

Schneider Electric Data Center Software

StruxureWare™ Operations 7.0 Software Platform

End to end Data Center Infrastructure Management (DCIM) software for monitoring, control of power, cooling, security and energy usage from the building through IT systems.

The modules listed below are available as part of the StruxureWare Operations software platform.

StruxureWare Operations: Capacity

StruxureWare Operations: Change

StruxureWare Operations: Energy Efficiency

StruxureWare Operations: Energy Cost

StruxureWare Operations: Insight

StruxureWare Operations: Dashboard

StruxureWare Operations: Mobile

StruxureWare Operations: VIZOR



Make the most of your energySM

StruxureWare™ Operations 7.0 Software Platform

Instant overview of data center operations through inventory management, PUE calculator, real-time device alarms, and location-based drill-down.

StruxureWare for Data Centers Suite enables vendor-agnostic inventory management with real-time device failures and data shown within your data center physical layout, as well as recommendations on how to resolve issues. A location-based drill-down view provides a structured overview of data center locations, from a global to local view down to single assets. The Power Usage Effectiveness (PUE) calculator supplies information on daily utilization of energy. For instant updates on the go StruxureWare Mobile provides access to StruxureWare Operations information via handheld PDA.

StruxureWare Operations 7.0, an integral part of Schneider Electric's StruxureWare for Data Centers Suite, is designed to solve the most complex challenges of operating enterprise data centers. The StruxureWare Operations Platform allows c-level executives, data center managers and facility managers alike to have complete visibility and control over their data center's daily operations. The complete suite is able to provide data gathering, monitoring, automation, and planning and implementation functionalities to enable an integrated and multifaceted view of all the mission critical physical systems of the data center. The platform also consists of a set of optional add-on modules to meet specific user requirements, including:

- > **Capacity** - Simulation, planning and optimization of infrastructure capacities to right-size the data center
- > **Change** - Fully integrated workflow management for IT physical infrastructure
- > **Energy Efficiency** - Intelligent PUE analytics at the subsystem level
- > **Energy Cost** - Instant overview of rack energy usage
- > **Insight** - Comprehensive tool for customizing report designs to visualize data
- > **Dashboard** - Live overview of data center operations using widgets and data sets
- > **Mobile** - Wireless operation of your data center allowing for real-time tracking of adds, moves and changes
- > **VIZOR** - On-the-go access for smart phone and tablet applications



Building a New Solution

- > Enhancement Options
- > Product Modules
- > Operations platform
- > Virtualization layer
- > Licenses
- > Hardware

A new level of business intelligence for your data center Data Center Infrastructure Management

An advanced, vendor-neutral software system that provides a unified view and analysis of complex IT physical infrastructure and communicates with building, enterprise and network management systems to ensure quality, gain energy and cost efficiencies and aid in short and long-term planning and provisioning of data center equipment and resources.

StruxureWare™ Operations Platform - Features and Benefits

Availability

Inventory management	Shows device data within the physical layout for instant access to device details and asset attributes, and overview of data center operations
Alarms within physical layout	Provides real-time device failures within floor layout and rack front view for status of data center operations.
PUE calculator	Provides Power Usage Effectiveness (PUE) value for information on daily utilization of energy.
Mobile data center operations	Integrates with StruxureWare Mobile for access to the StruxureWare Operations application on the go via the Motorola (Symbol) MC70 handheld PDA.
Network management	An overview of the data center network paths and their interconnections.
Blade server support	Mirror the exact data center setup, by modeling blades within their blade enclosures.
Inventory report	Includes structured information on all rack-mount devices, organized by device type, age, manufacturer and properties for quick overview of all current devices within a data center.

Convenience

Import InfraStruXure configuration	Speed deployment of the software by importing InfraStruXure Designer solution including architecture capabilities and constraints, floor and rack layout.
Recommended Actions	Providing descriptions of problems together with recommended actions reduces the need of training, eases deployment and speeds troubleshooting.
Auto Discovery	Reduces the time needed for installation and deployment by automatically detecting virtual machines and manageable devices.

Manageability

Customizable view	Provides location-based drill-down for a logical model of the data center, where data center rooms can be organized under regions, countries, campus, sites, buildings and rooms.
Virtual store room	Keep track of new devices from arrival on site in the virtual store room, as best practices recommend.
Floor layout view	View an accurate representation of your data center through the easy-to-use graphical floor layout and birds eye view.
Rack front view	Detailed rack front view provides an accurate graphical representation of equipment and its location in the rack.
Equipment browser	Quickly locate equipment based on vendor name, model and type, and export equipment data to excel format.
Device catalog	Utilize the extensive library of physical infrastructure and IT devices from leading vendors.
Custom devices	Quickly customize catalog devices to your specifications in just 2 clicks, amending custom properties such as power requirements and MAC address etc.
Free text search	Quickly locate devices and alerts through the free search field.
Generic UPS support	Allows for modeling data from any UPS vendor, providing support for existing data center environments.

Agility

Model any data center	Capable of modeling data centers and rooms with rows in any direction.
Common data model	Ensure mature and synchronized data throughout the entire data center life cycle.
Electrical room support	Monitor capacity and plan changes for centralized power equipment in areas outside of the main data center floor plan.
Optional deployment services	Ensure speedy deployment through the use of APC Professional Services.
Localization	User interface available in major local languages.
Virtualization	Critical events are translated into server impact analysis, and virtual machines at risk are automatically migrated to healthy hosts.

Protection

User roles	Enable different levels of access through multi-user login and pre-defined user roles.
Multi-user access	Enables several users to carry out work on the application simultaneously.
Password Security	User-selectable password protection prevents unauthorized access.
Read-only Access	Share access without risking unauthorized configuration changes.

StruxureWare™ Operations: Capacity for Data Centers

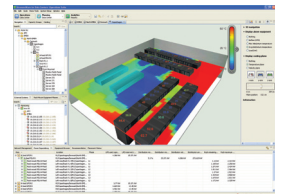
Planning and optimizing utilization of actual physical infrastructure capacities via shared data center model, enabling efficient equipment provisioning and right-sizing of your data center.

Simulation, planning, and optimization of infrastructure capacities to right-size the data center

StruxureWare Capacity predicts the optimal location for physical infrastructure and rack-based IT equipment based on the availability and requirements of physical infrastructure capacity; and user defined requirements such as redundancy, network and business use grouping. It reduces stranded capacity through optimized use of the physical infrastructure and avoids unplanned downtime. With its sophisticated simulation based on live data, InfraStruxure Capacity proactively analyzes the impact of changes before they occur, enabling informed decision making and planning, ensuring that your physical infrastructure provides the required capacity for current and future needs.



New! Virtual environment integrations between StruxureWare Operations and VMware and Microsoft Systems Center Suite.



StruxureWare™ Operations: Change for Data Centers

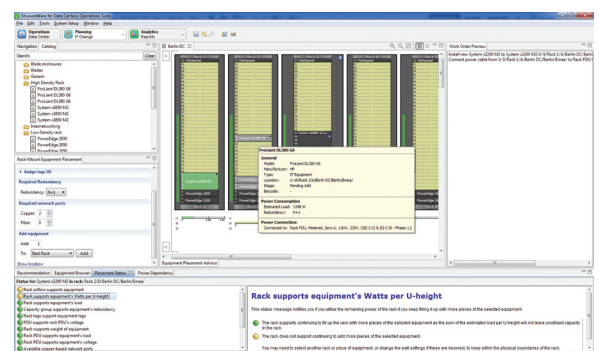
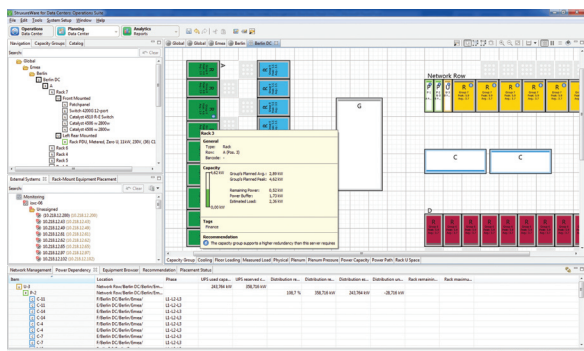
Workflow management allows for easily tracking and executing moves, adds and changes of equipment in the data center.

Fully integrated workflow management for your IT physical infrastructure.

StruxureWare Change enables operators to gain control over the data center environment by implementing organized moves, adds, and change work processes, significantly reducing the risk for inadvertent downtime. With its automated workflow system, operators can assign work orders, reserve space, track status, and extract an audit trail for complete visibility and history into the change lifecycle. The optional StruxureWare Mobile provides you with your operational changes while on the data center floor, enables barcode scanning and ensures data integrity, as well as improved operational efficiency.



Gain total transparency of physical equipment changes by user in the data center through StruxureWare Operations: Change.



StruxureWare Operations Capacity reduces stranded capacity through optimized use of the physical infrastructure and avoids unplanned downtime.

With its automated workflow system, operators can assign work orders, reserve space, track status, and extract an audit trail for complete visibility and history into the change lifecycle.

StruxureWare™ Operations: Energy Efficiency for Data Centers

Full insight into energy usage costs and current & historical energy efficiency for the facility, identifying efficiency losses and enabling improved PUE/DCiE values at subsystem level.

Intelligent PUE/DCiE analytics at subsystem level

StruxureWare Energy Efficiency provides current and historical Power Usage Effectiveness (PUE) values, enabling a fact-based understanding of how much power is devoted to driving the installed IT-equipment compared with the total facility consumption. It provides a detailed insight into how effectively energy is utilized down to subsystem level, as well as an understanding of how to improve energy efficiency. Subsystem data can either be measured or estimated, also allowing customers with few power meters to benefit from the application. The web-based dashboard view includes efficiency data on current and historical PUE, as well as detailed subsystem cost analysis. StruxureWare Energy Efficiency is available via StruxureWare Operations, which enables integrations with StruxureWare Central and 3rd party enterprise systems.



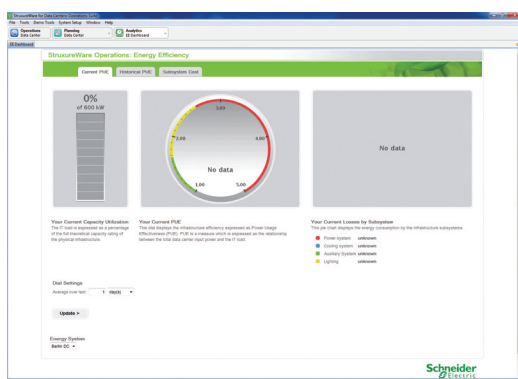
Intelligent PUE/DCiE analytics at subsystem level and instant overview of rack energy usage.

StruxureWare™ Operations: Energy Cost for Data Centers

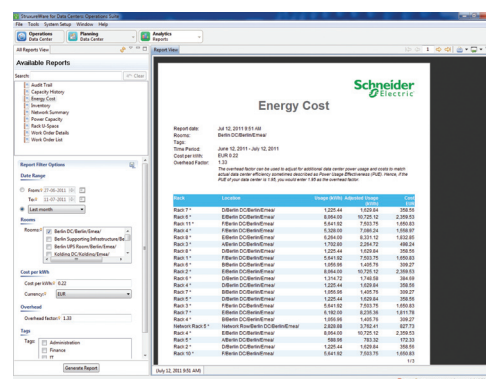
Cost analysis of energy use on a kW/h basis, detailed to the rack level, for calculating cost of energy consumption, aid in charge back and efficient budgeting.

Instant overview of rack energy usage.

The StruxureWare Energy Cost module provides an Energy Usage Report, which shows energy consumed within the data center by the kWh and cost per kWh, detailed to the rack level. The energy usage is based on metered data, gathered over a specified period of time. If no metered data is available, estimated power draw will be calculated based on the power draw of the individual IT assets or nameplate values. The Energy Usage Report provides the option of including an overhead factor accounting for energy losses through Power Usage Effectiveness (PUE). The report can be customized based on optional groupings by use of tags, such as department, tenant, purpose, density etc.



Full insight into current and historical energy efficiency for facilities, identifying efficiency losses and enabling improved PUE/DCiE values at subsystem level



Cost analysis of energy use on a kW/h basis, detailed to the rack level, for calculating cost of energy consumption for specified equipment and aid in charge back and efficient budgeting.

StruxureWare™ Operations: Insight for Data Centers

Comprehensive tool for customizing report designs to visualize data.

StruxureWare™ Operations 7.0 Software Platform: Insight is a report generator tool that allows for customization to individual business needs supported by a large community.

- > Provides reporting capabilities with transparency into key performance indicators.
- > Advanced report designer that allows you to design any report within minutes using drag and drop functionalities.
- > Allows creation of reports that combine data from StruxureWare Operations Platform with any external data point obtainable via web services or databases.
- > Large set of plug-ins, templates and customizations available online. Consultants available world-wide.



Customized reports built in StruxureWare Operations: Insight can be published in StruxureWare Operations with instant availability to all users or exported to various file formats.

StruxureWare™ Operations: Dashboard for Data Centers

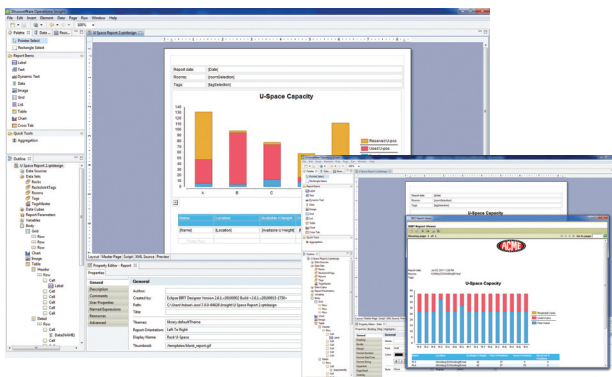
Easy-configurable web dashboards showing data center key performance indicators.

Built on an open platform, the user-friendly interface allows anyone to quickly configure a dashboard showing management-level information.

- > Choose between more than 20 data center metrics to create transparency into the data center.
- > Easy configuration with simple drag and drop functionalities that opens up for modifications to match the customer's theme and design.
- > High-level overview of data center operations for CEO-level customized according to needs.
- > Based on an open platform that enables bringing in other data center metrics easily.



The widgets displaying data center metrics can easily be re-used on the company's intranet or website.



Instant overview of data center operations through inventory management, PUE calculator, real-time device alarms, and location-based drill-down



Easy-configurable web dashboards showing data center key performance indicators, such as trending of data center parameters and capacity utilization

StruxureWare™ Operations: Mobile for Data Centers



Handheld, wireless bar-code scanner for viewing, creating & instantly synchronize changes on the go. Based on Motorola (Symbol) MC70 hardware.

Wireless operation of your data center.

StruxureWare Operations: Mobile, based on Motorola (Symbol) MC70 hardware, provides you with your data center inventory while on the data center floor. The integrated barcode scanner makes light work of implementing work orders and identifying equipment. Using your wireless network, StruxureWare Operations Mobile automatically synchronizes server locations, ensuring data integrity, removing human error and improving operational efficiency.

Always keep your physical data center updated and synchronized with StruxureWare Operations: Mobile.



StruxureWare Operations: Mobile provides alarms, alarm descriptions and recommended actions while on the go.

StruxureWare™ Operations: VIZOR for Data Centers

High level data center key parameters on the go via your tablet or smart phone.

Instant overview of rack energy usage.

The StruxureWare Operations: VIZOR provides key data center capacity parameters on power, cooling, space, and network as well as high level values on data center utilization on the go and delivers key data center capacity parameters straight to a wireless device such as Apple iPhone®, iPad®, or Android-based smart phone devices.



Overview of network displayed on Apple iPad.



Overview of network displayed on Apple iPad.

Schneider Electric

132 Fairgrounds Road
W. Kingston , RI 02892, United States
Phone: (401)-789-5735
Toll Free: (888)-289-APCC (2722)
<http://www.schneider-electric.com>