



PRODUCT DATASHEET

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.

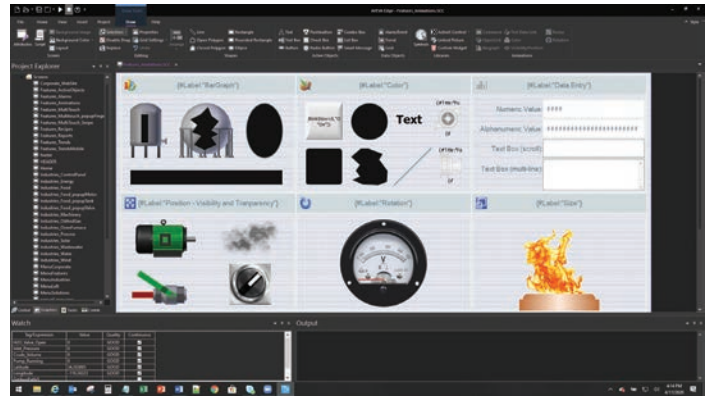
Key benefits:

- Broader connectivity spectrum with edge, web-based, and cloud applications
- Seamless integration between AVEVA Edge, InTouch, System Platform, Historian and PLCs
- Increased throughput
- Improved scalability and reduced application costs
- Support for multiple Device Integration Server 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

What's new

Customized driver installation

AVEVA Communication Drivers have been added to the System Platform installation suite for the upcoming 2020 R2 release. Adding the drivers into the suite facilitates start-up of projects and ensures customers can more easily leverage our communication offerings. The drivers are directly installable as optional selections from the System Platform 2020 R2 installation media, either as part of the communication drivers pack, or as a customized download. Modbus (TCP, RTU, ASCII).



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 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 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

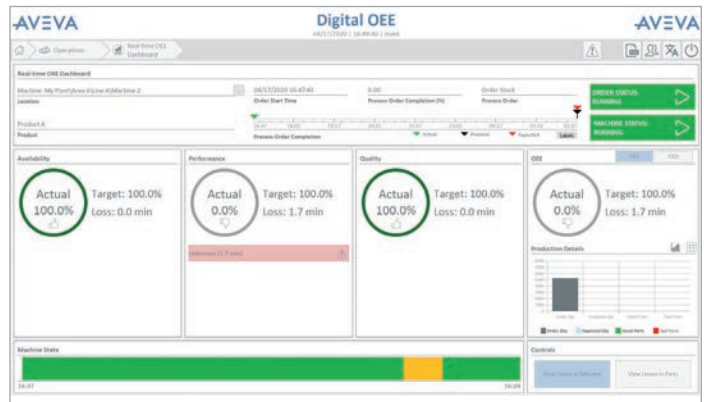
Communication Drivers enable parallel independent processing of I/O by each individual driver instance, which results in higher overall throughput or improved performance per driver and per node.

Support multiple driver versions

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 IIoT 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 InSight or System Platform without requiring license.



Auto-Build for greater engineering efficiency

Communication Drivers have an Auto-Build capability in 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 System Platform and PLCs.

Site-based licensing

Supports activation-based licensing as well as the traditional Industrial Graphics licensing.

Site-based licensing allows you to manage products at a centralized location rather than managing each product individually.



Connectivity Expands

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

The Gateway has been enhanced to act as an OPC UA Client; this enables stand-alone support for InTouch, Edge, Historian, InBatch 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 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 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. Communication Drivers are offered stand-alone and bundled with other offerings.