



DMS Version 1.7 Minor Release Notice

Meriam continues to grow the feature set of DMS by introducing functionality that gives us competitive advantages. The following new features are available in DMS Version 1.7 which ships in January, 2004.

Summary of New Features

Import/Export Utility for populating the DMS Server data from existing plant data sources and the utility. This utility introduces new important functionality like HART Field Device Revision (FDR) Independence, which allows a user to write imported data to any HART Device; providing a Portal to HART Devices.

3rd Party Application Integration for providing connectivity between DMS and any other manufacturer's device specific software applications, like Masoneilan's ValVue and Fisher Controls Valvelink.

Backup/Restore Utility for archiving a secure backup of DMS Server database and providing mobility for the DMS Server database from machine to machine.

Custom Categories for the creation of user defined categories and device models. This exciting feature has been added for users to create their own configuration parameters. This is a powerful tool for modeling literally any item in a plant.

Detailed Description & Selling Points of New Features

The following is a more detailed description of these new features and the important selling points for them.

1.0 Import/Export Utilities

The I/E Utility simplifies the most crucial step in bringing the DMS database up for full operation; that is, populating the database with all of the plant's field devices.

Field Device Templates are generated for categories of field devices. Data can be entered manually or ported from any source into the template which is then processed through the DMS Client Import interface.

This interface enables mapping of parameters into device configuration fields that can either be stored in DMS for conventional devices, or actually written to HART devices. The ability to map parameters from Non-HART sources directly to a HART configuration field is an extremely important aspect of the Import features.

Important Selling Points:

- DMS has the ability, with some data manipulation, to map data from any source, into the DMS database. This data can then be translated and written to HART devices, providing a HART Device Portal .
- The Import functionality takes advantage of existing plant databases and applications for the efficient and accurate intake of field device data into DMS.
- The technology behind the import functionality provides Field Device Revision (FDR) independence. For example, this means that a configuration from a Model 3051 FDR 2 can be written to a 3051 FDR 3 and visa versa. This is an extremely important and useful feature since all HART DD s are specific to the HART Device Model and FDR.

Value Statement: efficient and accurate importing of field device data saves hundreds of man-hours for the most critical aspect of launching a successful DMS System.

2.0 Third Party Application (3PA) Integration

Meriam recognizes that connectivity to other applications is the key to provide consistency and integrity for device data that is generated from different applications. Some manufacturers have taken a proprietary approach to providing access to the full capabilities of field devices by creating custom software applications. We refer to these custom applications as 3rd Party Applications (3PA).

In the case where a customer wants to connect a 3PA to DMS, DMS will manage the device, and the 3PA software will manage the interface to the device. Connectivity between DMS and the manufacturer s software (3PA) is established through association of a device model to 3PA s software.

An example of 3PA software is valve management applications like Masoneilan s ValVue and Emerson s ValveLink. A valve controller can be modeled in DMS using a standard device model such as SVI for Masoneilan. The SVI device model can be associated with the 3PA ValVue 2.

Once the 3PA is associated, each instance of an SVI will have a link to ValVue 2. The data from ValVue 2 for the specific SVI will be stored in DMS as an audit trail entry for the valve Tag ID. This ValVue 2 data will always be available to the user from a secure source and can readily be exposed for use with the ValVue 2 application.

Important Selling Points:

- Now any external device specific application can be linked to a device modeled in DMS for easy access and secure archiving of device specific application data. This may include calibration, configuration, valve signature and any other 3PA resulting data.
- The DMS 3PA Integration approach is not dependent on software revisions by the 3PA manufacturer, eliminating the coordination of DMS Version Releases with various other 3PA version releases.
- There is no additional Snap-On like charges for this functionality. However, the customer will need to purchase the 3PA. It is important to note that ValVue and ValveLink can be purchased as stand alone applications, which is the platform that would be needed for the DMS 3PA Integration.
- Since DMS stores the data for each device, 3PA s that are priced based on tag capacity can be purchased at a low prices with a lower tag capacity.
- All device specific 3PA data is securely stored in the robust DMS MS SQL based data server, which is usually backed up on a nightly basis.

Value Statement: Productivity is increased and data integrity is improved through the coordination of separate, but related maintenance software applications. Also, application with tag based pricing can be purchased with a lower tag count, because the data for each device is stored in DMS.

3.0 Backup/Restore Utility

DMS has a backup/restore utility that enables a user to back up the DMS Server data for archiving or for use on another installation of the DMS Server. One use case for this feature can be when a user begins the implementation of DMS at their plant from a desktop installation, and then decides to move the DMS Server over to a dedicated server. This utility will allow the user to perform the backup from the desktop, install DMS Server on the dedicated server, and then restore the backed up data to DMS Sever on the dedicated server.

The other traditional use case is for generating a backup copy of the DMS Server data for disaster/recovery scenarios.

Important Selling Points:

- The backup utility provides mobility for the DMS Server, whenever the need arises to move the DMS Server from one machine to another.
- The backup utility can be used to move data from a desktop machine to a laptop on a temporary basis, so that the DMS Server can become mobile on a laptop used in the field. This is an important feature for the use of 3PA s in the field. When the field work is complete, the user can backup the Laptop DMS Server and Restore it back to the Desktop DMS Server.

This backup/restore process will be made seamless and can be applied to subsets of the DMS Server data (Divisions) in a future release of a DMS Mobile Client (Scheduled for 1Q04 Release). The will allow the user to check out data from the server by Division instead of the entire DMS Server database.

Value Statement: The back-up utility reduces the time required to move the DMS Server database from machine to machine, and provides an efficient method for backing up data for disaster recovery plans.

4.0 Custom Categories

DMS allows the user to create a category and define the parameters with a unique label and default value. Once the category is defined, any number of device models can be assigned to that category, and the models will automatically have a configuration parameter list equivalent to what is defined for the newly created category.

This is a powerful tool that allows a user to model literally any device that they can think of. Even more powerful, is the ability to generate an import template based on the new category for mass import of devices into the DMS.

Important Selling Points:

- The Customer Defined category feature extends DMS to a database that can model mechanical equipment, motors, or any device that has maintenance schedules and needs to be tracked. The customer decides what parameters are tracked for each device.
- DMS is more than a process instrument maintenance tool, it can be applied to all plant equipment.
- The addition of this feature is another example of flexibility and a testimonial to our commitment to responding to customer s requests for features.

Value Statement: DMS can replace other databases that manage plant equipment other than transmitters and coordinate work efforts for inspections with calibration activity. This results in a more efficient maintenance work force.

Frequently Asked Questions and Answers

What is a Field Device Revision (FDR)?

A FDR is the device revision that the manufacturer issues with their HART Devices. The combination of the model and the FDR is what make the device unique from a HART perspective. For the most part, every HART Device has a unique Model and FDR combination which corresponds to a unique DD, which is registered with the HART Communications Foundation.

How do I figure out what the FDR of a device is?

Unfortunately, the FDR is not listed on the outside of the HART Field Device. You need a HART communicator to determine what the FDR of a device is. The combination of this information not being readily available with the incompatibility between FDR s creates a challenge for technicians.

Why is the FDR important to me and why do I need to consider it?

Every HART Device has a configuration, which is a list of configuration settings that is dependent and unique to the Model and FDR. So, for example, if you have a Model 3051C, FDR 2 configuration that you want to write to Model 3051, FDR 3, you will not be able to accomplish this. Most HART technology will recognize these as two different devices. You must translate the FDR 2 to the FDR 3 to handle the differences in these two separate DD s.

Our technicians don t know what the FDR is. How does Meriam make it easier to handle FDR s?

Meriam s DMS Version 1.7, MFC Firmware 1.12, and MFT Firmware 3.10 release will include what we call FDR Independence . Translation from one FDR to another enables the transfer of configuration between different FDR s. Many older HART devices are no longer available, as new features are incorporated into new revisions. This is a powerful tool for replacement of failed HART devices with new devices of the same model that have a different FDR.

What kind of data can I import into DMS?

With the new DMS Version 1.7, you can import all the necessary data to model a device, whether it is conventional (Not SMART), or HART. This data is imported though templates that the user needs to populate, and is then mapped to corresponding fields in the device configurations. The Import Interface provides functionality that allows the

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user to negotiate discrepancies in the device data that is being imported to assure proper modeling of devices in DMS.

Can I get the imported data into a HART Field Device?

Yes, once the imported data is properly mapped to a HART Model, the data can be written to the HART Device using an MFT or MFC and eventually directly through the Single Point Access interface via HART Modem.

Does any other solution have this FDR Independence capability?

NO! Based on our research, no one else has this functionality. It is unique to Meriam and seamlessly integrated with our Handhelds.

Can I model devices that are not instruments in DMS?

Yes, DMS has features that will enable the modeling of any device. The user can create their own category, models within the category, and configuration for each model. This is a unique and powerful tool that can extend DMS into a maintenance application for more than just Field Instrumentation.