TopKapi

SCADA SOFTWARE

Process Control & Monitoring















Who we are

AREAL is the editor of the TOPKAPI SCADA software package, which is used to monitor and control automated processes.

AREAL is deeply committed to improving the services delivered by its software to its customers, and pays special attention to:

- → Dedication to Innovation, Research and Development
- → Reliability of products
- → Ease of implementation
- Backward and forward compatibility to enable users to develop their applications over time and ensure their sustainability
- → Quality of technical support, to deliver fast and efficient answers to users

AREAL collaborates with many PLC and telemetry units manufacturers to improve product interoperability, and is a member of the OPC Foundation, which aims to promote interoperability by creating and maintaining open standards.

Know-how and durability

- → More than 25 years of innovation
- → Tens of thousands of licenses are in use in more than 80 countries
- → A team of professionals entirely dedicated to SCADA software
- → Extensive network of integrators and distribution partners
- → Top backward compatibility with previous versions



TOPKAPI SCADA

TOPKAPI provides all the usual functions of SCADA software systems:

- Communication with field devices (via dozens of direct protocol drivers or third party OPC servers)
- Calculation and data formatting
- Data logging
- Display with graphic editor (mimics)
- Alarms and events management
- Remote control with any kind of workstation (client/ server architecture)

But also...

Service / Technical Support

AREAL pays particular attention to the quality of the technical support in order to deliver fast and efficient answers to all TOPKAPI users.

The support team is made up of experienced specialists who are able to solve more than 90% of the submitted problems within 24 hours (working hours) and, in more than 99% of cases, at least propose alternative solutions within 48 hours.

Business sectors

The TOPKAPI solution is used in all areas of activity involving SCADA systems:

- Industry: Manufacturing, Process, Food and Beverage, etc.
- Environment: Water, Waste, etc.
- Energy: production and distribution
- Buildings: BMS, HVAC, fire detection, intrusion, etc.
- Infrastructures & Transports

TOPKAPI is a must-have for all applications involving remote controllers or telemetry units with periodic communication sessions.

WHY CHOOSE TOPKAPI?

- Proven and trusted solution
- Scalable, open and manufacturer-independent solution
- Fully integrated solution that does not require third-party add-ons
- Your know-how is leveraged by object-oriented parameterization
- Multilingual product
- Easy to use solution: flexible configuration without computer programming
- Processing power
- Free development tool
- Highly skilled, responsive and multilingual technical support



SCADA SOFTWARE FOR PROCESS

→ OPENNESS - INTEROPERABILITY

Companies must implement interoperable applications within their Information System to improve their competitiveness and performance.

TOPKAPI offers numerous possibilities to share information with any type of applications or hardware to which it may be associated. Bespoke applications, commercial software packages (CMMS, GIS, MES, ERP, data validation, etc.), connected field devices will all find a solution to exchange data with TOPKAPI (Web Services, OPC, DBMS, etc. please contact us in doubt).

→ REPORTS - PROCESS SUMMARIES

Transforming the ever-increasing amount of raw data into intelligible information for the user is one of the major challenges of today and tomorrow.

TOPKAPI reports module meets this need: it analyses historical information to synthesize key performance and diagnosis indicators, for an efficient and responsive control of industrial processes. Its ease of use makes it an indispensable tool for TOPKAPI applications, enabling on-the-fly calculation of custom indicators and time-delayed reporting.

→ DBMS CONNECTIVITY - HISTORIAN

TOPKAPI provides an SQL connector (subject to product version) to meet the growing needs for openness and interoperability; it can be used with most database management systems (DBMS) on the market.

It allows TOPKAPI historical data to be stored in an open format and to be accessed by other software applications.

→ AUTO-CONFIGURATION

TOPKAPI uses a setup assistant called SOFTLINK to ease and speed up the implementation, maintenance and commissioning of SCADA applications. SOFTLINK, in combination with structured object programming, makes it very easy to automate the generation of TOPKAPI applications (database, mimics, etc.) by importing data from external sources.

Benefits: increased productivity and lower TCO (total cost of ownership).



→ OBJECT CONFIGURATION

The use of custom automation objects eases implementation and maintenance; it cuts parameters settings, testing and commissioning times when applications monitor many similar devices.

For this purpose, TOPKAPI contains an object editor that allows you to create and manage a library of graphical objects for mimics design, and to structure the database using data object templates (structured objects). Instantiation, object inheritance and composition are the essential elements of this editor.

→ GRAPH TRENDS

Accessing real-time and historical data to analyze the process and identify unexpected behaviours is very simple with the TOPKAPI trending module.

As independent objects incorporated in the graphic displays, the graph trends can be moved, enlarged, and displayed as icons. They offer extensive control resources (zoom, cursor, comparison, etc.) which make their handling particularly ergonomic and user friendly. Any layout order can be performed in operating mode, allowing operators to view, print or extract data on-the-fly in the expected format.

CONTROL AND MONITORING

→ REMOTE ALARM NOTIFICATION

In the absence of a local operator, this built-in module allows to securely notify alarms to remote operators. It allows an easier and faster implementation than with an external add-on, and offers the following functions:

- Fault acknowledgement with password control
- Periods and day types with immediate, delayed or suspended faults
- On Call groups schedule, replacements, derogations
- Traceability and simplicity of configuration and maintenance
- Various transmission media: SMS, Text-To-Speech, email, fax, etc.

→ RECIPES

This built-in module allows you to manage recipes and their subsets without scripts programming. It processes in a coordinated manner the groups of manufacturing parameters and controls:

- Enter and save the recipe parameters
- Define the procedures and phases execution sequences
- Send parameters to the controllers
- Audit trail
- Batch processing



→ TELEMETRY - TIME-STAMP MANAGEMENT

TOPKAPI uses a special module to connect to remote devices through non-permanent links (PSTN, GSM data, GPRS,...) and to incorporate in its history information events and graph trend samples that have been time-stamped by these remote devices (PLCs, RTUs, Data loggers, etc.), or by third party applications. No specific settings are required. The processing is seamless, as if the data were acquired in real time, thanks to a large set of built-in protocol drivers complying with each manufacturer specification.

→ GIS - GEOSCADA

TOPKAPI provides in all its versions the support of WMS (Web Map Service) functions complying with the standard published by the OGC, Open Geospatial Consortium, to meet the needs related to the growing use of Geographic Information Systems (GIS).

The technical information acquired by the SCADA software can therefore be combined with up to date cartographic information. Extended zoom functions, panning and decluttering enhance data display for an optimal user experience.

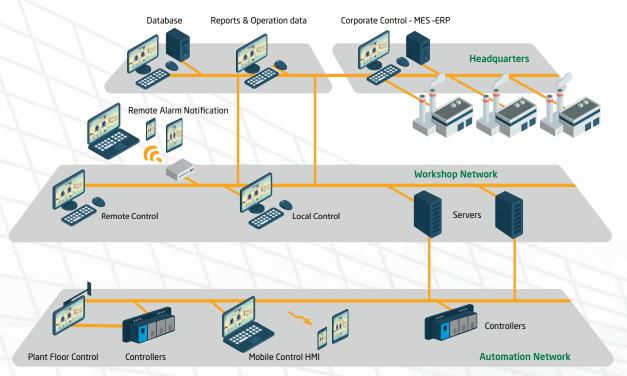
ARCHITECTURES

Providing the right information to the right person, on the right device, and at the right time

- → Modular offer: a solution for every need
- → Cybersecurity at the highest level
- → Easy deployment
- Easy maintenance

- → Flexible architecture
- → Local or remote operation
- → Perfect integration within the corporate information system





→ CLIENT/SERVER

- True application client/server solution, not limited to elementary data exchange
- The data is unique and supplied to all workstations by the server that performs acquisition
- Any modification on the application is automatically distributed to all workstations regardless of the technology used
- Client deployment in a few mouse clicks
- Designed to operate under harsh environments, such as low bandwidth networks
- 100% TCPIP: easy integration within the company's information system

→ THE CHOICE OF TECHNOLOGY ACCORDING TO YOUR EXPECTATIONS

- Web thin client without specific setup
- RDP thin Client
- Full fat client with optimal response time

→ HOT BACKUP AND SHARED PROCESSING

- Automatic hot switchover of acquisition and data processing
- A unique application with runtime processing shared over two or more servers
- Easy configuration of redundancy parameters and application broadcast
- Data uniqueness (internal values, remote controls, acknowledgements, etc.)
- Background synchronization of historical data

→ WEB CLIENT

- Full HTML5 Web server for easy access with thin clients
- No initial setup and no maintenance required on the client workstations. Extremely easy deployment.
- Ready to use with Tablets and Smartphones. Compliance with any HTML5 browser
- Specific HMI controls for touch screens
- Fast and safe. Highly secured connection. No RDP technology involved
- The applications formerly developed for conventional PC control stations can be used on web clients without any reworking

→ SAFETY

We need to provide secure systems while keeping easy access to information.

This is done by:

- Authentication and integrity check of execution programs
- Client/Server encrypted communication
- Web Server / TOPKAPI server encrypted communication
- DMZ location of the web server when needed
- Traceability of remote connections

AREAL is an active member of the French government's ANSSIled working group on SCADA systems safety. Our current and future implementation takes into account the ANSSI recommendations.



+ HARDWARE AND OPERATING SYSTEM

- TOPKAPI runs under Windows environment on a PC standard hardware configuration.
- TOPKAPI runs under virtual environments such as VMware or Microsoft Hyper-V.
- More information is available at : http://www.topkapi-scada.com/en/technical-specifications

→ DEVELOPMENT TOOLS

The development tools are provided as part of any TOPKAPI server license and may be duplicated. They can be used concurrently on several machines without additional license fees.

+ ACQUISITION

Most of the controllers or RTUs available on the market can be connected to TOPKAPI with its native protocol drivers or via third party OPC servers. Communication media include Ethernet, TCP-IP, GPRS-3G-4G, serial links RS232-422-485, radio, PSTN or GSM via modem, SMS, FTP servers, etc.

AREAL is an active member of the OPC Foundation, and TOPKAPI can be provided with an OPC client and/or server driver depending on the options ordered.

+ DEVELOPMENT

- Dynamic switchover of software language
- Total upward compatibility
- JavaScript available to customize HMI

THEY TRUST US

Tens of thousands of people around the globe, working hard for worldwide to small companies, use TOPKAPI daily to operate their facilities more efficiently, and trust AREAL to help them carry out their mission without discontinuing.



















Barcelona, Rome, Luxembourg, Zurich, Buenos Aires, Santiago de Chile, Sydney, Casablanca, Algiers, Abidjan, Dakar, Tunis, Jeddah, Amman, Jakarta, Kuala Lumpur, Paris, Bordeaux, Lille, Lyon, Marseille,...









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