



Integrated supervision for smart buildings



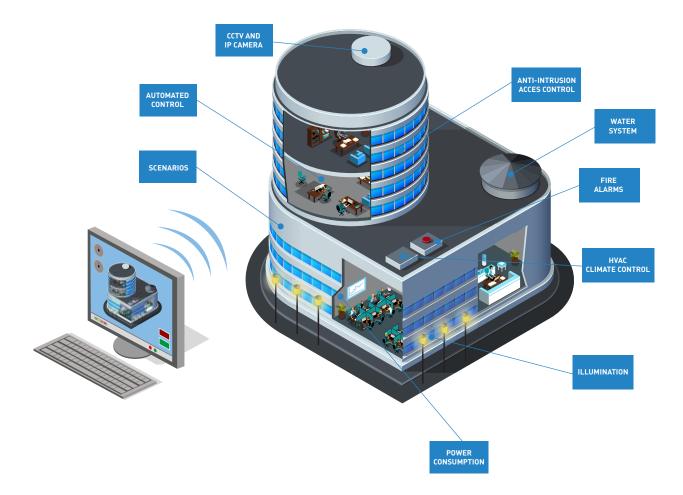
## Modern Supervision for Smart Buildings

## SCADA software is technology for Building Automation.

Since 1990, Progea has been committed to creating powerful and innovative automation software. Based on their extensive experience, and employing the most innovative technological solutions, the Progea team are experts in Scada/HMI solutions applicable to all sectors of civil and industrial automation.

Movicon™ BA is Progea's Scada/HMI solution designed for Building Automation for simplicity of use with correlated support services and documentation. Dedicated to the developer community, the Progea customer support and assistance website is packed with useful tips and examples, leaving little or no need to contact the Customer Support Center directly for help.

The Progea Training, Support, and Consulting services help users become familiar with functions and face every emergency with the best solutions. This will reduce installation and internal development costs.







## Integrated Building Systems Management

Movicon<sup>™</sup> BA software will empower your building supervision activities with greater openness and scalability than any other software.

### **Building Automation**

Movicon™ BA is Progea's supervision solution for intelligent buildings. Progea are leading experts in surveillance and control software systems (Scada/HMI). Movicon™ BA offers all the great advantages of 'Open' software in integrating and viewing automation systems for modern buildings, whether residential, industrial, office buildings or large community centers and housing estates. Movicon™ BA offers the advantages of the latest software technology along with flexible solutions. The extensive experience acquired through years of business success has enabled Progea to satisfy any system integration need by offering one powerful, flexible, open software for monitoring and controlling building systems.

### Open Solution

Movicon™ BA boasts full flexibility when it comes to integrating all building management systems into one single supervision project. That saves a lot of time and resources, and at the same time it improves supervision and control capabilities. This all boils down to saving you time and resources and as well as improving supervision and control capabilities. The Movicon™ BA technology is completely XML-based. With one siingle display screen you can at last manage control buses, lighting systems, heating and air conditioning systems, security systems, CCTV, power saving systems and any other device you normally use in your building management activities.

## Flexibility of Use

The Movicon™ BA flexibility will enable you to integrate your systems into any type of architecture that includes Desktop PC, Media Center, Tablet PC (Win32 or Win64), touch panel (Windows Embedded, WinCE), Palmtops, or smartphones (Windows Mobile). You can also access your system through the web using any Internet browser, smartphone, or tablet from all over the world. The unlimited viewing solutions ensure that you are in full control any time and any place.

#### True User-Friendliness

Creating supervision projects with Movicon™ BA is simple and fun. A powerful object-based editor enables you to build graphic interfaces using animated and interactive items featuring vector graphics as well as your own BMP, GIF, or JPG images. All the tools you will ever need are built-in and ready to use. Pre-configured graphic object libraries, communication drivers, alarm management, logging and control, event scheduling, trends, and charts are all within a few clicks' reach in one simple and user-friendly software environment.



## SCADA Technology Devised for Building Automation

### More Powerful

Extend beyond the restricted use of conventional supervision systems. Movicon™ BA is compatible with all the powerful functions of SCADA/HMI systems to enable significant improvement to data visualization capabilities. A powerful, object-based graphic environment is at your fingertips for easy and effective management of alarms, historical logs with DBMS (e.g., SQL Server, Oracle, MS Access), trends, scenarios, schedulers, and control logic parameters. All is packed neatly into an all-in-one powerful and simple programming environment.

### Cost Reduction

Movicon™ BA offers you the use of one unique development environment for your supervision and control systems. An all-rolled-into-one environment means that you can make substantial savings when it comes to learning, personnel training, and maintenance. Movicon™ BA licenses are both scalable and flexible with the option to upgrade to Movicon™ to contribute further towards an overall reduction in development and maintenance costs.





## Arrange and Display All Building System Data

## Movicon<sup>™</sup> BA integrates all architectural systems into one solution: one supervision center.

### Integration

Movicon™ BA offers the great advantage of being hardware-independent. This means that you can can run the same software on any PC, Touch Screen or Palmtop, connecting to all building control systems, via buses such as EIB/ Konnex, LON, BACNet, using control panels such as Notifier, Elkron and more, as well as bus systems based on Modbus RTU or TCP interface and much more. CCTV and IP Cameras can also be integrated. Another great advantage is that with Movicon™ BA you are free to use your system of choice. No other software can give you such flexibility and enable you to safeguard your investments at the same time.

## Data Sharing over the Web

Movicon™ BA offers you the advantage of exchanging data over ethernet networks as well as the OPC technology. This will enable you to integrate your supervision system with LAN systems.

## Integrated I/O Drivers

Movicon™ BA includes several built-in communication drivers, ready for connecting the most common systems and devices used in building automation, such as networks, buses, dashboards, control units or specific devices. The main drivers include import functions to reduce configuration delays and errors. Moreover, the Movicon™ BA platform fully supports OPC technology on both Client-side and Server-side.

Movicon Web Clients PC, Tablets, Smartphones Movicon Movicon Client Movicon Client Scada/HMI Movicon WinCE HMI BACNet/IP KONNEX LON :00 Modbus TCP |:00 

The flexible Movicon™ BA architecture makes it possible to arrange and integrate all sub-systems into just one supervision tool independently from the different networks and devices used. Resulting data can be transmitted to other client workstations whether PC, touch screen or mobile device as well as over the web.

## Outstanding Vector-Based Graphics and Multi-Touch Management

## Superior graphics

The main purpose of any supervision system is to visualize processes in real time. Clearer vision makes way for more efficient system management. With the advancement of technology over the last decade, users now expect to find closer-to-reality system and process visualization. Graphics therefore play greater if not crucial role ever than before because they account for most of the time engaged in project development. In this respect, Movicon™ BA is clearly ahead potentially in terms of graphics. It offers a vector-based graphic editor packed with purpose-built and customizable symbol and object libraries which come with 16 animation properties and powerful command functions. The interface is completely customizable with BMP, GIF or JPG images and the Power Template technology support. The control panel graphics are independent from screens and screen resolutions. It also supports touch and multi-touch functions as well as multi-monitor viewing.



## Powerful Alarm Management

#### Powerful Alarm, History and Statistics Management

The powerful Movicon™ BA alarm management handles events with great accuracy. It keeps users constantly and instantly aware of the system's status by providing a continuous wealth of information. This information is essential to enable prompt and effective user intervention to minimize system downtime and maximize efficiency. The Alarm Log Tool (Historical Log) automatically logs all events (Alarms, Driver-related events or System events) in the appropriate log files on ODBC (Open Database Connectivity) relational database or in .CSV, .XML or encrypted text files.

## Notification by SMS-Voice-Email-Fax

Movicon™ BA includes a powerful, integrated event and alarm notification solution. You can receive updates from Movicon™ BA directly on your mobile phone using SMS or voice notification messages when specific events (alarms or other configurable events) occur. Movicon ™ BA also has a text-to-speech feature to alert you by phone vocally. Notifications can also be sent by email with attachments or fax. The system will keep you updated on all current situations and status no matter where you are. You will find this feature indispensable for constant system control to allow you to intervene or interact by remote and over the web to remedy threatening system downtime situations in time and thus optimize costs.





## Logging, Analysis and Reporting

### Logging and Statistical Analysis

Movicon™ BA includes powerful Data Loggers that can log any event, alarm or process information (temperatures, consumption values, etc.), and save data history to Relational Database files in full automated mode. The historical log format is open by credit of the ODBC technology, and supports SQL Server, Access, Oracle and more. Logged data may be viewed in 2D and 3D Charts, Trends, Tables and Reports and over the web. Powerful tools for analytically managing events and system downtimes make it possible to get reports on the duration of total and partial downtimes. The resulting data is displayable in table, pie chart or histogram format to reveal the alarms relating to the preselected period as well as their classification by "Duration" or "Frequency". These reports can be viewed or printed upon command or whenever a specific event occurs and exported in various formats (Excel, PDF, HTML). The reports are designed to contain both concise and detailed information about every single alarm being statistically analyzed.

Power Consumption Analysis and Energy Efficiency

New technologies make it possible to manage and optimize energy resources used in buildings with the aim to improve the global environment crisis situation. Energy management efficiency is aimed at reducing emissions, consumption levels and energy waste to improve energy efficiency and reduce building running costs. The Directive EN15232, issued by the European Commission, defines Building Automation functions that when implemented have an impact on the building's energy performance. It also provides methods for evaluating various requirements entailed and the effects of Building Automation Control Systems (BACS) on a long term basis by assessing and classifying the results

obtained. Modern building project engineers can now integrate the latest technologies for improving energy efficiency by using a supervision system. Movicon™ BA is perfect for this job purposely designed as a smart system for detecting, monitoring and adapting energy consumption levels based on the building's current needs. Integrating Movicon™ BA into your the building management process will save you 5% to 30% on energy consumption according to building size. This will lead to a substantial save in energy costs, quick investment returns with a considerable lower impact on the environment with less polution thus contributing to eliminating the global greenhouse effect.

#### **Planned Maintenance**

Movicon™ BA simplifies planned maintenance with the option to activate alarms based on the statistical duration value instead of the associated variable's set value. This makes is easier to set thresholds with set-points based on the variable's total time ON. To support users further in their work, Movicon™ also includes the option to associate external files to activate HTML help files, .AVI movie files, .WAV sound files (.WAV) or BMP files.





## The Software for Integrated Building Management

#### Scheduler Management

Movicon™ BA uses purpose-built scheduler command objects that are simple and intuitive to use in calender planning. Calender configurations can be managed with various calender graphics or in table format which include holiday planning management as well.

### Video Camera Management

Movicon™ BA provides native solutions for managing images imported from IP Cameras. Images can be viewed both on local PCs and embedded systems (WinCE, PocketPC) or over the web using purposely designed display screens without the aid of additional and costly add-ons. Movicon™ BA also accepts the integration of external components such as ActiveX and third-party libraries (DLL) to ensure users get full support for the most basic to the most advanced digital video supervision systems.

#### Speech Recognition

Movicon™ BA offers a Speech Recognition facility that will enable users to interact with the control system using vocal commands as one would do in natural everyday situations. Once enabling this feature your control will automatically recognize vocal commands, request confirmation or ask for the value desired (i.e. a temperature setting). The use of vocal commands is an alternative way to evoking commands using touch screens and keyboards.

## The Benefits of Flexibility

One-only configuration environment for scalable runtime applications from Windows Server to Windows CE, or in Server, Client or Web Client architectures.

Movicon™ BA project flexibility is empowered by XML-based project designing. This means the same one project can be executed in different architectures from safe redundant server systems for "mission critical" applications down to micro-applications for touchscreen, embedded, mobile and Windows CE-based systems. Easier to manage, very cost effective and scalable. Just the one software for your every application need.







## Get Safe and Easy Access to the entire Building Using Internet

Movicon ™ BA is a software platform designed to enable system accessibility over Internet/Intranet architectures with any Internet browser or Apple iOS, Android and Blackberry.

The innovative Web Client technology of Movicon™ BA transforms your supervision tool into an access point for remote monitoring and controlling the entire building. Any operating system browser will get access to view your system for full supervision independently from the server with the option to login when remote interaction is needed. What's more no addition installation or configuration is needed with the Movicon™ BA technology to achieve this. Purpose- designed Apps have also been provided to get you system access using smartphone or tablet. Therefore by transforming your mobile device into a Web Client gives you great freedom to control and access your system no matter where you are without being restricted to stationary PC use in the office.

Building Internet-Ready with Movicon™ BA simplicity is designed to make your life easier.



# Movicon™ BA is much more than a Supervision Tool

## Multi-utility deployment:

Movicon™ BA makes it extremely easy to integrate and manage all systems of any building type whether residential or industrial. By using a PC workstation, a Touch Screen, mobile device or any web Browser you will be able to perform the following:

- Lighting Control and Management
- Comfort and Climate (heating, air conditioning, HVAC) Control and Management
- Technical Systems Control and Management (motors, valves, services)
- Water System Control and Management (lift pumps, irrigation, etc.)
- Comfort Management based on saved environment settings and configurations
- Data and Alarm Management deriving from Anti-Intrusion System or Access Control
- Data acquisition and management from Fire Alarm Systems
- Power consumption monitoring with optional circuit breaker switch functions
- Weather reports and window shutters and blinds, window, shed and roof top window control etc.
- Power Consumption Control and Management (water, lighting, air conditioning and heating)
- Statistical analysis
- CCTV and IP Camera video feedback acquisition and management
- Web-enabled IP Camera interface management
- Emergency lighting Control and Management
- Alternative energy systems management such as photovoltaic or cogeneration systems













## **Key features:**

Movicon™ BA is a fully integrated software platform offering an all-in-one monitoring and control system for all your building facilities with project editing and runtime functions.

- One development environment for XML projects executable in both Win32/64 and WinCE
- Real-time data acquisition from the most widely used Building Automation systems
- Powerful, unrivalled graphic rendering, including vector-based editor, toolbox and complete and customizable graphic libraries; full support for the most widely used graphic formats.
- Alarm and Event Management and Logging from all integrated systems, including Voice/ SMS/Email/Fax notification
- Guaranteed access security: Users, Passwords and Audit Trail
- Redundancy Management (Hot backup)
- Integrated Networking with Client/Server architectures, also on Wireless-based and Mobile-based systems
- Monitoring and Control over the Internet via Browser, Tablet or Smartphone
- Object-oriented Scenario Management with wizards
- Data Logger featuring DBMS history logs (Relational Database, e.g. SQL Server, Oracle)
- Powerful Historical and Dynamic Trends, 2D and 3D charts
- Integrated VBA and VB.Net logic
- IEC 61131-3 SoftLogic PLC for I/O control solutions

- Event Objects
- Dynamic Scheduler Objects with holiday management
- Native drivers for bus systems and Building devices
- OPC Client and Server
- Web Client Technology
- Local and remote debugger
- IP Camera and CCTV support (native)
- Vocal Commands
- Touch and Multi-touch Management







For further information www.progea.com



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