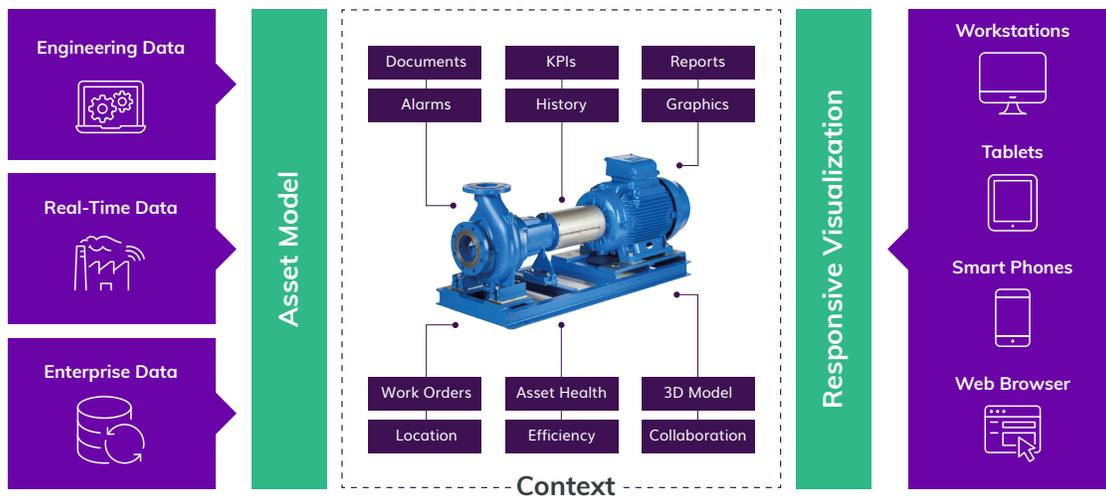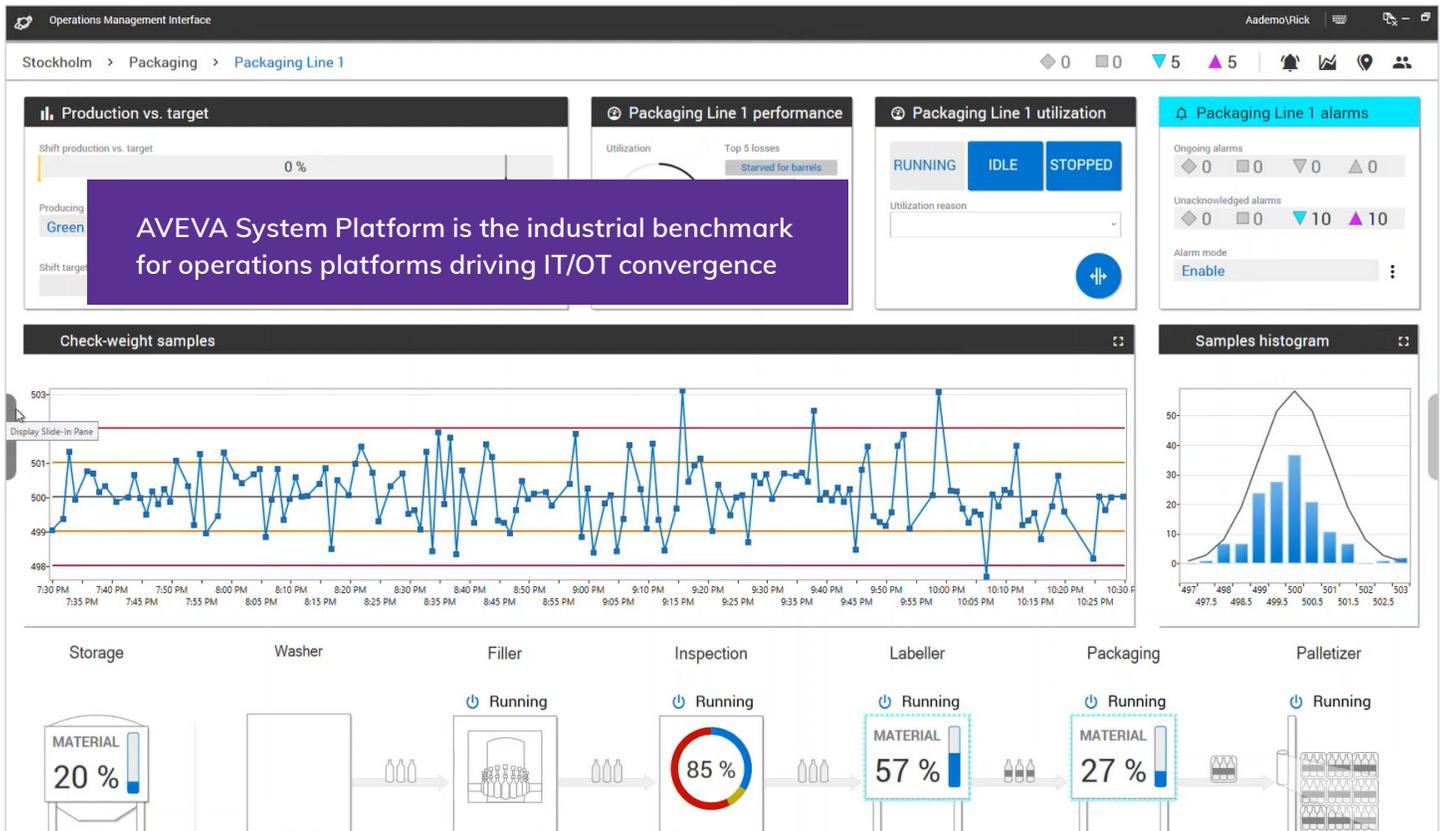# AVEVA™ System Platform

formerly Wonderware

AVEVA System Platform with Operations Management Interface (OMI) is the world's only responsive, scalable solution for supervisory, advanced SCADA, MES, and IIoT applications that contextualizes operations processes across the organization. AVEVA System Platform provides a collaborative, standards-based foundation that unifies people, processes, and assets across all facilities for continuous operational improvement and real-time decision support.

Engineering Data

Real-Time Data

Enterprise Data

Asset Model

| Documents | KPIs | Reports |
| Alarms | History | Graphics |

| Work Orders | Asset Health | 3D Model |
| Location | Efficiency | Collaboration |

Context

Responsive Visualization

Workstations

Tablets

Smart Phones

Web Browser

AVEVA System Platform is the industrial benchmark for operations platforms driving IT/OT convergence

Overview

AVEVA System Platform's Operations Management Interface (OMI) brings a responsive operations visualization framework to industrial organizations seeking an innovative new way to build rich, modern user experiences across all device formats through context-aware and reusable content. Offering powerful experiences for both engineers and operators, AVEVA System Platform provides the foundation for a truly effective performance management system that reinforces positive outcomes. Achieve up to 80% reduction in engineering effort to create applications using templates, objects, and out-of-the-box content, and expand your operator situational awareness, increasing effectiveness up to 40%, by identifying and resolving abnormal situations five times faster than traditional HMIs.

At-a-glance

- Powerful context-aware UI/UX visualization framework
- Standards-based design techniques utilizing objects and templates
- Unique centralized deployment with native redundancy
- Comprehensive automation object and graphics library
- Extend your operations platform with additional AVEVA and 3rd party software
- Hardware agnostic that works with any PLC, RTU or PAC
- Maximum device flexibility and eliminates the need for UI scripting
- Complete scalability – unlimited IO, unlimited clients
- Most secure industrial platform with node-to-node TLS encryption

Industry-leading engineering

Responsive development has arrived

Easily create the optimal user experience across multiple form factor display devices from big screen monitors to smartphones.

Create applications that last

Standardize the use of templates and change propagation to build and maintain applications sustainably and maximize reusable engineering.

Dynamically build applications

By using new smart navigation capabilities and layout configurations, you can use your plant model to automatically link content.

Engineers can be wizards

Object wizards create versatile templates that adapt based on a device's configuration. Symbol wizards standardize custom configuration options like graphical elements, scripts, or custom properties and automatically assemble them into a single composite symbol.

Collaborative cloud-based development Application design and testing can be done in the cloud or on-premise to enable teams of engineers to work concurrently and remotely on the same application at the same time.

Most comprehensive out-of-the-box content

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

WYSIWYG

Use the device simulator and preview modes to build, test, and optimize any monitor configuration or content to perform on every display screen, regardless of resolution. You can even test multi-monitor configurations without physical access to the monitors themselves.

Fluent communications for any device or system

Expand connectivity and increase the value of data by leveraging real benefits from the IIoT, big data, and cloud technologies.

- Support for OPC-UA, MQTT, DNP3, Modbus, and IEC 60870 protocols.

- Support for many PLC brands, including Schneider Electric, Allen-Bradley, GE, Siemens, Automation Direct, Bosch, Eaton, WAGO, Beckhoff, BACnet, Texas Instruments, Mitsubishi, Omron, and Opto 22.

- Auto-build capability expedites engineering efforts by reading the structure of a PLC program and automatically building templates and instances based on the PLC schema.

- Secure encrypted communications

AVEVA System Platform
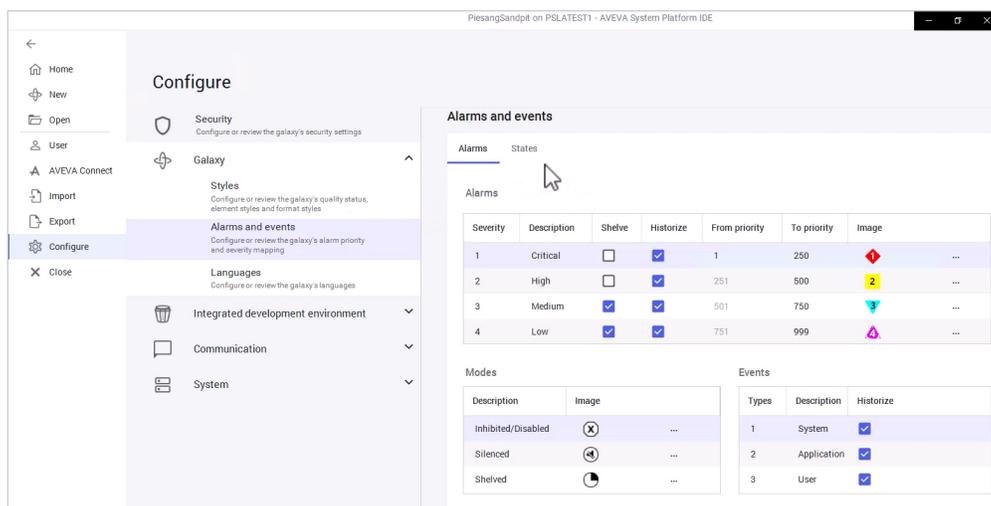
Industry-leading engineering

Empower operators with situational awareness

- Deliver immersive control applications that weave context throughout the visual design, including situational awareness concepts for improved operator performance.

- Quickly navigate displays following intuitive and modern UI/UX design techniques, pop-out slide panels, and multi-level window structures.

- Uncover new insights and training opportunities by reviewing historical activity through the historical playback capability – no scripting or configuration necessary. Just hit play.

- Apply geographical perspectives to decision- making with the Map OMI App, enabling operators to become more aware of geographically distributed assets.

- Centralize access to non-traditional information sources such as work orders and team collaboration to bring greater context to process-centric views.

- Increase usability across devices with multi-touch and gesture controls such as panning, zooming, and declutter mechanisms.

- Automatically calculate statistical summary process data (i.e. maximum, minimum, average, etc.) in real-time without any coding.

- Capture the "best operator" in the system to reduce operator strain and expedite on-boarding for new operators.

Intelligent alarming supports productivity

Maximize the use of advanced alarm management capabilities like state-based alarming, alarm suppression, alarm shelving, alarm grouping, and aggregation to identify and filter out nuisance and "bad actor" alarms based on severity to maintain focus on the most relevant process information, reducing operator distractions and fatigue.

## Establish a system of record

Unlike conventional relational databases, AVEVA Historian handles time-series data, as well as alarm and event data. Unique "block technology" captures plant data hundreds of times faster than a standard database system and utilizes a fraction of conventional storage space.

Capture everything on time

Manage low bandwidth data communications, late coming information, and even data from systems with mismatched system clocks, ensuring high resolution data is captured accurately every time.

Analyze complex trends

Process one year of historical data in less than a second to facilitate troubleshooting, identify inefficiencies, and eliminate the time-consuming activity of locating data using AVEVA Historian Client's powerful trend, query, and reporting tools.

AVEVA System Platform
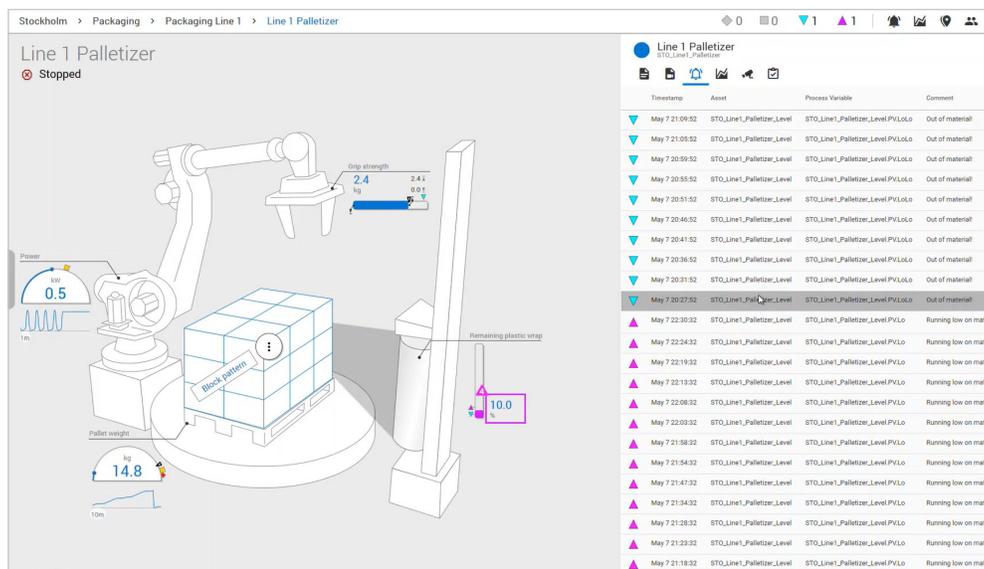
Amplifying the operations platform

Visualize more with OMI Apps

OMI Apps are extensible capability that can be incorporated into displays to provide enhanced functionality for specific use cases. The growing library of apps are available from both AVEVA and our technology partners.
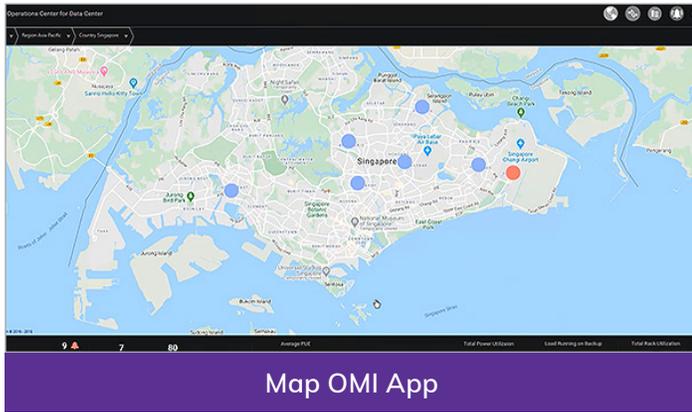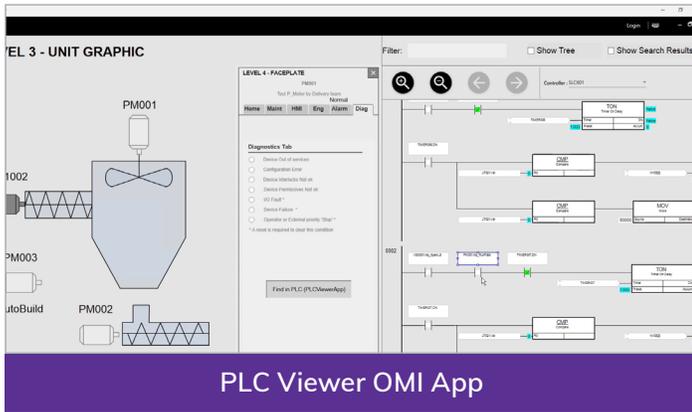

Map OMI App

Offers geographical contextual presentation which enhances the model-based navigation.
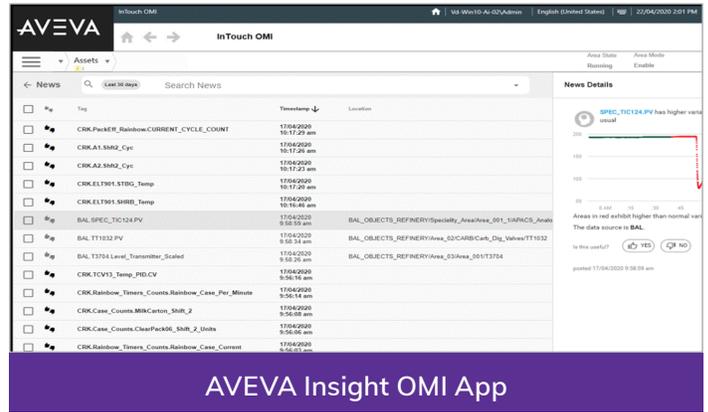
AVEVA Insight OMI App

Builds artificial intelligence into the context of real-time decision making.
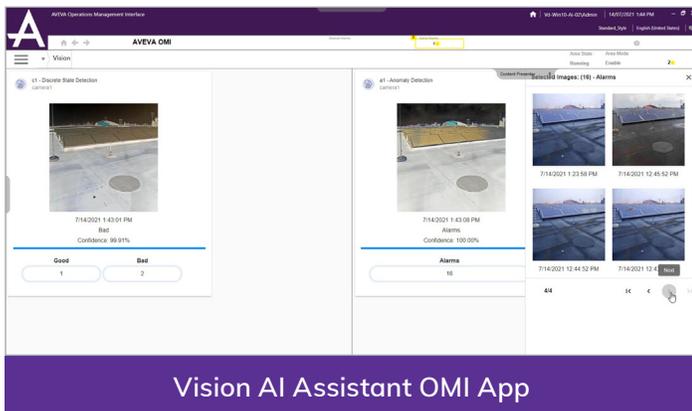

PLC Viewer OMI App

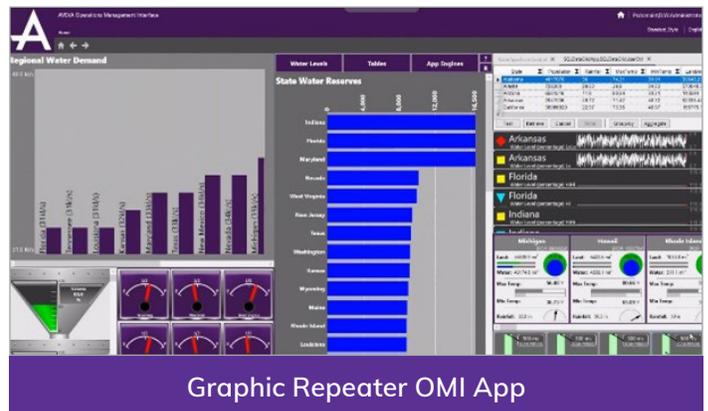Empowers operators to troubleshoot PLC logic and execution in real-time.

3D Viewer OMI App

Renders 3D models of assets contextually for alarms, alerts, and status changes.

Vision AI Assistant OMI App

Monitor real-time image streams and provide anomaly alerts and notifications to operators.


Graphic Repeater OMI App

Repeat selected symbols for similar datasets in a variety of patterns.

Integrate with AVEVA and partner software

AVEVA System Platform is the ideal open standards-based foundation that interfaces to countless software systems and services, including AVEVA's broad portfolio of operations software.

AVEVA™ Teamwork

SaaS application for skills development, knowledge sharing, and collaboration management across facilities and teams
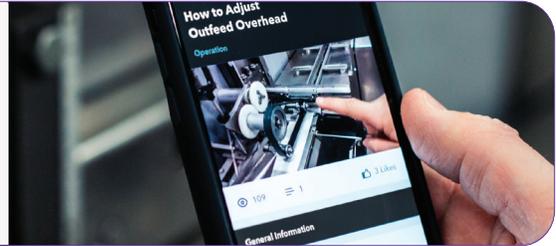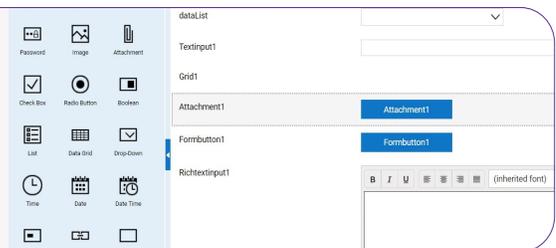

AVEVA™ MES, Batch and Recipe

Leading MES software for CPG manufacturing with integrated production, inventory and quality operations management capabilities

AVEVA™ Work Tasks

Digitize work and data collection procedures to connect workers assigned tasks and instructions on mobile and desktop devices

AVEVA™ PI System™

Enterprise-class information management system for aggregating, enriching, analyzing, and using operations data
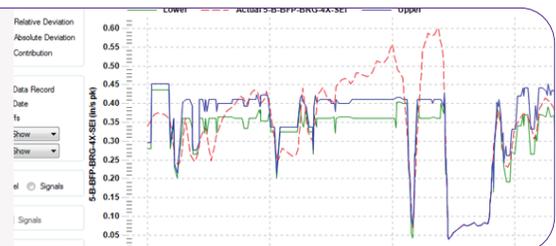

AVEVA™ Insight

AI-infused SaaS application for predictive/prescriptive maintenance, CBM, OEE, alert notifications, and contextual visualization

AVEVA™ Predictive Analytics

AI-powered predictive maintenance software to maximize asset reliability and prevent unplanned downtime

Future-proof investment

Architectural flexibility

Easily scale as your operations grow, from a single box system to client-server to multi-tiered deployment, without re-engineering the solution. AVEVA System Platform was designed to expand and change over time to accommodate shifting needs, including the ability to distribute the system across multiple servers for maximum uptime and redundancy.

### The best of all worlds: On-premise, cloud, and hybrid

AVEVA System Platform supports a mix of on-premise and cloud-based applications for the most pragmatic and flexible approach to real-time control and actionable insights that suits your needs.

Maintain a healthy system

Enable continuous proactive monitoring of your system's health, performance, and availability. AVEVA System Platform greatly mitigates the risk of application downtime by making incremental changes on the fly and manages system patches centrally by downloading and pushing updates directly to networked machines.

Multi-device experience

Configure applications once and deploy actionable content anywhere on any device.
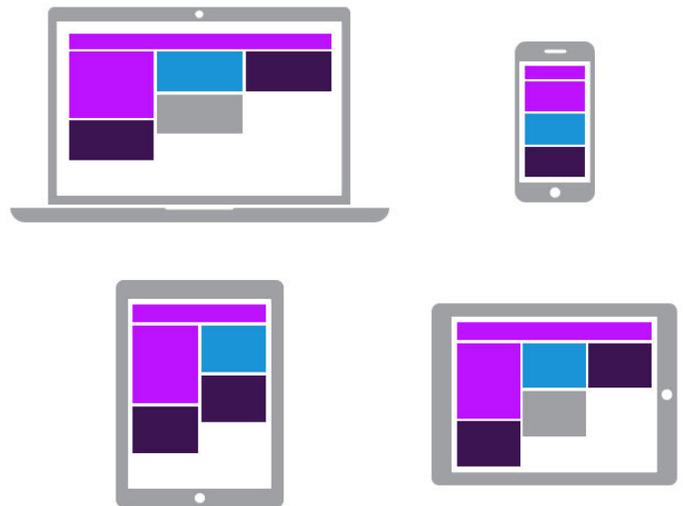
For more information on
AVEVA System Platform, please visit:
aveva.com/en/products/system-platform

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aveva.com