Integration Tools

- Improve information flow between applications by easily sending online instrument and valve data to enterprise applications

- Reduce the potential for data entry errors and save time by automatically logging changes made through the OPC Server or Web Services to the Audit Trail

Leverage third-party trending applications through the OPC Server to view live instrument and valve data and access predictive diagnostics through AMS Device Manager.

Overview

The Integration Tools option for AMS Device Manager consists of two applications: an OPC Server and Web Services.

The OPC Server provides the ability to send live instrument and valve data values and Device Description (DD) parameters to OPC client applications. Access to AMS Device Manager field device data lets you act quickly and intelligently based on accurate field information.

Web Services provides you with the ability to collect and move data from AMS Device Manager and into other applications. Calibration data and Audit Trail entries are all easily accessed and transported via Web Services to other locations, giving you an easy way to fully utilize the data in AMS Device Manager for reporting or other uses.

OPC Server

The AMS Device Manager OPC Server is based on OPC Foundation guidelines. Interoperability between control applications, devices, and business applications is possible because of the OPC standard interface.

The OPC Server is best suited to periodically read or write a single data value to an instrument or valve connected to AMS Device Manager. The instrument or valve data value is sent over a HART connection communicating at 1200 baud, allowing an update to be witnessed on your OPC client application as quickly as every seven seconds.

OPC client applications may include:

- expert systems and historians for plant applications

- spreadsheets and intranet pages for desktop applications

- EAM/CMMS modules

The OPC Server can communicate with both HART® and Foundation™ fieldbus protocols. Foundation fieldbus parameters can be accessed through AMS Device Manager using the High-Speed Ethernet (HSE) Interface for systems where an Emerson host is not present.

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Web Services allows you to access diagnostic data from AMS Device Manager and export a report to Excel for analysis.

Device parameters including process values from the OPC Server can be forwarded to a DCS or Historian that is also connected to the OPC Server. This allows you to forward a device parameter/status from AMS Device Manager to DeltaV™ system through the OPC Server. The link between AMS Device Manager and the DCS connects the device parameter and alarm condition information.

Web Services

The Web Services provided by AMS Device Manager are used to interface HART, Foundation fieldbus, or conventional device information in AMS Device Manager with third-party applications.

Web Services provides an interface that allows you to access data within AMS Device Manager. Web Services use XML to provide a platform and language independent implementation of distributed application services and information.

An updated Web Services application is available with each version of AMS Device Manager. Both of these options can be licensed via the Integration Tools license.

Benefits

■ Improve information flow between applications by easily sending online instrument and valve data to enterprise applications or displaying it in other applications.

The possibilities are endless. Will you create a document that reports the current level and flow of your process? Will you create a spreadsheet that compares the process variables of multiple devices installed in similar application areas? Or will you monitor the ambient temperature of the instrument to alert you of potential freezing or overheating?

■ Reduce the potential for data entry errors and save time by automatically logging changes made via the OPC Server to the Audit Trail.

Keeping accurate, on-going records is essential in regulated industries – but it can be costly both in time and money. The AMS Device Manager Audit Trail automatically generates a complete historical record for each device. Anytime a change is made to an instrument or valve through the OPC Server, an event is logged to the Audit Trail. Using Web Services, this data can then be used to help you analyze how your plant is running, allowing you to get the most from your system.

Requirements OPC Client

■ OPC Data Access Custom Interfaces, Versions 1.0a, 2.05 or higher

■ OPC Data Access Automation Interfaces, Version 2.0 or higher

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