



AVEVA™

PRODUCT DATASHEET

AVEVA™ System Platform, formerly Wonderware

Real-time Operations Management Platform for Supervisory Control,
SCADA and IIoT

- Platform & Vendor agnostic software works with any PLC, RTU, PAC including IT applications
- World's only responsive OMI client is data driven, context-aware
- Most comprehensive automation object library, graphics library, UI/UX runtime framework
- Runtime applications are dynamically built
- Unique centralized deployment
- Remote Web Access – Zero Installation & no Java JRE
- Unlimited Scalability – unlimited IO, unlimited clients
- Most secure industrial platform with node to node TLS encryption



Overview

Business Value

- AVEVA System Platform is even more versatile and powerful with the first ever responsive, Operations Management Interface (OMI). InTouch OMI visualization provides modern user experiences across all platforms without requiring scripting or programming!
- Easy to use, responsive design features enable multi-monitor configurations possible in less than 5 minutes.
- We've also greatly improved scalability. You can now run up to 10 times more client sessions on a terminal server with the entire application project running on a single node.
- Experience as much as 80% reduction in engineering effort to create applications due to ease of use, elimination of scripting and out of box content.
- Identify and resolve abnormal situations 5 times faster due increase situational awareness.
- Increase your operator effectiveness by 40% or more reducing task completion time.

What's New?

.NET Controls for InTouch OMI

InTouch OMI now lets you easily import, configure, and use .NET controls in InTouch OMI. These controls behave just like OMI Apps, and can be placed directly in a pane of an OMI layout.

Scripting Support for InTouch OMI

Layout scripting lets you customize run-time behaviors enhancing user experience. Scripts can interact with all the content in the layout including: Graphics, Apps & Controls. Scripts can leverage exposed properties, events and methods. Support for common graphic centric Quickscripts like ShowContent(), SetCustomPropertyValue is provided.

Performance Improvements

Performance improvement in development check- in time include:

- Propagation changes to templates and creating instances have been shortened

- Deployment times for InTouch ViewApp instances have been reduced
- Object Wizard and Symbol Wizard performance has been optimized
- The startup time for the Galaxy Repository process has been improved

Responsive Layouts for InTouch OMI

The Layout Editor has a new option for creating responsive layouts for different form factors. This allows InTouch OMI to dynamically display and resize content in response to the screen size on which it is being viewed.

Support for OPC UA Server for real-time data

AVEVA System Platform now includes OPC UA server functionality. This lets you browse the namespace in a deployed galaxy, and connect, subscribe, and retrieve galaxy data, without the need for a gateway or other protocol translation mechanism.

Credential Management for InTouch OMI ViewApps

InTouch OMI ViewApps can use security credentials to gain access to third-party data (e.g. GIS map, PDFs) where credentials are not defined. For example, opening secure PDF files based on Operator role.

Easy to Build

Responsive HMI Development Has Come to Industrial Software

AVEVA System Platform includes InTouch OMI, the world's first 'responsive visualization framework.'

- Helps you easily create the optimal user experience across multiple form factor display devices.
- Helps you to easily create graphics that look and work great on all your devices from big screen monitors to smart-phone displays.
- Configure once, deploy anywhere. Reusable HMI content translates to the lowest development and maintenance costs.

Applications Automatically Build Themselves Dynamically!

By using new model-driven smart navigation capabilities, multi-monitor configurations and screen profiles, you can use your project's plant model and content to automatically link graphics to objects.

- Automatic, model-driven navigation eliminates the need for you to build the navigation hierarchy.
- Generate Supervisory structures and tags that automatically mirror your PLC control logic.
- Link and map HMI/SCADA tags to physical device IO automatically.

Engineers Can Be Wizards

Object and Symbol Wizards greatly simplify how you design, build and manage industrial applications.

- Object wizards create versatile templates that adapt based on a device's configuration during the commissioning stage. This drastically reduces the number of templates required to accommodate different configurations for the same device.
- Symbol Wizards help to standardize how you configure symbols while minimizing application assembly. Symbol Wizards enable engineers to choose custom configuration options like graphical elements, scripts or custom properties, and automatically assemble them into a single composite symbol.

Most Comprehensive Out-of-The-Box Content

Leveraging pre-built application content, you can save time, reduce development costs, and reduce to time to value compared to custom configurations.

- Pre-built Automation Library that includes: a process device object library, faceplates, trends and symbols. All library content is hardware agnostic and operates seamlessly with any vendor. This enables DCS functionality for any PLC, PAC and DCS without the cost or complexity of a DCS.
- Automation library lets engineers get to work immediately and quickly assemble applications with proven strategies, rich functionality and known performance.

Collaborative Cloud-based Development

AVEVA System Platform with InTouch OMI continues to be the most sophisticated and collaborative application development environment in the industry.

- The entire application design and testing environment can reside in the cloud, to enable teams of engineers to work on applications across proof-of-concept, development and FAT testing stages before deploying to the production system.
- OMI configuration supports concurrent development by enabling multiple developers to work concurrently and remotely on the same application at the same time - without any lock-out issues.
- The device simulator, HMI live preview and WYSIWYG editors offer the ability to build, test and optimize any monitor configuration or HMI content to perform on every display screen, regardless of resolution—the first time, every time! You can even test multi-monitor configurations without physical access to the monitors themselves.

Easy to Use

Empower Operators with Situational Awareness

Equip your Operators with actionable information that helps them quickly identify and resolve abnormal situations before they result in process delays.

- Operators can quickly navigate HMI displays with modern UI/UX design. This increases usability across devices and provides multi-touch and gesture controls such as panning & zooming, clutter & declutter of graphical layers and a larger view of the process.
- Uncover new insights and operator training opportunities by giving context to historical activity and access to operational process playback views. The historical playback functionality works on any graphic and on any monitor screen—no scripts or configuration necessary. Just hit play.
- Making decisions based on geography is basic to human thinking. The Map OMI App enables operators to become more aware of remote geographically distributed assets.

- Auto-navigation uses your plant model or custom criteria to bring rich context to your assets.
- Shifting between process-centric views and IT processes used to require multiple applications. Now, with contextualised apps built on a unified integrated platform, you can access non-traditional information sources (e.g. work orders) without shifting application contexts.
- Statistical summary process data (e.g. maximum, minimum, average, etc.) is automatically calculated in real-time without any coding.
- Increased system performance enables you to process 1 year of historical data in less than a second, giving you immediate access to client performance trends.

Graphical Workflow for Techs!

Visual build functionalities improve accessibility for non-engineering users (P&ID techs, maintenance techs, HMI developers) by reducing the technical knowledge required for routine tasks like adding devices, replacing devices and editing their respective HMI screens.

- Defining process control objects independently compared to how they're presented during implementation, paves the way for task-oriented workflows that are optimised for differing skill sets.
- The graphical workflow auto-deploys object instances when creating new HMI displays.
- The graphical toolbox enables rapid graphics assembly and editing using a searchable pick list, to streamline the HMI build process.

Intelligent Alarming Supports Operator Productivity

Now it's easier for operators to focus on the most relevant process information on their screen at all times. System Platform reduces operator distractions and fatigue by identifying and allowing you to filter out nuisance and 'bad actor' alarms based on severity.

- Increase operator productivity with advanced alarm management capabilities like state-based alarming, alarm suppression, alarm shelving, alarm grouping and aggregation (active and historical) alarms.
- Operator alarm awareness has increased due to capability of having active alarm aggregation from the user interface navigation tree.



Easy to Own

The Best of All Worlds: Hybrid, Cloud, On-Premise & IIoT

Supporting a mix of on-premise or cloud-based applications offers the most pragmatic and flexible shift to real-time control and actionable insights.

- Identify any discrepancy and root cause using advanced Historian capabilities such as automated anomaly detection.
- Access efficient reporting and analysis tools such as intuitive prebuilt charts and dashboarding or dash-boarding capabilities designed especially for business users.
- Empower Operations to control and monitor industrial and production sites anywhere, on any internet-connected device mobile displays.
- Improve decision support with cloud-based Historian that transforms information from across the enterprise into a single source of actionable information for operational, engineering and corporate business users.

Reduce the Administrative Burden on IT

AVEVA System Platform makes application delivery much easier and reduces IT administration burden due to a zero client installation approach. This greatly simplifies the lifecycle maintenance and updating of client applications (with newer revisions) across multiple PC machines.

Eliminate System Downtime

AVEVA System Platform greatly mitigates the risk of application downtime.

- Make incremental system changes in response to staged object deployments within 1 scan cycle. In other words, make continuous object updates on the fly.
- Enable continuous proactive monitoring of your system's health, performance and availability.
- Equip IT personnel to be proactive responders by implementing automatic trigger alerts in response to upset conditions.
- Manage system patches from a central location by downloading and pushing updates directly to networked machines.

Centralized web-based License Management

AVEVA System Platform enables you to efficiently monitor and administer software licenses to enforce compliance for all users. With web-based licensing activation, you can automatically discover and verify installed software at each plant facility, create detailed inventory reports of licenses, and establish compliance reports with ease. Basic license server monitoring capability through Sentinel is included with no additional licensing or cost.



Technology Compatibility Support

OS Compatibility

- Windows 10 Enterprise (x64, x86), Professional (x64, x86)
- Windows 8.1 Enterprise (x64, x86), Professional (x64, x86)
- Windows Server 2012 Data Center, Embedded
- Windows Server 2012 R2 Data Center, Embedded, Standard
- Windows Server 2016 Data Center, Standard

Database Compatibility

- SQL Server 2012 Standard Sp2 (x64, x86), Enterprise (x64, x86), Express-SSMSE
- SQL Server 2012 Standard SP2 (x64, x86), Enterprise (x64, x86), Express-SSMSE (x64, x86) SP1 and SP2
- SQL Server 2014 Standard (x64, x86), Enterprise (x64, x86), Express-SSMSE (x64, x86)

- SQL Server 2014 Standard (x64, x86), Enterprise (x64, x86), Express-SSMSE (x64, x86) SP1
- SQL Server 2016 Standard, Enterprise, Express

Virtualisation Compatibility

- Microsoft Hyper-V: based on the version of Windows
- VMware 6.0 virtualisation with High Availability and Disaster Recovery (HA/DR)
- VMWare vSphere 6.0
- VMware 5.0 Update 1 virtualisation with High Availability and Disaster Recovery (HA/DR)

For more information on AVEVA System Platform, please visit: sw.aveva.com/monitor-and-control/hmi-supervisory-and-control/system-platform