

*Tivoli Endpoint Manager for Power
Management - Difference in the
Calculation of the Earlier and Revised
Power Consumption Over Time*



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Difference in the Calculation of the Earlier and Revised Power Consumption custom report

The custom report shows the difference in the calculation used in the deprecated and revised version of the Power Consumption Over Time web report.

The *Power Consumption Over Time* web report has been updated to increase accuracy in the calculations, particularly when:

- More than one computer type is selected.
- The number of computers of each computer type is different from another computer type.

Comparing the versions of calculating Power Consumption Over Time

In the deprecated version of the calculation, when there is more than one computer type selected from among *Notebooks*, *Desktops*, or *Servers*, the average power consumption per computer of each computer type is calculated separately.

Averaging out all the computer type's average computer usage per computer gives the average power consumption per computer over the whole deployment. The calculation uses the same weightage for each group of computer type. This assumption is less accurate because the number of computers of each computer type might be significantly different from another computer type. The new calculation takes the average of computer usage of all computers of the selected computer types.

Table 1 shows an example data set of computers under a deployment and their power usage, using *Notebook* and *Server* as the two selected computer types.

Table 1. Example using the deprecated and the revised calculation

Sample Data Set	Average Power Consumption Per Computer	
	Deprecated Calculation	Revised Calculation
• Notebook 1: 1.5 kWh • Notebook 2: 1.5 kWh • Notebook 3: 1.5 kWh • Server 1: 3.0 kWh	The average power consumption per computer of each computer type is calculated separately: $((1.5 + 1.5 + 1.5)/3 + 3.0)/2 = 3.25 \text{ kWh}$	The new calculation takes the average of computer usage of all computers of the selected computer types: $(1.5 + 1.5 + 1.5 + 3.0) / 4 = 1.875 \text{ kWh}$

Using the custom report

To generate the *Difference in Calculation of the Earlier and Revised Power Consumption* custom report, you must extract and save a copy of the report to a folder, then import it from the console.

To do this, download the custom report and extract it to a folder.

From the Tivoli Endpoint Manager console, click **Tools > Launch Web Reports**. The Web Reports window opens. Enter your Web Reports username and password. Click **Login**. The main Web Reports page opens in a new browser.

Select **Systems Lifecycle**. Go to the **Report List** tab and select **Import Report**. Click **Browse** and select *PowerConsumptionCalculationDifference.beswrpt* from the extracted folder. Click **Import**. A new folder will be created under **<BESReportsServer>\wwwroot\ReportFiles** in the BES server.

Copy all the extracted files to the newly created folder. Click the **Report List** tab and select the *Difference in Calculation of the Old and Revised Power Consumption* report.

Fill in the parameters that the report covers. In the following example, the Report Grouping Policy is for All Computers, and the report shows results for Notebooks and Desktops. The consumption period has a Start Date of 04/29/2012 and an End Date of 06/24/2012.

Click **Generate Report**. The Report Options section shows the difference between the calculation of the deprecated and revised versions of the Power Consumption Over Time web report.

Description:

The following report shows the difference in the calculation used in the deprecated version of the Power Consumption Over Time web report and its new version.

Select the reporting groups on which to report:

Report Grouping Policy: All Computers

Report Groups: Find Group names containing:

☒ All Computers

[Select All](#) [Deselect All](#)

Show results for: ☒ Notebooks ☒ Desktops ☐ Servers

Consumption Period:

Start Date 04/29/2012 **End Date** 06/24/2012

[Generate Report](#)

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Report Options:

Average Power Consumption data per computer over a period from 04/29/2012 to 06/24/2012, with savings compared to start date average on 04/29/2012 for Notebooks, Desktops in the "All Computers" grouping policy.

Average per Computer Consumption Over Period by Group						
Groups	Total Consumption over Period			Savings Compared to Start Date		
	Cost	Power	Carbon	Cost	Power	Carbon
▼ All Computers						
Deprecated Calculation	\$1.98	24.7 kWh	35 lb	\$-1.98	-24.7 kWh	-35 lb
Revised Calculation	\$3.95	49.4 kWh	69 lb	\$-3.95	-49.4 kWh	-69 lb
Difference	\$1.98	24.7 kWh	35 lb	\$-1.98	-24.7 kWh	-35 lb

Figure 1. Example of a generated Difference in the Calculation of the Earlier and Revised Power Consumption custom report

Support

For more information about this product, see the following resources:

- Tivoli Endpoint Manager Support site
- Knowledge Base
- Forums and Communities

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