## **QuickCheck SNAP-ON™ Application**

- Facilitate and accelerate interlock checkout to save time and improve safety
- Substantially reduce commissioning time when testing 1 out of 3 voting
- Read and export as-built configuration information
- Access real-time information from HART® and FOUNDATION™ Fieldbus devices
- Take set up off the critical path with bulk import



Streamline interlock checkout by grouping, monitoring and fixing the output of HART transmitters from the convenience of your AMS Device Manager workstation.

#### **Overview**

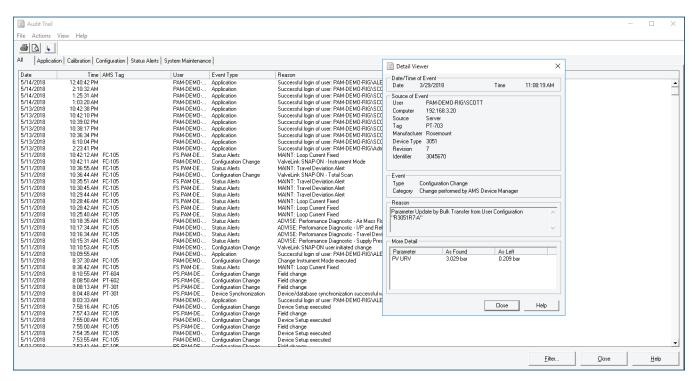
The interlock checkout phase of a new plant is critical to the safety and success of the project. During this time, technicians check the proper response of the process control system against simulated normal and emergency conditions.

If a digital control system (DCS) controls the process, simulation software checks the DCS configuration and programming, but it does not verify the operation of the field devices or wiring. AMS Device Manager and QuickCheck can help you verify all wiring from the field to the control room, allowing you to focus on checking the DCS configuration and your DCS logic.

# Enhance Safety, Save Time and Improve the Bottom Line

Sending technicians into the field with handheld communicators to manually place smart devices in loop test mode is time intensive and may expose the field technician to a variety of hazards including heights, temperature extremes and chemicals. With the QuickCheck SNAP-ON application, you can group, monitor and fix the output of HART transmitters from the safety of an AMS Device Manager workstation. A single database allows group creation and execution from the server plus or any Client SC station.





The Audit Trail automatically records QuickCheck status alerts. Alert information is always up-to-date and right at your fingertips.

#### **Document QuickCheck Activities**

As device outputs are fixed and released, QuickCheck writes entries to the AMS Device Manager Audit Trail giving you a complete history of the checkout process. You can also generate reports specific to QuickCheck activities. For instance, create a report on device status, so a device is not accidentally left in a fixed output mode. You can also generate a report showing which devices are currently in write-protect mode, so you can make adjustments if necessary.

#### **Produce QuickView Configuration Reports**

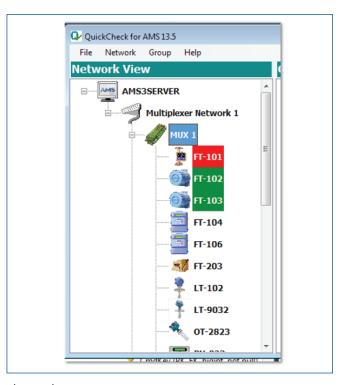
View your field device configuration parameters as read from the installed device. Compile configuration data directly from the device, and produce reports or export the data for use with external programs.

A QuickReport for a single device type provides live data for each available parameter to facilitate easier report building.

#### The Plant Explorer

The QuickCheck Plant Explorer scans your network and detects host systems, their network components and connected HART devices. The physical network is represented in the QuickCheck user interface with graphics consistent with AMS Device Manager's Device Connection view.

When a device is in the fixed output mode, its icon displays a red background. When a device is in the write protect mode, the icon displays a green background. This gives you a quick way to reference the status of the device.



Plant Explorer

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To organize devices into interlock checkout groups, simply drag and drop the device icon from the Plant Explorer to the Group Explorer. Each device may be included in multiple groups. Some devices offer multiple outputs, including frequency output. These devices may be added to the same group multiple times as long as a different output type is selected each time. Bulk additions simplify creation for large groups of a single device type or revision.

### **QuickCheck Groups**

There are two different types of groups you can create in QuickCheck.

#### **QuickStep Groups**

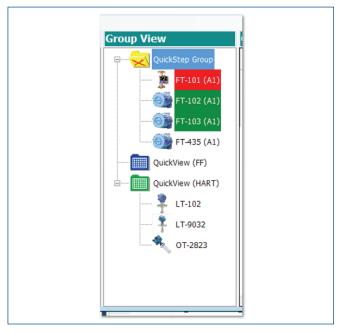
QuickStep Groups allow the output of devices in the group to be fixed and released by clicking on the check box in the Group Detail display on the QuickCheck form. Fixing the output of a device is as simple as clicking on the check box and responding to the Fix Output Wizard dialog boxes. To release the output, simply uncheck the box.

Additionally, QuickStep groups allow you to configure steps, where each step defines a fixed output level for each device in the group. The output level can be defined in terms of engineering units, milliamps or hertz. With the use of the Previous and Next buttons, you can execute one step at a time, fixing the outputs of the devices in the group to the outputs you configured. Execute any of the steps directly by using the Execute button. QuickStep Groups were designed with 1 out of 3 voting in mind to meet your requirements regardless of their complexity.

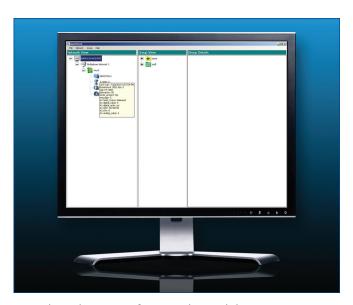
#### **QuickView Groups**

QuickView Groups allows you to create a data table for each group. The rows of the table are the tags of the devices in the group. The columns are created by you. The QuickView Design View provides a list of all the parameters that can be read from your devices through the AMS Device Manager OPC Server. Select which parameters you want to to read into each column for the device types in the group.

When QuickCheck updates the values, the program reads the parameters directly from the live device, giving you an organized collection of data. This information can be printed in a report form, or exported to Microsoft Excel or delimited text file. This allows you to share real-time data with other programs.



QuickCheck Groups.



Access basic diagnostic information by simply hovering over a device.

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#### **QuickCheck Bulk Import**

In the past, QuickStep groups could not be created until all devices were known to AMS Device Manager. This added time to the process and put group configuration on the critical path of testing. Now, bulk Import allows QuickStep groups to be configured outside of the QuickCheck application in Excel or any other application that produces a comma delimited file (.csv). A template file can be created in QuickCheck from an existing QuickStep group to show the format of the file. Use this template in Excel to create QuickSteps in a simple table format.

Once the import file has been created and saved as a .csv file, the Bulk Import utility allows the data loaded into the utility and validated before it is imported into QuickCheck. Future device tags may be included in bulk import files, allowing you to create QuickStep groups while some devices are still offline. The Bulk Import utility allows for several validation options, including scanning for each device's digital units, upper and lower range values (if the device is online). Validation messages make it easy to fix issues before the data is imported into the QuickCheck database.

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