



Cetrics™
The smart way to complete control

Cetrics – a powerful tool for
electricity suppliers and customers



Cetricis – for complete control

Cetricis is a universal metering data handling system developed by Cewe Instrument using the latest technologies. Cetricis is based on many years of experience of earlier systems such as EnerBase. To ensure that we are developing the right product we have conducted a continuous dialogue with our customers. As well as wanting the actual functions, customers have insisted on **user-friendliness, expandability, flexibility** and an assurance of **future maintenance**. These four demands are the cornerstones of the platform that is Cetricis.

User-friendliness

Cetricis is the system that puts the user at the centre. You can quickly get started with the system, and while you work with it you get clear, accurate information about how things are working and whether anything has gone wrong.

Users can be assigned different levels of authorisation depending on their knowledge of the system and the extent to which they are permitted to influence the system. So more than one user in the organisation can use the system.

Expandability

Cetricis is built around a powerful core surrounded by functions which are like blocks. The core and its peripheral functions are all well defined and documented in a way that makes them open to expansion. This also means that the software is scalable and can suit both large and small systems.

This design approach means that changes and additions can be made to the system without altering the standard system. As a result, adaptations can be made with a high degree of security by skilled customers, consultants or Cewe Instrument at reasonable cost.

Flexibility

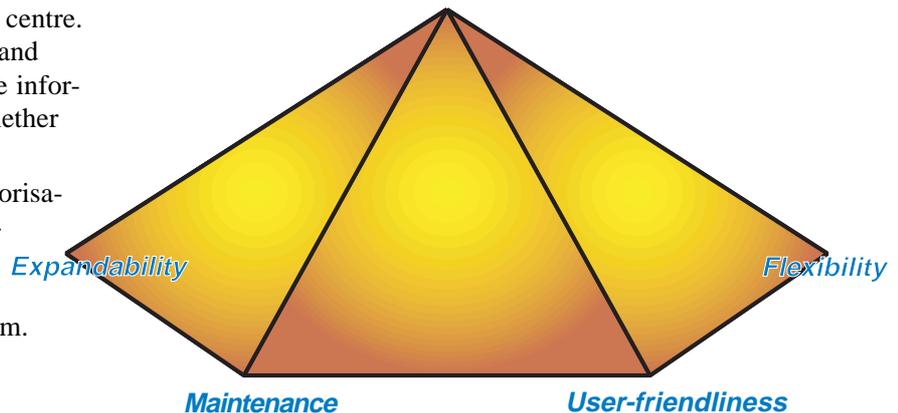
Using standard tools, Cetricis can be adapted to other systems, for example to export data. These may be billing systems, accounting systems or a simple Excel spreadsheet.

Reports in Cetricis are created with the standard tool Crystal Reports. Using this tool the customer can modify, add or create new reports for the system.

Maintenance

If a software program is to survive it must be possible to maintain it. Customers who invest in a system need to be sure that the software can survive and be well maintained. Cetricis has been developed with survival in mind. This not only means that the product is easy to adapt and build on; it guarantees secure maintenance in the future.

The smart way to complete control



System requirements

The system requirements for Cetricis depend on the configuration installed. A configuration may be everything from a single-user system with a small number of terminals and series, to a system with a large number of users and thousands of terminals and series. These are the minimum requirements for a single-user system with a few terminals and series:

- Intel Pentium II 400 MHz
- 64 MB RAM (128 MB recommended for Windows NT and Windows 2000)
- CD-ROM (for installation)
- 1 GB free hard disk space (should be calculated accurately for each configuration)
- Monitor with a resolution of 800x600 pixels and 256 colours (recommended resolution 1024x768 pixels)

Operating system requirements

Cetricis will run under Windows NT 4.0 with Service Pack 4 or later, and Windows 2000.

The installation of a host for connections requires Windows NT 4.0 with Service Pack 4 or later, or Windows 2000. If data is collected from terminals from the same computer, there is no need to install a host for connections.

We recommend running Cetricis under Windows 2000.

What does Cetricks give the user?

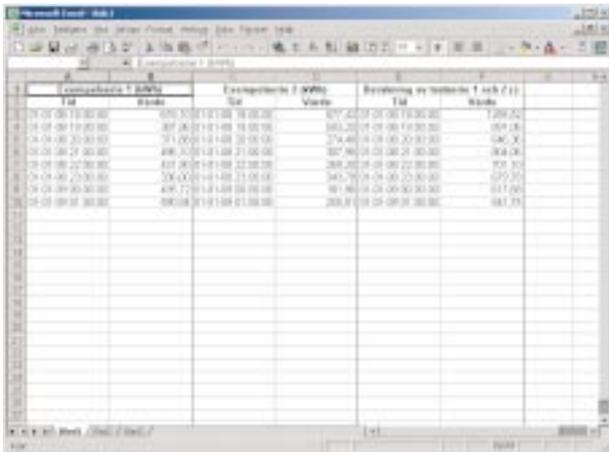
Cetricks is used for the automatic collection of metering data from different kinds of communicating equipment. The system is an open solution, meaning that the equipment can be made by other manufacturer than Cewe Instrument. Collected data are saved in database format and can be presented in different ways, eg on-line, as graphics and as text. Data can be compared as well. Collected data can also be exported to another program, for example for accounting or to a rental billing system.

Data collection

Data can be collected from metering equipment in the usual way via the serial communication ports on a suitable medium. A communication port on a computer network can also be addressed. There is no need for the equipment to be connected to the computer where Cetricks is installed; it can be connected to the computer that is nearest to the metering equipment. This minimises the installation cost, for example for a company that normally has a computer network with extensive coverage.

Exporting data

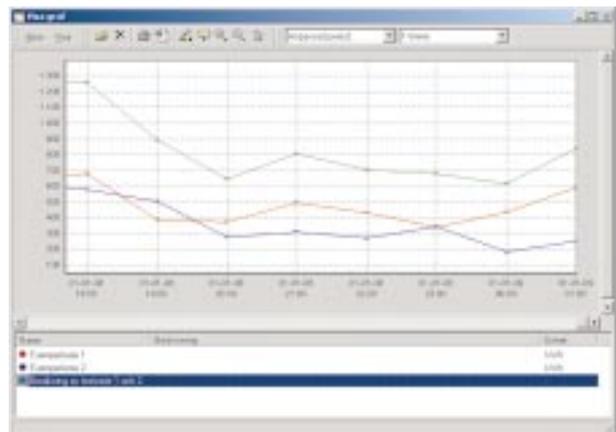
The ability to export data is often a vital part of a modern data processing system. This might involve the export of data to a rental billing system, for accounting or simply to Excel. This goes without saying in Cetricks, where data can be transferred to Excel simply by pressing a button. More automated transfers are also possible, of course.



Tar	Weeks	Experiments / WPM	Billing to Invoice / Job / Job
17.07.2011 12:00:00	106.71	11.17.100 10.00.00	107.42 17.07.2011 12:00:00
17.07.2011 12:00:00	107.46	11.17.100 10.00.00	108.20 17.07.2011 12:00:00
17.07.2011 12:00:00	111.02	11.17.100 10.00.00	112.44 17.07.2011 12:00:00
17.07.2011 12:00:00	118.75	11.17.100 10.00.00	120.44 17.07.2011 12:00:00
17.07.2011 12:00:00	120.20	11.17.100 10.00.00	122.44 17.07.2011 12:00:00
17.07.2011 12:00:00	124.07	11.17.100 10.00.00	124.44 17.07.2011 12:00:00
17.07.2011 12:00:00	127.71	11.17.100 10.00.00	126.44 17.07.2011 12:00:00
17.07.2011 12:00:00	130.04	11.17.100 10.00.00	128.44 17.07.2011 12:00:00

Graphical analysis tool

There is a graphical analysis tools for the rapid analysis of events. With the tool, chosen quantities can be compared. For example, the effect of outside temperature on power consumption. By generating the graphs of outside temperature and power, the process can be monitored over time. Another example is a wind farm, where the power from the generator can be compared with the wind strength to see how the wind strength affects the efficiency. If you want to take out a subset for further presentation you can move all the data into Excel by pressing a button.



Reports

All reports have been developed with the standard tool Crystal Reports. Using this tool, changes/adjustments can be made in the reports, or more reports can be added. Some examples of standard reports are text, line and column reports, durability graphs and invoice information. These can be generated for any chosen period and resolution: day, week, month or year.



Fields of application

Power supplier

In today's communication society, data is collected from metering points via one of the communication media that is available at a relatively low cost. The market is also insisting on more frequent readings and correct billing. Customers want to pay for what they have used and no more.

Cetric's offers an open solution in which different kinds of meters can be read. The system is tailored for today's needs in terms of the export and presentation of metering data. Cewe Instrument can supply a complete solution, from metering point to presentation.

Industry

The system is used to create statistics which can

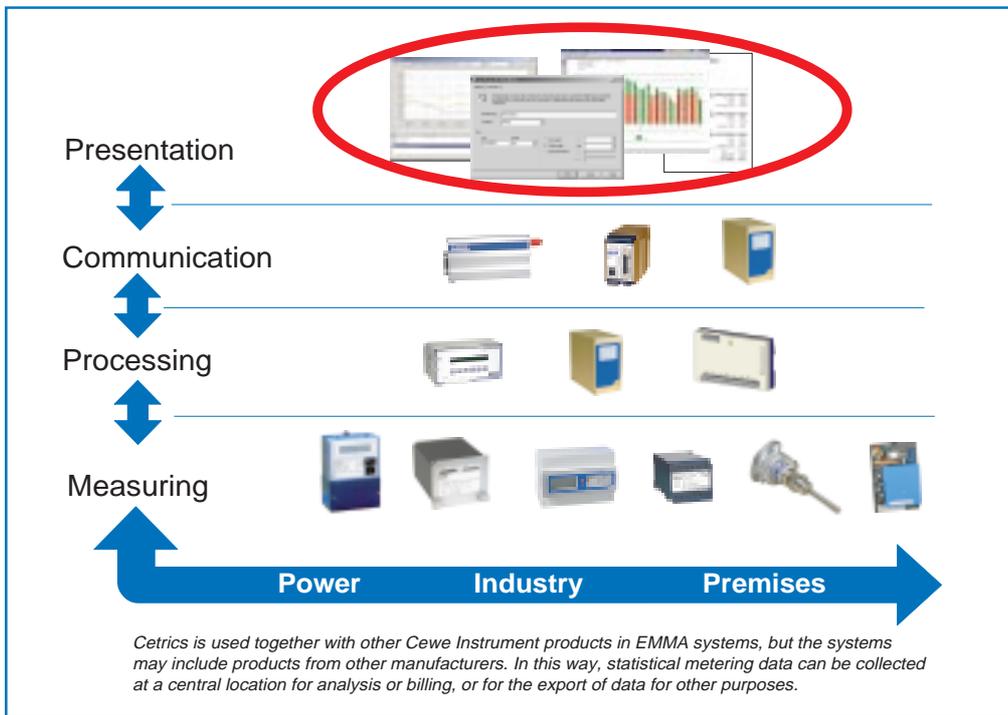
form the basis of energy efficiency improvements and so cut energy costs. By studying the energy profiles, production hours can be planned to create a more uniform profile and reduce the costs of power subscriptions, for example.

Cetric's handles price lists, tariffs and customers. The system is a perfect tool for cost sharing, both internally and externally. The costs of consumption can be followed up and so linked to the products produced. This can be very valuable in energy-hungry processes where the energy accounts for a major share of the production cost.

Buildings

In commercial buildings there is a need for internal billing of consumption costs. Consumption must be metered and the costs must be shared out internally within the buildings for a fair allocation. Cetric's is the tool for collecting metered data and fairly allocating the costs.

Cetric's gives you complete control over the entire system



Cewe Instrument AB

Box 1006 • SE-611 29 Nyköping • SWEDEN

Tel: +46 155 775 00 • Fax: +46 155 775 97

e-post: info@ceweinstrument.se • www.ceweinstrument.se

