
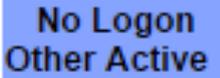
Detailed Activity Report

The detailed activity report contains information about the computer's status for each 15-minute reporting timeslot throughout the working day. It is an ideal way to understand in detail what was happening on a specific computer and analyse cyclical usage patterns.

Detailed Activity Report

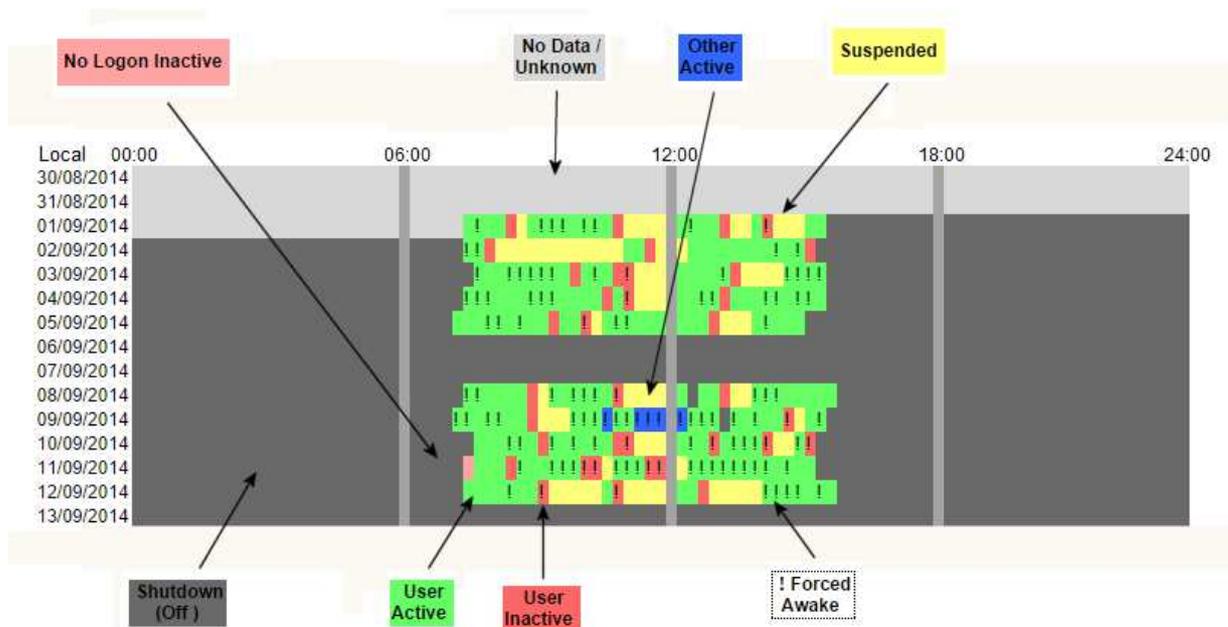


The information is shown using a mixture of colours and symbols. The following table explains this:

Symbol / Colour	Meaning
	Each block represents a 15-minute time slot.
	Indicates that the computer state was not recorded. This may be because PowerMAN was not installed or was unexpectedly shutdown (for instance power failure).
	Indicates the computer was suspended (sleep or hibernate).
	Indicates the computer was shutdown (including shutdown and then restarted).
	Indicates a user was logged on but inactive. An effective PowerMAN deployment will normally aim to minimize such time periods. NB: In typical deployments, it should be possible to achieve an inactivity level of < 20% without significantly disrupting user productivity.
	Indicates that user activity was detected. This typically means any user input (keyboard or mouse) activity during the monitoring period.
 	Indicates that other (protected) activity was detected whilst a user was logged on / not logged on. The System Administrator can define lists of protected programs, files etc. that trigger this state. The companion PowerSTART program can also be used in scripts or similar to notify PowerMAN that 'other' activity is occurring.
	Indicates a no user was logged on and the system was inactive. An effective PowerMAN deployment will normally aim to almost eliminate such periods.

<p>Phantom Active</p>	<p>Indicates nobody was logged on but apparent (phantom) mouse/keyboard activity was detected. This is most commonly due to faulty or poor quality optical mice. In many circumstances, such “activity” can prevent power management from working consistently.</p>
<p>! Forced Awake</p>	<p>An exclamation mark symbol indicates the Windows idle timer was disabled by an application or service. In other words, the computer was forced awake and was not capable of entering a suspended power state. This state will also be reported if power management is completely disabled.</p> <p>Most computers will be forced awake occasionally. If the computer is permanently in this state it will suffer from PC ‘insomnia’. You can work around this by using the PowerMAN policy enforcement feature.</p>

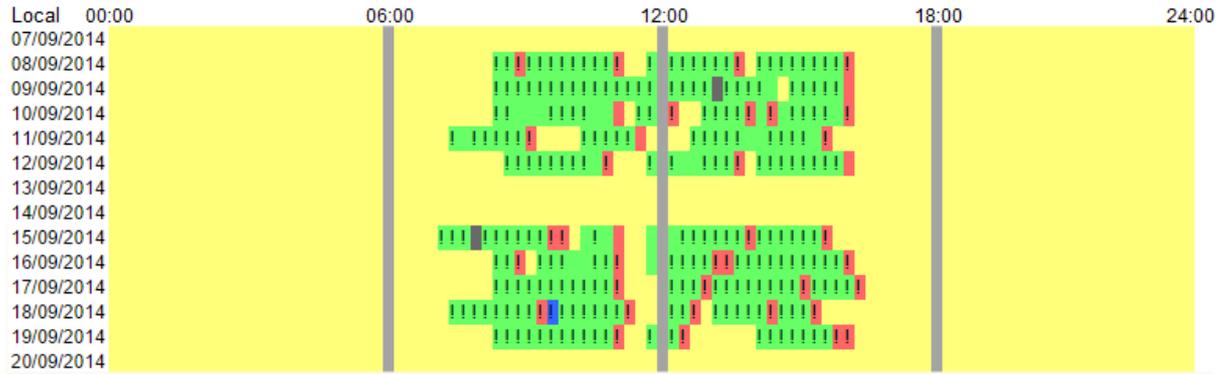
The following example chart demonstrates a typical computer that is in use during weekday office hours and turned off outside this period. During the day the user is active for much of the time with occasional periods of inactivity / PC suspended. The PC is sometimes forced awake indicating an application is busy and temporarily inhibiting power management.



Tip: PowerMAN reports inactivity on a conservative basis. Any user activity during the 15-minute reporting timeslot will mark that slot as user activity (and not inactivity). In other words, PowerMAN is biased to over report activity and not inactivity. This is deliberate. The choice of a 15-minute reporting granularity reduces the amount of usage data collected and stored.

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The following chart shows a similar situation with a PC that is in use during weekday/office hours and suspended outside these hours:



Live Reporting

In addition to historic reporting, PowerMAN can optionally provide near-instantaneous or “live” status information. This is typically updated every few minutes. This feature must be enabled by the System Administrator. To access this report open the Live tab.

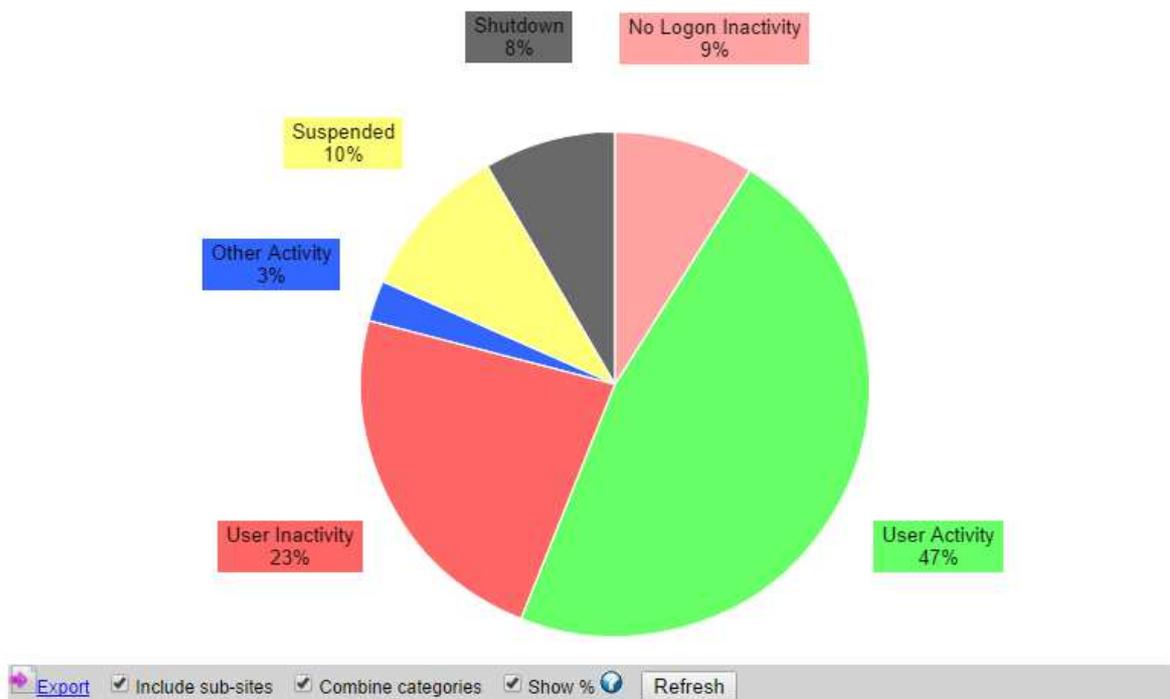


Site Live Status Report

The site live status pie chart reports the current (within the last couple of minutes) status of all workstations in the current site and optionally all sub-site.

University of New Town Live Statistics

Live Activity Breakdown



The report provides several additional options. These have the following meanings:

- **Include sub-sites** – Include data from all child sites (enabled by default)
- **Combine Categories** – Simplify display by coalescing related reporting types. If this option is disabled then a detailed breakdown including all combinations of power status will be generated.
- **Show %** - Show the results as percentages or absolute computer numbers

Workstation Availability Report

The collection of live data also allows PowerMAN to provide a workstation availability dashboard. This is intended for use in public access area dashboards, intranets and service desks or similar

The availability report currently shows the number of workstations broken down as follows:

- **Available** – Known turned off, suspended (with no logon) or turned on and with no logged on user
- **Not available** – Current logged on user or no recent data (> 30 days)

Sub-Site Computer Availability



Workstation Live Status Report

The workstation live status report shows the current status of each workstation within the current reporting site. Click on the workstation name to link through to the detailed workstation report:

Live Computer Status

Computer Name	Unknown	Available	Not Available
Workstation001	Workstation021	Workstation058	Workstation137
Workstation002	Workstation038	Workstation070	Workstation160
Workstation003	Workstation041	Workstation080	Workstation163
Workstation004	Workstation044	Workstation088	Workstation167
Workstation005	Workstation046	Workstation112	Workstation207
Workstation010	Workstation048	Workstation114	Workstation213
Workstation013	Workstation056	Workstation115	Workstation223
Workstation016	Workstation057	Workstation124	Workstation225
Workstation017			Workstation226
			Workstation227
			Workstation228
			Workstation234
			Workstation235
			Workstation244
			Workstation267
			Workstation269
			Workstation273
			Workstation283
			Workstation294
			Workstation312
			Workstation319
			Workstation326
			Workstation327
			Workstation328

Show detailed activity status

[Open restricted live availability report](#)

The **Show detailed activity** option displays more detailed live status information. Unticking this option produces a simplified report indicating a computer is available or not available for use. The same simplified report is available via the **Open restricted live availability report** link (bottom right). This variation of the report does not require a user login and is intended to provide an availability dashboard or similar.

Tip: It is anticipated that the **Live / Availability Reports** will evolve further in later product releases. If you have a specific requirement or product suggestion relating to the display of live data please contact your Account Manager.

Asset Reporting

In addition to power management reporting, PowerMAN can also report on managed device hardware. The information collected includes installed hardware and device capability information. This feature can be used to quickly locate devices that meet specific search criteria. The feature can be accessed via the Devices tab. This feature requires client version 5.2.8 or later and must be enabled by the system administrator.

Devices Tab

The devices report displays a list of assets that match the filter criteria. The current filters include:

- Last status (known) date
- Computer name
- PowerMAN client version
- Operating system version
- Battery present
- Hardware vendor and product
- BIOS vendor and version
- CPU model and core count
- Installed RAM
- Installed hard disks and optical drives
- Free system drive storage capacity

To locate devices, select the desired criteria and click refresh. The **Computer Name** search filter supports use of * and ? as wildcards:

Summary | Live | **Devices**

Demonstration Devices

Client Version	All	Computer Name	<input type="text"/> (Use * and ? for wildcards)
OS Version	All	CPU	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz
Battery	All	Logical Cores	All
Vendor	HP	RAM	All to All GB
Product/Code	All	Hard Disks	All
BIOS	All	Optical Drives	All
BIOS Version	All	Free System Drive	All GB

Export Show 1000 Computers last status from 15/05/2019 until 14/05/2020 Include sub-sites Refresh Showing 60 of 329 available records

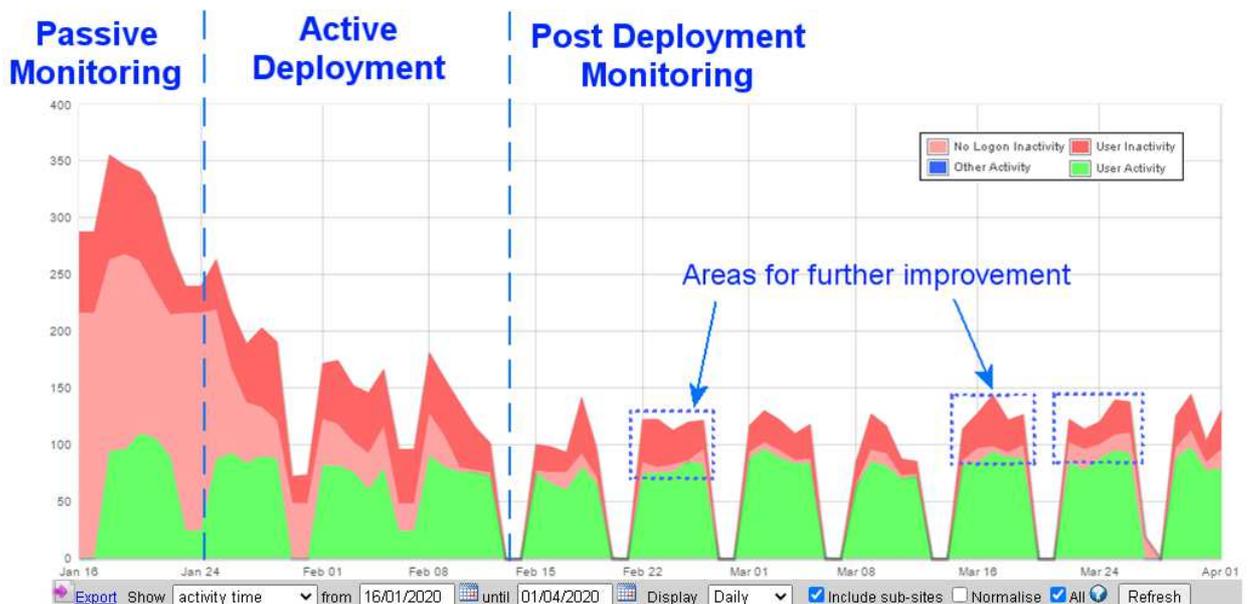
Computer	Version	OS	Battery	Vendor	Product/Code	BIOS	Version	CPU	Logical Cores	RAM MB	Hard Disks	Optical Drives	Free System Drive MB	Last Status
Workstation021	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	434540	19/03/2020
Workstation042	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	428826	10/05/2020
Workstation044	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	435733	09/05/2020
Workstation045	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	428807	11/05/2020
Workstation046	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	438610	02/05/2020
Workstation048	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	438792	09/05/2020
Workstation077	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	297595	11/05/2020
Workstation078	5.4.0.5932	10.0.9200	False	HP	8299	HP	P01 Ver. 02.04	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	4	3975	1	1	328999	11/05/2020

Measuring Progress

A typical PowerMAN deployment is divided into three distinct phases:

- An initial period of **passive monitoring** - This allows a baseline usage profile to be established.
- Deployment of an **active power policy** - This is designed to reduce energy waste from the established baseline. Typically, the specific settings used are chosen based upon both the results of the monitoring phase and existing knowledge about the usage pattern and user requirements.
- A **post deployment monitoring** phase - In this phase the power policy is monitored, areas for possible further improvement may be identified and, if necessary, policies refined

The most effective PowerMAN deployments use the initial passive monitoring phase to fully understand the existing usage profile. This passive process is transparent to users and allows you to collect information that can then be used to design the specific strategy you use to reduce PC energy waste. We recommend that this phase lasts at least two weeks or until you have seen the usage pattern repeat at least once. After you have implemented an energy reduction initiative, it can be very useful to refer back to the data previously logged to measure progress and identify areas for possible further improvement. The PowerMAN reporting solution makes this easy:



The purpose of most deployments is to reduce computer inactivity levels to as small as practical without unduly disrupting productivity. The chart above shows a fairly typical deployment. It has the following key features:

- Initial levels of PC inactivity (red / pink) are predominant
- There is significant waste at weekends (red / pink between green areas)
- Following activation of PowerMAN (around 24th of January), the inactivity rapidly decreases as the power policy is rolled out

- Following this, inactivity is removed at weekends
- Ultimately, weekday inactivity is reduced to one quarter or less of total activity

For devices in a typical weekday office setting, this creates a very distinctive pattern where each week is represented by a green area, bounded by clear white areas for the weekend, and a relatively small red / pink 'top' as shown above.

Tip: The objective of most power management projects is to reduce the level of inactivity (red / pink) to the minimum practical level. In a typical scenario, a reasonable target is < 1 hr/PC/day.

Reducing energy waste (inactivity)

The PowerMAN client software offers a variety of features that can be used to reduce waste (inactivity) levels. These features can be used in combination to achieve the best results for your environment. The exact settings you use will depend upon your organisation, user and maintenance requirements:

- Idle (timeout) policies typically work best because they allow each computer independently reduce waste according to their own usage profile irrespective of general operating times. This strategy avoids a "one size fits all" approach.
- Schedule based policies can make a significant difference (shutdown at night time and weekends) but may leave uncontrollable inactivity levels during 'operating' hours. This is sometimes desirable in timetabled environments such as schools. We recommend that wherever possible you use such policies in a secondary role rather than as your primary power management strategy.
- The scheduled wake feature can be used to ensure computers are ready for use at the start of the day or to create a regular maintenance window for virus scans or system updates. Please remember that most workstations supports wake from the hibernate and sleep states (but not power off). This is due to hardware design.
- A combination of "Default/Specific User" policies, that apply when users are logged on, and "No User" policies, that apply when nobody is logged on, may enhance energy saving by allowing a more aggressive savings strategy to be used when no user is present. In some circumstances, it may not be desirable to use any power management when users are logged on. The "No User" feature ensures this doesn't mean power management is never used.

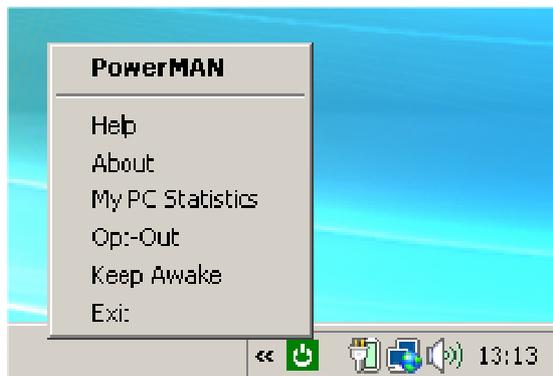
NB: If the "Default" policy is already sufficient then a specific "No User" policy may not be required.

- The logout feature can be used to transition abandoned user sessions to the No User policy state. This is ideal for hot desk / shared computing environment where there is frequent user turnover and the primary strategy is to manage power when no user is logged on. This feature may not be suitable for environments where a user has exclusive use of the PC and power management can be safely used without logging the user out first.
- PowerMAN allows multiple idle policies to be defined for each of the default, no user and specific user categories and the policies arranged in precedence order. Each policy may have an optional start/end time and apply only on certain days. Either of the time fields may be left blank. PowerMAN processes the policies in strict order and

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will apply the first applicable policy at any given time. To ensure consistent behaviour, we suggest that you configure time bound policies first and provide a non-time bound or “fallback” policy last.

- The policy enforcement feature can be used to remove PC ‘insomnia’ where applications or Windows services prevent the PC from entering a low power state for a prolonged period of time. Please remember to allow some time for legitimate system activity when the user is not present. A grace period of 10-15 minutes is typically appropriate.
- It can often work best to initially activate only some modest power settings. This allows users to get used to the change and allows you to measure the effect. Typically, these may include turning off PC’s that are not logged on and turning off monitors after a few minutes. Once these changes are accepted by users, it may be possible to go further.
- Consider enabling the PowerMAN user interface feature to allow selected users to opt-out or keep their PC awake. To avoid this feature being abused, we recommend this feature is only enabled sparingly to selected users with a specific authorised usage case:



- Remember that it can be helpful to communicate the energy strategy and on-going progress to users. Some organisations have reported that user participation may itself contribute to the organisations wider energy/cost saving goals and lead to further increased savings. With PowerMAN statistics, it may even be possible to create league table of the most wasteful computers or departments!
- Above all, please remember that you can continue to use the PowerMAN reporting system to monitor progress, track trends and resolve problems that may emerge in the future.

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The following table explains two common scenarios:

Scenario	Common features	Possible solution
Workplace / Office User dedicated PC	Majority of users leave systems on to avoid start-up delay and preserve work or allow remote access	Sleep / hibernate systems when not in use (including when users logged on). This preserves system state ready for later access by the same user. Consider using scheduled wake for the start of working day. Configure system for remote wake if remote access required and use a product like WakeMyPC to simplify end user remote access.
Hot desk office or Public access area Non-dedicated PC	Users frequently change and therefore data preservation for extended periods is not required. No requirement for remote access	Log out / shutdown systems not in use. Consider using Logout / hibernate or sleep as an alternative to minimise start-up delays. If appropriate use scheduled wake / shutdown to match user usage pattern

Choosing between Shutdown, Hibernate and Sleep

PowerMAN offers three levels of power saving. The following guidelines may be useful when determining which policy to enable:

- Shutdown (Power Off)** – The most efficient (and extreme!) method of power saving. This is generally only appropriate for situations where no user is logged on although some sites, such as public access areas, may invoke this policy after sufficient warning to deter users from leaving computers on and unattended. Any programs or open documents are closed and the user must re-open them again before continuing.
- Hibernate (S4)** – This consumes a similar amount of power as shutdown but allows the user session to be restored with a short delay (usually about 20-30 seconds). This is appropriate for computers which are used long term by the same user or where power management only occurs when no user is logged on (shared computers). Any programs or open documents are preserved and the user may continue immediately after the system has resumed.
- Sleep (S1-S3)** – This typically consumes slightly more power than hibernate but allows the user to become active again after only few seconds delay. Typically, a PC in this state consumes only 2% of the energy used when running normally. However, this depends upon the exact configuration of the hardware. Any programs or open documents are preserved and the user may continue immediately after the system has resumed.

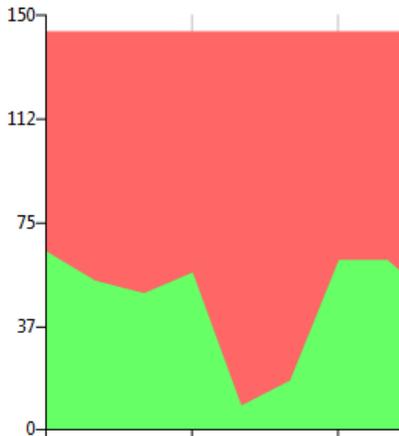
Tip: The Hibernate and sleep states do not logout the current user. Any programs or open documents are preserved and the user may continue immediately after the system has resumed. In a shared computer environment, this can result in the next user being unable to logon because the workstation is locked by the previous user. Consequently, these approaches are not appropriate for shared systems unless combined with an initial logout policy.

Some computers support different variants of the sleep state (e.g. suspend to RAM). The PowerMAN reporting system can be used to find which sleep states are available on a specific PC. However, in most cases, the available states will be configured in the system BIOS and cannot be controlled through software such as PowerMAN. In order of decreasing energy consumption the available states are as follows:

S1 Sleep Smallest saving	System appears off. The CPU is stopped; RAM is refreshed; the system is running in a low power mode
S2 Sleep	System appears off. The CPU has no power; RAM is refreshed; the system is in a lower power mode than S1. NB: This mode is rarely available on modern PCs
S3 Suspend Biggest saving	System appears off. The CPU has no power; RAM is in slow refresh; the power supply is in a reduced power mode. NB: Recommended for maximum power saving.

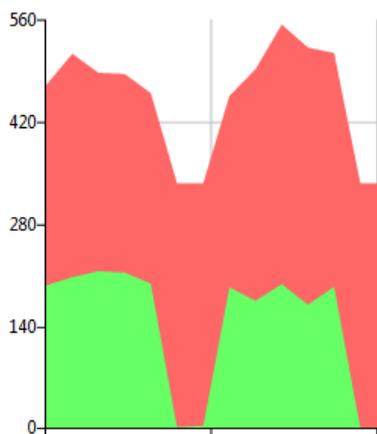
Common scenarios

The following screenshots illustrate the key features reported by PowerMAN for different scenarios of PC power management:



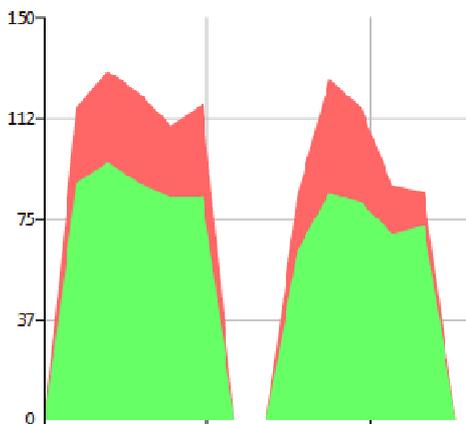
This chart is very typical of a site (or computer) that is never power managed. The combined level of activity (user activity and inactivity) is constant – in other words the computer(s) are never powered off or suspended.

This scenario is, fortunately, quite rare.



This chart demonstrates the effect of passive power management. During periods of activity (usually weekly) the total level of activity increases. At weekends (the middle of the chart) a base load of inactivity is present. This indicates that some computers are powered off / suspended when not in use but a significant proportion of computers are left powered on.

This is the scenario is the most common in unmanaged environments.



This last chart demonstrates the benefits of an effective power management strategy. During operating hours (weekdays) there is predominantly user activity. There are some periods of inactivity such as break times, but these are a small minority. There is little or no inactivity outside operating hours (weekends) indicating the management system is effective.

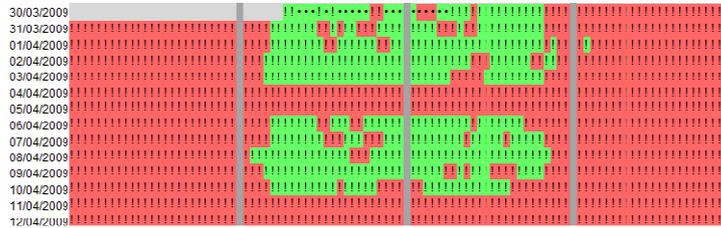
This scenario is what an effective PowerMAN deployment should aim for.

An ideal configuration will have minimal inactive (red/pink) periods.

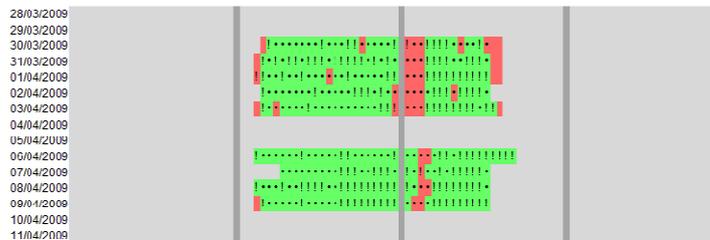
PowerMAN Server Management Reporting Platform Guide v5.5

The following diagrams demonstrate two examples from the computer activity report.

These are the possible two extremes. An effective deployment should aim for the second scenario:



This computer is used on weekdays but is not turned off or suspended outside these hours. The computer is permanently forced awake indicating that a program is preventing the computer from entering a reduced power state OR that power management is disabled. This computer is not power managed.



Similarly this computer is used on weekdays but is turned off or suspended outside of these operating hours. This is an effectively power managed computer.

Reporting System Administration

The following sections describe the available PowerMAN reporting system administration features. These features are only available to users permitted by the system administrator. If you need access, please contact your system administrator.

Tip: If you need assistance with the PowerMAN hosted (cloud) service to create a new logon or reset your password, please contact [Technical Support](#).

Some configuration features are global (e.g. apply to all reporting sites) whilst others may only apply to the current site and optionally sub-sites of the current site.

Site Administration Logon

To perform administration tasks you must logon to the reporting system with an identity previously configured with the **Site Administration** access level.

To login using an email address, proceed as follows:

1. Enter your email address and password into the login fields (top right)
2. Press the **Logon** button



user@example.com

.....

Logon

Alternatively, if Windows Integrated Authentication is enabled just press the **Logon** button. No password is necessary:



datasynergy.corp\fredf

Logon

Site Configuration Tab

After logon, you will be redirected to your organisation root (top-level) site. This is the site that contains all other sub-sites. To view the current site / sub-site configuration properties, proceed as follows:

1. Navigate to the appropriate sub-site (or the root site for global configuration)
2. Select the **Configuration** tab:

Summary	Live	Devices	Configuration	Logins	Notifications
---------	------	---------	---------------	--------	---------------

The current PowerMAN configuration will be displayed:

Demonstration Configuration

Identity

Unique Identity	{5c551639-5b14-440a-a0cc-158b57f158b}	
Site/Group Name	Demonstration	Save

Configuration

Auto Computer Move	<input checked="" type="checkbox"/> Enable computer auto-move	<input checked="" type="checkbox"/> Update sub-sites	Save
Show Computers	<input checked="" type="checkbox"/> Show computers	<input checked="" type="checkbox"/> Update sub-sites	Save
Auto Site Creation	<input checked="" type="checkbox"/> Enable auto site creation (OU Based)		Save
Anonymous Viewing	<input checked="" type="checkbox"/> Permitted		Save

Costs

Nominal Site Costs	Estimated kWh / PC	<input type="text" value="0.06"/>		Save Use Defaults
	Cost / kWh \$	<input type="text" value="0.20"/>		
	kg CO ₂ / kWh	<input type="text" value="0.25"/>	<input checked="" type="checkbox"/> Update sub-sites	
Baseline Inactive Hours	Normalised Inactive Hours	<input type="text" value="7.50"/>		Save
	Reference Date	<input type="text" value="18/02/2018"/>	<input checked="" type="checkbox"/> Update sub-sites	Clear

Miscellaneous

WakeMyPC (WoL) Service	<input type="text" value="https://yoursite/wakeproxy.aspx"/>		Save	Clear	Default
	<input checked="" type="checkbox"/> Update sub-sites				
Timezone	Bias: <input type="text" value="0"/>	hours UTC	<input checked="" type="checkbox"/> Update sub-sites	Save	

Rename Current Site

To change the name of the current PowerMAN site, proceed as follows:

1. Open the **Configuration Tab**
2. Enter a new site name

Site/Group Name	Demonstration	Save
------------------------	---------------	------

3. Click **Save**

Computer/Site Auto Move (Site Lock)

The reporting site associated with a computer can be changed at any time. This is typically achieved by moving the computer to a different Active Directory OU, by changing the client-side SiteGUID setting via Group Policy or by using the PowerMAN reporting interface to manually move the computer to another site.

In a typical configuration, the PowerMAN system will automatically move a computer to the new sub-site when a change is detected. This feature greatly simplifies the administration of PowerMAN reporting. However, in some circumstances it may be advantageous to “lock” a computer to the current reporting sub-site regardless of current client settings or AD membership. This may be useful during a transition in reporting arrangement or following manual assignment of site membership. To configure the computer auto-move feature, proceed as follows:

1. Open the **Configuration Tab**
2. Select the appropriate auto-move setting (and optionally update sub-sites):

Auto Computer Move	<input checked="" type="checkbox"/> Enable computer auto-move	<input checked="" type="checkbox"/> Update sub-sites		Save
---------------------------	---	--	---	------

3. Click **Save**

Restricting access to named computer reports

PowerMAN will normally display summary information about each named computer in a site and provide a link to more detailed information about that computer. The administrator can optionally disable this feature to prevent the reports from showing information about named computers. In some environments, this may be used to increase privacy of individual users (for instance, if the computer’s name is related to the user’s name).

To configure this feature, proceed as follows

1. Open the **Configuration Tab**
2. Select the appropriate show computers setting (and optionally update sub-sites):

Show Computers	<input checked="" type="checkbox"/> Show computers	<input checked="" type="checkbox"/> Update sub-sites		Save
-----------------------	--	--	---	------

3. Click **Save**

Automatic Site Creation (Active Directory)

PowerMAN can be configured to automatically create sub-sites (e.g. reporting groups) based upon the Active Directory hierarchy. This is sometimes known as the workstations 'distinguished name (DN)' and is typically enabled by default. This feature can reduce administration but has no effect when Active Directory is not present.

To configure this feature, proceed as follows

1. Open the **Configuration Tab**
2. Select the appropriate auto site creation setting:



3. Click **Save**

Tip: The Auto Site creation feature applies globally to all sub-sites. Once enabled, simply configure the PowerMAN client with the "root" SiteGUID. No further action is required.

Anonymous Report Viewing

PowerMAN may be configured to permit anonymous report viewing. This allows reports to be viewed (but not configured) without a specific logon. This feature is enabled by default.

To configure anonymous viewing, proceed as follows:

1. Open the **Configuration Tab**
2. Select the appropriate anonymous viewing setting:



3. Click **Save**

Tip: The anonymous report viewing feature applies globally to all sub-sites.

Changing Nominal Site Energy Costs

PowerMAN allows you to estimate the cost of energy used / wasted. PowerMAN uses the nominal energy cost figures you provide to perform this calculation per sub-site. This estimate will be more accurate if all computers in the sub-site are similar and have the same energy properties. The process is only an estimate but can, with correct configuration, still be very informative:

Nominal Site Costs	Estimated kWh / PC	<input type="text" value="0.06"/>		<input checked="" type="checkbox"/> Update sub-sites	<input type="button" value="Save"/> <input type="button" value="Use Defaults"/>
	Cost / kWh \$	<input type="text" value="0.20"/>			
	kg CO ₂ / kWh	<input type="text" value="0.25"/>			

To configure nominal energy costs, proceed as follows:

1. Open the **Configuration Tab**
2. Enter an estimate (average) **consumption figure in kWh**. This is the energy used by a typical computer (and the display/monitor) in one hour. You can measure this using a watt meter or crudely estimate it from the power supply specification plate present on most devices (this figure is generally larger than actual consumption).

NB: A typical desktop computer is 60-150Wh (0.06-0.15kWh). Laptop and low-energy computers may be less.

3. Enter the **electricity cost per kWh**.
4. Enter the amount of **CO₂ produced for each kWh** of energy generated. This figure will depend upon the source of your electricity. If you use a 'green' tariff it will be lower or even zero.

NB: The UK Government currently uses a nominal figure around 0.25 kg/kWh. This figure will vary by country and by energy supplier. Please remember it is only an estimate.

5. Optionally, check the **Update sub-sites** box to update all child sites
6. Click **Save**

Configuring baseline inactivity (estimated savings reports)

PowerMAN can calculate the savings achieved in terms of activity hours, estimated cost or estimated CO₂ measured against a baseline period. The baseline is usually established during the audit phase of deployment before enabling power management. To configure a baseline figure for a site proceed as follows:

1. Audit the target computers for a period of time. Ideally this should be for at least 2 business cycles (e.g. 2 weeks).

NB: You should satisfy yourself that the workstations and audit period are representative of normal use.

2. Use the normalisation feature to establish the average level of inactivity in hours during the audit period. To do this:
 - i. Filter the site summary chart to show only the desired audit period
 - ii. Select the **Site Activity** chart
 - iii. Unselect the show **All** option
 - iv. Tick the **Normalise** option
 - v. Click **Refresh**
 - vi. Read-off the normalised amount of inactive hours from the top of the chart. This is located top-right

For example: **7.5 inactive Hours/PC/Day**

3. Open the **Configuration Tab**
4. Locate the **Baseline Inactivity** settings:

Baseline Inactive Hours	Normalised Inactive Hours	<input type="text" value="7.50"/>		<input type="button" value="Save"/>
	Reference Date	<input type="text" value="18/02/2018"/>	 <input checked="" type="checkbox"/> Update sub-sites	

5. Enter the figure calculated above and the date the estimate was calculated for. If the estimate covered several weeks, enter the mid-date for the estimate period.
6. Optionally, check the **Update sub-sites** box to update all child sites
7. Click **Save**

Configuring Integrated WakeMyPC (WoL) Service

PowerMAN can optionally integrate with Data Synergy's companion WakeMyPC product. This tool can be used by users to remotely wake-up (or power-on) a workstation on demand. It can also be used by the system administrator to wake groups of workstations on demand or on schedule. WakeMyPC integration permits these features to be accessed directly from the PowerMAN reporting interface.

To configure this feature proceed as follows:

1. Open the **Configuration Tab**
2. Select the appropriate WakeMyPC server address (and optionally update sub-sites):

WakeMyPC (WoL) Service	<input type="text" value="https://yoursite/wakeproxy.aspx"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Update sub-sites	
	<input type="button" value="Save"/>	<input type="button" value="Clear"/> <input type="button" value="Default"/>

3. Click **Save**

Configuring Reporting Site Time Zone

PowerMAN supports operation across multiple time zones. This feature permits per-workstation reports to be viewed in local (rather than server) time. To configure this feature proceed as follows:

1. Open the **Configuration Tab**
2. Select an appropriate time zone (e.g. 0 for GMT, -6 for CTD etc.):

Timezone	Bias: <input type="text" value="-6"/>	hours UTC <input type="checkbox"/>	<input checked="" type="checkbox"/> Update sub-sites	<input type="button" value="Save"/>
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3. Click **Save**

Logins Tab

The logins tab allows a user with administrator access to create, delete and reset other user logons.

To view the current logins, proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab:



The available user logins and associated access levels will be displayed. For example:

Login Administration

Email Address	Home Site	Parent Access	Access Level
admin@example.com	None	Enabled	Site Administrator Password Impersonate Delete
fred@example.com	None	Enabled	Viewing Only Password Impersonate Delete
bob@example.com	Customer Service	Disabled	Viewing Only Password Impersonate Delete

Create a new login

To create a new user login, proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab
3. Enter the desired user **email address** and **password** (or enter a qualified username if using Windows integrated authentication mode)
4. Select an appropriate **access level**
5. If applicable select a home site and optionally check the box to prevent user from navigating to parent sites
6. Click **Create**:

Create New User Login

Email Address

Initial Password

Access Level

Home Site

Disable parent site(s) access

Tip: In Windows integrated mode, the qualified user name should be entered instead of an email address. In this case, no password is required. A qualified name is in the format:

domain\username

A helper page is provided to display the current qualified user name as communicated by the browser. Please visit the following page to display the current logon:

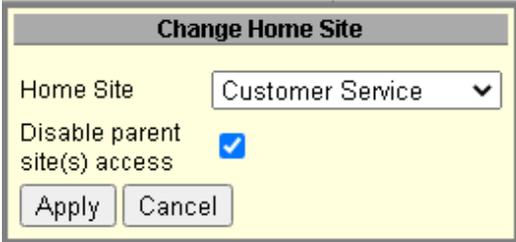
<http://yourserver/currentidentity.aspx>

Login home site and parent site navigation

Optionally, a PowerMAN reporting login can be limited to a specific sub-site. This may be useful in a larger organisation to prevent a user from viewing reporting statistics outside of their permitted scope. For example, a branch manager may be permitted to view statistics for their own branch office but not view other branches. In addition, users with a specific home site may also be prevented from navigating to parent sites above their home site. These two features are typically used together.

To restrict a login to a specific sub-site (and all child sites), proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab
3. Locate the desired user account
4. Click either the **home site** link or the link in the **parent access** column
5. Select the desired **home site** (or "None" if not applicable) and, optionally, also **disable parent site access** (usually desirable):



The image shows a dialog box titled "Change Home Site". It has a yellow background and a grey border. Inside the dialog, there is a label "Home Site" followed by a dropdown menu showing "Customer Service" with a downward arrow. Below that is a label "Disable parent site(s) access" followed by a checked checkbox. At the bottom of the dialog are two buttons: "Apply" and "Cancel".

6. Click **Apply**

Login access level

PowerMAN supports three distinct user access levels:

- **Anonymous Viewing** – Allows any user to use reporting features but not change the system configuration. To access the system the user must know the reporting URL. Please see above for instructions on how to enable/disable anonymous access via the Configuration tab.
- **Viewing Only** – As above but requires pre-authorized user login
- **Site Administration** – Allows the user to use the reports AND to further configure energy costs, other user accounts and notifications.

To change an existing user login level, proceed as follows:

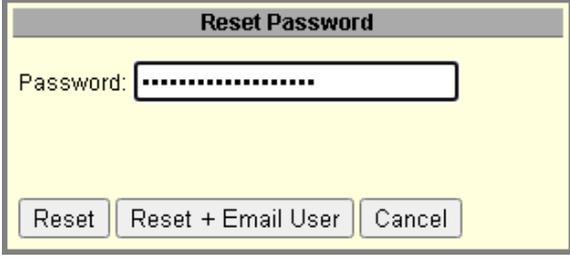
1. Navigate to the root site
2. Select the **Logins** tab
3. Locate the desired user account
4. Click the link under the **Access Level** column
5. Select the desired access level and click **Apply**:



Reset login password

To reset a login password, proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab
3. Locate the desired user account
4. Click the **Password** link
5. Enter the new password:



The image shows a 'Reset Password' dialog box. It has a title bar with the text 'Reset Password'. Below the title bar, there is a label 'Password:' followed by a text input field containing a series of dots. At the bottom of the dialog box, there are three buttons: 'Reset', 'Reset + Email User', and 'Cancel'.

6. Finally, click one of the following:

- **Reset** – Resets the password
- **Reset + Email User** – Resets the password and sends a password reminder email.

Impersonate login

For troubleshooting purposes, it may be useful to impersonate a user and see the same view of the PowerMAN reporting system that is available to that user.

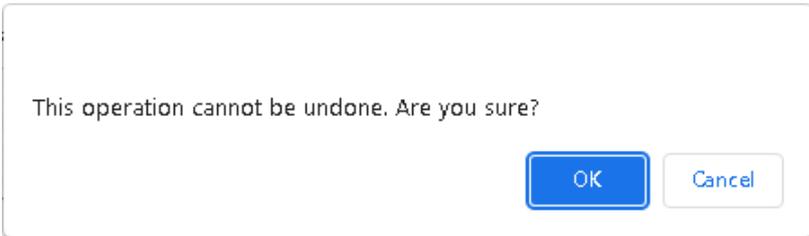
To impersonate a user, proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab
3. Locate the desired user account
4. Click the **Impersonate** link

Delete login

To permanently delete a user login, proceed as follows:

1. Navigate to the root site
2. Select the **Logins** tab
3. Locate the desired user account
4. Click the **Delete** link
5. When prompted, click **OK**



The image shows a confirmation dialog box with the text 'This operation cannot be undone. Are you sure?'. At the bottom right of the dialog box, there are two buttons: 'OK' and 'Cancel'.

Email Notifications / KPIs

PowerMAN can automatically email summary reports every day, week, month or year. This can be useful to keep stakeholders such as IT managers, Energy / Sustainability managers or Finance managers informed about the power management project and how it is progressing. The reports summarise key performance indicators (KPIs) and present these in an easy to understand summary format:

From: PowerMAN Power Manager
 To:
 Subject: Power management summary (Weekly)

Hi,

The most recent PowerMAN weekly power management summary is [now available](#).

The summary reports the total operating time of your computer estate, how much of that time was actively used by users and how much of it was inactive. This inactive time is potentially wasteful and reducing this will reduce on-going energy costs.

	Week commencing 27/02/2022
Description:	Colleges
Unique computers	2090
User active hours	18980 (12 %)
Other active hours (Defined by system administrator)	0 (0 %)
User inactive hours	141261 (88 %) 83935 due no user logon (52 %) 57326 due to inactivity whilst user logged on (36 %)
Total hours	160241 (100 %)
Inactive cost (estimated)	£ 1526.91
Suggestion	PowerMAN "No User Policy" may reduce inactivity when no user is logged on. This will have no effect when a user is logged on.

To review the data in detail, please visit the [PowerMAN Power Manager Server](#) reporting system.

For advice and suggestions on how to get the most from power management, please visit the [PowerMAN website](#)

To view the current notifications proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab:



The current notifications will be displayed. For example:

Notification Administration

Email address	Greeting	Frequency	Home Site	Status	Last Run
fred@example.com	Hi Fred,	Monthly	None	Enabled	Never Delete
geoff@example.com	Hi Geoff,	Weekly	Customer Service	Enabled	Never Delete

Create a new notification

To create a new email notification, proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab
3. Enter an appropriate **greeting** and email **address**
4. If appropriate select a **home site** (or none)
5. Select a report **frequency**
6. Click **Create**

Create New Notification

Greeting	<input type="text" value="Hi Bob,"/>
Email Address	<input type="text" value="bob@example.com"/>
Home Site	<input type="text" value="Management"/>
Frequency	<input type="text" value="Weekly"/>
Disabled	<input type="checkbox"/>
<input type="button" value="Create"/>	

Change notification greeting

To amend an email notification greeting, proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab
3. Locate the desired email address
4. Click the current **greeting link**
5. Enter the desired greeting. e.g. Hi

Change Greeting

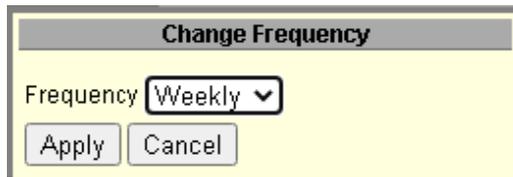
Greeting	<input type="text" value="Hi,"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

6. Click **Apply**

Change notification frequency

To amend an email notification frequency, proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab
3. Locate the desired email address
4. Click the current **frequency** link
5. Enter the desired frequency and click **Apply**

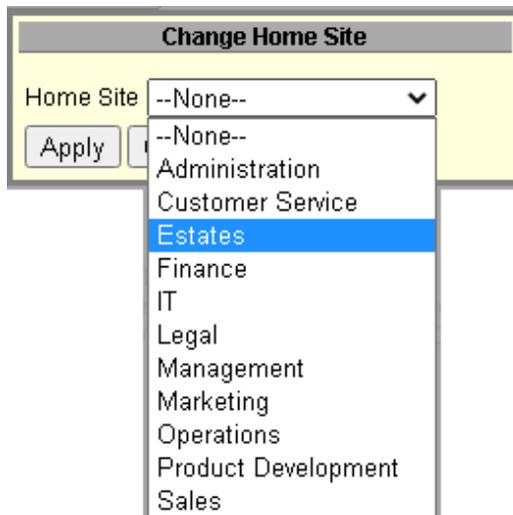


Change notification home site

The email notification home site defines which sub-site is used to generate the report.

To amend an email notification home site, proceed as follows:

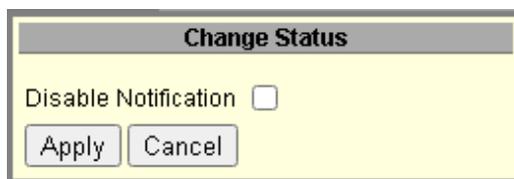
1. Navigate to the root site
2. Select the **Notifications** tab
3. Locate the desired email address
4. Click the current **home site** link
5. Select the desired site (or none) and click **Apply**:



Enable / disable notification

To disable an existing notification without permanently deleting it, proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab
3. Locate the desired email address
4. Click the current **enabled / disabled** link
5. Tick the box to disable the notification OR untick the box to enable it again
6. Click **Apply**:

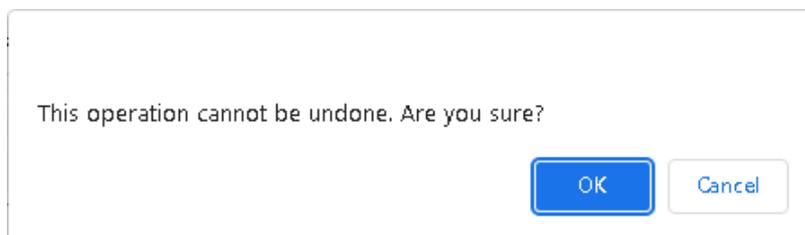


A dialog box titled "Change Status" with a yellow background. It contains a label "Disable Notification" followed by an unchecked checkbox. Below the checkbox are two buttons: "Apply" and "Cancel".

Delete notification

To permanently delete an email notification, proceed as follows:

1. Navigate to the root site
2. Select the **Notifications** tab
3. Locate the desired email address
4. Click the **Delete** link
5. When prompted, click **OK**



A confirmation dialog box with a white background and a thin border. The text inside reads "This operation cannot be undone. Are you sure?". At the bottom right, there are two buttons: "OK" (highlighted in blue) and "Cancel".

Manually creating and moving sub-sites (not required for AD mode)

Sub-sites provide a convenient way to sub-divide your organisation into manageable groups of computers. There is no practical limit on the number of sub-sites or how they may be arranged. Each sub-site has its own name and nominal energy costs. Most organisations will benefit from using the sub-site feature. This is especially the case when a large number of computers are present or they are located at different locations or have substantially different functions.

Most deployments use Active Directory (AD) integrated mode to create sub-sites automatically based on the AD. This approach reduces administration and will ensure your PowerMAN reporting hierarchy always matches your AD.

Alternatively, you can configure the client software to report to a specific sub-site by configuring the **SiteGUID** setting or, if necessary, manually move computers from one sub-site to another. It is generally simpler to assign the SiteGUID setting via the client software. This approach typically requires less effort, especially for a large number of computers.

Tip: An **ideal site** is a group of similar computers within a defined environment such as an office, department or room. A typical site can have from 1 to several hundred computers and will be **suitable for managing as a single entity with a common power management strategy**. After deployment, you should try not to significantly change the size or scope of the site (it is easy to create another one) as this may reduce the quality of the report data gathered.

PowerMAN assumes that computers in a site are similar and have the same (nominal) energy consumption and energy cost. If the energy consumption is significantly different and increased estimation accuracy is desired, we recommend subdividing sites further by similar computer hardware. Please contact Technical Support if you need advice on this.

The PowerMAN Installation Guide provides a detailed procedure to configure the SiteGUID setting for the PowerMAN client software. To manually create a new sub-site, proceed as follows.

NB: This procedure is NOT required if using Active Directory integrated mode.

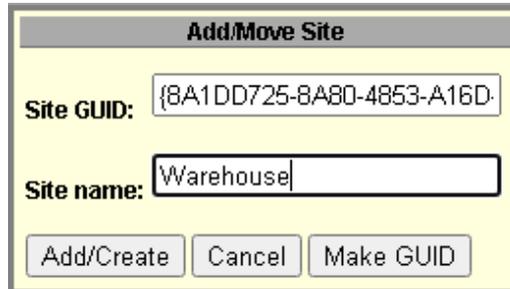
1. **Logon** to the PowerMAN reporting system
2. Navigate to the appropriate parent **sub-site** (or root site)
3. Click **Add/Move** site

Demonstration

Organisation	Demonstration	OU=Desktop,DC=corp,DC=local
Created	01/01/2018	First Data 14/08/2019
Expires	13/05/2022	Last Data 14/05/2020
Data Retention 	1835 days	Total Computers 78 Export / Recent (30 days) 84 Export / All time
		Total Sub-Sites 11 Export Add/Move Site

4. Enter the desired **SiteGUID** or if this is unknown click **Make GUID**

NB: The SiteGUID can be generated either on the server or during in client setup. Typically, the SiteGUID is generated on the server, copied to the clipboard and then pasted into the client configuration. The reverse procedure can also be used.



5. Click **Add/Create Site**

Tip: You can also use the same procedure to move an existing sub-site to a new location in your organisation hierarchy. To do this, follow the procedure above with an existing SiteGUID. The site (and all computers) will be moved to the new location.

Tip: Alternatively, a SiteGUID can also be generated using the PowerMAN client software as follows:

- i. Enter the command:


```
POWERMEN MAKEGUID
```

e.g. {bb0f71da-a116-4f80-a2cf-4d6645e2ce63}
- ii. Copy the SiteGUID (including brace characters) to the client settings
- iii. Click **Add/Move** site on the PowerMAN reporting system
- iv. Paste the desired **SiteGUID** (including the enclosing brace characters) into the dialog
- v. Enter an appropriate site name
- vi. Click **Add/Create Site**

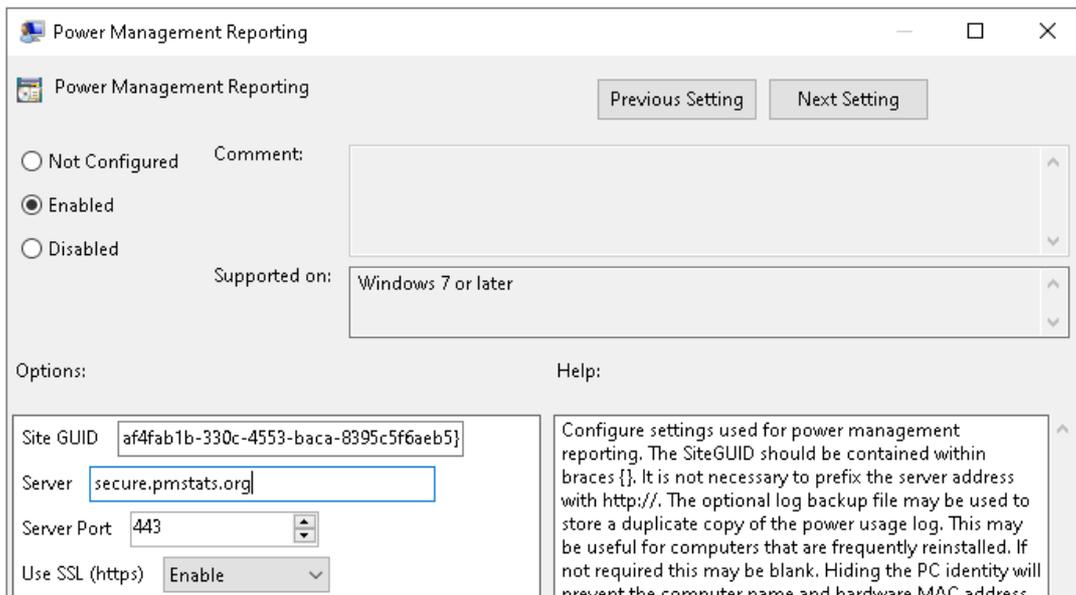
Client configuration with a SiteGUID (non-AD integrated mode)

Following creation of a sub-site, the SiteGUID can be deployed to the client software using Group Policy (or similar) with the procedure below:

1. Open the **Group Policy Management Console** (or your own chosen configuration tool)
2. Navigate to the **PowerMAN** policy configuration section
3. Select **Power Management and Monitoring**, right click and select **Properties**
4. Select **Enabled** and enter the desired SiteGUID and reporting server details

NB: The SiteGUID setting is always enclosed with {braces}.

5. Click **OK**



The sub-site must be registered on the reporting system. If not already registered, this can be done using the following procedure:

1. **Logon** to the PowerMAN reporting system
2. Navigate to the appropriate parent **sub-site** (or root site)
3. Click **Add/Move** site
4. Enter the desired **SiteGUID** and site name
5. Click **Add/Create**

Automatic reporting site creation based upon Active Directory

PowerMAN Enterprise Server v5.3 and later also allows reporting sites to be automatically created based upon the workstation Active Directory (AD) hierarchy. This feature requires client software v5.2.6 or later and can simplify both initial setup and on-going administration.

To enable this feature, proceed as follows:

1. Determine the root sub-site SiteGUID. This is available in the **Configuration** tab
2. Copy the SiteGUID, including the enclosing brace characters, to the clipboard or save it in a document.
3. Locate the **Auto Site Create** feature
4. Tick the **Enable auto site creation** checkbox:



5. Click **Save**
6. Deploy that SiteGUID for the root site to *all client computers* using the procedure above

As computers report data, the workstation 'distinguished name (DN)' will be used to automatically create a multi-site reporting hierarchy based upon the AD tree. For instance the computer PC2723 could have the DN:

CN=PC2723,OU=Workstations,OU=Management,OU=Head Office Staff,OU=Departments,DC=Customer,DC=local

This would place the workstation in the following PowerMAN reporting location:

AD Root -> Departments -> Head Office Staff -> Management -> Workstations

PowerMAN will automatically generate any necessary reporting sub-sites and arrange them accordingly. If a workstation moves to a different AD location, it will automatically move on the reporting system the next time it uploads data.

Tip: This feature is disabled if the workstation is currently in a sub-site that has auto move disabled. The automatic and manual creation sub-site modes may be combined in the same deployment. Automatic deployment will happen when:

- i. The client computer is configured with a SiteGUID configured for site auto creation ('AD Root' in the example above)
- ii. Client software is v5.2.6 or above

Deleting a sub-site

To permanently delete a sub-site and all computers within it, proceed as follows:

1. Login with an account that has the **administrator** access level
2. Navigate to the sub-site containing the target sub-site(s)
3. **Tick** the delete checkbox for the target sub-site(s) (on the right hand side)
4. Click **Delete** and confirm you wish to delete the site

Sub-Sites

Site	Recent/Total Computers	Last Status	Inactive Hours	Active Hours	<input type="checkbox"/> No Logon	<input type="checkbox"/> Inactive User	<input type="checkbox"/> User	<input type="checkbox"/> Other	Delete
Sales	72/72	14/05/2020	67.50	322.50	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		<input checked="" type="checkbox"/>
Marketing	13/13	14/05/2020	63.50	111.25	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		<input checked="" type="checkbox"/>
Administration	15/15	14/05/2020	61.50	150.00	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		<input type="checkbox"/>
Management	18/18	14/05/2020	60.00	212.50	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		<input type="checkbox"/>

[Export](#) Show sub-sites from until

Tip: Deleting a sub-site is a **permanent** operation. Once deleted all computers within that site and all data for that site are permanently erased. For a private system, please make sure you have regular backups.

Moving and Deleting Computers

To manually move a computer to different sub-site or to permanently delete a computer, proceed as follows:

1. Login with an account that has the **administrator** access level
2. Navigate to the sub-site containing the target sub-site(s)
3. **Tick** the checkbox for the target computers(s) (on the right hand side)
4. Click **Move** or **Delete** as required and, if prompted, confirm

Computers

Computer	Client Version	Last Status	Inactive %	Inactive Hours	Active Hours	<input type="checkbox"/> No Logon	<input type="checkbox"/> Inactive User	<input type="checkbox"/> User	<input type="checkbox"/> Other	WakeAll	Delete Move
Workstation094	5.4.0.5932	11/05/2020	47.54	7.25	8.00	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation318	5.4.0.5932	10/05/2020	36.71	7.25	12.50	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input checked="" type="checkbox"/>
Workstation204	5.4.0.5932	14/05/2020	48.94	5.75	6.00	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input checked="" type="checkbox"/>
Workstation141	5.4.0.5932	10/05/2020	52.50	5.25	4.75	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation171	5.4.0.5932	11/05/2020	33.93	4.75	9.25	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation261	5.4.0.5932	10/05/2020	59.38	4.75	3.25	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation232	5.4.0.5932	11/05/2020	19.79	4.75	19.25	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation198	5.4.0.5932	14/05/2020	64.29	4.50	2.50	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation074	5.4.0.5932	14/05/2020	32.73	4.50	9.25	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>
Workstation098	5.4.0.5932	09/05/2020	39.53	4.25	6.50	<div style="width: 10%; background-color: red;"></div>	<div style="width: 10%; background-color: red;"></div>	<div style="width: 80%; background-color: green;"></div>		Wake	<input type="checkbox"/>

[Export](#) Show computers from until Include computers in sub-sites

Tip: Deleting a computer is a **permanent** operation. Once deleted that computers contribution to the site statistics will be removed.

Appendix A - PowerMAN Demand or “Pull” Reporting API

PowerMAN Enterprise Server v5.4 added a demand or “pull” report API. This was expanded in release v5.5 to add additional report types.

The API is implemented by making a GET request to the /SiteSummary.aspx page. The report parameters are specified using the query string. The following parameters are currently supported:

Parameter	Description
Report	Specifies the report type. The supported values are: SiteHistorySummary = Daily summary report SiteHistoryDetail = Detailed report per 15-minute reporting block
SummaryType	For the SiteHistorySummary report, specifies the report type. The supported values are: 0 = Daily 1 = Weekly 2 = Monthly
Subsites	Specifies if sub-site data should be included. The supported values are: 0 = No 1 = Yes
StartDate	Define the report start date. If this is omitted the default value is 90 days ago.
EndDate	Define the report end date. The default is yesterday.
Normalise	Specifies if aggregate or normalised data should be returned. The default is aggregate data.
ShowAll	Specifies if both activity/inactivity data should be included. The supported values are: 0 = No. Include only inactivity data. 1 = Yes. Include both activity and inactivity data.

For example:

<https://server/SiteSummary.aspx?SiteGUID=6d5516395b14440aa0cc158b57ff2e0&Report=SiteHistorySummary&SummaryType=0&StartDate=18/02/2022&EndDate=19/05/2022&Subsites=1&Normalise=0&ShowAll=1>

Note: When “pull” report requests are made outside of a browser (for instance using the WGET command-line tool) the default date/time format for the PowerMAN server is used. The standard PowerMAN hosted reporting system uses European date/time format e.g. dd/mm/yyyy.

Appendix B – Report page HTML anchors

PowerMAN Enterprise Server v5.5 and later supports html anchor element. These allow individual reports to be directly linked to from third-party pages. The following anchors are currently supported:

Page	Anchor name	Purpose
SiteSummary.aspx	info	Links to site information panel
	breakdown	Links to site summary (pie) chart
	summary	Links to main activity chart
	membersites	Links to member sub-site list
	membercomputers	Links to member computer list
ComputerSummary.aspx	info	Links to computer information panel
	hardware	Links to hardware information panel
	powermanagement	Links to power management capability panel
	network	Links to network adapter / address panel
	history	Links to computer activity chart
PersonalSummary.aspx	detail	Links to detailed computer activity chart
	info	Links to computer information panel
PersonalSummary.aspx	history	Links to computer activity chart

For example, to access the detailed activity chart for a specific computer:

<https://servername/ComputerSummary.aspx?ClientGUID=9502b773e8c044cba557043937d02f40#detail>