Power Fault Recording
Application Example

Customer: **Chemical Industry (global player)**

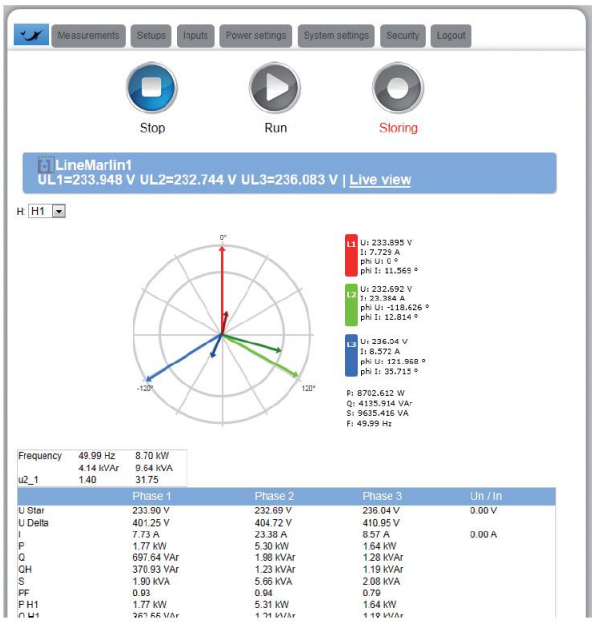
The customer is connected to the public grid. They want to monitor their whole grid with all-in-all 49 feeders. All data should be stored in one database. The real-time values of every feeder for voltage, currents, active and reactive power, energy consumption should be available in the control room represented with a graphical visualization of their grid. Transients should automatically be printed and stored on a network drive. They also want to make reports according to the EN50160 for a definable time period.

Challenges and Requirements

- 49 Feeders
- Connection of the DEWETRON-Units to the Power-Control-Center
- Transfer of the Data and Transients of 49 Powermodules
- Different security levels, Linux and Windows Operating Systems
- Common Cluster Server for all DEWETRON-Units
- Automatic Transient Reporting

Software:

- Marlin Standard and Marlin Professional
- SCADA-104 protocol
- PMT4 for power quality evaluation and Transient evaluation
- Automatic Transient Reports and publication in the intranet



Hardware:

- 13 DEWE-838 Units
- 7 DEWE-820-PFR Units

System Overview (Schema):

In the following picture you can see the system overview. All RMS-Values (10min-values) and Transients (10 kHz) of all devices are stored in the database on the cluster server. If there occour transients in the grid, they automatically will be printed and stored on a network device. From the database on the cluster server all reports according to different standards (especially EN50160) for a definable time interval, can be done with the analysis software PMT. In addition all real-time values are available at the Power Control Center using the SCADA 104 protocol.