



> THE OBJECTIVE

- > Monitor and record very rapid electrical phenomena at different points in the installation
- > Capture electrical events lasting approximately one millisecond
- > Analyze the parameters recorded and check the quality of the electrical energy flowing in the network
- > Determine the origin of the malfunctions and establish whether their sources are located upstream or downstream of the point of supply
- > Limit access to the application so that only the event display function is available in the control room

> THE STRATEGY PROPOSED

- > Measure the installation's power quality parameters: voltage, frequency, unbalance, flicker, signalling voltages, harmonics and interharmonics, voltage surges, etc.
- > Capture disturbances/events: dips and overvoltages, recording of the signature, waveforms, transients, peak detection, etc.
- > Set up a server application for data retrieval via the Ethernet network and in a Citrix[®] environment
- > Set up a "standby duty" application to report any new events observed related to power quality

> THE SOLUTION CHOSEN

- > Installation of network quality analyzers compliant with IEC 61000-4-30 standard Class A for MV networks (downstream of the power and current transformers)
- > Implementation of automatic data retrieval software for the equipment data and integration in an existing database
- > Implementation of simplified software in the standby-duty room

Energy production,
transmission & distribution

Energy Efficiency

NETWORK SUPERVISION

Meteorological
measurement

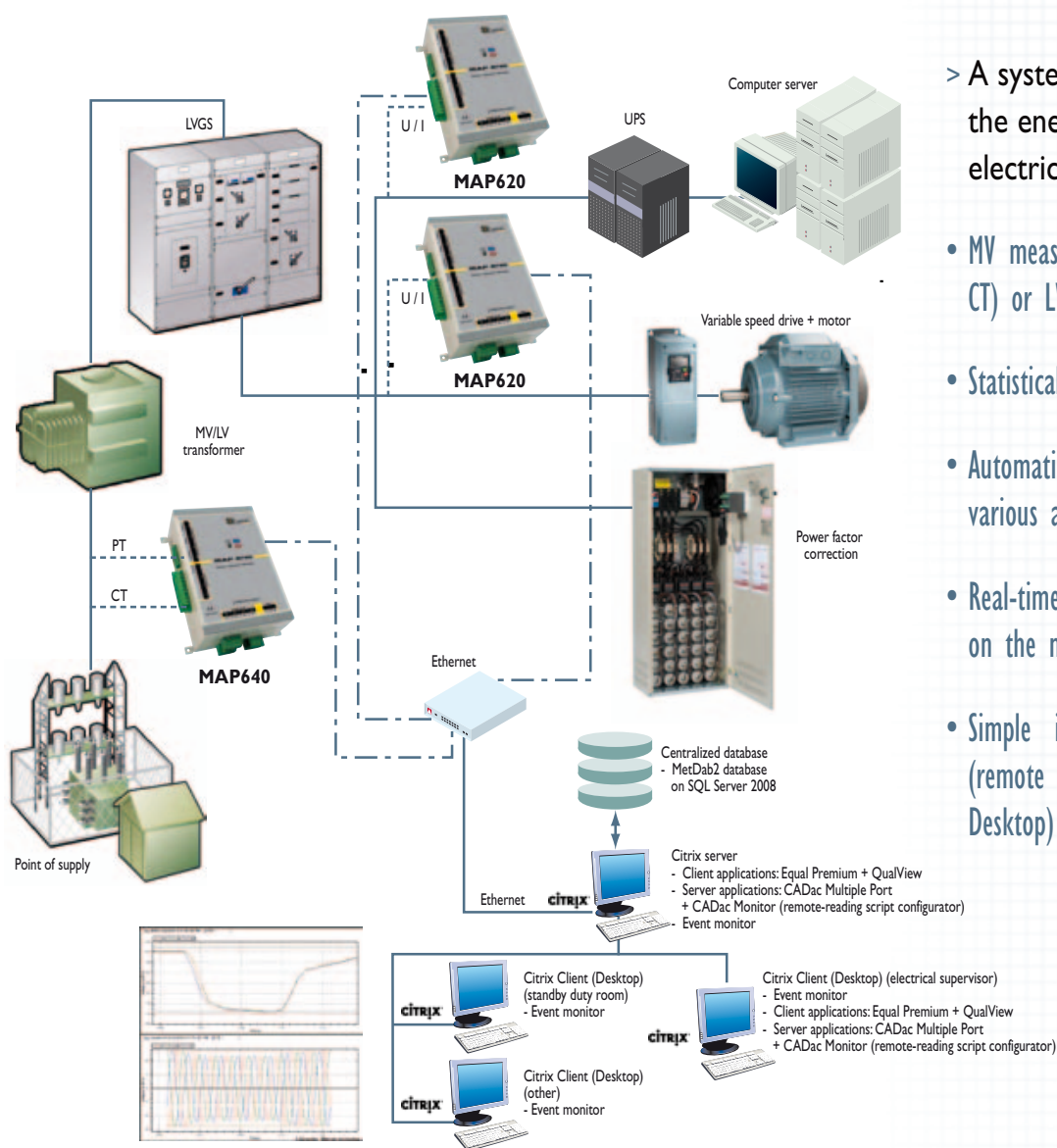
Audit & Inspection



➤ **Limit operating losses**
by detailed network mapping

➤ **Quickly identify the symptoms** linked to
energy quality

➤ Up to **16 % saved on production losses** avoided
thanks to the analysis solution



> A system for measuring the quality of the energy from several points in the electrical network

- MV measurement (downstream of the PT and CT) or LV measurement
- Statistical view of the events' impacts
- Automatic transfer of the data from the various analyzers into the central database
- Real-time information on the events detected on the network (dips, overvoltages, etc.)
- Simple integration in Citrix® environments (remote software activation via a Citrix® Desktop)



> RECOMMENDED PRODUCTS

MAP640	<ul style="list-style-type: none"> • Permanent network analyzer (voltage / current) compliant with IEC 61000-4-30 Class A with capture of fast transients (2 MHz)
MAP620	<ul style="list-style-type: none"> • Permanent network analyzer (voltage / current) compliant with IEC 61000-4-30 Class A
E.Qual Premium Server	<ul style="list-style-type: none"> • Configuration and analysis software • Remote-reading engine • Configuration of the database and remote-reading scripts • Multi-equipment analysis • Module for analyzing downloaded files
Event Monitor	<ul style="list-style-type: none"> • Software for automatic updating of events (e.g. for standby duty control room)