





EDL-Portal

EDL-Portal 2.0



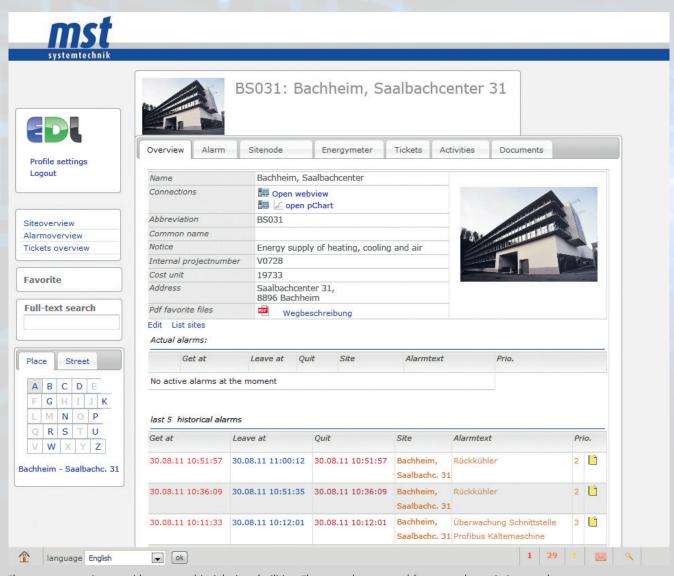
EDL stands for energy services (EnergieDienstLeistung). The EDL internet portal, www.edl.ch, provides a user-friendly platform for the monitoring, operation and management of facilities and buildings.

Instrument for handling all energy values

The portal provides user-friendly operation, clear visualization capabilities and centralized management of various data such as energy consumption, alarm records and documents. This also includes other services such as facility management and cost control.

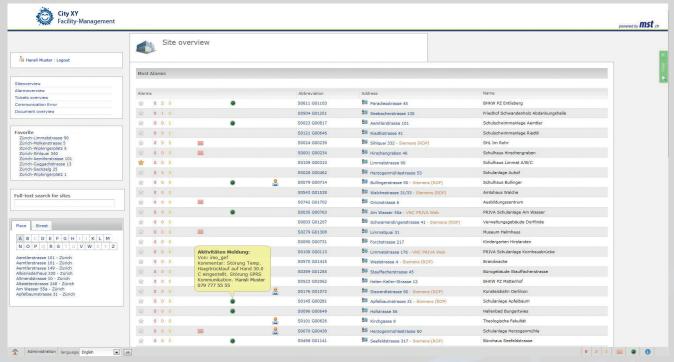
Since the EDL-Portal is accessed via internet using a browser, it is not location-dependent. Users require no additional software or hardware for operation.

Data transmitted by the browser is encrypted, making communication as safe as, for example, eBanking. Portal servers are operated according to the latest security standards. To ensure trouble-free operation, redundant and UPS-supported servers are used.



The system overview provides a central insight into facilities. These can be accessed from anywhere via internet browser.

System overview of urban real-estate management



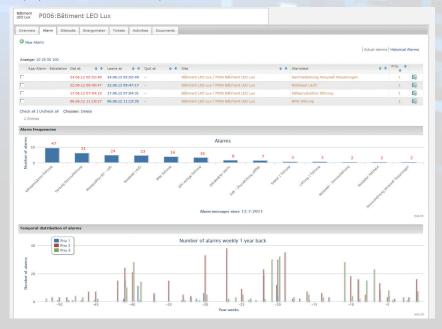
Facilities can be sorted and displayed either alphabetically by street or place name, or according to alarm priority. Favourites may also be defined for faster and more convenient access to specific facilities.

Weekly average of energy consumption in MWh



All stored data such as energy values, alarms, faults and other messages can be analysed, graphically visualized and assessed.

Display of alarms for one facility



Alarms can be displayed and sorted as a summary list or, for administrative assessment, in bar graph form.

The user can choose whether to display according to alarm details or alarm frequency.

Following the same principle, it is also possible to analyse and assess energy consumption.

Functions in the EDL-Portal

The EDL-Portal offers many functions, even in the standard version.



All users, whether they are managers, staff or technicians, can access facilities via internet regardless of location. No additional software is required, just a browser.

Each user can be assigned individual access rights. As a result, all system access and interventions are logged. The portal is the ideal solution for operators of multiple facilities. The EDL-Portal is system-independent, which means facilities can be connected whose chosen automation systems come from different manufacturers.



Operation via the browser

Operate and monitor from anywhere. Only an internet connection is needed. Data transmission is encrypted.



Remote alarms

Alarms can be sent directly to mobile devices (SMS) and fixed network phones (voice).



User administration

With the help of user administration, different access rights can be defined for various users.



Email notification

Alarms and other messages can be sent by email.



Journaling/Ticketing

A journal is kept automatically in which all system access and any interventions are logged. Alarms and manual entries may generate tickets.



Trending & Analysis

Stored data, including energy values, alarms, faults and other messages can be analysed and visualized graphically.



Documents

It is possible to upload plant-specific documents, for example documents needed for maintenance.



Access control

The app EDL-Guard can be used to increase personal safety at facilities.



Monitoring and visualization

Systems can be monitored around the clock down to PLC level. This ensures reliability.



Electricity, heat and water

Consumption values for electricity, heat and water are presented in the energy meter category.



Energy management

An energy management function is integrated as a standard. Through optimization of energy consumption, costs can be saved.



Facility management

The EDL-Portal includes technical facility management.



Alarm generation and management

All alarms are recorded and logged. There are several ways of forwarding alarms.



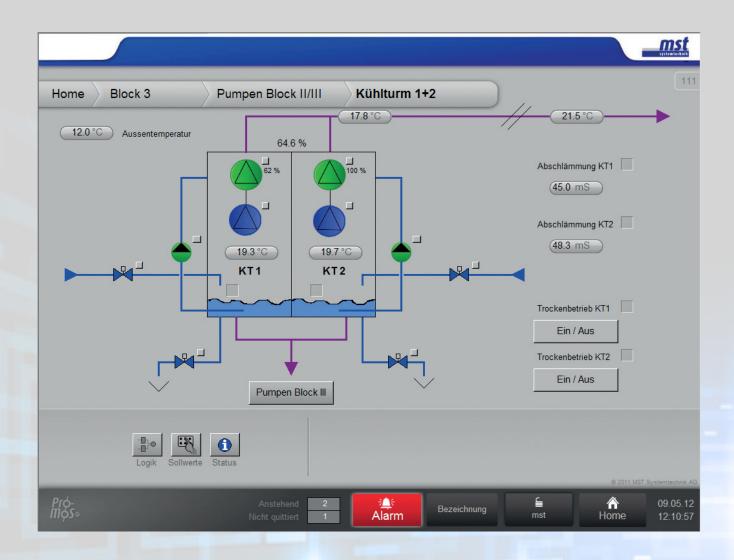
Cost optimization

The cost of a facility can be constantly monitored and optimized throughout its lifecycle.

Graphical operation mode for facility management

The EDL-Portal allows facilities to be visualized and operated in a fully graphical mode. Access rights can be defined and regulated via user administration, which is included in the basic module. The graphical operating mode visualizes a facility down to its lowest

level. A user with the appropriate permissions can, for example, alter a room's set points, close blinds, open flap valves, etc. Activity monitoring permits a transparent trail of all interventions.



Additional security with the EDL-Guard app

The EDL-Guard app, available as an option, allows greater safety and supervision of on-site operations.

People entering a facility register with the app and their presence is indicated and logged in the EDL-Portal. In the event of an accident, the person may either directly use a mobile device to send an emergency call, or else an alarm will be triggered automatically by the "dead man" monitoring function.

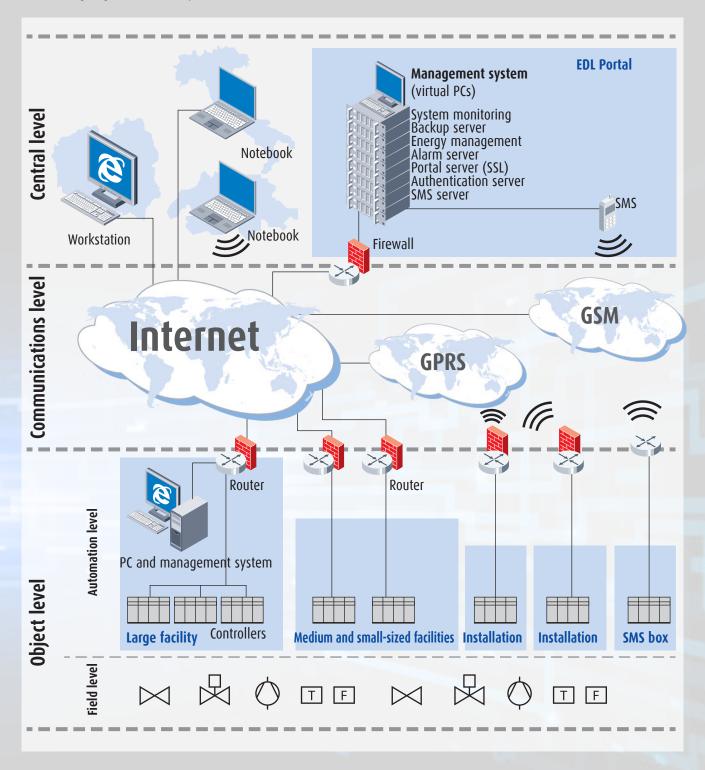
This app is available for iPhone and Android devices.



System structure of EDL-Portal

The EDL-Portal is especially interesting for operators of multiple facilities. As the central, system-independent umbrella, it provides a "management system for all management systems", ensuring transparency, helping to optimize costs and processes and offering extensive evaluation capabilities.

The following diagram shows the system structure of the EDL-Portal:







MST Systemtechnik AG

Airport Business Center 60 CH - 3123 Belp

Tel: +41 (0)31 810 15 00 Fax: +41 (0)31 810 15 05

MST Systemtechnik AG

Riedtlistrasse 39 CH - 8006 Zürich

Tel: +41 (0)43 210 31 31 Fax: +41 (0)43 210 31 35

www.mst.ch | info@mst.ch



MST System Solutions GmbH

Lyoner Straße 14 D-60528 Frankfurt am Main Tel.:+49 (0)69 66 55 42 30 Fax: +49 (0)69 66 55 42 31

www.mst-solutions.de info@mst-solutions.de