

Open, flexible technology for Electric Utility Supervision



The software solution for increasing efficiency and reducing losses in production, distribution and power system management.



SCADA/HMI technology for Electric Utilities

Power saving is one of the prime issues of today. Ever increasing energy requirements need efficient systems, cogeneration systems and power efficiency systems, reductions in losses and downtimes. Increasing concerns in environmental conditions require new production plant systems that run on renewable and clean energy sources capable of sustaining the new efficient energy and power saving standards. These prevailing challenges are paramount in the Progea software solutions to the very competitive advantage point of those operating in this sector.



Progea is investing even more resources in developing software solutions for the **Power Utility sectors**.

Great efforts **sustained by over 20 years experience** have empowered function and module implementation specific to the power utility needs. With Movicon it is very **easy to create** animated screens, alarm management, data logging, analysis reports and trends for improving efficiency, consumptions, reduce losses and prevent or quickly detect breakdowns.

Movicon is the ideal solution for managing any supervision system in the energy sector, whether electric, gas, water, air or steam sectors. Thanks to its modular and scalable architecture, Movicon can be deployed in massive production or power distribution plants right down to smaller automated production plants or Power Grid solutions.

Thanks to Movicon a great number of communication drivers can be used to get accurate information from control or RTU systems for visualizing, recording and managing data.

Control systems for global production and BT/MT distribution supervision and monitoring.

Geographically distributed Powergrid applications for monitoring and diagnostics.

Data acquisition, Historian and power substation Monitoring.

Visualization (HMI) for power management systems, power plant (conventional or alternative energy) and cogeneration systems.

Remote or local control of power production systems of renewable sources: Wind Turbine, Photovoltaic, Biogas, Geothermal systems. Data acquisition, building power efficiency calculations and analysis solutions. **Movicon** can be used in conventional or renewable power production applications, PowerGrid applications, distribution and substation applications, in **power efficiency and consumption monitoring and control systems**. Safer, more efficient application distribution at a very affordable price with fast return on investments.



➤ Expand your systems

Thanks to Movicon's **open and flexible standard technology**, vertical solutions for power and electric sectors can be quickly created and implemented with great ease and intuition using all-purpose predisposed tools and modules. The **Movicon software** scalability means quick application in real-time data collection, supervision and monitoring, analysis and report systems adaptable to all your application needs in the power and electric sector.

The main benefits are:

- Deployment Flexibility
- Application Scalability
- Hardware independent
- Cost reductions
- Increased performances
- Maximum efficiency

By using standard and open technology means your **investments are completely protected** to allow you to upgrade or integrate your system with additional or new technologies and devices later on in the future.

➤ All under control

Movicon's powerful Alarm management allows you to display, record, notify and analyze each event type of your system. Events, status changes, peak consumptions can be managed and traced as well as any other message or

technological alarming on disruptions of any sort, protection interventions, emergencies or other. **The alarms can be used with RTU local times or time stamp.** Detailed information, troubleshooting and comments for users and maintenance staff can be linked to each alarm with hypertexts, images and movies.

Each alarm, displayable in windows, banners and status bars, can be notified directly to on-call duty staff using the inbuilt Dispatcher with SMS, e-mail or Voice (TTS-text-to-speech). The speech recognition also allows vocal commands to be sent to the plant system. **All events are accurately recorded in the appropriate relational databases** using your preferred format (Ms SQL Server, Oracle, MySQL), with millisecond precision.

➤ Safe, extendable and integrated communications

Hundreds of integrated and ready-to-use communication drivers allow immediate connections directly to various control devices, securities and field RTUs. Support to specific protocols including IEC 60870-101, 60870-104, 61850 and tools (Meters and Network Monitoring and Analyzers) to ensure **flexibility-of-use and diversity of system integrations.** The inbuilt OPC technology and

powerful networking facilities offer **maximum connectivity.** What's more the system has been designed to guarantee openness and transparency in Real Time Database information accessibility

➤ Analyzing tools to improve efficiency

Apart from collecting information from production processes and systems, the powerful inbuilt analysis and report facilities together with specific analytical tools, consent database archives to be visually presented in your preferred format for accomplishing quick and thorough trending, curves, reports and any other analytical type. Trends, Data Analysis and Charts will display trend curves, both in realtime and in historically logged time ranges and periods.

The Report Designer and the Crystal Report Engine are both powerful tools consenting access to historical data for presenting analytic summaries and results in Reports, Tables and Charts. These inbuilt tools are purposely designed to consent statistical analysis on downtimes, performances and power consumptions, comparing input data for the preselected time ranges and periods.

Plant information, interactive screens, Trends and Reports can be made available over the web thanks to the innovative **Movicon Web Client technology.**

Thanks to the **efficient analysis tools**, you can obtain realtime information on ongoing consumptions, effective power efficiency and emissions into the atmosphere allowing you to react accordingly and immediately when reaching critical levels, **safeguarding not only company costs but the environment as well.**

➤ **Don't risk being left in the dark**

Being connected, remaining in contact and always kept updated on all ongoing situations are vital to any business, above all in the power sector.

Thanks to **Movicon**, personnel can get all the information necessary, whether locally, remote or closer-at-hand with mobile system connectivity using technologies for Windows CE/Mobile and Web Client, resting assured with secure redundant architecture for mission critical situations. Full control 24/7.

➤ **Security wherever needed**

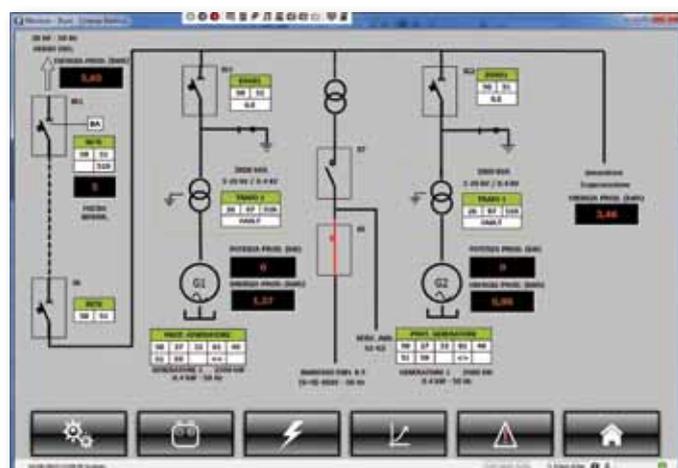
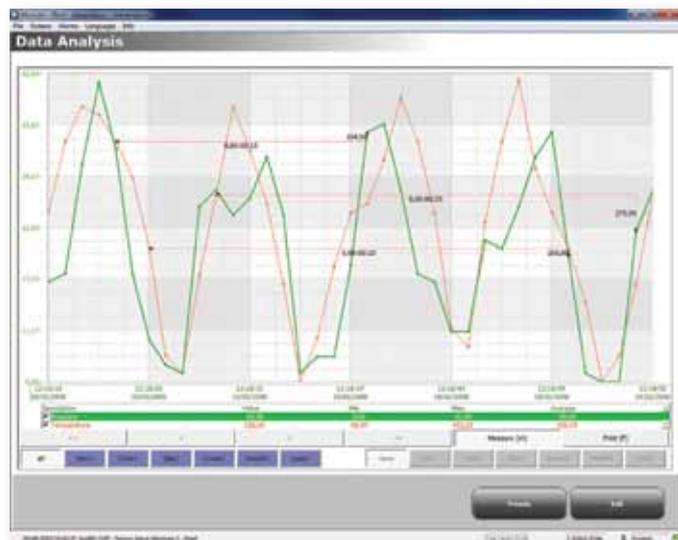
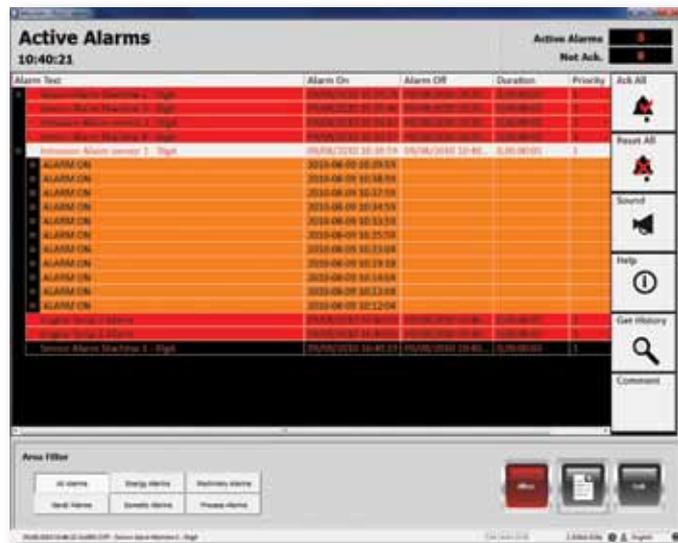
Security, Traceability, Audit Trailing are concepts that run deep in Movicon. A powerful and complete Users and User Group management consents system access with passwords ranging up to **1024 hierarchy levels and 16 access areas.** A complete LogOn management including password expiry and electronic signature is also included. The Audit Trails have been designed compliant to the FDA stipulated CFR21 Part 11 normative.

➤ **The Main Movicon features for Electric Utilities:**

Library containing an extensive range of standard drivers, including IEC 60870-101/104, SNMP, as well as DLMS and IEC61850 (in final preparation stages). All these drivers are native to and integrated in Movicon to guarantee simplicity-of-use, performances and security complete with diagnostics facilities, local and remote connectivity managements. "Data quality" management provided along with complete support to OPC DA and XML, Client and Server.

Powerful vectorial graphics: object-oriented configuring with graphic libraries containing expandable electrical symbol categories.

Graphics editor consents powerful animation functions, import-export, supports bitmap and vectorial formats, zoom, multi-monitor plus a vast variety of other graphics functions obtainable within a few mouse clicks.



Movicon®



The vectorial graphics are independent from screen resolutions.

Powerful and completely configurable alarm management with SMS/Voice/Email/Fax notification management, historical log in DB, PLC timestamp with millisecond support, statistical event Analysis.

Configurable Users management with maximum security levels. Audit Trail management for complete traceability of all operations performed.

Collected data logging with data file archiving on event/command/change, native and transparent support to preferred relational databases such as Ms SQL Server™, Oracle™, MySQL© safe and efficient

Automatic redundancy management (Hot-backup) for fault-tolerant and mission critical systems.

Powerful and open Report Management. Inbuilt Report Designer including Crystal Report™ Report Engine integration for creating sophisticated reports based on statistical analysis, downtime analysis, energy efficiency, consumptions, productions. Reports are accessible over the web

Powerful Trends for dynamically and historically visualizing trend curves. Data Analysis for advanced analyzing functions based on Trends.

Event Notification to personnel, Event Scheduling for maintenance interventions, statistical variable information.

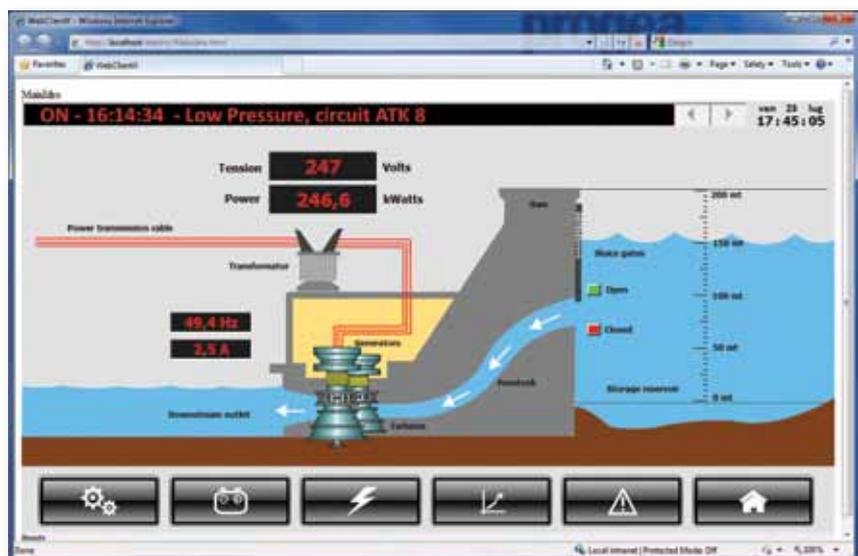
Client/server Architecture for centralized or distributed solutions

Inbuilt IEC1131 SoftLogic (optional).

Modem Connectivity for remote connections (point-to-point serial or RAS).

Builtin VBA languages, multithreading, IL Language, XML-based projects, complete openness to third party software integration (ActiveX, OXC, DLL, .EXE).

Builtin Web Architecture, true Thin Client based on Java applet and midlet





Flexible, open and standard software technology for energy management.

All the Movicon 11 Scada platform technology and reliability is at the full disposal of all those operating in the Energy Production, Management and Distribution sectors. Simple but powerful and open, based on cutting edge technologies, Movicon is the best solution for any supervision project, from simple auto-production stations to the more complex or conventional power plants or BT/MT power distribution substations.



Progea is a leading company in Scada/HMI software solutions.

In operation in the software sector for automation since 1990, Progea now boasts innovation-oriented technology beyond the cutting-edge, with a young highly motivated team and steady growth in the international automation market.

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