

# EMPURON SUPERVISE LS

## Central monitoring for decentralized power plants

Heating systems in single or multi-family homes, cogeneration units (CHP), Solar plants are just some examples of "decentralized supply systems". Service and operation of these facilities may require costly visits. **EMPURON SUPERVISE LS** automatically monitors the units and stores its operational data and reports. As soon as deviations from the optimal system parameters occur, service staff will be informed e.g. by mail.

### Operational targets of EMPURON SUPERVISE LS

ESPs, operators or service providers who are responsible for the operation of multiple distributed plants, get a platform that informs them at any time about messages and statistical values of plants - no need to visit. In case of errors or violation of plant limit values, **EMPURON SUPERVISE LS** additionally can send an alarm via "SMS" or "E-mail".

**EMPURON SUPERVISE LS** also provides a data archive and a reporting interface for the operating data. Statistical analysis, such as finding on accumulation of local disturbances, are possible at any time

### Browser interface - selection guide from the system overview, marking of defective systems and system components

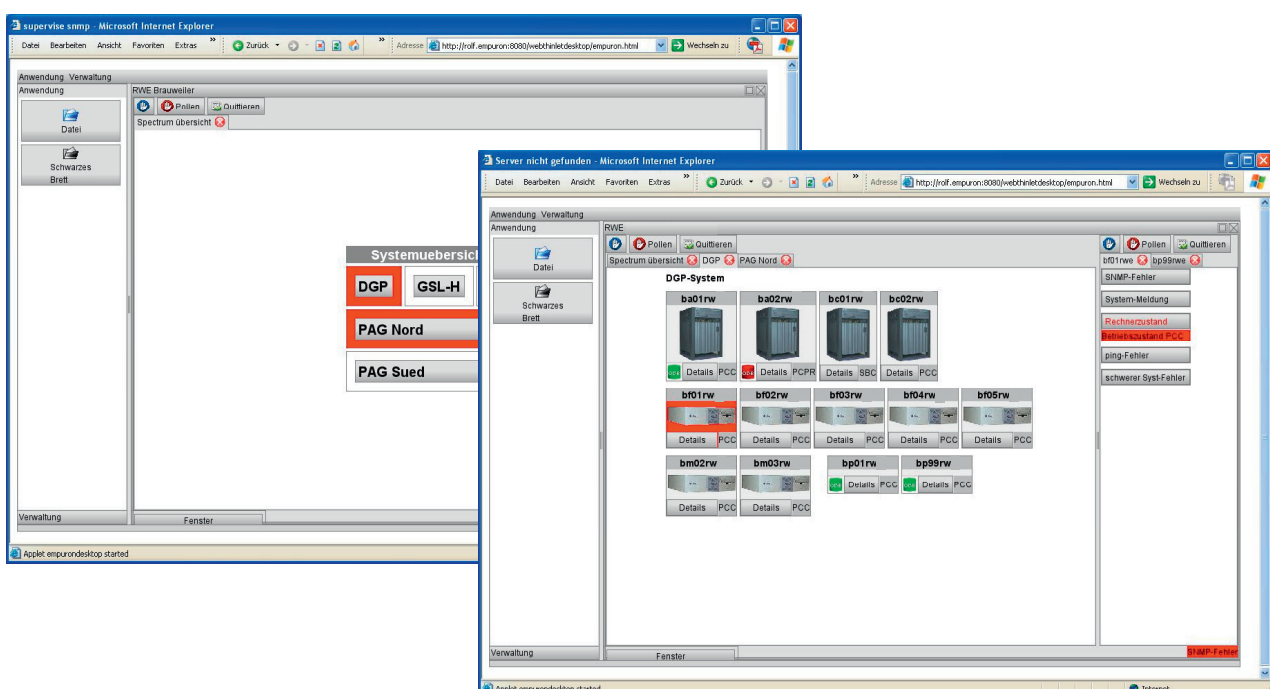
### Support of disturbance management

Status and error messages of the plants can be viewed via Internet. Each service call can be prepared on this basis.

The sequence of an error processing by service providers could, for example, be:

- Receipt of an alarm via SMS or E-Mail
- Access to local plant information via Internet
- Interactive evaluation of the information
- Troubleshooting by remote control and/or planning of field service incl. the needed tools.

By automatic monitoring of the plant parameters, errors can be detected before occurring.





### Benefits for operators of heating systems, CHPs, solar plants

- Cost reduction in support services.
- Minimized downtime of monitored systems.
- Central Information archive for statistical analysis and extraction of commercial indicators.
- Image building and customer loyalty through the use of modern technology.

As a central monitoring system **EMPURON SUPERVISE LS** collects runtime and message data in a homogeneous structure.

The data can be used without special knowledge of the individual components.

- Saving training time
- Targeted use of professionals
- Reduction of costs for subsequent errors

### Reporting - Improvement of the internal and external information exchange

**EMPURON SUPERVISE LS** simplifies information management. Via browser employees and partners access all relevant data in a secure and password-protected environment. **EMPURON SUPERVISE LS** analysis can be carried over to reports via a comfortable report generator.

### Operation of the system

**EMPURON SUPERVISE LS** can be offered internet-based as ASP-Solution (Application Service Providing) – operation and maintenance of the system is performed by EMPURON.

### Data acquisition

The operational data of the plant come in via the standard reporting channels, which often are already pre-equipped or easy to retrofit. Normally, the information is transferred via telephone line (modem, ISDN). Other transfer routes (e.g. GSM or "Power-line") can also be used.

### Analysis of plant data

