AMS Device Manager with the DeltaV™ System

- Predict necessary maintenance activities instead of reacting to problems that are already impacting your process
- Manage all your field devices using a single, integrated application
- Seamlessly launch device tasks, methods, and SNAP-ON™ applications from the DeltaV Explorer
- Gain comprehensive asset management capabilities through predictive diagnostic information
- Achieve system-wide device alerts and automated documentation using Alert Monitor and Audit Trail
- Decrease interlock verification time

Introduction
AMS Device Manager is the premier predictive maintenance software application for instruments and valves available today, providing a single tool for HART®, FOUNDATION™ fieldbus, WirelessHART®, PROFIBUS PA, and PROFIBUS DP device configuration, calibration, documentation, and diagnostics.

AMS Device Manager enables your maintenance team to easily monitor field device health status and resolve potential issues before they become costly problems. When installed onsite, AMS Device Manager and the DeltaV system work together to deliver a seamless user interface in an integrated operating environment.

Commissioning and Configuration Directly in the DeltaV Explorer
The DeltaV Explorer enables faster start up and commissioning of HART, WirelessHART, FOUNDATION fieldbus, PROFIBUS PA, and PROFIBUS DP devices through integrated device commissioning and configuration tools.

Whether you are starting up a new plant or resuming production after a shutdown, integrated commissioning and configuration functionality allows you to reduce commissioning time, eliminate errors, and deliver immediate cost savings to your facility.
Using AMS Device Manager with the DeltaV system enables you to access important HART, Foundation fieldbus, WirelessHART, PROFIBUS PA, and PROFIBUS DP device data with no additional cabling or field wiring required!

Benefits of Full Asset Management

It’s easy to take the device configuration capability in DeltaV Explorer to the next level. You can enable AMS Device Manager in your DeltaV system through the simple addition of a license code to gain the benefits of a comprehensive asset management system for all your intelligent devices.

Access the full power of your intelligent field devices

Using AMS Device Manager with your DeltaV system, configure field devices from the maintenance shop, store device configurations in your plant database, perform device loop tests and calibrations, associate electronic drawings and notes with a particular device, import or export system data, and establish multi-level password security – quickly and easily.

Streamline Device Commissioning

Use AMS Device Manager templates to define parameters for common devices and then commission those devices in bulk. Then run a validation report to quickly identify any discrepancies. Reduce commissioning time by up to 80% and eliminate configuration errors.

Improve operations and maintenance effectiveness

AMS Device Manager increases productivity by detecting and diagnosing potential equipment problems before they impact the process, reducing unnecessary and unproductive tasks.

AMS Device Manager’s focus on human-centered design provides Device Dashboards for Emerson field devices.

The enhanced user interface offers operators intuitive graphics to aid in making timely, accurate decisions when abnormal operating conditions occur.

Improve system availability using Alert Monitor

AMS Device Manager’s Alert Monitor is a powerful diagnostic tool used to observe field devices suspected of periodic or intermittent malfunction – one of the most difficult failure modes to troubleshoot.
Use Alert Monitor to watch for field device failure patterns and to view device alerts from SNAP-ON™ applications. The Alert Monitor summary screen provides an overview of all device alerts, regardless of the field device protocol.

Alert Monitor will organize your alerts so you can easily identify new alerts and keep track of existing ones. Filter alerts to quickly find the information you need.

Powerful Interlock Verification Application

When a digital control system controls the process, simulation software checks the DCS configuration and programming, but it does not verify the operation of the field devices or wiring.

The QuickCheck™ SNAP-ON application facilitates and accelerates interlock checkout, saving time and improving safety. AMS Device Manager and the QuickCheck SNAP-ON allow you to verify all wiring from the field to the control room so you can focus on checking the DCS configuration and DCS logic.

Enhanced Smart SIS

AMS Device Manager is fully compatible with DeltaV workstations as well as the DeltaV SIS Safety Logic Solver.

Separate user security is provided for SIS devices that prevents unauthorized "writes" when the logic solver is locked. Faster and safer SIF proof tests are delivered, as well as automated documentation for regulatory requirements.

Identify devices as SIS to prevent unauthorized access. Also limit user access by plant area - to ensure the right people have access to the right devices.

Audit Trail Automatically Documents Alerts and Actions

DeltaV users can streamline work practices and gain enhanced diagnostics from AMS Device Manager with the Audit Trail option.

The Audit Trail automatically generates and saves a historical record in AMS Device Manager for device alerts captured from devices in the scan lists, device configurations, calibration tests, and diagnostics information. All records are date- and time-stamped and include user and PC correlation.

The tabular format of the Audit Trail allows you to review all configuration changes or focus on a few specific changes. In addition, you can view records for an entire plant or for a single, specific device. To ensure data integrity, historical records cannot be edited.

Interface for Handheld Communicators

The Handheld Communicator interface kit provides easy transfer of field device information between Emerson’s AMS Trex Device Communicator or 475 Field Communicator and AMS Device Manager. You can easily share HART, FOUNDATION fieldbus, and WirelessHART device configurations, synchronize the database, and efficiently manage the predictive diagnostics from your field devices.

SNAP-ON Application Options

SNAP-ON applications provide specialized functionality with AMS Device Manager and can be launched directly from the DeltaV Explorer. Available SNAP-ON applications include:

The AlertTrack™ SNAP-ON application gives you visibility to the health of your field devices and documentation of parameter changes. Group devices and set parameters for testing, then analyze trends to identify problem assets. You can also route device alerts to your cell phone, pager, or other mobile device.

The AMS ValveLink™ SNAP-ON application allows you to perform advanced diagnostic tests on Fisher FIELDVUE™ HART and FOUNDATION fieldbus digital valve controllers. Supported tests include dynamic error band, drive signal, output signal, step response, and valve signature curve. Test results, performance diagnostics, alert details, and advanced help are also provided.
Use the QuickCheck SNAP-ON application to check multiple devices at the same time.

The AMS Wireless SNAP-ON application gives you more power to manage your wireless networks. Design your network online and validate it against best practices. Once the network is installed, graphically view communication paths to easily identify any potential trouble spots.

The Calibration Assistant SNAP-ON application supports the use of self-documenting calibrators and allows manual data entry for standard (non-communicating) field instrumentation. Set up calibration routes for maintenance activities, track activities, and produce printable calibration reports.

The Meter Verification SNAP-ON application allows you to verify and document the overall health of your Micro Motion® Coriolis mass flowmeters. Schedule meter verification tests in advance to be more proactive in your maintenance efforts.

Use the MV Engineering Assistant SNAP-ON application to perform extended configuration, maintenance, diagnostics, and testing for Rosemount® HART or Foundation fieldbus 3095 and 3051SMV MultiVariable transmitters.

The QuickCheck SNAP-ON application greatly reduces time to verify interlocks by providing the ability to fix the output of multiple devices for interlock validation. The QuickCheck function can be used to create macros for stepping multiple transmitters through validation tests, such as 2003 voting logic.

Device Access With DeltaV

The DeltaV system simply and quickly passes field device data through the controller to the AMS Device Manager system without the need for extra hardware or wiring. AMS Device Manager stations can be deployed on DeltaV Professional PLUS stations, application stations, and other compatible DeltaV workstations.

All DeltaV operator stations have the ability to view Foundation fieldbus device diagnostic status screens when AMS Device Manager has been installed. Full AMS Device Manager capability is provided when an AMS Device Manager Client SC license is included.

Device configuration and commissioning tools are also available from the DeltaV Explorer on Professional PLUS and Professional stations.
### AMS Device Manager and DeltaV DCS Compatibility Table

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