DATASHEET

AVEVA™ Communication Drivers

Providing the next generation of connectivity

Communication Drivers play a critical role in AVEVA's Industrial Internet of Things (IIoT) connectivity strategy. The inherent architecture of Communication Drivers allows for seamless integration of a growing number of devices, whether new or legacy. Communication Drivers especially enable 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 systems to PLCs, controllers, edge devices, smart devices, and even proprietary hardware.

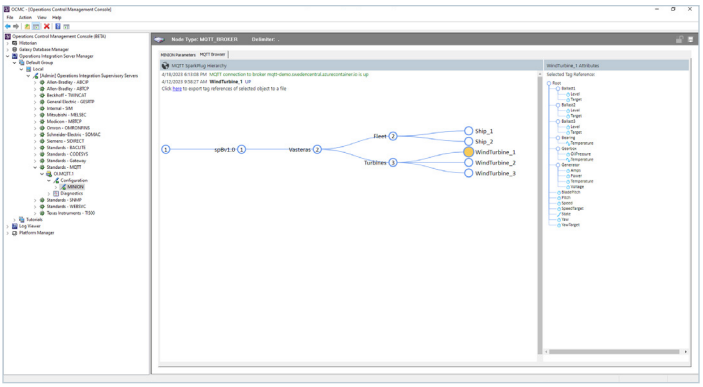
Product at a glance

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 the Supervisory HMI, SCADA systems and historian databases remains a challenge for many organizations, AVEVA's Communication Drivers provide users provide 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 AVEVA™ Edge, AVEVA™ InTouch, AVEVA™ System Platform, AVEVA™ Historian and PLCs
- Improved scalability and reduced application costs
- Elimination of single points of failure, high availability for greater communication uptime, reduced downtime
- Support for OPC-UA and MQTT communication protocols
- Auto-Build support for Allen Bradley, Siemens PLCs
- Secure encrypted communications
- Cross-portfolio interoperability
- Disable unused data publishing services for increased efficiency and improved security posture
- MQTT driver-specific diagnostic tags
- IPv6 support for select drivers



What's new

Cross-portfolio interoperability

Traditionally, AVEVA Communication Drivers are accessed by consuming applications through a client/server architecture based on OPC DA or SuiteLink. In the new update the application server solutions can integrate OI Servers directly, without OPC or SuiteLink as intermediary protocols. This feature is coming to more products in subsequent releases.

Communication Drivers SDK

The new SDK facilitates development of communication drivers for the AVEVA Communication Drivers framework. With this release and onwards, the SDK is part of the AVEVA Communication Drivers Pack and distributed as an optional installable with each release. The SDK requires Microsoft Visual Studio 2022, tooled for C++ desktop development.

MELSEC Enchancements

AVEVA Communications Drivers Pack 2023.1 now supports Mitsubishi MELSEC iQ-R devices.

OPC UA client tag prefix enhancement

Allows adding a prefix syntax to an alias set to simplify referencing of addresses that would otherwise be lengthy due to OPC UA syntax.

AVEVA EDGE

MQTT

An updated MQTT driver supports the Eclipse Foundation Sparkplug-B specification in both Windows and Linux environments. The driver has also been enhanced to perform publishing optimization of the payload based on data changes and support store and forward when there is a network disconnect to the broker.

TI500

Driver support for the Linux environment.

Key features and benefits

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 license 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.

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 risks of downtime.

Increase 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

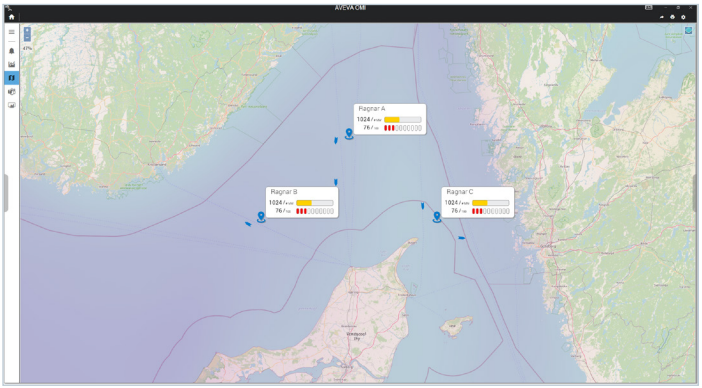
AVEVA Communication Drivers provide single node side-by-side upgrade capability, which allows users to continue running the previous driver version while adding a new version of the same driver protocol. This unique capability allows continued growth without disruptions and enables coexistence with legacy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

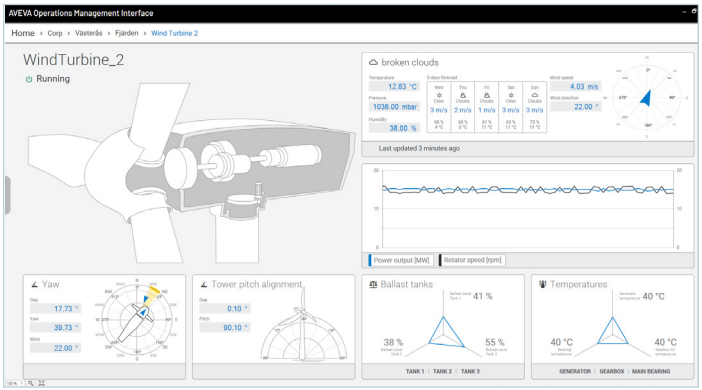
IIoT connectivity applications

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 license.

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.





A wide range of connectivity

AVEVA Communication Drivers continue support for major PLC brands, such as Schneider Electric, Allen-Bradley, Siemens, Mitsubishi, Omron, GE, Beckhoff, Texas Instruments, Codesys, and includes support for multiple industrial standards including OPC UA, MQTT (incl. Sparkplug), BACnet, SNMP, and REST APIs.

When paired with AVEVA System Platform, AVEVA Communication Drivers also support DNP3, IEC 61850, IEC 60870-5-104, and Modbus RTU.

Summary

AVEVA Communication Drivers are hardware independent, so you have the flexibility to connect to any device or PLC with a uniform, intuitive interface efficiently and hassle-free. Our 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 percent. AVEVA Communication Drivers are offered stand-alone and bundled with other offerings.