

DC Spyder

Power measurement in itself has no meaning unless the data is put into some perspective. One needs to be able to see historic charts, analyse trends or send alerts when a threshold is crossed by one of the parameters. With DC Spyder it is possible to do just that. It is an easy to use application that uses the Schleifenbauer Gateway to retrieve the data from the PDUs. Schleifenbauer Products is proud to be able to offer a monitoring solution that is tailored to the benefits of the Schleifenbauer PDUs, Bus bar-meters or DP-meter.

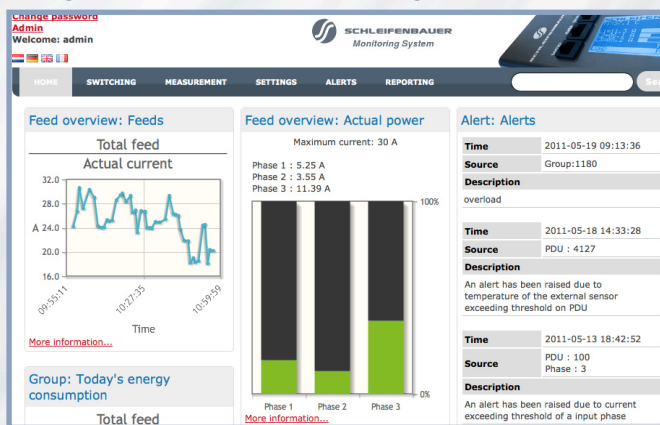
Power consumption of IT-equipment is no longer the territory of the IT manager alone. Today, other departments like Facility Management and Finance have just as much interest in the power statistics of IT equipment.

DC Spyder provides all the information that is needed to increase the availability of the IT processes and keep track of the most important cost of a datacenter: power usage. It can be used to forward energy costs to specific departments or customers. DC Spyder is able to connect to other systems to create even more value from the measurements.

Web-based

DC Spyder is a web-based information system for monitoring and controlling power in data centres. From high-level overviews and statistics right down to a single outlet, you will obtain detailed measurements and be able to control the outlet state.

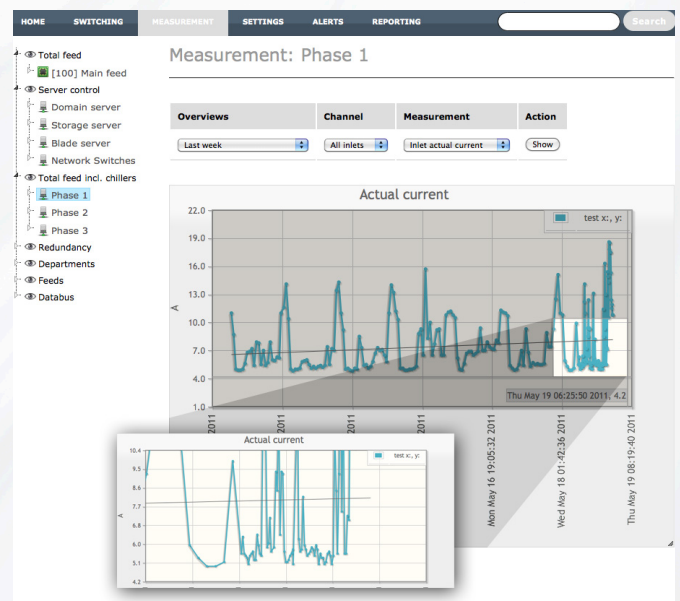
The main window offers a dashboard, providing a customisable overview. These so-called 'widgets' update every 5 seconds, providing the user with a live overview of the entire system. Other features, such as switching, measurements, settings, alerts and reports are accessible through the tabs, as shown in the image below.



Measurements

Schleifenbauer PDUs measure current (A), voltage (V), energy (kWh) and power factor (%) on both inlets and outlets.

Temperature (°C) is measured at PDU level only. Furthermore, aggregated values are calculated for devices connected to multiple outlets or entire groups of units. DC Spyder constantly updates a database containing these values obtained from all PDUs in the network. Using the measurement tab, the user is able to generate graphs of an entire group of PDUs, a device such as a server, a single outlet on a PDU or even on a complete feed for a certain time interval. The user-friendly, interactive graph tools allow the user to zoom in on details, view the graph full screen or export the data for analysis in other software systems.



Switching

Of course, a single outlet can be switched ON or OFF or rebooted using the buttons in the switching tab. Switching off is protected by double confirmation from the user. In case a server is connected redundantly to multiple outlets, on multiple PDUs/Feeds, the complete group can be switched. The status is shown using clear colours and updated as soon as the status changes.



Alerts

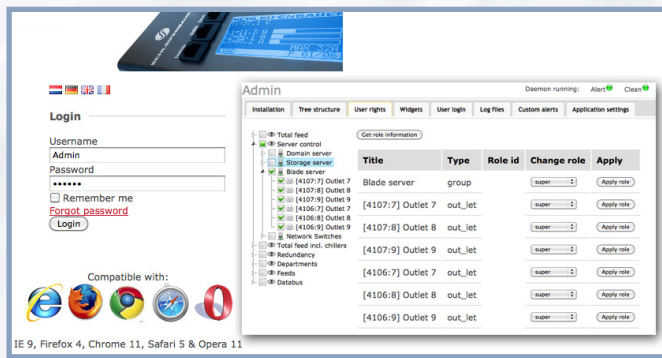
In case of any failures or exceeded thresholds, alerts are raised by DC Spyder. Besides the standard alerts raised by the PDU itself, which are picked up and handled by DC Spyder, custom alerts can be configured for a set of units. Alerts are shown in the dashboard as well as in the alert tab. Furthermore, a message is sent per e-mail to notify an administrator in case an alert occurs. In case the situation causing the alert has been resolved, the administrator can tick off the alert. He or she then enters a message explaining how the situation has been resolved. These messages are stored in the database for future reference.

Alert Overview.

Number	Time	Description	Source	Seen?	Level
46	2011-05-18 14:33:28	An alert has been raised due to temperature of the external sensor exceeding threshold on PDU	PDU : 4127	OK	Warning
44	2011-05-13 18:42:52	An alert has been raised due to current exceeding threshold of a input phase	PDU : 100 Phase : 3	OK	Warning
41	2011-05-04 16:08:20	overload	Group:1258	OK	Error

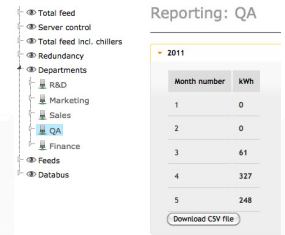
Access, Users and Roles

As one would expect from a Monitoring System, access to the system can be controlled per user. Each user can be granted rights based on roles, in order to limit or grant access to certain features. For example, a user might have access to certain resources (servers or groups of devices) or be allowed to generate graphs but not to switch outlets on or off. The administrator is able to navigate to the backend area to configure the whole system. Besides the standard information on each user, the language is also stored in the user profile.



Reporting

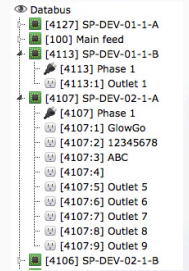
Besides the export of Graphs as Comma Separated Value files (CSV), DC Spyder allows for the generation of reports over selected groups of devices, e.g. per month.



Auto Discovery

Automatic Discovery and Structuring of Devices

DC Spyder automatically finds new devices on the data bus. By using a custom-made template, the newly discovered devices are automatically arranged in the tree of devices. In case a unit is disconnected, this is also shown in the tree. Optionally, the user can rearrange the units by dragging and dropping the units in other groups.



Modular Design

Object Oriented, Platform Independent and Open.

Since the design of DC Spyder was based on a modular, object-oriented approach, maintenance and customisation of the software is easier. The DC Spyder foundation is the Model-View-Controller approach. This means that User Interfacing, Logic and Data are handled by separate objects, allowing the view of the data to be fully customised to your information demands. A set of standard widgets is enabled or disabled with just a few clicks in the administration section. Since the software has been written in PHP and MySQL, based on open frameworks, developers are free to add their own plug-ins to the system. The source codes are version managed in a SVN repository and available upon request. Training and support for developers by senior software engineers is available through Schleifenbauer Products. DC Spyder runs on a Linux server with Apache, MySQL and PHP. This can be installed by the user or acquired as a ready-to-use package (including hardware) from Schleifenbauer Products.

The screenshot shows the 'Overview widgets' configuration table. It has columns for Widget name, Visible, and Delete. The table lists several widgets: 'Alert: Alerts', 'Feed overview: Feeds', 'Feed overview: Actual power', and 'Group: Today's energy consumption'. Each widget has a 'Visible' checkbox checked and 'Delete' and 'Edit' buttons.

Pricing May 2011

DC Spyder	one-off fee	annual fee
DC Spyder management software license fee including 50 device pack	€ 2.723	
DC Spyder 50 device pack (add 50 devices to DC Spyder management)	€ 990	
Maintenance fee for software licence (incl. 50 device)		€ 445
Maintenance fee for 50 device-pack		€ 178
Rack-mount server (hardware) with pre-installed software	€ 1.520	
On site installation (1 day, including 200 km travel)	€ 1.250	

The maintenance fees for management software and device packs are obligatory. This will grant full support from our development & support desk and allow for free updates and upgrades.