

What's New?

StruxureWare

Power Monitoring Expert v7.2



Schneider
Electric

Course Objectives



By the completion of this course you will be able to:

- Describe the new features of Power Monitoring Expert v7.2.
- Rename a device in Power Monitoring Expert.
- Create a Vista diagram with links to devices without communication.
- Upload a new hierarchy template into the system.
- Configure the hierarchy with specific site information and devices.

Target Audience

- This training course is an integral part of the complete Schneider Electric curriculum.
- This course is designed for:
 - Users who are experienced with Power Monitoring v7.0.1.

Why a New Release?

Increase Project Profitability

- Productivity Toolkit: tools, “How to” documentation and working example files.
- Up to 33% productivity gains compared to earlier versions.
- Five new customization options to meet customer needs easier.

Aligned with StruxureWare Strategy

- Updated product name to align with StruxureWare convention.
- EcoStruxure Web Services (EWS) for plug & play with other software.
- New features to enable segment editions of PME (e.g. PME4DC, PME4HC, etc.).

New End-User Features

- Customizable Billing report for tenant metering and cost allocation.
- Reports supports SQL Server Express
- Support for more web browsers: Chrome, Safari.
- Easily manage devices (e.g. renaming, managed circuits, hierarchies).

Agenda

- **Recommended Systems**
- New Features
- Billing Module
- Productivity Toolkit
- Miscellaneous
- Align with StruxureWare
- Support Resources
- Summary

Support Matrix

- Microsoft Windows (32 and 64 bit)

- Windows 7 Professional/Enterprise
- Windows Server 2008 Standard/Enterprise
- Windows Server 2008 R2 Standard/Enterprise

- Microsoft SQL Server (32 and 64 bit)

- SQL Server 2008 Standard/Enterprise
- SQL Server 2008 R2 Express (comes on the Power Monitoring Expert DVD)
- SQL Server 2008 R2 Standard/Enterprise
- SQL Server 2012 (distributed database systems only)

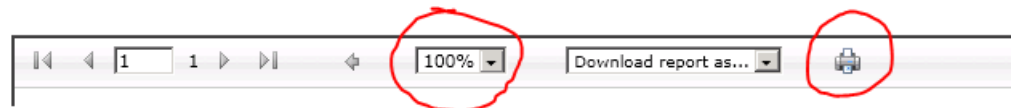
➤ See the “**StruxureWare Power Monitoring Expert Installation Guide**” (ref# 7EN02-0329) for more information

Support Matrix

Web Client

Processor	RAM	Minimum Display Resolution	Browser
2 Ghz Dual Core	2 GB	1024 x 768	Internet Explorer 8, 9, 10
			*Google Chrome 20+
			*Apple Safari 5+ (on Macs)

* Not able to “zoom” or “print” in Reports.



● Tablets for Diagrams Only (not other Web client applications)

- iPad iOS 5 (Safari)
- iPad iOS 6 (Safari)
- Android Ice Cream Sandwich (4.0)
- Android Jelly Bean (4.1)

Systems Up To 250 Devices

System	Devices	Users	Server Type	Hardware	Years of Logging	OPC Tags	VIP Tags
B1	≤ 50	≤ 5	Computer Type: Desktop OS: Windows 7 (64-bit) SQL: 2008 R2 Express	CPU: Intel Core i3 (2 core), or better RAM: 2+ GB HDD: 500+ GB	~4 years (10 GB)	1000	250
B2	≤ 100	≤ 5	Computer Type: Desktop OS: Windows 7 (64-bit) SQL: 2008 R2 Express	CPU: Intel Core i3 (2 core), or better RAM: 4+ GB HDD: 500+ GB	~2 years (10 GB)	1000	250
B3	≤ 100	≤ 5	Computer Type: Desktop OS: Windows 7 (64-bit) SQL: 2008 R2 Standard	CPU: Intel Core i3 (2 core), or better RAM: 4+ GB HDD: 500+ GB	~6 years (30 GB)	1000	250
A1	≤ 100	≤ 15	Computer Type: Workstation OS: Windows 7 (64-bit) SQL: 2008 R2 Standard	CPU: Intel Xeon E56xx (4 core), or better RAM: 8+ GB HDD: x2 500+ GB	<6 years (30 GB)	5000	1500
B4	≤ 250	≤ 10	Computer Type: Workstation OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: Intel Xeon E56xx (4 core), or better RAM: 8+ GB HDD: x2 500+ GB	~2.5 years (30 GB)	5000	1000
A2	≤ 250	≤ 20	Computer Type: Server OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: Intel Xeon E56xx (4 core), or better RAM: 16+ GB HDD: x4 300+ GB	<2.5 years (30 GB)	10000	3000

- Based on the following device mix: 10% advanced; 20% intermediate; 70% basic/entry.
Calculate ION_Data size and years of logging for Advanced systems

Systems Up To 2500 Devices

System	Devices	Users	Server Type	Hardware	Years of Logging	OPC Tags	VIP Tags
B5	≤ 600	≤ 10	Computer Type: Workstation OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: Intel Xeon E56xx (4 core), or better RAM: 16+ GB HDD: x6 300+ GB	~1 year (30 GB)	5000	1000
A3	≤ 600	≤ 35	Computer Type: Server OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: x2 Intel Xeon E56xx (4 core), or better RAM: 24+ GB HDD: x6 300+ GB	<1 year (30 GB)	30000	10000
B6	≤ 2500	≤ 10	Computer Type: Server OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: x2 Intel Xeon E56xx (4 core), or better RAM: 24+ GB HDD: x5 300+ GB x1 1.5+ TB	~2 years (200 GB)	10000	2500
A4	≤ 2500	≤ 50	Computer Type: Server OS: Windows Server 2008 R2 SQL: 2008 R2 Standard	CPU: x2 Intel Xeon E5-2xxx (6 core), or better RAM: 32+ GB HDD: x6 300+ GB x2 1.5 TB	<2 years (200 GB)	50000	15000

> Contact the factory for systems larger than 2500 devices

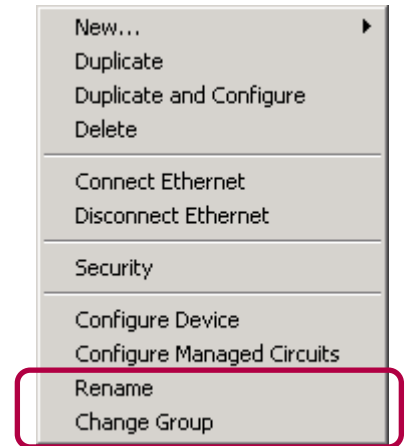
> See the **“StruxureWare Power Monitoring Expert System Design Guide”** (ref# 7EN02-0330) for more information

Agenda

- Recommended Systems
- **New Features**
 - Device Management
 - Report Enhancements
 - Offline Configuration
 - Hierarchies
- Billing Module
- Productivity Toolkit
- Miscellaneous
- Align with StruxureWare
- Support Resources
- Summary

Device Renaming

- Easily rename a device without breaking connections to historical data.
 - Change **name**, **group**, or both
- Automatically propagates new name in system:
 - Reports
 - Dashboards
 - Tables
 - Vista diagrams



> See the KB article: “*Update the Device List After a Device Rename*” for more information

Management Console Display Area

- **Group** and **Name** are now separate columns.

Group can be hidden or used for device grouping and organization.

Name is always displayed

Drag a column header here to group by that column

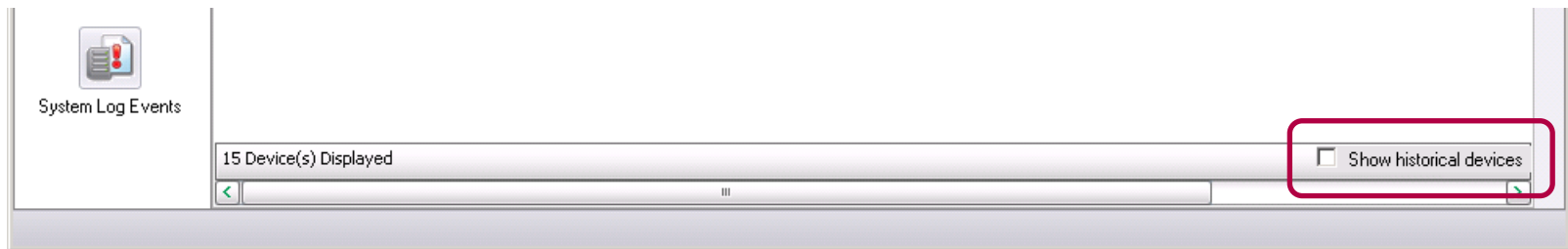
Enabled	Group	Name	Type	System Name	Data Availability
X	Keating	Main	ION 7650	Victoria_Keating.main_7650	All
X	Victoria_Keating	elevator	ION 7350	Victoria_Keating.elevator	All
X	Victoria_Keating	RTU_4	ION 7350	Victoria_Keating.RTU_4	All


- **System Name** and **Data Availability** are new columns.

- **System Name** shows the original device name in group.name format.
- **Data Availability** indicates **All** for devices that are active and have real-time and historical data, and **Historical only** for devices that have been deleted and only provide historical data.

Management Console Display Area (cont.)

- The **Show historical devices** option displays devices that have been deleted in Management Console.
 - Historical data for these devices still exists in the databases.



 Watch the video “*Device_Renaming.avi*” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for more information

Device Management



Procedure

- Select a device in Management Console.
 - Select an existing device (if available), or add a new device.
- Change the device's Group and Name in Management Console.
- View the updated device name in the Web client applications.
 - The new device name will be immediately available in Diagrams and Reports.
 - The name change may take a few minutes before it is available in Dashboards, Tables and Alarms.

Learning Outcomes

- Rename a device in Power Monitoring Expert.

Managed Circuits

- Automatically create **individual sources for each circuit** of a multi-circuit device, such as the BCPM.
- Each circuit is an individual source for both **real-time** and **historical** data.

Management Console - supervisor - Power Monitoring Expert

File Edit View Tools Help

Drag a column header here to group by that column

Enabled	Group	Name	Type	Address	Site	Status	Protocol	Description
✓	Test	Device1	ION 7650	127.0.0.1/7902	<Ethernet/ENG>	Device Connected	ION	
✓	BCPM	Device1	BCPM	10.168.91.43/502/10	BCPM	Site Available	MODBUS	
✓	Demo	Device1	BCPM	10.168.91.43/502/10	BCPM	Site Available	MODBUS	

Group	Circuit	Device	Type
Demo	Device1_IPH_Ch31	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch32	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch33	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch34	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch35	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch36	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch37	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch38	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch39	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch40	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch41	Demo.Device1	BCPM_Circuit
Demo	Device1_IPH_Ch42	Demo.Device1	BCPM_Circuit

3 Device(s) Displayed

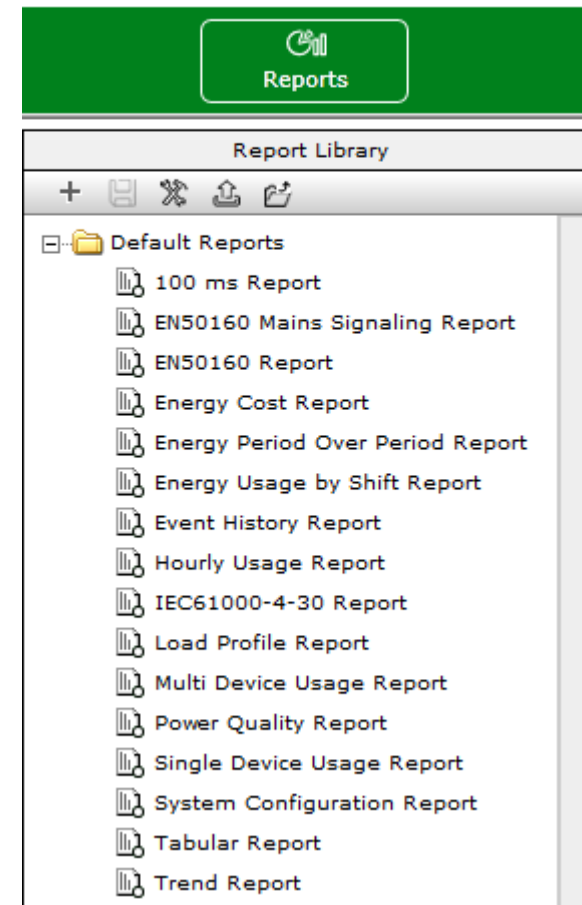
Context Menu:

- New...
- Duplicate
- Duplicate and Configure
- Delete
- Connect Ethernet
- Disconnect Ethernet
- Security
- Configure Device
- Configure Managed Circuits**
- Rename
- Change Group

 Watch the video “*Managed_Circuits.avi*” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for more information

Web Reports work with SQL Express

- PME systems installed using the factory provided SQL Server Express will support the Reports application in the Web Client
 - All 16 default report templates
 - Configure and save reports (pdf, xml, html, xls)
 - Schedule reports to run automatically



Local Mode Reporting

 6.0

 7.0

 7.2

- Previous releases used Microsoft ReportViewer in **Remote Mode**.
 - Report processing done in Reporting Services
- New release uses ReportViewer in **Local Mode**.
 - Report processing done in application

> See Solutions Expert Community post: ***“PME 7.2 Local Mode Reporting”*** for more information

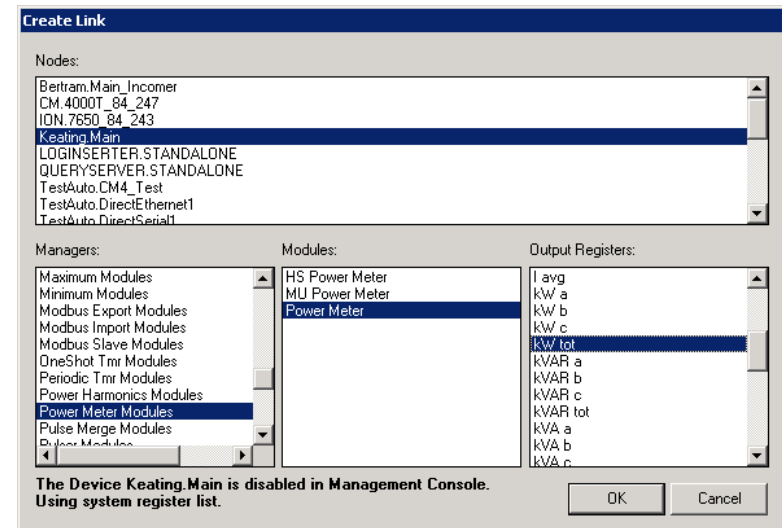
Considerations for Custom Reports

- Custom reports **developed in BIDS** for SPM 7.0.1
 - Should continue to work normally after upgrading to PME 7.2.
- Custom reports with **custom View Providers** for SPM 7.0.1
 - Might work, but must be verified after upgrading to PME 7.2.
 - Custom view providers may reference .dll files that have changed in PME 7.2.

> See “*Solutions Expert Community*”
for the most up-to-date information

Offline Configuration

- Configure Vista graphics and VIP applications off site.
 - Automatically uses “offline” mode if devices are disabled in Management Console.



- Reduce project risk and increase profits
 - Create custom work up-front, rather than at the end of the project.
 - Reduce travel expenses for time required on site and cost of delays.



Watch the video “**Offline_Configuration.avi**” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for more information

Offline Configuration



Procedure

- Disable one of the devices in Management Console.
- In Vista, create real-time objects.
 - Create a Numeric, Status or Control object linked to a register from the device.
 - Save the diagram.
- Confirm that the new objects work in Vista.
 - Enable the device in Management Console.
 - The real-time data objects should update with real-time values..

Learning Outcomes

- Create a Vista diagram with links to devices without communication.

Source Hierarchies

In previous releases

- A hierarchy is used to organize physical power meters and equipment into logical categories:
 - Load Type > Plug Load (or HVAC or Lighting, etc.)
 - Site > Building > Floor > Area
 - Victoria > Bertram > Floor 2 > Coffee Room
- In previous releases, source hierarchies were created in the **Virtual ION Processor (VIP)** or **complicated device names** in Management Console
 - Long time to create
 - Error prone
 - Hard to manage and maintain
- New architecture in PME 7.2 can easily manage this...

Source Hierarchies

In Power Monitoring Expert v7.2

- Organize sources from Management Console into physical locations and areas for easier management.

- **Default** and **custom** hierarchies to model any business:

- Data centers
- High-rise buildings
- Multi-building campus

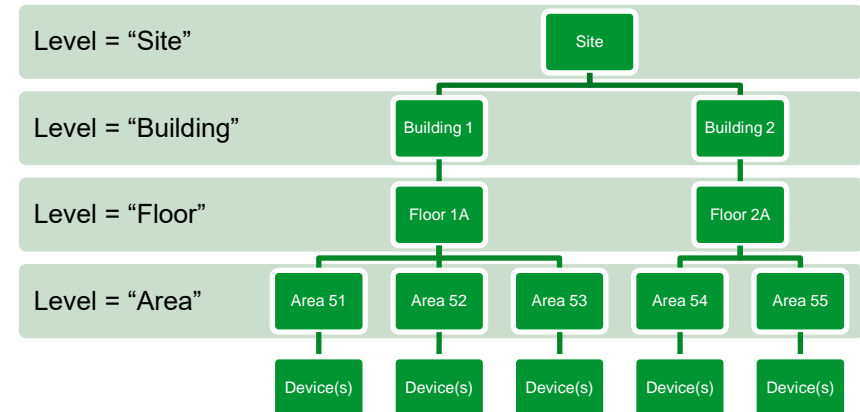
- Customizable templates (.xml) define the levels in the business model.

- Site > Building > Area
- Building > Panel > Circuit > Tenant

- User-defined attributes (contact name, address, etc.) can be added to each level and leveraged in custom reports.

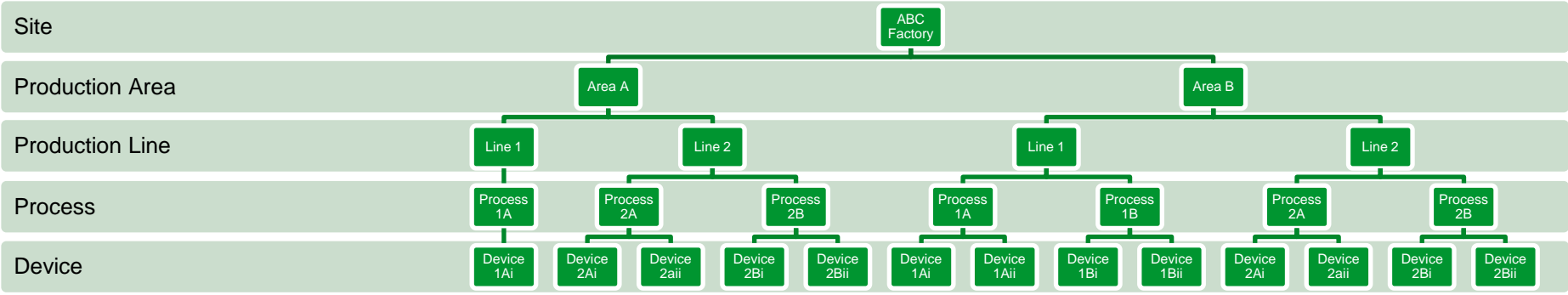
> See the **“Hierarchy Configuration Guide”**

(ref# 7EN02-0339) for more information

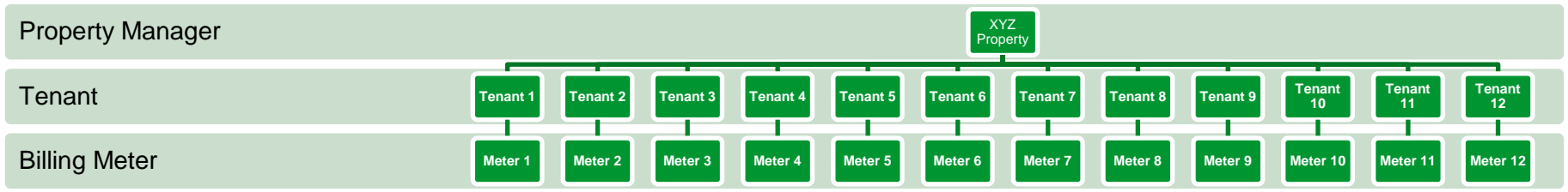


Hierarchies for data aggregation

- Cost Allocation** example for Industry 



- Tenant Billing** example for Buildings 



Use Hierarchies in the Software

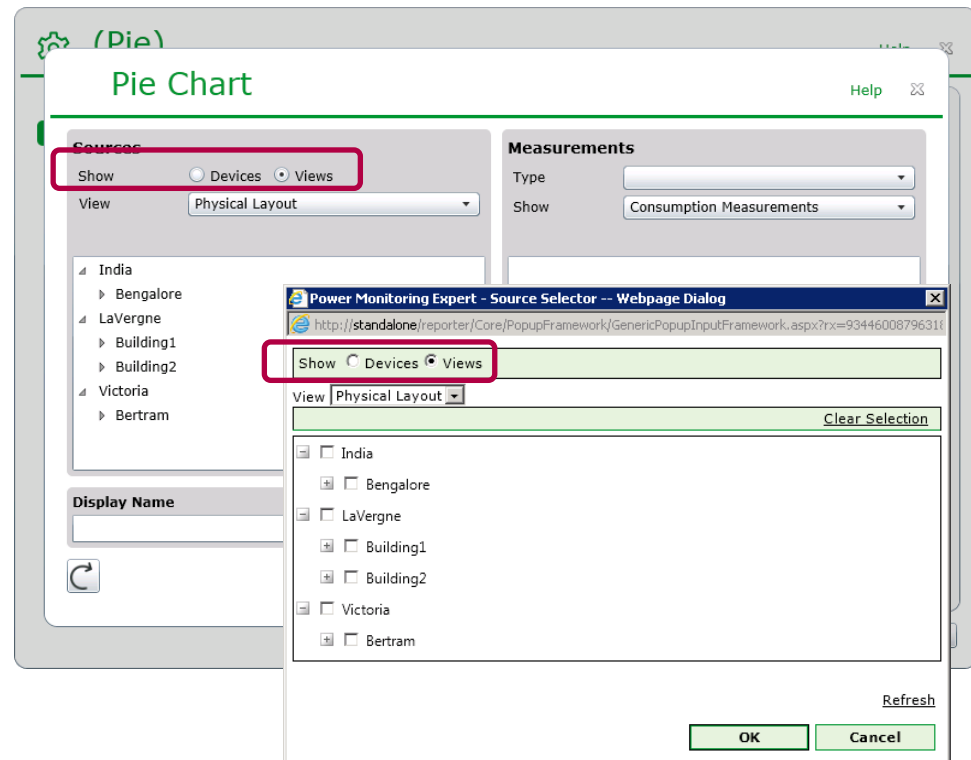
- Hierarchies supported in **Dashboards** and **Reports**.
 - Consumption data is **summed** (energy and power)
 - Non-consumption data is **averaged** (voltage, current, etc.)
 - Calculations are done during runtime

Dashboards

- Supported in all gadgets.

Reports

- Hourly, Multi Device, and Single Device usage reports
- Tabular and Trend reports
- Billing report



Hierarchy Time Management

- Hierarchies will have the ability to track configuration changes over time.
 - Update the name(s) of a hierarchy at any time (even in the past) to ensure accurate reporting of associated data points.

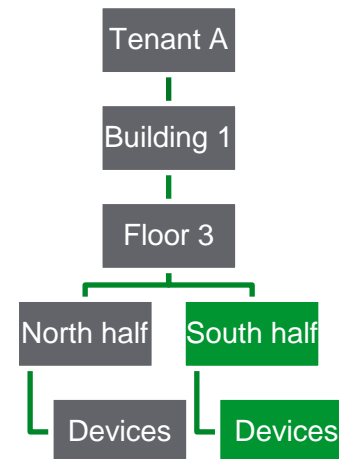
For Example –

- Report on energy consumption for a Tenant who has re-located, expanded, added or removed circuits during the billing period.

Today



Future Expansion



Hierarchy Manager

Editor

- Used to:
 - Check the hierarchy after a configuration (.csv) import, or
 - Configure the hierarchy directly.
- Populate the hierarchy with site information (Site = “Victoria”) and assign devices from Management Console.

The image displays three overlapping screenshots of the Hierarchy Manager web application, each showing a different view of the hierarchy data.

Left Screenshot: Site View

Site: **Buildings** Areas

Site

Name	Building
<Filter>	<Filter>
India	Bengalore
LaVergne	Building1, Building2
Victoria	Bertram

Middle Screenshot: Buildings View

Site **Buildings** Areas

Buildings

Name	Site	Areas
<Filter>	<Filter>	<Filter>
Bengalore	India	BArea1
Bertram	Victoria	VArea2, VArea1
Building1	LaVergne	LArea2
Building2	LaVergne	LArea1

Right Screenshot: Areas View

Site **Buildings** Areas

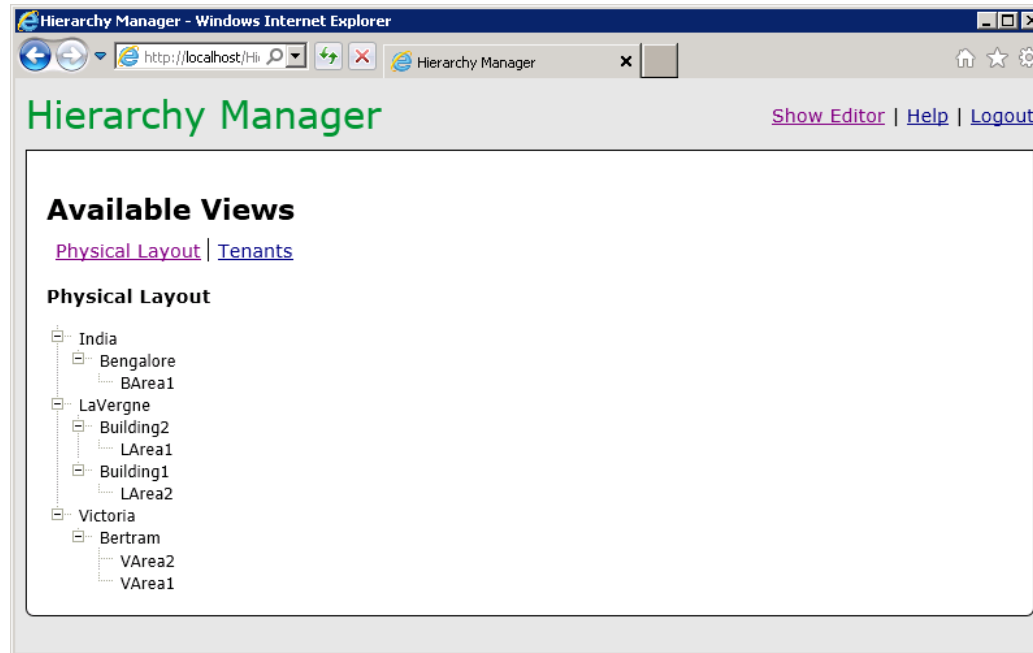
Areas

Name	Building	Device
<Filter>	<Filter>	<Filter>
BArea1	Bengalore	CM.4000T_84_247
LArea1	Building2	Victoria_Keating.Main_...
LArea2	Building1	Victoria_Keating.main_...
VArea1	Bertram	ION.7650_84_243
VArea2	Bertram	Victoria_Keating.Main_...

Hierarchy Manager

Views

- Allows multiple hierarchies to be modeled for different applications.
 - **Physical Layout** (single-line electrical) hierarchy vs.
 - **Tenant** hierarchy



Define Hierarchy Configuration

- The hierarchy template can generate a .csv file.
 - All nodes and relationships are defined as column headers

	A	B	C	D	E	F	G
1	Devices_Full Name	Areas_Name	Floors_Name	Buildings_Name	Site_Name		
2	Test_Site.Test_8600_A						
3	Test_Site.Test_8600_B						
4	Test_Site.Test_8600_C						
5	Test_Site.Test_8600_D						
6	Test_Site.Test_8600_E						
7	Test_Site.Test_8600_F						
8	Test_Site.Test_8600_G						
9	Test_Site.Test_8600_H						
10	Test_Site.Test_8600_I						
11							

- Edit the configuration using a .csv editor, then import it back into the software.
- Use the **Hierarchy Manager** to ensure accuracy of the configuration.

> See the **“Hierarchy Configuration Guide”**
(ref# 7EN02-0339) for more information

Hierarchy Management



Procedure

- Load a new hierarchy template into the system (Site > Building > Area > Meter > Load-type)
- Configure the hierarchy in the Hierarchy Manager
 - From Management Console, click **Tools » Hierarchy Manager**.
- View the hierarchy configuration
 - Click Show Views in the top of the Hierarchy Manager.
- Create a Dashboard that uses hierarchies
 - Create a new Dashboard with a Pie gadget.
 - For the Data Series, display the sources by the **By Load Type** view.
 - Individually add each of the load types (HVAC, Lighting and Production) with the Real Energy Into the Load measurement.
 - View the gadget.

Learning Outcomes

- Upload a new hierarchy template into the system.
- Configure the hierarchy with specific site information and devices.

Agenda

- Recommended Systems
- New Features
- **Billing Module**
- Productivity Toolkit
- Miscellaneous
- Align with StruxureWare
- Support Resources
- Summary

Billing Module

Optional (Licensed) Module

- Advanced and flexible **Billing Report** to replace the **Energy Cost Report**.
- **Flexible tariff engine** with flat & tiered rates, time-of-use (TOU), power factor (PF) penalties, coincident demand, taxes and fees.
 - Tariff definition is managed separately from the report.
- Uses new **Hierarchies** feature
 - Buildings, departments, processes, shifts, lines, equipment, etc.
 - Track changes over time and update hierarchy for tenants, departments, etc.

Schneider Electric		Monthly Tenant Bill		
12/1/2012 12:00:00 AM - 12/31/2012 12:00:00 AM (Server Local)				
Tenant Name	Tenant A			
Physical Tenant Meter(s)	Victoria_Keating.PNL_K, Victoria_Keating.RTU_4, Victoria_Keating.elevator			
Rate Name	Sample Large Rate			
	Reading	Unit Cost	Cost	
Energy Register Readings				
Victoria_Keating.PNL_K:				
530,741.44 kWh @ 12/1/2012 12:15 AM				
530,827.51 kWh @ 12/31/2012 12:00 AM				
Victoria_Keating.RTU_4:				
526,475.06 kWh @ 12/1/2012 12:15 AM				
544,002.06 kWh @ 12/31/2012 12:00 AM				
Victoria_Keating.elevator:				
930.54 kWh @ 12/1/2012 12:15 AM				
958.93 kWh @ 12/31/2012 12:00 AM				
Energy Consumption Charge				
Victoria_Keating.PNL_K: 6,188.75 kWh	23,749.02 kWh	\$0.0570 per kWh		\$ 1,353.69
Victoria_Keating.RTU_4: 17,531.88 kWh				
Victoria_Keating.elevator: 28.40 kWh				
Transmission Charge				
	23,749.02 kWh	\$0.0034 per kWh		\$ 80.75
Line Maintenance Charge				
	23,749.02 kWh	\$0.0073 per kWh		\$ 173.37
On Peak Usage Charge [Weekdays between 8:00am-8:00pm]				
Victoria_Keating.PNL_K: 2,433.50 kWh	8,982.15 kWh	\$0.5479 per kWh		\$ 4,921.32
Victoria_Keating.RTU_4: 6,540.19 kWh				
Victoria_Keating.elevator: 8.47 kWh				
Off Peak Usage Charge				
Victoria_Keating.PNL_K: 3,755.25 kWh	14,766.87 kWh	\$0.1296 per kWh		\$ 1,913.79
Victoria_Keating.RTU_4: 10,991.09 kWh				
Victoria_Keating.elevator: 19.93 kWh				
Tenant A - Coincident Peak Demand Charge [Main Meter Peak @ 12/25/2012 2:00 PM]				
Victoria_Keating.PNL_K: 9.52 kW	38.45 kW	\$6.800 / kW		\$ 264.93
Victoria_Keating.RTU_4: 28.93 kW				
Victoria_Keating.elevator: 0.00 kW				
Processing Fee				
	Fixed Fee			\$ 3.75
Facility Fee				
	Fixed Fee			\$ 20.00
Total				\$ 8,731.60

Billing Module (cont.)

- Easily customize the **Billing Report** in XML, not Business Intelligence Development Studio (BIDS).
- Provides templates and complex examples.
 - Individual and bulk billing statements.

```
<!-- ***** BEGIN LINE ITEMS ***** -->
<!-- ***** REGISTER READING LINE ITEM ***** -->
+ <LineItem i:type="RegisterReadingLineItem">
<!-- ***** CONSUMPTION LINE ITEM - Off Peak Winter ***** -->
+ <LineItem i:type="ConsumptionLineItem">
<!-- ***** CONSUMPTION LINE ITEM - Partial Peak Winter ***** -->
+ <LineItem i:type="ConsumptionLineItem">
<!-- ***** CONSUMPTION LINE ITEM - Off Peak Summer ***** -->
+ <LineItem i:type="ConsumptionLineItem">
<!-- ***** CONSUMPTION LINE ITEM - Partial Peak Summer ***** -->
- <LineItem i:type="ConsumptionLineItem">
  <LineItemLabelDisplay>Energy Consumption - Partial Peak Summer</LineItemLabelDisplay>
  <ModifierDisplay>${MODIFIER}</ModifierDisplay>
  <ModifierDisplayFormatString>0.0000</ModifierDisplayFormatString>
  <NoDataBehaviour>Hide</NoDataBehaviour>
  <OutputValueDisplayFormatString>N</OutputValueDisplayFormatString>
  <ReadingDisplay>[READING] kWh</ReadingDisplay>
  <ReadingDisplayFormatString>N</ReadingDisplayFormatString>
  <TaxExempt>false</TaxExempt>
  <HideMultipleMeterInformation>false</HideMultipleMeterInformation>
  <Measurement>REAL_ENERGY</Measurement>
  <ModifierValue>0.07026</ModifierValue>
  <ReadingMultiplier>1</ReadingMultiplier>
  <TouDefinitionName>PGandE</TouDefinitionName>
  <TouInstanceName>Partial-peak-Summer</TouInstanceName>
  <TouType>Database</TouType>
</LineItem>
<!-- ***** CONSUMPTION LINE ITEM - Peak Summer ***** -->
+ <LineItem i:type="ConsumptionLineItem">
<!-- ***** DEMAND LINE ITEM - Partial Peak Winter ***** -->
+ <LineItem i:type="DemandLineItem">
<!-- ***** DEMAND LINE ITEM - Peak Summer ***** -->
+ <LineItem i:type="DemandLineItem">
<!-- ***** DEMAND LINE ITEM - Partial Peak Summer ***** -->
+ <LineItem i:type="DemandLineItem">
<!-- ***** DEMAND LINE ITEM - Peak Winter ***** -->
+ <LineItem i:type="DemandLineItem">
<!-- ***** DEMAND LINE ITEM - Peak Summer ***** -->
+ <LineItem i:type="DemandLineItem">
<!-- ***** Reactive Energy REGISTER READING LINE ITEM ***** -->
+ <LineItem i:type="RegisterReadingLineItem">
<!-- ***** Reactive Energy CONSUMPTION LINE ITEM ***** -->
+ <LineItem i:type="ConsumptionLineItem">
<!-- ***** Power Factor EXPRESSION LINE ITEM ***** -->
+ <LineItem i:type="ExpressionLineItem">
<!-- ***** Customer Charge PER DAY RATE LINE ITEM ***** -->
+ <LineItem i:type="PerDayRateLineItem">
<!-- Blank Line -->
```

➤ See the “*PMEv7.2_Tenant_Billing_Demo.pdf*” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for the configuration procedure and demo videos

Agenda

- Recommended Systems
- New Features
- Billing Module
- **Productivity Toolkit**
- Miscellaneous
- Align with StruxureWare
- Support Resources
- Summary

Productivity Toolkit

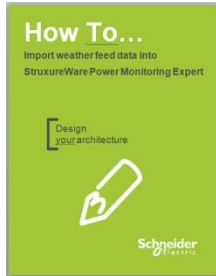


- Increase **efficiency of system design and deployment** by providing documentation, tools, libraries, and end-to-end “How To” guides.
- Organized into 4 categories:
 - Premium content only accessible to **Schneider Electric** and **Gold & Silver** partners.



> See “*Solutions Expert Community*” (powersolutionscommunity.schneider-electric.com) for the most up-to-date information

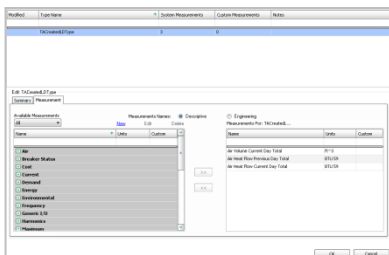
What's Inside?



- How to guides, TVDAs and System Technical Notes (STNs) with factory recommendations on deployment of end-to-end applications



- Exclusive new features to extend and customize the software



- Productivity Tools and documentation of deep factory knowledge to help speed project design and deployment.

Design & Deployment



DESIGN & DEPLOYMENT

SYSTEM MAINTENANCE

CUSTOMIZATION

INTEGRATION

Content	Availability
WAGES Application for TWIDO	Now
Device Measurements Cross Reference Guide	Now
How can I Deploy a Basic PME System in a Day (TVDA)	Now
How to Excel Import into Management Console	Now
ION Reference / ION Device Template Reference / ION Handles	Now

> TVDA – Tested Validated Documented Architecture

System Maintenance



DESIGN & DEPLOYMENT

SYSTEM MAINTENANCE

CUSTOMIZATION

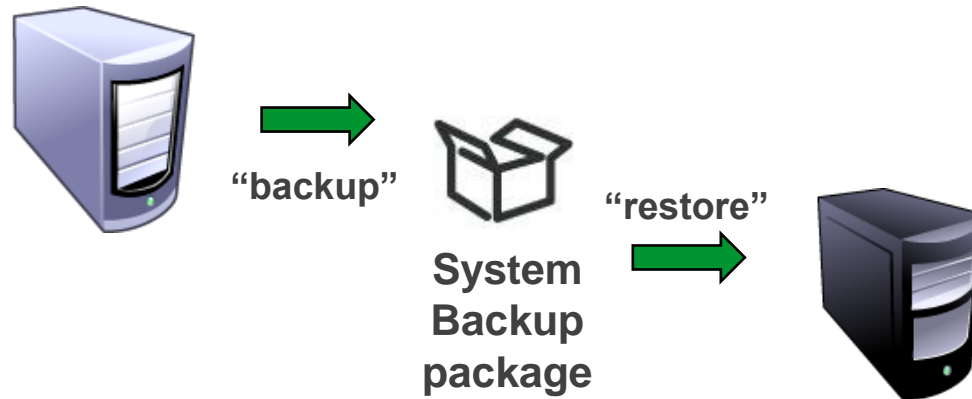
INTEGRATION

Content

Availability

System Backup and Recovery Tool

Coming Soon



Customization



DESIGN & DEPLOYMENT

SYSTEM MAINTENANCE

CUSTOMIZATION

INTEGRATION

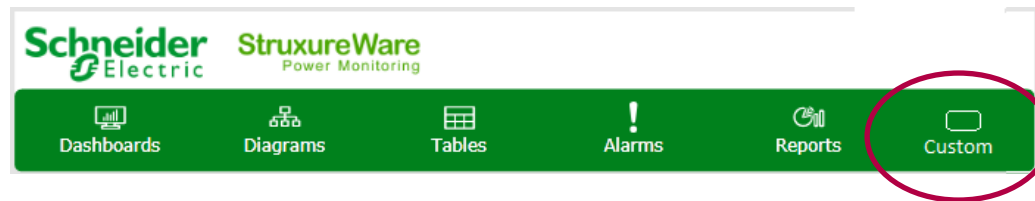
Content	Availability
How to Expose Custom Measurements for Use in Web Applications	Now
How can I Add a Web Image Gadget to the PME User Interface (STN)	Now
How can I Modify the PME Web User Interface and Add Web Content (STN)	Now
How can I Import Weather Feed Data into PME (STN)	Now
Report Development Kit	Coming Soon

- > Only accessible to **Gold & Silver** partners. Bronze partners cannot access this content.
- > **STN** – System Technical Note



Custom Tabs in Web Client

- Modify the navigation tabs in the toolbar to integrate local applications to provide a seamless single experience for the user.
 - Integrate any application that can be hosted in an iFrame.



- Tab pictures/icons are in .xaml format.
 - We provide some .xaml images, or
 - You can create your own

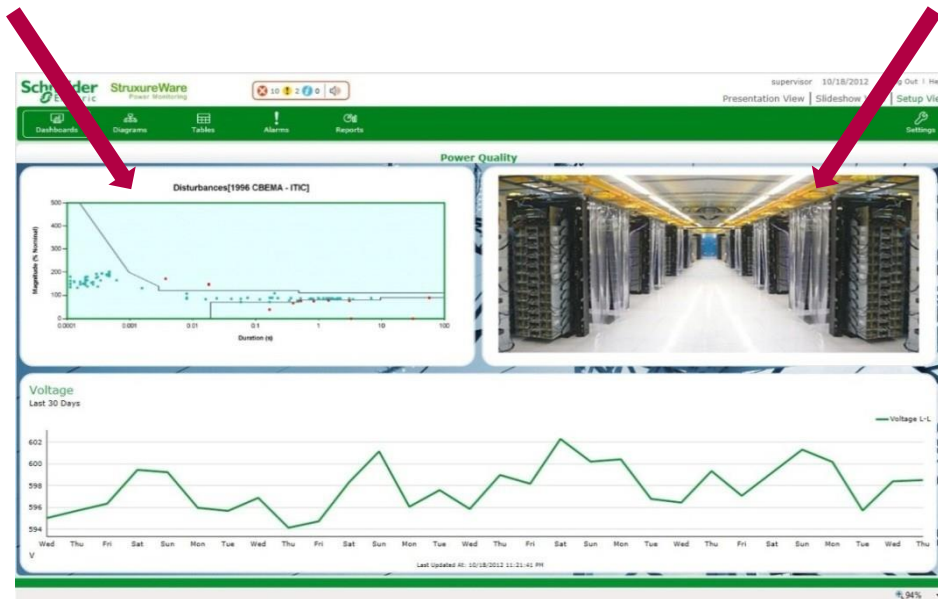


➤ See the KB: ***“Reordering, Hiding and Adding Application Buttons in Web Applications”*** (RESL209440) for more information



Web Image Gadget

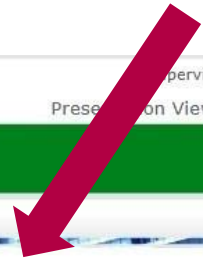
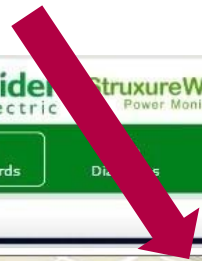
- Display external web content in a Dashboard using image snapshots
 - Intranet or external website content
 - Selected part of a Report
 - Custom images
 - Web cameras



- Image is a “user selected” portion of webpage using a “cropping” tool
- Image will automatically update at user specified interval



Web Image Gadget examples



Schneider Electric StructureWare Power Monitoring

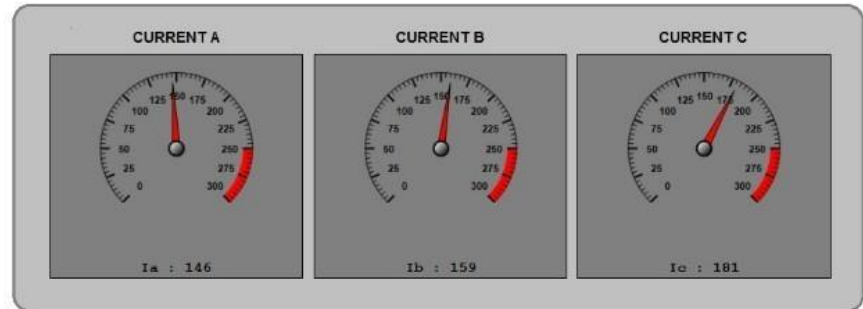
10 2 0

Supervisor 10/18/2012 Log Out | Help

Presention View | Slideshow View | Setup View

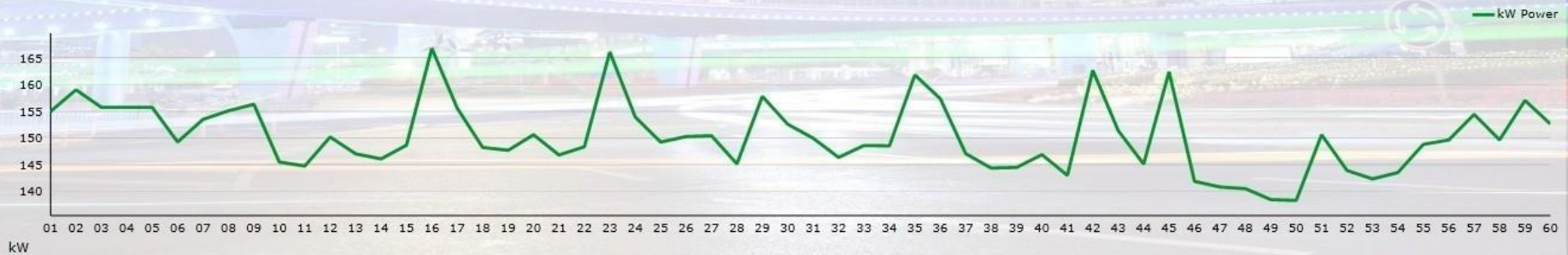
Dashboards | Tables | Alarms | Reports | Settings

kW Load



Load Profile

Last Hour



Last Updated At: 10/18/2012 11:13:26 PM



Web Image Gadget setup

Specify the **URL**, a **delay** to wait before loading the page and a **refresh interval**.

Quickly select (crop) the webpage content with the mouse, then make final adjustments.

Webpage preview

(Web Image) Help

Summary

Selected URL: http://

Loading Wait Time: 0 seconds

Refresh Interval: 300 seconds

Image:

Width: 1000

Height: 848

Crop rectangle: (Draw region on the preview using the mouse, then adjust using the crop values below)

Left: 0

Top: 0

Width: 1000

Height: 848

Preview Clear Crop

OK Cancel



Integration

DESIGN & DEPLOYMENT

SYSTEM MAINTENANCE

CUSTOMIZATION

INTEGRATION

Content	Availability
ETL for EGX300	Now
How can I Import and Use KPI Data in my PME System (STN)	Coming Soon
How can I Import KPI Data and Create KPI Dashboards	Now

- > Only accessible to **Gold** partners. Silver & Bronze partners cannot access this content.
- > **STN** – System Technical Note

Agenda

- Recommended Systems
- New Features
- Billing Module
- Productivity Toolkit
- **Miscellaneous**
- Align with StruxureWare
- Support Resources
- Summary

Alarm Acknowledgement

- Alarm acknowledgement synchronized between **Alarms** and **Global Event Log Viewer** in Vista.
 - Acknowledge in Web > display in Global Event Viewer
 - Acknowledge in Global Event Viewer > display in Web

Alarms Events

View: **Custom View-1**

Alarms Displayed: 526 Unacknowledged Alarms: 10,309 (Not displayed: 9,785) Acknowledge Select Columns

Drag a column here to group by that column

Vista - supervisor - Power Monitoring Expert - [Global Event Viewer 1 (ALARM : 9993)]

File Edit Options View Window Help

Active	Start Time	Device	Timestamp	Node	Priority	Cause	Cause Value	Effect	Effect Value	Ack Time	User Name	Remark
	7/23/2013 8:21:58.000 AM	Robert										
	7/23/2013 3:50:06.000 AM	Robert										
	7/23/2013 3:22:23.000 AM	Robert	100 07/23/2013 03:50:07.000 AM	Robert_Ho.SDP	128	Power Factor	-76.116	Under PF sign	Motor Control Status -	ALARM		
	7/22/2013 10:36:01.000 AM	Robert	101 07/23/2013 03:50:06.000 AM	Robert_Ho.SDP	128	Power Factor	-58.595	Under PF sign	ON	07/31/2013 0	supervis	Acknowledged in Web
	7/22/2013 4:52:50.000 AM	Robert	102 07/23/2013 03:22:24.000 AM	Robert_Ho.SDP	128	Power Factor	-76.324	Under PF sign	Motor Control Status -	ALARM		
	7/22/2013 1:37:39.000 AM	Robert	103 07/23/2013 03:22:23.000 AM	Robert_Ho.SDP	128	Power Factor	-60.440	Under PF sign	ON	ALARM		
	7/22/2013 12:05:50.000 AM	Robert Ho.SDP	Under PF sign				-76.110					

Hide Alarm Details

Active	Start Time	Device	Type	Drop out Time	Duration
False	7/23/2013 3:50:06.000 AM	Robert_Ho.SDP	Under PF sign	7/23/2013 3:50:07.000 AM	00:00:01

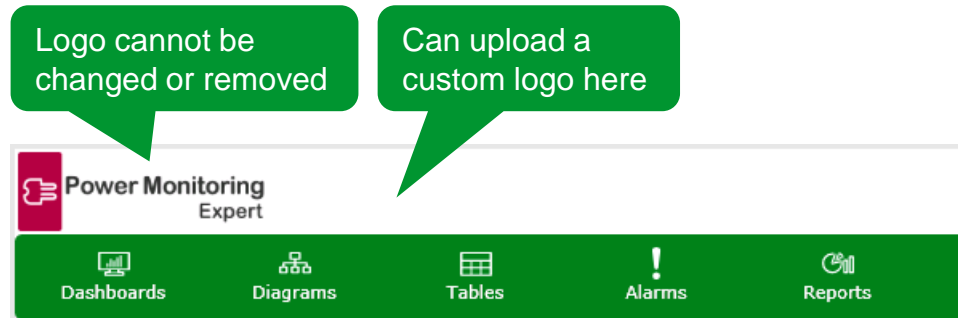
Acknowledgement	Acknowledged By	Priority	Value	Dropout Value	Condition
7/31/2013 9:02:41 AM	supervisor	128	-76.116	-76.116	Motor Control Status - Off

Notes

Acknowledged in Web

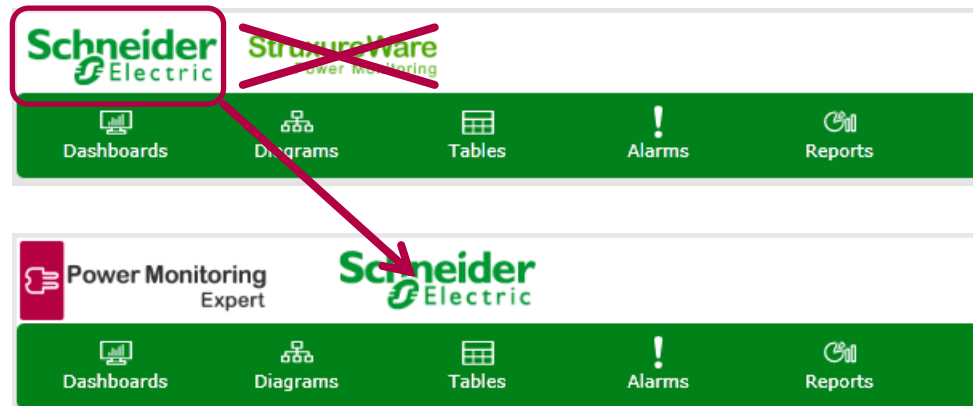
Logo Behaviour Changes

- New installations of PME v7.2



- Upgrades from SPM v7.0.1 to PME v7.2

- Moves the “primary” logo to the “secondary” position
- “Secondary” logo is removed



Web Client Login Bypass

- To bypass the login page and log in as a visitor, append **/visitor** to the end of the web address:

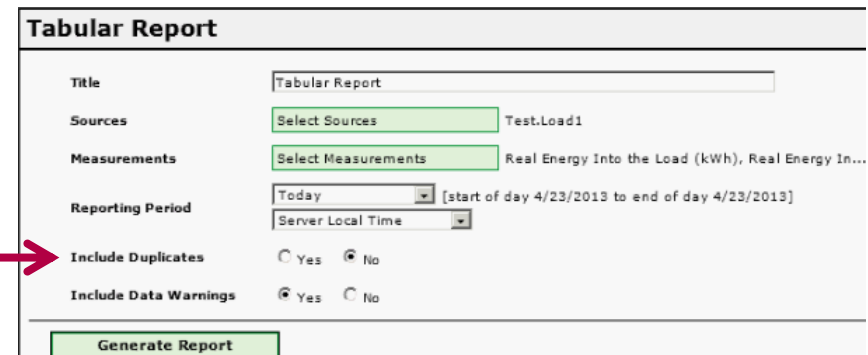
`http://localhost/web/visitor`

- This will take you directly to dashboards or the visitor slideshow

> See the Web client's online *Help* for more information

Data Integrity in the Database

- Improved data integrity by keeping duplicate data records that are created in on-board meter logs.
 - Must enable this feature manually, using SQL Server Management Studio
 - Duplicate logs are stored in a separate database table.
 - Special database “view” to access all data records, including duplicates.
- Duplicate data is available in some reports:
 - Reporter (Excel based “RepGen”)
 - Tabular report



Tabular Report

Title: Tabular Report

Sources: Select Sources Test.Load1


Measurements: Select Measurements Real Energy Into the Load (kWh), Real Energy In...

Reporting Period: Today [start of day 4/23/2013 to end of day 4/23/2013]
Server Local Time

Include Duplicates: Yes No

Include Data Warnings: Yes No

Generate Report

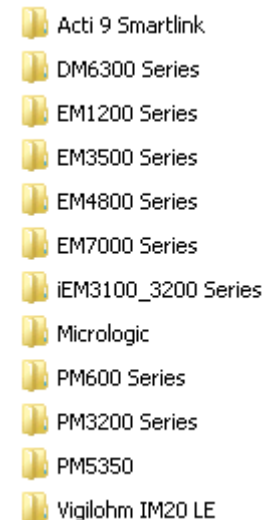
 Watch the video “*Duplicate_Data.avi*” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for more information

Device Support

- Release notes and mapping spreadsheets for device drivers recently added to the product are included:
\\Schneider Electric\Power Monitoring Expert\system\doc\Device Support\

- The release notes provide:

- Firmware versions supported by the device driver
- Modbus register mapping (and PC logging details)
- Images of Vista diagrams for the devices
- Pertinent safety messages.



➤ See “**Solutions Expert Community**” (powersolutionscommunity.schneider-electric.com) for the most up-to-date information

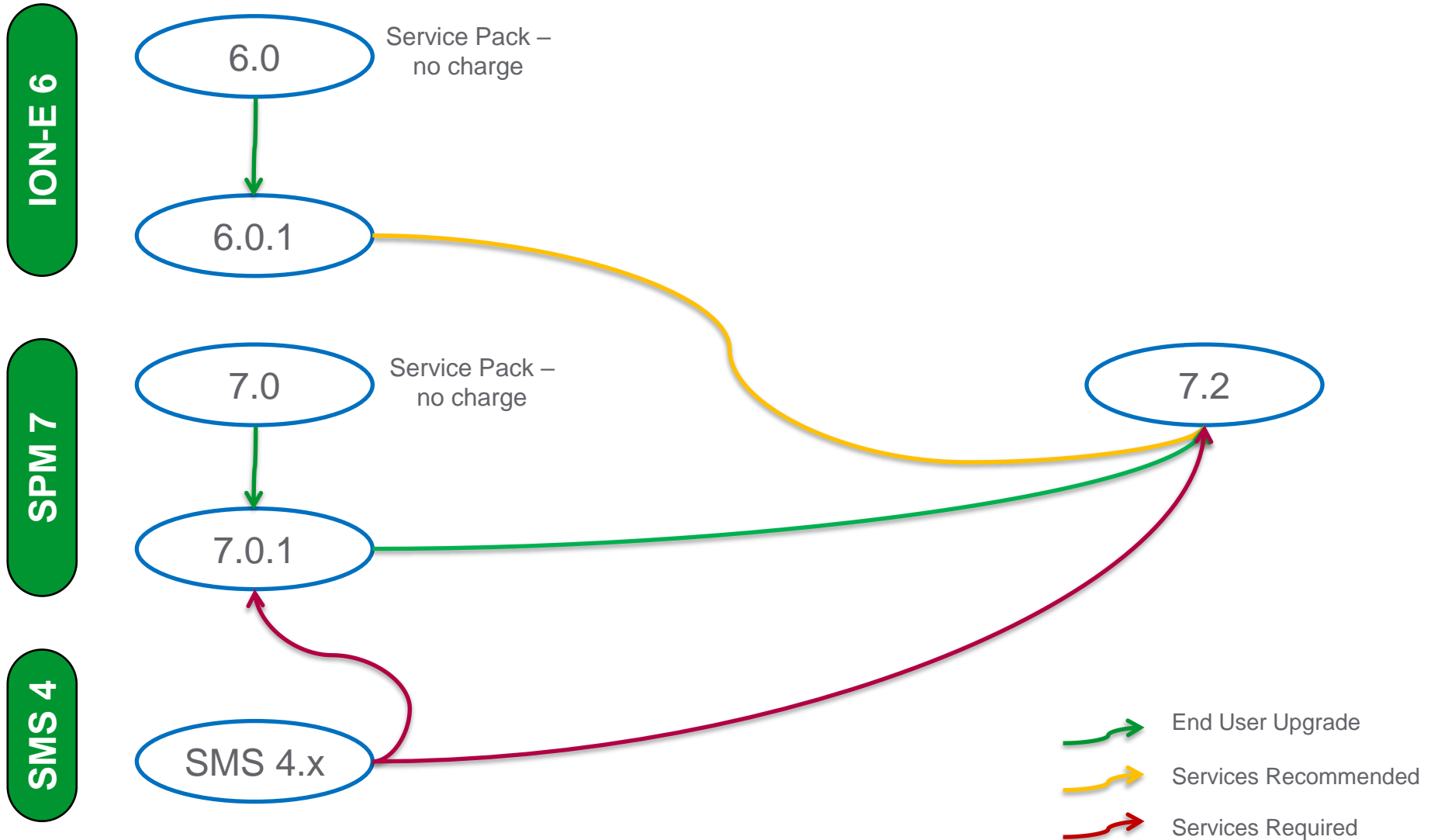
Database Management

- Database scheduled jobs are configured in Windows Task Scheduler.

Database	Schedule Job	Default Time
Application_Modules	Backup	Daily at 1:30 AM
	Maintenance	Daily at 2:30 AM
	Trim	Daily at 2:30 AM
ION_Data	Backup	Weekly at 12:00 AM Friday
	Maintenance	Daily at 2:00 AM
	Size Notification	Daily at 3:00 AM
ION_Network	Backup	Daily at 1:00 AM
	Maintenance	Daily at 7:30 AM
ION_SystemLog	Maintenance	Daily at 7:05 AM
	Trim	Daily at 4:00 AM

- All scheduled jobs are configurable and are enabled by default.

Supported Upgrade Paths to PME v7.2



Agenda

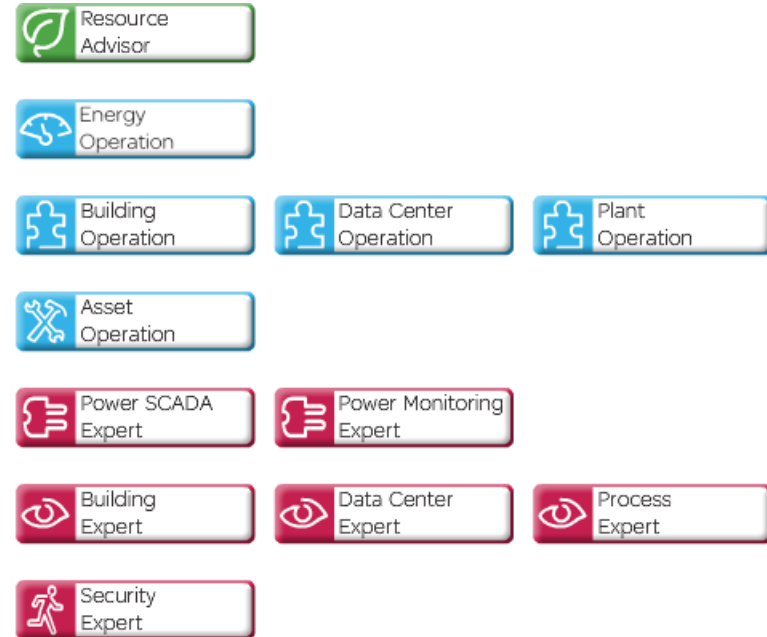
- Recommended Systems
- New Features
- Billing Module
- Productivity Toolkit
- Miscellaneous
- **Align with StruxureWare**
 - Branding
 - EWS
 - One License
- Support Resources
- Summary

Align with StruxureWare Brand

- Name change from “Power Monitoring” to “Power Monitoring Expert”
 - Full software rebrand (including all folders and files)



Power Monitoring
Expert
version 7.2



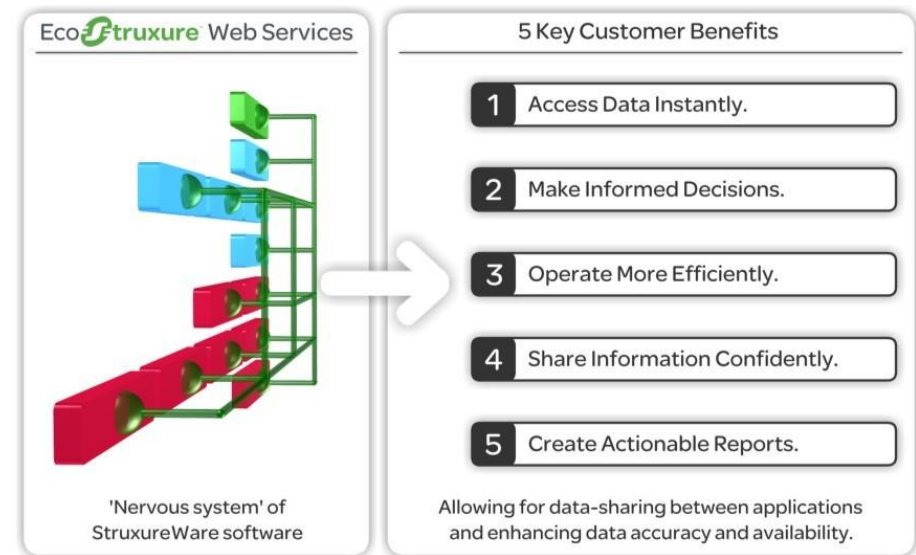
> See “*Discover StruxureWare*” on *My Learning Link* for more information

EcoStruxure Web Services (EWS)

- Power Monitoring Expert v7.2 is an **EWS v1.1 server** (not client).
 - Publish **Real-time**, **Historical**, and **Alarm** data to other systems.

- **Modern web services architecture**

- Schneider Electric and selected partners can use EWS to provide PME data to custom applications.
- Documentation included in **Productivity Toolkit**.



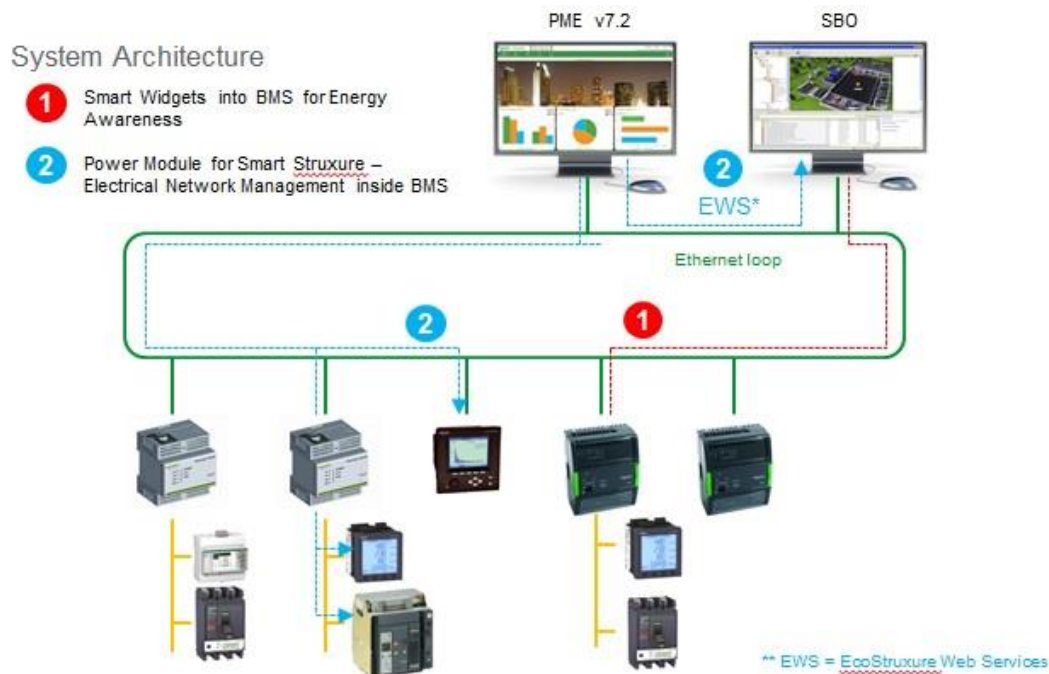
Watch the videos “*EWS_FeatureDemo.avi*” and “*EWS_ConfigurationDemo.avi*” from <https://schneider-electric.box.com/s/p6brep0m8k4tgv793hwr> for more information

StruxureWare Integration

Available end of 2013

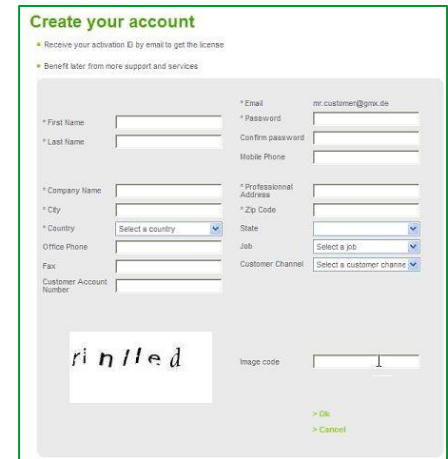
- Integration with StruxureWare Building Operation (SBO)

- The SBO **Power Module** will access PME data
- Alarm acknowledgements in SBO flow back to PME
- User Interface integration for seamless user experience



Registration & Software Enforcement

- **User Registration is required** and is done by creating a Web User Management (WUM) account
 - WUM account creation is fast and easy
 - Complete a simple web form, providing **email address**, first name, last name, password, mailing address



- **PME Software Licences are enforced** using Activation IDs
 - PME Software Licence “activation” provides copy protection and enforcement of:
 - Primary Server Licence
 - Device Licences
 - Client Licences



- See the “**10 - PME v7.2 New Order Process & Software Activation**” from <https://schneider-electric.box.com/s/qnscdhc2ioumtm5b30dc> for more information

Agenda

- Recommended Systems
- New Features
- Billing Module
- Productivity Toolkit
- Miscellaneous
- Align with StruxureWare
- **Support Resources**
- Summary

Communities



Solutions Expert Community

> Connect for answers. Collaborate for excellence.

- > <https://powersolutionscommunity.schneider-electric.com>
- > A global community for projects & services and system integrators
- > Contains advanced troubleshooting articles and procedures



- > <http://shoppingkiosk.schneider-electric.com>



- > <http://www.schneider-electric.com>

Documentation



- System Design Guide
- Standard Scope of Work
- Commercial policy
- Specification for Tender / Bid
- Installation and Commissioning Guide(s)
- User Guides / Online Help

➤ See ***“Solutions Expert Community”*** or ***“Shopping Kiosk”***
for the most up-to-date information

Sales Demo

Download the Controlled Sales Demo from Box folder:

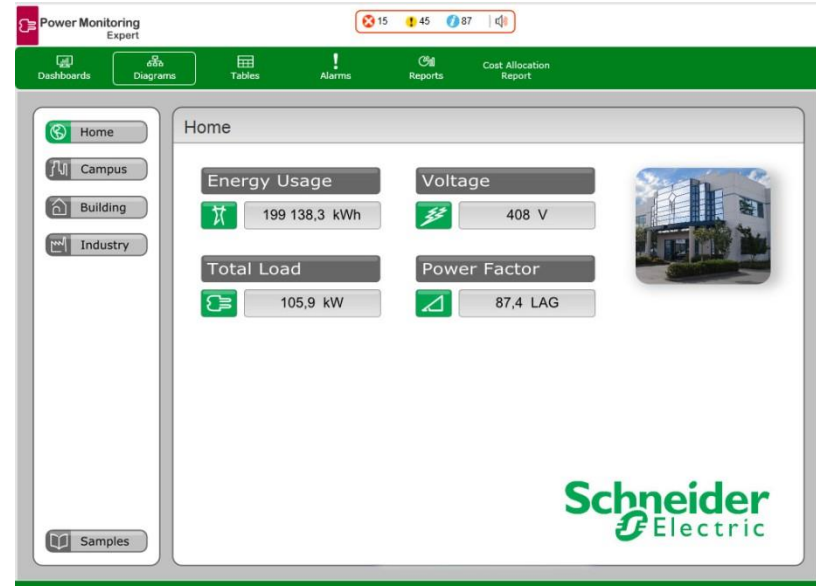
<https://schneider-electric.box.com/s/sr784igxpi1nr9ttlz42>

- Not a live system
- Great for showing what the **Web Client** applications look like
- Great for showing real examples of the outputs of **Reports**

Live Sales Demo on the internet

<http://spm7demo.energymeters.com/web/>

- Login: **demo**
- Password: **Spm7!**
- Live metering in a mixed-use Schneider-Electric building in Canada
- Good for **Dashboards** and exploring **Diagrams** for the Keating_Main meter



Agenda

- Recommended Systems
- New Features
- Billing Module
- Productivity Toolkit
- Miscellaneous
- Align with StruxureWare
- Support Resources
- **Summary**

Summary

Increase Project Profitability

- Productivity Toolkit: tools, “How to” documentation and working example files.
- Up to 33% productivity gains compared to earlier versions.
- Five new customization options to meet customer needs easier.

Aligned with StruxureWare Strategy

- Updated product name to align with StruxureWare convention.
- EcoStruxure Web Services (EWS) for plug & play with other software.
- New features to enable segment editions of PME (e.g. PME4DC, PME4HC, etc.).

New End-User Features

- Customizable Billing report for tenant metering and cost allocation.
- Reports supports SQL Server Express
- Support for more web browsers: Chrome, Safari.
- Easily manage devices (e.g. renaming, managed circuits, hierarchies).