

DATASHEET

# AVEVA™ Plant SCADA

# formerly Citect SCADA

Flexible, high-performance SCADA software for plant personnel, AVEVA Plant SCADA offers superior operational context and built-in functionalities to help consolidate, simplify, and optimize control. It empowers operators of industrial processes to streamline their operations for efficiency, reliability, and safety.

# Empowering operators on the plant floor

With intuitive configuration tools and powerful engineering features, AVEVA Plant SCADA helps consolidate and streamline control from an increasing array of data sources. This enables the creation of a visually informative supervisory application that maintains operator focus, reducing human error and revealing opportunities for performance improvement.

Plant SCADA's robust capabilities allow a holistic view of operations, empowering teams to not only optimize the now, but also look to the future in the design and acceleration of operations control. Seamlessly weave visualization, alarming, trends, interlocks, and control together for superior operational context. Through improved supervisory control and more effective integration and mobility capabilities, organizations can harness process data to increase productivity and support digital transformations.

## At-a-glance

- Improve production efficiency and streamline the operator experience toward facilitating timely decision making and reduced risk of downtime.
- Increase operator awareness with navigation zone and alarm indicators, saving valuable time in diagnosing process anomalies.
- Align with Abnormal Situation Management industry best practice guidelines.
- Simplify engineering with a host of contextual improvements that enhance project design and management, reducing total cost of ownership.
- Bring mobility to the plant floor via browser-based visualization.
- Extend operational value with native integration into our AVEVA industrial software portfolio.







## Increase operator awareness

Plant SCADA helps reduce the noise of information overload by providing context-aware supervisory applications to guide users to the point of immediate action. New and experienced operators alike can benefit from this guidance, while also taking advantage of Plant SCADA's consistent response path across departments and operational areas.

Situational awareness techniques like grey-scale coloring and simplistic animation reduce the complexity and reaction time for all users. Intuitive interface design options like menu-driven navigations highlight alarm counts and severity based on current selections. Equipment hierarchies linking interface components that align to the actual process flow promote easy drill-down and drill-up discovery.

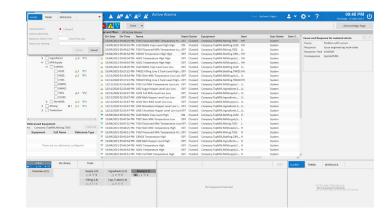
The combination of real-time data, alarm details, historical trending, and associated information in a single interface minimizes the risk of incorrect decisions and leads to quicker resolution of issues.

### Utilize advanced alarm management

Alarming is a key aspect of operations control that requires effective implementation to ensure that plant personnel do not miss critically important events. Plant SCADA employs a sophisticated approach to alarm management that utilizes shapes, colors, and numbers to quickly convey alarm status. It applies this style standard across an application's components, which can also contain configuration for borders, textures, and visibility constraints around alarming objects.

Plant SCADA's alarming techniques go beyond styling to include the ability to configure acknowledgment, cause, and responses, filter and sorting options, reason statements, and alarm shelving.

This flexibility establishes a solid base from which to create powerful operations control applications for monitoring any industrial process.





# Benefit from simplified engineering

AVEVA Plant SCADA makes engineering an application that perfectly meets your needs as simple as possible. It also offers already a wide and powerful set of capabilities that have been refined over the years to fulfill the demands of industrial operations all over the world.

# Object-based overlay on a tag-based database

This sophisticated object configuration combines with the simple creation and editing of a tag database. Together, they offer a significant amount of flexibility for templatizing design elements.

### **Broad graphics library**

Plant SCADA includes a wide selection of configurable and reusable out-of-the-box vector-based symbols and imagery with animations. This significantly reduces the time needed for building graphical elements while giving the flexibility to customize them to suit unique needs. The library includes a dedicated set of graphics that follow industry best practices for situational awareness.

### Alarm management

The instant visual alarm summary, with an immediate focus on abnormal situations, shows the highest priority alarm for a piece of equipment. Alarm indicators quickly draw operators' attention and help locate the source of anomalies and associated severity. Define up to eight cause(s), response(s), and consequence(s) for alarms to give operators the information they need to deal with abnormal situations.

#### Context-aware template

Layout template that provides a new way to assemble SCADA visualization to emphasize context. This equipment-driven interface provides operators with real-time, holistic situational context to help improve efficiency and facilitate timely corrective action.

### Connectivity library

The library supports communication with over 150 native protocol drivers that you can configure with different parameters. It enables connectivity with a vast selection of production devices across many communication types including OPC UA, BACNET, IEC61850, MODBUS, DNP3, IEC60870.

#### Centralized client-server architecture

Plant SCADA can handle any unique operating environment with a wide array of architecture capabilities including clustering, with redundancy and separated processing of tasks for high flexibility. Secure centralized deployment makes server management simple with controlled transfer of project changes to servers & clients as well as delta-only deployment.

### Comprehensive programming language

Cicode is a powerful and easy-to-use scripting language praised for its extraordinary flexibility, agility and performance. Unique to Plant SCADA, Cicode is a programming language with over 1,000 built-in functions purposely written for industrial environments.

### Multi-language support

Plant SCADA supports Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, and Spanish.

### Deep integration with Schneider Electric

Plant SCADA offers native integration with Schneider Electric software and hardware solutions, including PLCs, PACs, power and energy meters, and EcoStruxure Control Expert (Unity Pro).

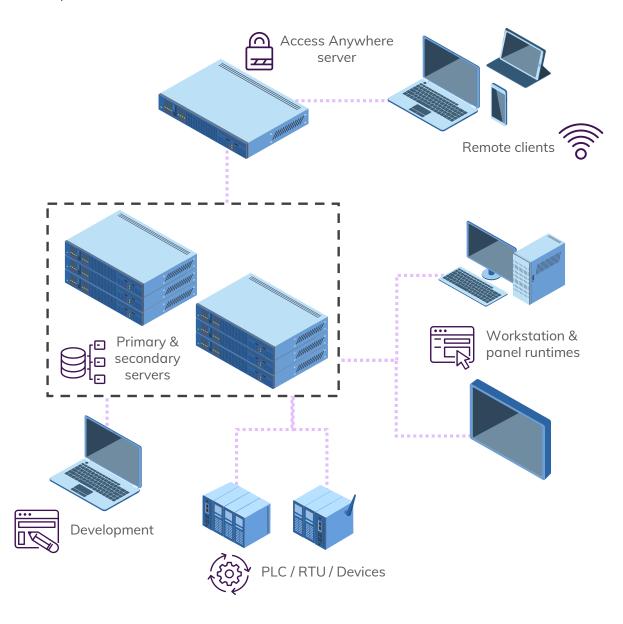


# Flexibly deploy anywhere

AVEVA Plant SCADA is highly flexible. You can deploy it in any configuration to meet the unique requirements found across industrial environments. Designed from the start for client-server architectures, Plant SCADA is a distributed system that ensures high performance control and data integrity.

Plant SCADA has five fundamental tasks which handle communications with I/O devices; monitoring of alarm conditions; report data output; trending and visual display. Each task works as a distinct client and/or server module, performing its own role and interfacing with the other tasks through the client-server relationship.

Each of these tasks is independent, performing its own processing. Due to this approach, users have control over which nodes in the system perform which tasks. For example, you can nominate one node to perform the display and trending tasks, while a second node performs alarming, communications, and reporting. This provides benefits in redundancy, where Plant SCADA will tolerate failure anywhere in the system with no loss of functionality, or performance.



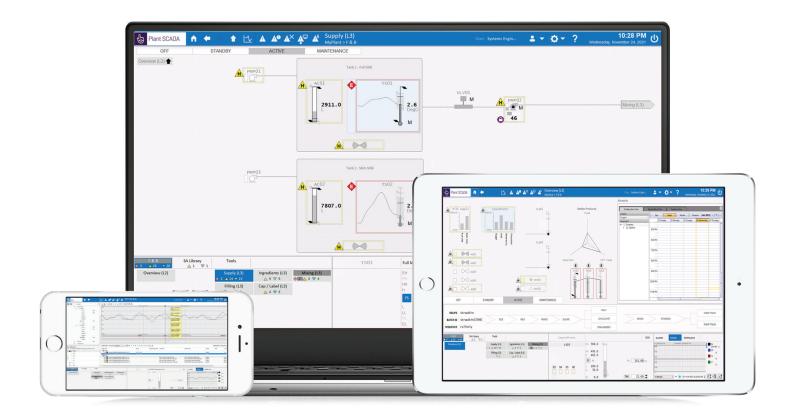
# Clients & accessibility

Empower users with three options that enable visualization, collaboration, and execution regardless of where they are or what type of screen configuration. Users can securely monitor, control, and troubleshoot plant equipment or processes from any location, on any device, at any time.

AVEVA Plant SCADA desktop client – full-featured desktop application for panel-based and control roombased workstations. This is the traditional SCADA experience for stationary operations users.

AVEVA Plant SCADA web client – brings industrial graphics to your casual and mobile users. This read/write visualization provides a simple means for production or process status monitoring, KPI access, and operational dashboards.

AVEVA Plant SCADA Access Anywhere – offers remote or mobile users read/write secure access to a complete Plant SCADA application with any HTML5-compliant web browser on any device.



# Extend across AVEVA's software portfolio

Benefit from holistic operations control through unparalleled flexibility and convenience with AVEVA's market-leading HMI & supervisory visualization, collaboration, manufacturing execution, and analytics software. The portfolio empowers teams with a complete set of capabilities to help improve operational excellence from edge to enterprise.



**AVEVA™ Historian:** Al-infused SaaS application to visualize and optimize operations using predictive asset and process analytics



**AVEVA**<sup>™</sup> **Insight**: Process database integrated with operations control enabling access to your process, alarm, and event history data



 $AVEVA^{\text{TM}}$  Teamwork: SaaS application for skills, development, knowledge sharing, and collaboration management across facilities and teams

### **AVEVA Plant SCADA**

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AVEVA Historian: A natural pairing to capture and store process, alarm and event history data for detailed analysis and troubleshooting.

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AVEVA Insight: Bring Alinfused process analytics in the cloud to both on-site and offsite workers with the ability to visualize data in multiple charts and dashboard displays. AVEVA Teamwork: Retain worker knowledge and foster digital collaboration to develop skills and document procedures and best practices for use by new and experienced teams.

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For more information on AVEVA Plant SCADA, please visit: aveva.com/en/products/plant-scada

