DATASHEET

AVEVA™ Communication Drivers

Providing the next generation of connectivity

AVEVA Communication Drivers plays a critical role in AVEVA's industrial internet of things (IIoT) connectivity strategy. The inherent architecture of AVEVA Communication Drivers allows users to seamlessly integrate a growing number of new and legacy devices. AVEVA Communication Drivers especially enables systems in geographically disparate areas to communicate effectively by integrating disparate systems on a global scale. Our robust lineup of communication drivers makes it possible to connect AVEVA software to PLCs, controllers, edge devices, smart devices, and even proprietary hardware.

Product at a glance

Expanding connectivity and increasing data value are vital, as companies strive to leverage the full potential of their hardware and improve architectures for IoT/IIoT, big data, and cloud systems.

While connecting and integrating disparate devices to supervisory HMI/SCADA systems and historian databases remains a challenge for many organizations, AVEVA's communication drivers give users a single, hardware-independent platform that helps improve standards, simplify configuration, promote consistency, and maximize communication uptime.

Key benefits:

- Broader connectivity spectrum with edge, web-based, and cloud applications
- Seamless integration between PLCs and AVEVA™ Edge HMI, AVEVA™ InTouch HMI, AVEVA™ System Platform, and AVEVA™ Historian.
- Increased data throughput
- Improved scalability and reduced application costs
- Support for multiple AVEVA Communication Drivers versions on a single node
- Elimination of single points of failure
- High availability for greater communication uptime, reduced downtime
- Single node side-by-side compatibility
- Support for OPC-UA and MQTT communication protocols
- Auto-Build support for Allen Bradley, Siemens PLCs
- Secure encrypted communications

Key features and benefits

OPC UA Methods client

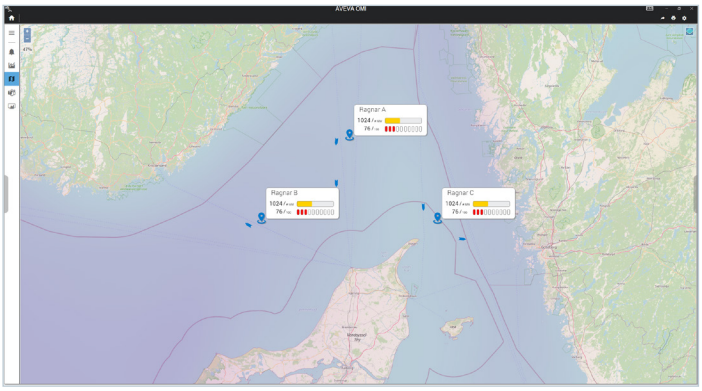
The OPC UA client adds support for OPC UA Methods. This facilitates function calls to objects in an OPC UA server. Methods is a core capability in the comprehensive OPC UA standard. It is used for both simple actions as well as for the exchange of complex payloads, such as recipes or production orders.

Increase scalability and reduce application costs

It is no longer necessary to restrict a single driver to a single node. With AVEVA Communication Drivers, you can run multiple, completely independent instances of the same driver in a single node. Single-node option now covers as many servers as you want in a single node. This allows users to consolidate scattered architectures into fewer nodes.

Improve robustness and eliminate single point of failure

By running multiple instances of the same AVEVA Communication Drivers on the same node, any potential problem that may affect one driver instance is isolated to just that instance.



Auto-build for greater engineering efficiency

AVEVA Communication Drivers have an auto-build capability in AVEVA System Platform. This feature helps improve engineering efficiency by reading the structure of a PLC program and automatically building the Application Server templates and instances based on the PLC schema. This can result in faster time-to-runtime and better integration between AVEVA System Platform and PLCs.

Maximize communication uptime

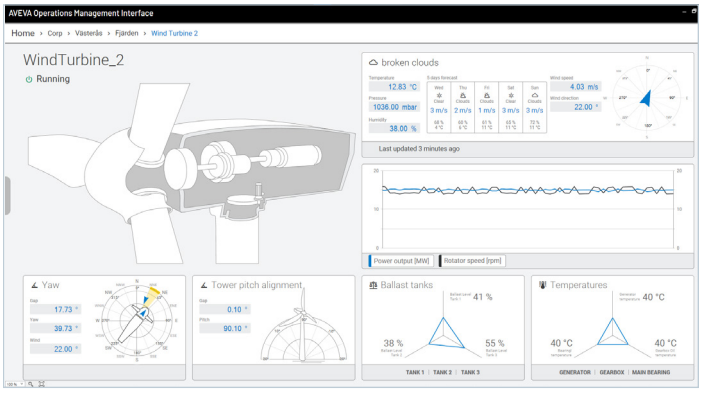
Communication driver restarts that require configuration changes can be restricted to a single instance, allowing other drivers to work unaffected. This helps improve communication uptime while reducing the risk of downtime.

Increase data throughput

AVEVA Communication Drivers enable parallel independent processing of I/O by each individual driver instance, which results in higher overall throughput or improved performance per driver and per node.

Support multiple driver versions

AVEVA Communication Drivers provides single node side-by-side upgrade capability, which allows users to continue running the previous driver version while adding a new version of the same driver protocol. This unique capability allows continued growth without disruptions. It also enables coexistence with legacy DAServers or DI.



IIoT connectivity applications

To facilitate greater adoption and integration of IoT applications for edge devices, we've introduced free 32-tag tiny application support. This enables integration with small applications (32 tags) in edge sites and the ability to connect to AVEVA Insight or AVEVA System Platform without requiring a license.

Connectivity expands

AVEVA Communication Drivers continue support for major PLC brands, such as Schneider, Allen-Bradley, GE, and Siemens. AVEVA Communication Drivers now also support Automation Direct, Bosch, Eaton, WAGO, Beckhoff, BACnet, Texas Instruments, Mitsubishi, Omron, and Opto 22. Communication Gateway–formerly known as FSGateway, the Communication Gateway–acts as a communications protocol converter. Communication Gateway can be used to link clients and data sources that communicate using different protocols.

Communication Gateway has been enhanced to act as an OPC UA Client. This enables stand-alone support for AVEVA InTouch HMI, AVEVA Edge HMI, AVEVA Historian, AVEVA™ Batch Management, or any OPC/DDE/SuiteLink-compliant software that requires connectivity to OPC-UA Servers. Communication Gateway now also supports MQTT protocol, making device configuration and integration and interoperability easier than ever.

Summary

AVEVA Communication Drivers is hardware-independent, so you have the flexibility to connect to any device or PLC with a uniform, intuitive interface efficiently and hassle-free. AVEVA Communication Drivers can help increase the availability of built-in system diagnostics for prompt troubleshooting and optimization. Designed to support multi-instance capability, our device integration solution can help you reduce PLC connectivity configuration effort by almost 50%. AVEVA Communication Drivers is offered stand-alone and bundled with other offerings.