

OCTOBER 2023



# Real-Time Data

An abstract graphic on a dark blue background. A large, thick, purple arrow points upwards from the bottom left. To its right, several colorful, winding paths in yellow, orange, and teal snake upwards. The paths are composed of solid lines and dotted lines, with small diamond and circle markers scattered around them.

**Unifying  
Control Systems**

Process and  
Factory

# Unifying Control Systems for Industrial Automation Markets

Streamline operational lifecycle management for process, hybrid and discrete/machine builder applications

Steve Biegacki – FDT Group Managing Director



**Steve Biegacki**  
FDT Group Managing Director

For decades, there has been a delineation between Process Automation (PA) and Factory Automation (FA) control system applications. These application types solved definite challenges while being serviced by specific device and control system manufacturers. As automation communication protocols evolved, the lines between PA- and FA-based systems blurred, allowing vendors to simplify industrial device management for design, configuration, and operation covering both application types.

Today, it is not uncommon to see a PLC-based system (typically FA) solving process control applications. It is also not uncommon to see a DCS system (typically PA) communicating to sensors and actuators via discrete I/O or another network like IO-Link that may have only been applied in PLC-based applications before.

So, how are the different types of sensors and actuators configured in these different control system environments, since they are the same device – no matter the PA or FA system? The FDT (IEC 62453) standard supports open integration and device management, allowing vendors to offer system solutions with a unified environment supporting operational lifecycles for Process, hybrid and discrete/machine builder applications.

FDT supports diverse engineering environments with standalone configuration tools, modular middleware hardware integration tools, and integrated engineering control and asset management applications. The open and flexible holistic FDT standard is protocol agnostic, allowing control, configuration, lifecycle monitoring, and data access to all connected devices in any mixed/nested network topology. The key component delivering asset management operations such as remote commissioning, configuration, parameterization, and diagnostics is the Device Type Manager (DTM).



## NEWSROOM

Many hybrid applications (food/beverage, pharmaceutical, etc.) users may not be familiar with the FDT/DTM standard that can bridge these environments. Instead, they find their application functioning in isolated segments, delivering inefficient device management and maintenance routines that hurt critical production output. Users exploring opportunities for standardized intelligent device management can note that this use case is solvable. It's important to talk with your vendors and include FDT during the bidding process to unify the application environment, including systems, devices, and communication networks.

FDT Group is a collaborative standard that works alongside other standards associations to harmonize device integration, management, and maintenance efforts — users should request it.

Be sure to read our latest technical article in this issue that takes a deeper look at use cases focused on FDT in factory and hybrid applications.



### FDT GROUP BOARD OF DIRECTORS APPOINTS ANDRÉ UHL AS CHAIRMAN

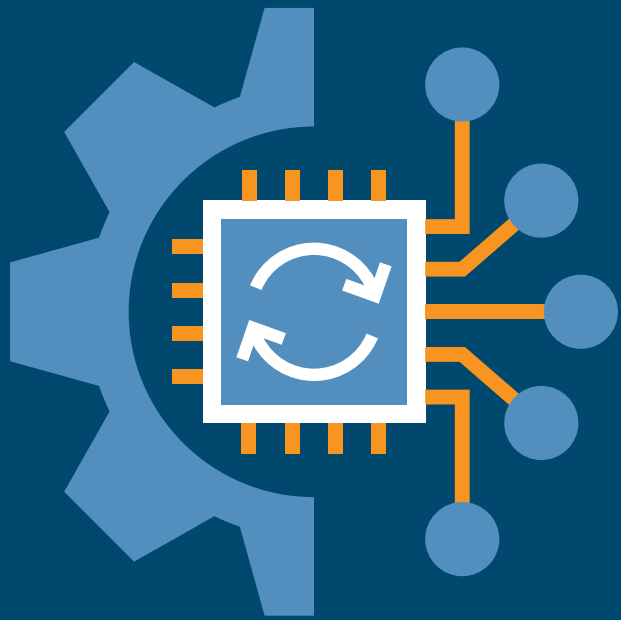
*Successor from Schneider Electric to lead the executive strategy for the open FDT/DTM standard*



## Intelligent Device Management Challenges? Give us your feedback.

Participants that take the survey will be entered to receive a \$100 Amazon Gift Card.





OPPORTUNITY FOR INNOVATION

# Can FDT/DTM Technology Work in Factory Automation and Hybrid Applications?

The great unifier for industrial engineering control environments

## Mistaken perception?

There is a common belief amongst the automation community that FDT/DTM (IEC 62453) technology is only applicable for process automation applications. This belief could be a consequence of the typical article, ad or video that is made for the promotion of this open standard.

## Finding out answers

This article is to inform and raise awareness that a correct implementation of FDT technology can be effectively utilized in any industrial control automation environment, including factory automation and hybrid applications - plants that feature both factory and process automation applications. Whether the application deploys fieldbus networks, HART field devices, remote I/O systems, drives and motor starters, or sensor networks, it is most likely that the manufacturer has a DTM (device driver) created for the devices it supplies.

One of the causes behind this mistaken perception could be the typical example shown in the available documentation or case examples of the FDT/DTM concept, which always features either a field device or a control valve.

There is a good reason for this approach - field transmitters and control valves are good examples of complex devices that benefit from a comprehensive asset management implementation, which enables plant operators to obtain large amounts of data from the field using a uniform and user-friendly interface.

The other cause may be due to the association of the use of FDT technology with device commissioning software applications (PACTware or *fdtCONTAINER*), which are offered by field device suppliers as freeware applications.

## The great unifier

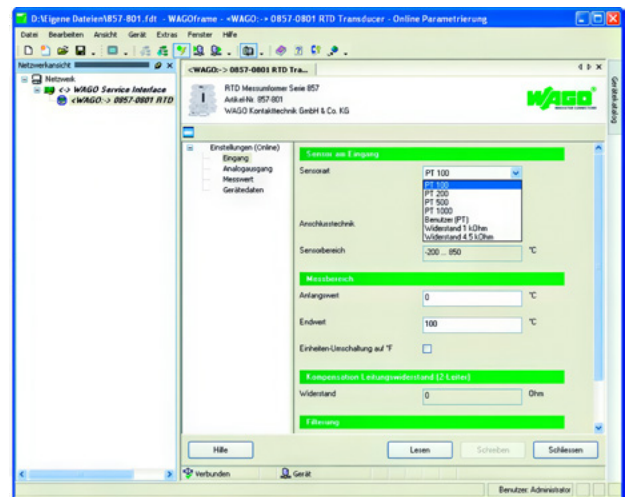
One of the use cases that limited the adoption of smart devices was that suppliers' engineering tools had to

use different integration software to gain access to the data available in the connected field devices. Major DCS suppliers could afford to include integrated asset management solutions into their plant-wide software systems that worked fluidly with their engineering software.

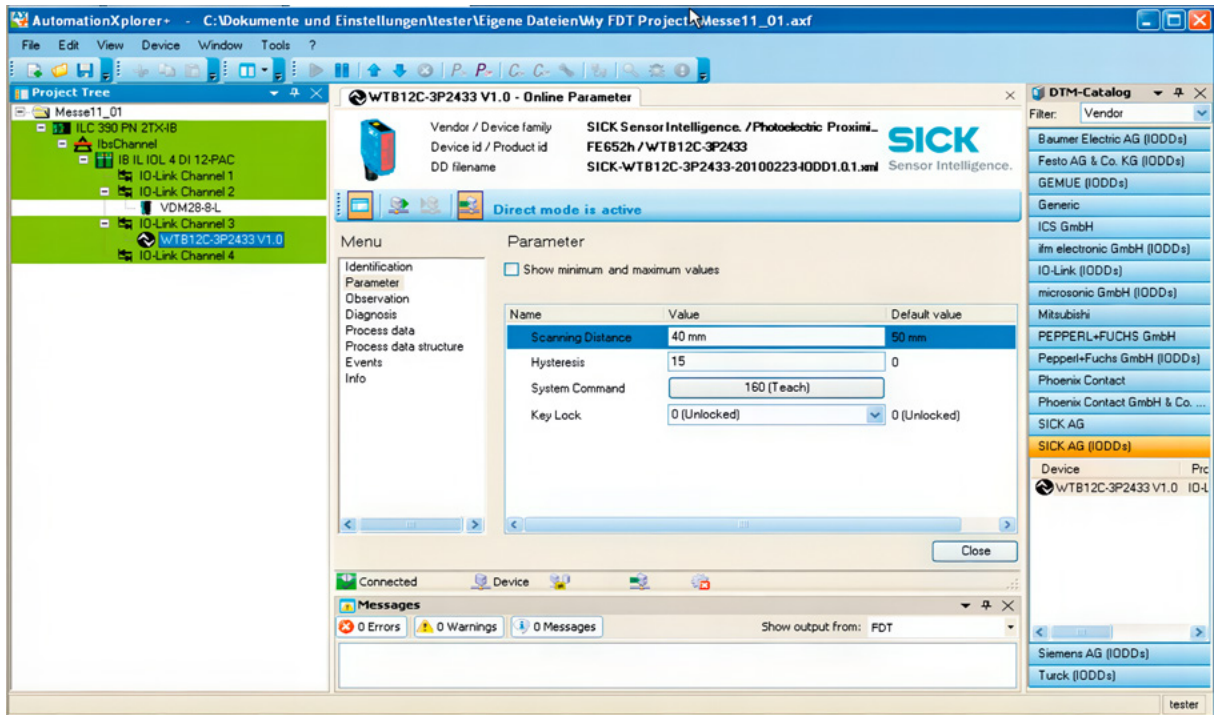
However, smaller suppliers, especially third-party field device and interface technology suppliers, could not afford to support smart field devices in their less expensive, factory-oriented modular remote I/O systems.

FDT technology has supported communication 'nesting' since specification version 1.2. Nested communication support enables DTMs to communicate with devices that use the same / or different communication protocols that are attached to different hardware levels. This 'nesting' feature harmonizes the topology and data structure providing a unified environment for device management.

FDT's nesting communication feature, combined with the modularity framework application concept, allowed smaller suppliers to incorporate the FDT core application into their existing engineering software solutions.



WAGO Frame - framework application



Phoenix Contact's AutomationXplorer framework application

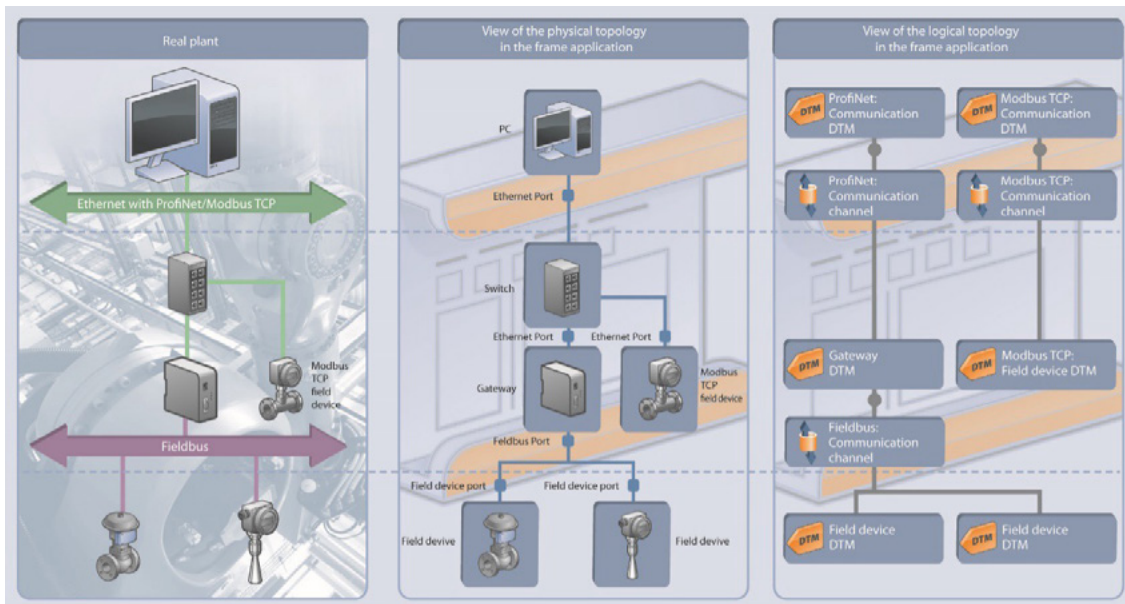
Using the FDT framework, vendors could offer economically appealing compact modular RIO systems with HART support. Manufacturers, including: Phoenix Contact, WAGO, Beckhoff, Weidmuller, Turck, and others, now have I/O solutions that work as either low-cost remote I/O solutions for factory automation applications and by including integrated HART support that, when combined with intrinsically safe versions of key I/O modules, can be successfully employed in hybrid applications.

These applications of FDT/DTM technology take advantage of one of the most important features - applications are available either as a standalone configuration tool or as a modular middleware hardware integration tool that can be embedded into any engineering control application to a level where it becomes almost invisible to the operator.

## A solution for nested communication applications

To clarify this point, let's review some FDT/DTM basic concepts. In FDT/DTM technology, there are three basic types of DTM files:

- **Device DTMs** - work in a similar way as hardware drivers and run in a FDT framework application.
- **Gateway DTMs** - work as device drivers but also provide protocol translation and media conversions for industrial communications gateways.
- **Communication DTMs**, also known as Comm DTMs, provide communication channels for devices connected through nested communication networks (any protocol).



Example of the FDT framework illustrating networking and nested communications

Nested communications enable suppliers to offer complete I/O subsystems that can be delivered with head stations compatible with whatever protocol that may be required by the end user, a family of components such as power supplies and I/O modules, and a user-friendly FDT-based integrated asset configuration management solution. This solution avoids powered backplanes with hot-swapped I/O modules and redundancy schemes for cost reduction because these features are not usually required in machine control applications.

## Typical application examples

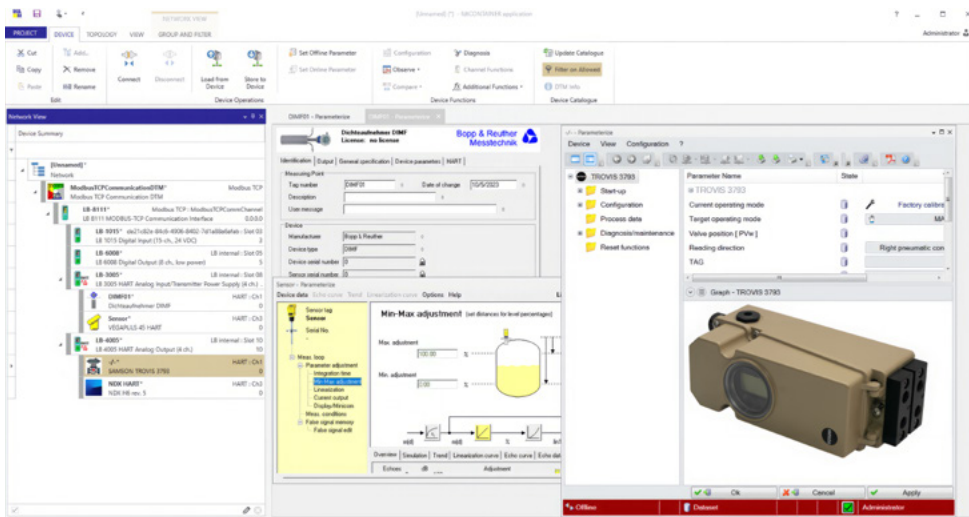
Let's analyze the following application examples of FDT technology in hybrid and factory applications:

Remote I/O subsystems are particularly adequate to use the modular approach that the FDT/DTM concept provides.

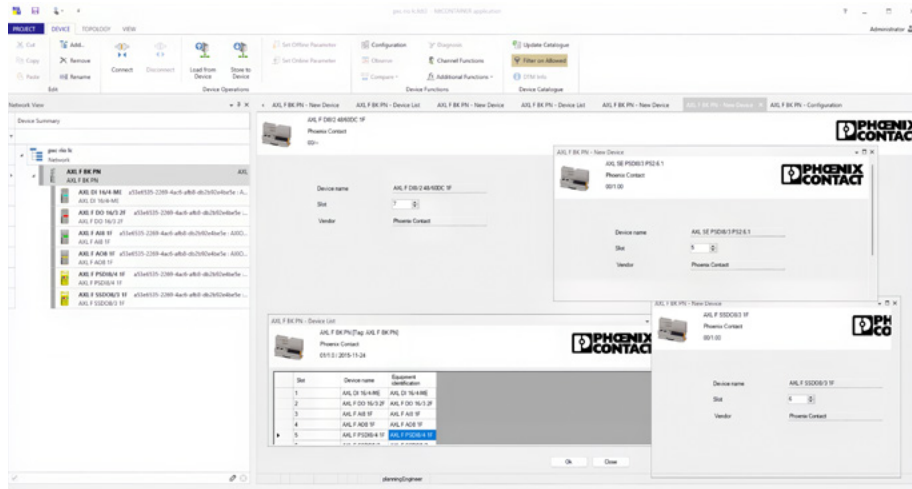
A typical remote I/O implementation of FDT technology will look like this:

- A **Comm DTM** is used for the communication of the RIO system to the control system backbone network.
- A **Gateway DTM** is used for the integration of the RIO system head station. This modular DTM allows end users to replicate the I/O module structure implemented in the application.
- **Device DTMs** are used to support the smart devices connected to the corresponding RIO modules.

The most common implementation of FDT technology in RIO systems would be HART-enabled I/O modules in combination with HART-enabled field devices. In this case, the I/O modules can send information about any device connected to them, whether they are smart or traditional devices.



Use of FDT technology in Remote IO systems with nested communication network support (HART through Modbus TCP)



Low cost Phoenix Contact RIO system for machine control applications featuring DI, DO, AI and AO modules.

This arrangement provides access to all features of a smart device with its specific Device DTM running in the FDT framework application, whether running as a standalone application or as an integrated engineering application. At the same time, it provides easy access to basic diagnostics for simple non-smart field devices, like short circuits and lead breakage information from connected DI and DO discrete devices. Therefore, this is a built-in method to bring intelligence to non-smart devices.

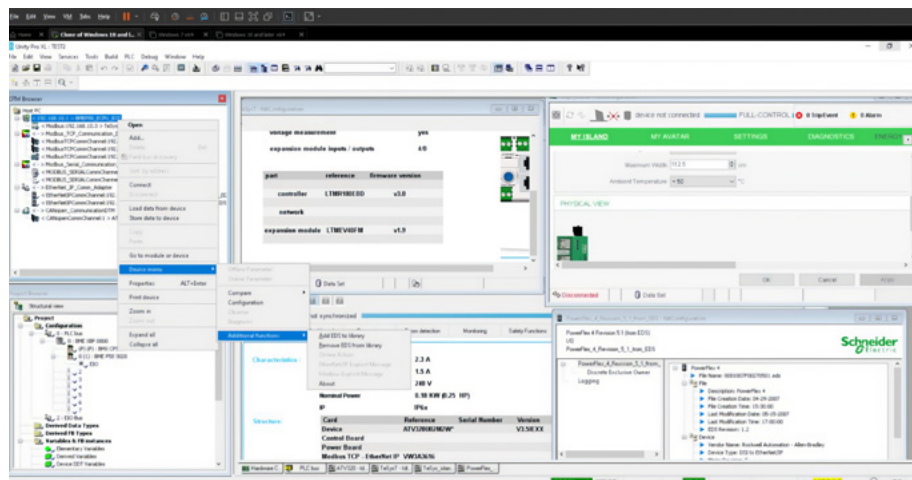
## An integration solution for machine builders

Using compact modular RIO systems provides a solution well-suited for machine builders. This kind of manufacturer can design a machine with a common I/O configuration and the choice of the most adequate communication head station. If the machine is connected, to a control system compatible with FDT technology, its integration becomes trivial.

Another non-process-related application of FDT technology consists of the integration of complex actuators such as speed drives, control drives, and motor commands.

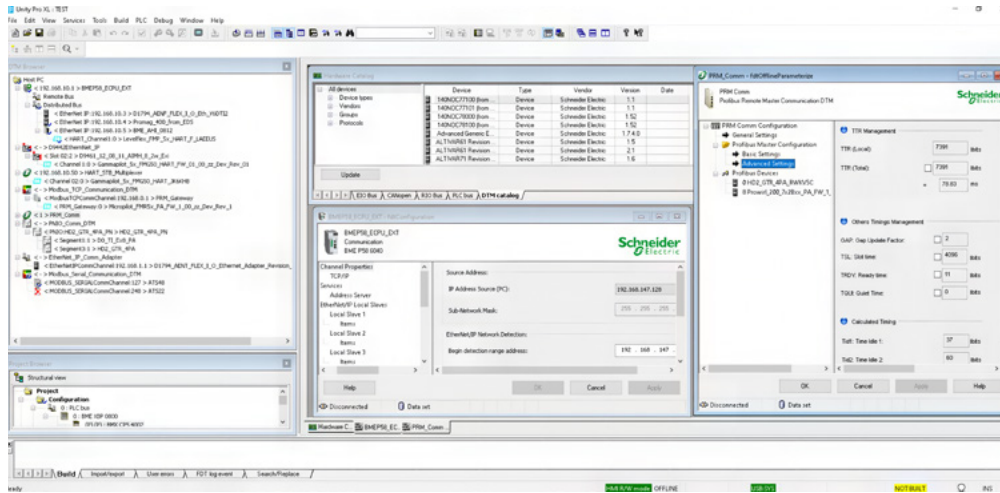
For this type of application, there are not as many DTMs available. Most of the available solutions come from the Schneider Electric product line. Schneider's approach to these kinds of applications has a secret feature - they have incorporated an Interpreter DTM that converts EDS (Electronic Data Sheet) files to DTMs included in their Generic DTM for Ethernet/IP Adapter Devices and their Modular Generic DTM for modular Ethernet/IP Adapter Devices.

This tool offers end users the ability to import any EDS file corresponding to any EtherNet/IP device and present the EDS as a generic DTM. Therefore, in addition to Schneider's motor control devices with native DTMs, you can use Rockwell Automation's ample line of EtherNet/IP devices whose EDS files can be accessed through the FDT framework.



EDS import tool using the EDS to DTM functionality.





A Unity Pro FDT configuration using Ethernet IP, Modbus TCP, Profibus DP and PA, Hart and Modbus serial Comm DTMs

## Embedding FDT technology into control engineering systems

Perhaps the best example of a control software platform based on an FDT core solution is Schneider Electric's EcoStruxure platform. In this FDT/DTM implementation, the FDT core works as the hardware configuration component of the engineering tool.

Its behavior clearly resembles how smaller platforms like PACTware work. After starting the main software application, the embedded FDT environment scans the server, workstation, or VM where it is installed and looks for any newly installed DTM. Afterward, the new DTM is seamlessly integrated into the DTM catalog.

When the EcoStruxure PLC programming solution is running, after the CPU and I/O options have been selected, the integrated framework works as the host for all the available DTMs.

## One single solution for all fieldbus protocols

Most third-party fieldbus interface solutions designed for specific PLCs require the use of a fieldbus specific software tool for its configuration. This software works by mapping the I/O information from the field devices that the controller requires to create the I/O image map in the controller's memory. The controller does not require the additional data that a smart field device can generate.

If the control system's installation employs more than one fieldbus protocol, a different configuration tool is necessary.

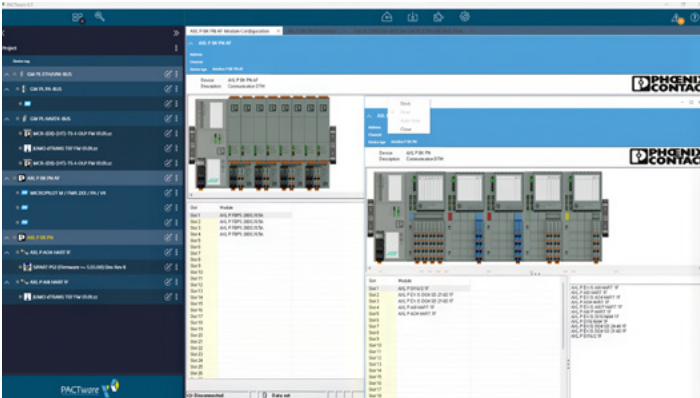
The use of an integrated FDT framework greatly simplifies these types of applications by using a single configuration utility for the integration of different communication protocols into the control system.

Support for any new communication protocol is enabled by the corresponding Comm DTM, which becomes part of the hardware catalog of the PLC programming platform. This approach allows the inner working features of the protocol to be hidden from the user interface.

The user can add any device supported by any available Comm DTMs installed in the system. The FDT framework works like an abstraction layer, enabling the system to have seamless access to connected devices. Each device DTM becomes available for access through the corresponding Comm DTM. When connecting RIO systems or field buses, a Gateway DTM must be installed below the Comm DTM in the topology. This allows RIO I/O modules or specific fieldbus devices to be added to the system by connecting them to the right Gateway DTMs. The main advantages are that all fieldbus interfaces are hidden by the framework application from the user, working as an abstraction layer for the fieldbus protocols used for connecting smart devices.

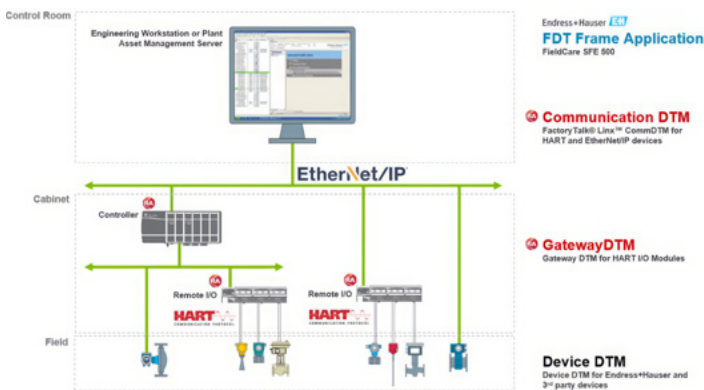
Using this approach, a FDT compliant controller may be equipped with different Gateway and CommDTMs for each of the protocols required.

**Let's see a couple of examples:**



Phoenix Contact Profinet RIO using HART gateways, Axioline P RIO modules and a Profibus PA to Profinet proxy.

- Using an Axioline P Remote I/O, in combination with compatible HART modular Gateways and a redundant Profibus to Profinet Proxy, it is possible to connect a controller with DI and DO signals, HART Devices and Profibus PA field devices.
- If you are a Rockwell Automation user, you may be working with the FactoryTalk software suite. This software package allows the integration of all kinds of devices, I/O system, and controllers into a companywide implementation of cloud-based applications, IIoT solutions and data processing services, such as Microsoft Azure or ThingWorx. The hidden ingredient in this plant wide solution is a piece of software known as the FactoryTalk Linx CommDTM.



Functional scheme of the FactoryTalk Linx CommDTM

As an example, in the FactoryTalk Suite, the FactoryTalk Linx CommDTM enables the communication of any device DTM connected to the system through an EtherNet/IP, ControlNet, or a DeviceNet network.

The FactoryTalk Linx CommDTM is the key part of the whole FactoryTalk architecture. It employs an embedded FDT framework application known as FactoryTalk AssetCentre that allows the system to perform asset management operations such as remote commissioning, configuration, parameterization, and diagnostics of any CIP-enabled device connected to the system.

In FactoryTalk, this functionality is available to any CIP-enabled device connected, if a DTM is available, for that device. It is not limited to process field devices.

In fact, one of the subsystems that benefit the most from the use of FDT technology in the Rockwell product portfolio is the remote I/O subsystem.

**Hybrid plants**

In hybrid plants, there may be a primary area dedicated to, for example, beverage production, which sometimes may require flammable oils for flavoring or alcohol-based products from the production of spirits. These processes involve hazardous areas and usually require batch process control. The typical application solution would feature either HART field devices, Profibus PA field devices, or EtherNet/IP devices.

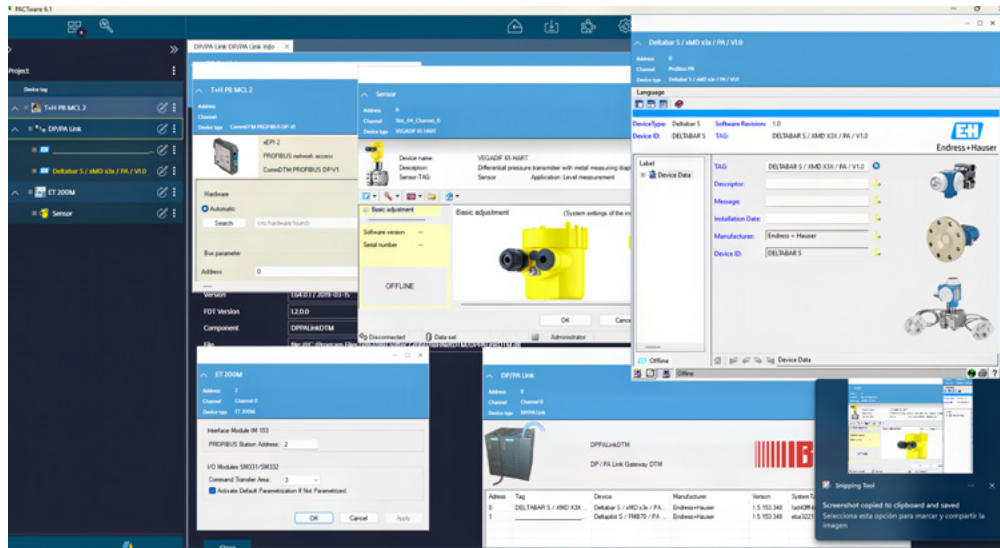
Schneider Electric's EcoStruxure platform supports both native Profibus Remote Master (PRM) and third-party Profibus masters that allow the system Profibus support.

Both native and third-party RIO systems can be configured using the corresponding DTMs and can also work as HART gateways when equipped with AI and AO cards with integrated HART modems.

These systems are available with either Profibus DP, EtherNet/IP, or Modbus TCP support. DI and DO cards that include lead breakage and short circuit detection for simple binary sensors can provide additional functionality.

RIO systems typically equipped with intrinsically safe IO cards include HART support.

All these devices can be integrated using the embedded FDT framework application into the PLC configuration and programming software.



Third party DTMs used for Siemens DP/PA link and ET-200 M RIO system.

## Integration of devices without original FDT support with products from third-party suppliers

One of the key features that FDT technology offers is openness. Even if a manufacturer does not have a DTM for their devices, there are viable alternatives.

Software developers have created third-party DTMs for popular hardware, like the third-party DTMs created to enable asset management of devices such as Siemens DP/PA Links and ET-200 remote I/O systems. With these Gateway DTMs, you can use an FDT framework in a Siemens-based control system and unite for the typical asset management tasks required by both Profibus PA and HART smart transmitters.

Perhaps the user will not have access to the complete features of a certain device by using these Generic DTMs, but for most of the applications, the range of functionality achieved is good enough. And the benefits of a user-friendly interface are notable.

## A future proof solution ready for OPC-UA and the NOA concept

Since specification version 2.0, FDT offers support for the OPC UA standard. FDT technology uses the OPC UA for the FDT Device Information Model, implemented in an OPC UA Server, allowing device information corresponding to any DTM installed and running on any FDT framework application to be mapped and accessible to higher-level applications.

Using OPC UA technology makes all the data supplied by the field infrastructure available to any OPC UA client application that may require that information.

Lastly, FDT technology allows a simple path for the implementation of the Namur Open Architecture (NOA) concept, which consists of a second channel of communication between the field level and the upper levels of the traditional automation hierarchy, unlocking access to additional field data for the following purposes:

- Monitoring of field devices, process analyzers, electrotechnical equipment, etc.
- Plant or fleet management of mechanical equipment
- Accessing data and/or implementing additional measurements for process optimization

The NOA concept objective is to provide an additional Digital Operational Infrastructure (DOI) for monitoring and optimization (M+O) purposes for increased reliability, easier maintenance, improved energy efficiency, and personnel safety.



# Full Stack FDT UE Support



## Cross-Platform with legacy DTMs: A Bridge from Legacy to the Future

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[fdt@mm-software.com](mailto:fdt@mm-software.com)



EcoEtruxure™

### Field Device Expert

for HART  
Version: 5.0

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Life Is On



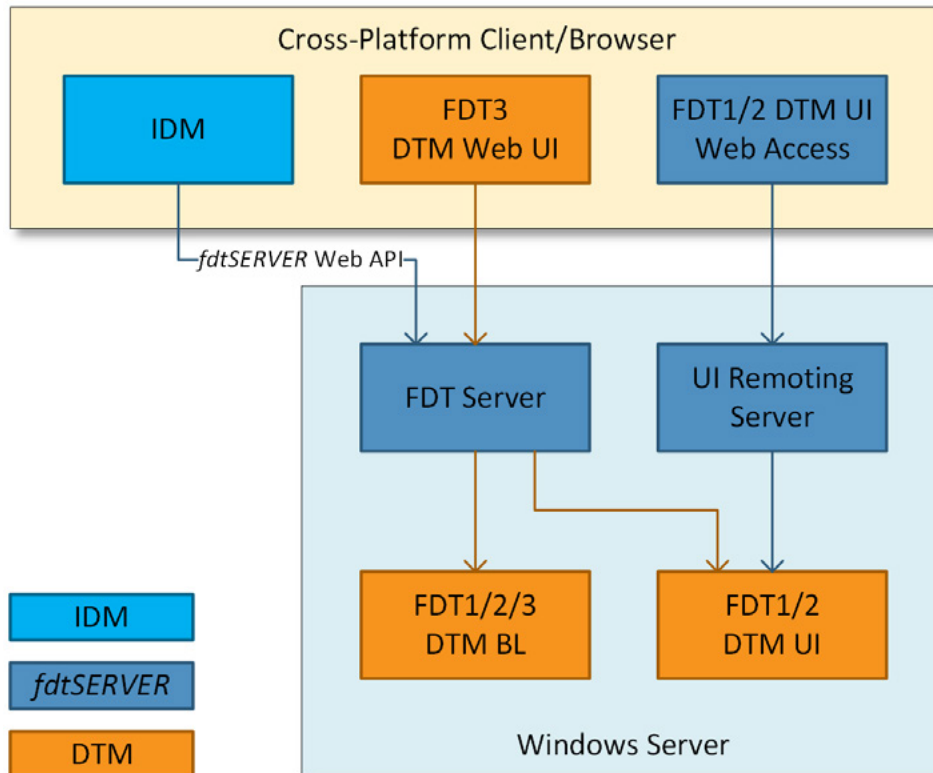
# HARMONIZING CROSS-PLATFORM ACCESS WITH LEGACY DTMS: A BRIDGE FROM LEGACY TO THE FUTURE



Intelligent device management cross-platform functionality has become more and more popular for the industrial automation community, and the FDT (3.0) Unified Environment (FDT UE) provides the software-based Server solution based on Common Components to fulfill any vendors asset management requirements. As the industry

scales to support modern technologies, the need to bridge the current install-base of FDT 1.2.x and 2.x device DTMs within a FDT Desktop application is imperative as the industry migrates to a standardized distributed control environment.

FDT has been the defacto integration and device management standard for multi-vendor and multi-protocol environments for over 20 years. That means that there are tens of millions of FDT/DTMs deployed in critical production plants and facilities around the globe today. As the industry accelerates its digital transformation journey, many vendors are asking for the most efficient path to



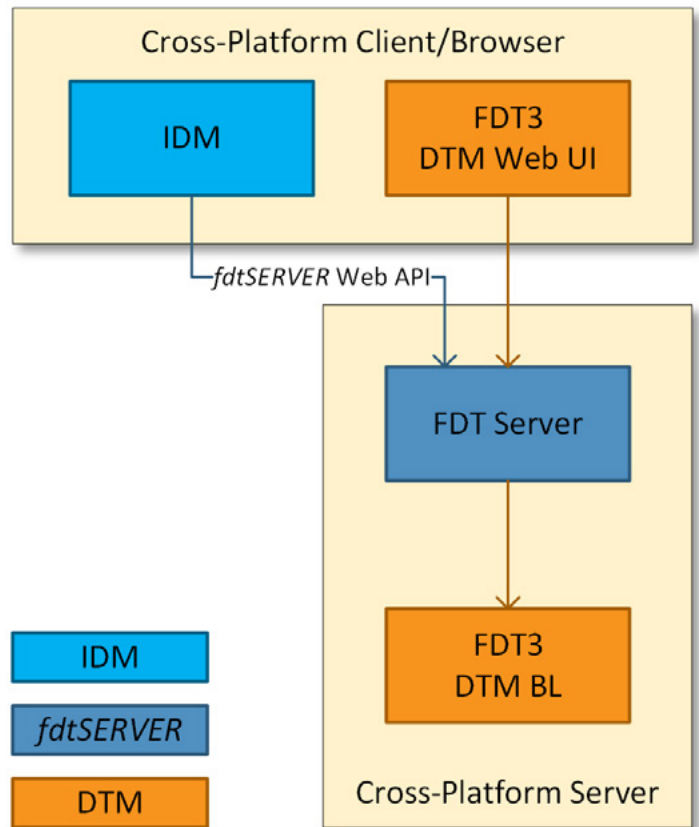
preserve the legacy FDT/DTM installation with the new modern FDT distributed server environment. Does the process require development of both the FDT Server inclusive of cross-platform functionality and the FDT Desktop with backward compatibility? Well, the best answer is that with the M&M *fdtSERVER*, you can harmonize both worlds!

The new M&M *fdtSERVER* allows system vendors to develop their cross-platform device management strategy that allows access to all FDT/DTM operations via Web API. This includes the operation of FDT 1.2.x and FDT 2.x DTM UI's remotely through a web page, including new FDT 3.0 DTMs entering the market allowing for an efficient way to bridge legacy devices with the future.

Once there are enough FDT 3.0 web UI-based DTMs to support the legacy install base, the application no longer needs backward compatibility capabilities. This means users can easily switch to the pure cross-platform edition of M&M *fdtSERVER* with compatible API removing the need of the Windows-based computer in the field. Plant managers and engineers will now be able to experience the modern FDT distributed control environment with web services using client/browser-based access for intelligent device management.

The M&M *fdtSERVER* supports all common FDT features including Device Catalog, FDT Topology, DTM UI, DTM Command Function and DTM Parameters (FDT 2.x/3.0 only).

**[Ask for a free trial version of the M&M \*fdtSERVER\* today!](#)**



**[Click here to view a quick M&M \*fdtSERVER\* video overview](#)**

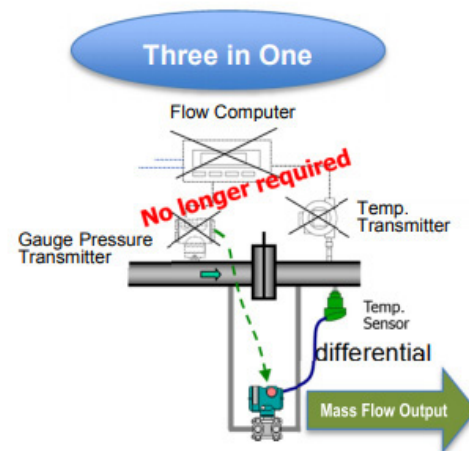
# Yokogawa Adds New Functions to Oprex™ Field Instruments

**EJX Multivariable Transmitter, FDT 2.0-based-DTM, and FlowNavigator Flow Configuration Software FSA120 improve procurement, setup, operations, and maintenance, reducing the troubleshooting time required in the event of equipment failure.**

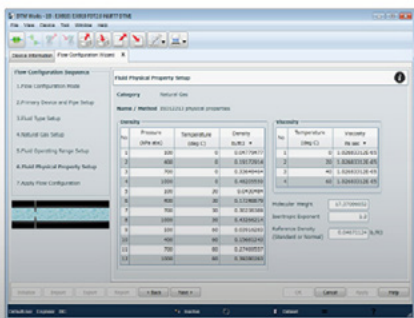
EJX Multivariable Transmitter successfully integrates the DPharp multi-sensing capability with an onboard flow computer and can be configured for multi-variable (DP, SP, T) or dynamically compensated mass flow outputs. Dynamic flow compensation allows the EJX Multivariable transmitter to eliminate inherent errors in the DP flow calculations at actual operating condition and to model the flow profile more precisely. Extensive range of primary elements and process fluids are supported. The EJX Multivariable Transmitter is compatible with a wide range of primary devices, including orifice plates, nozzles, venturi tubes, multiport averaging pitot and cone meters, and can be used with various types of fluid, including general fluids DIPPR, steam tables IAPWS-IF97 and natural gas standard AGA8/ISO12213.



EJX Multivariable Transmitter



Application information, such as the primary device and fluid data required for mass flow calculation, is using an FDT 2.0-based mass flow parameter configuration tool — FlowNavigator Flow Configuration Software FSA120 that runs on a PC and is downloaded to the transmitter by means of field communication. In operation, the flowmeter computes standard volumetric or mass flow from measured differential pressure (DP) and flowing density using actual measured pressure and temperature, unlike standard differential pressure transmitters which assume pressure and temperature — and therefore flowing density — to be constant.

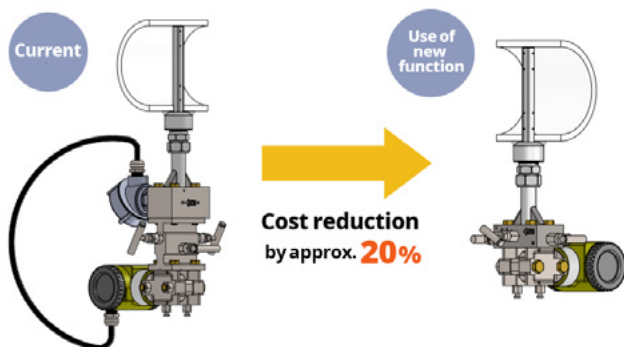


## OpreX™ Field Instruments: FlowNavigator Flow Configuration Software FSA120

FlowNavigator Flow Configuration Software FSA120

## New functions have been added to the YOKOGAWA Multivariable Transmitter EJX910A and EJX930A.

**Instrument configuration for measuring saturated steam**  
(Example : 8 inch pipe installation)



## Saturated Steam Mode added for EJX Multivariable Transmitter

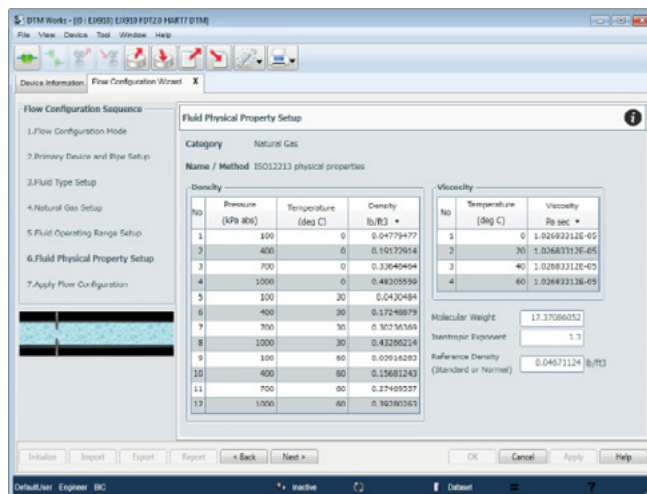
To reduce engineering man-hours and procurement costs, operation without using an external thermometer under saturated steam is made possible. The EJX Multivariable Transmitter can now calculate steam temperature from static pressure values using the steam table (international state formula IAPWS-IF97). When saturated steam mode (ET Fixed = Saturated Steam) is set, steam temperature values can be calculated. In measurement function B (mass flow measurement), saturated steam flow rate can be measured without connecting an external thermometer.

## Storage of User Flow Parameters in FlowNavigator Flow Configuration Software FSA120

Application information, such as the primary devices and fluid data required for mass flow calculation, is using an FDT 2.0-based mass flow parameter configuration tool, FlowNavigator. Users can now enter application information using FSA120 FlowNavigator R2.03 GUI (Graphic User Interface) allowing "User Flow Parameters" to be stored in the transmitter. This reduces man-hours required for equipment setup and management, enabling rapid start-up of operation. Previously, storage of "User Flow Parameters" in the transmitter was not possible.

"User Flow Parameters" entered using the FlowNavigator's GUI include the primary device and fluid data required for mass flow calculation.

- Primary device and pipe setup
- Fluid type setup
- Fluid operating range setup
- Fluid physical property setup



Fluid physical property setup



## Vortex Flowmeter VY Series debut

*As the inventor of the vortex flowmeter,  
Yokogawa is bringing  
the vortex technology to a new era*

- Realization of condition based maintenance by remote maintenance and self diagnostic
- Inheriting the structure of the digitalYEWFO Series and Yokogawa's long history of achievements

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## Display of Device History

Detailed equipment history information, including alarms and process data detected by the transmitter, can be displayed, and harvested via the EJX Multivariable Transmitter FDT 2.0-based-device DTM in the unlikely event of equipment failure. This provides improved maintenance operations by reducing the troubleshooting time required in the event of equipment failure.

-----Maximum/Minimum-----		
Static Pressure Max	. 3564.7	kPa
Static Pressure Min	. 0.0	kPa
CapTemp Max	. 120.7	degC
CapTemp Min	. 19.0	degC
AmpTemp Max	. 85.0	degC
AmpTemp Min	. 18.9	degC

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# Improve Operations with DTM's to Gain Access to Plant-Floor Data

With increasing quantities of information that originate on the plant floor, remote access to real-time data and plant performance metrics is more important than ever.

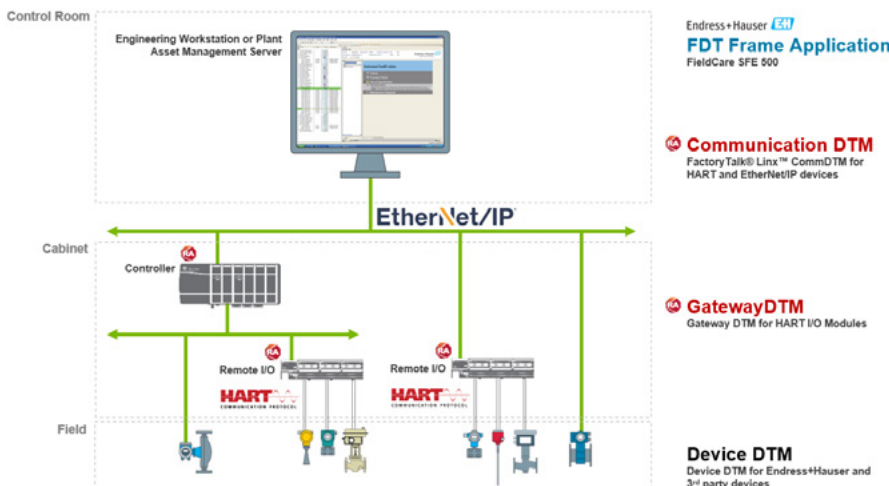
That is why Rockwell Automation is committed to providing intelligent device management across the automation architecture. A leading standardized method used for streamlining device lifecycle management (integration, configuration, monitoring) with advanced diagnostics according to NE 107 (NAMUR) recommendation is DTM-enabled I/O. The DTM is an embedded software (device, gateway, and comm levels) solution that standardizes the communication path and access to all connected devices/data over any network topology in the automation infrastructure. The solution supports a major automation use case aimed at providing a unified user environment optimizing operations and maintenance performance for effective asset management.

To learn more about using DTM's to gain an integrated approach to field device management, please consider the following resources:

The FactoryTalk Linx CommDTM Getting Results Guide will guide you through the set-up of the communication path between your field devices connected to Allen-Bradley I/O and an FDT asset management system.

To download the latest FactoryTalk® Linx CommDTM and the Gateway DTM for your Allen-Bradley I/O platform, please visit our [Product Compatibility and Download Center](#) (PCDC) click on "Find downloads" and search for "DTM".

To engage with experts from Rockwell Automation and our [technology partners](#), please attend the annual [Process Solutions Users Group at Automation Fair](#) in Boston, MA USA on November 6-9, 2023. In addition to the full Rockwell Automation portfolio including, FactoryTalk Software, Allen-Bradley Hardware, PlantPAx Distributed Control Systems, and Lifecycle IQ Services, you will be able to talk to device and infrastructure providers to discover how their products (communication interfaces, cables, and safety barriers) create an opportunity to capture additional value by using device data to enhance decision making.



[Click here for more information on Automation Fair.](#)

System Topology – This diagram illustrates how different parts of the system work together.



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## **A digital transformation strategy that includes upgrading to a modern DCS can help producers be more productive, profitable and reduce risk**

How can a process industry producer or manufacturer move beyond the status quo to keep up with industry and technological trends?

A one-size-fits-all solution just won't cut it anymore. It's time to get surgical about solutions.

Enter: Digital transformation as enabled by the modern distributed control system (DCS).

**LEARN HOW**



**Rockwell  
Automation**



# Maximizing Efficiency and Reliability: Schneider Electric's Innovative Field Device Management Solution

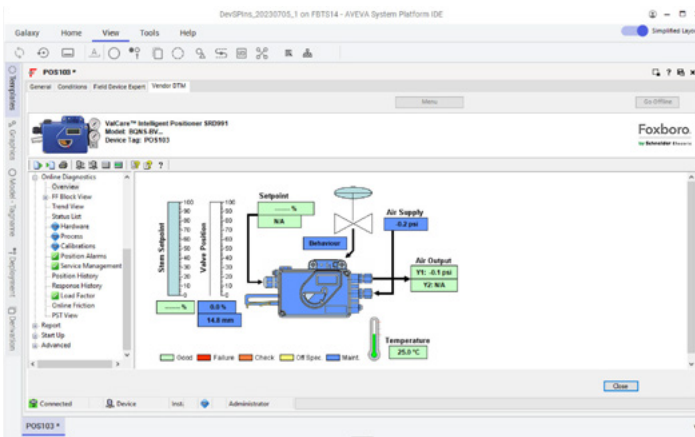
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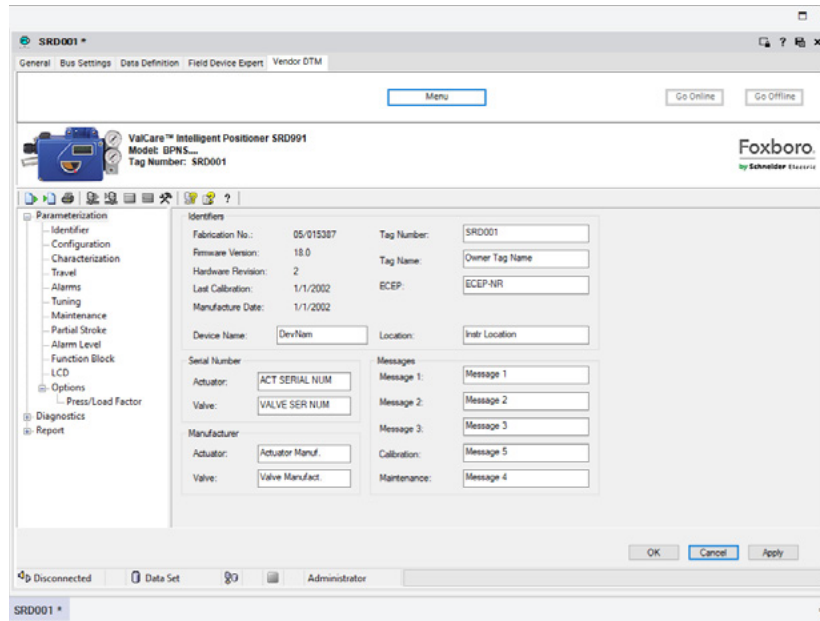
## OFFERING A COMPREHENSIVE, END-TO-END APPROACH TO OPTIMIZE EFFICIENCY, RELIABILITY, AND COST-EFFECTIVENESS IN INDUSTRIAL PROCESSES

Traditional field device management solutions have primarily focused on configuration and diagnostics. However, to achieve optimal performance and cost-effective maintenance of field devices, it is essential to adopt a more holistic approach. Recognizing this need, Schneider Electric introduces an innovative Field Device Management offering.

At the heart of this groundbreaking solution lie two powerful modules:

1. **EcoStruxure Field Device Expert:** This integrated solution, built on FDT technology, empowers businesses to efficiently commission, configure, and maintain field devices throughout their lifecycle. The Intelligent Commissioning Wizard automates HART field instrumentation commissioning, reducing manual efforts and maximizing efficiency.
2. **EcoStruxure Maintenance Advisor:** Leveraging advanced analytics and IoT technology, this module predicts potential field device failures, enabling proactive maintenance scheduling. It enhances operational reliability by providing real-time data for quick issue identification and troubleshooting. Integration with Mobile Operator Rounds ensures comprehensive asset monitoring.





**By combining these solutions, Schneider Electric offers a comprehensive, end-to-end approach to optimize efficiency, reliability, and cost-effectiveness in industrial processes:**

1. **Increased Efficiency:** Automating commissioning and providing predictive maintenance insights reduces downtime and improves operational efficiency. Proactive maintenance scheduling ensures precise and timely task execution, optimizing plant performance.
2. **Enhanced Reliability:** Condition Based maintenance extends reduces the risk of unplanned downtime. Early detection and resolution of potential issues safeguard critical assets, enhancing reliability and productivity.
3. **Reduced Costs:** Implementing condition-based practices and avoiding unnecessary trips optimize resource utilization, resulting in cost savings.
4. **Improved Compliance:** Comprehensive asset monitoring improves safety and environmental compliance. Real-time monitoring and early issue detection ensure devices operate within specified parameters, enhancing regulatory compliance.

Leveraging advanced technologies and intelligent analytics, you can optimize your industrial processes, maximize asset performance, and gain a competitive edge with Schneider Electric's innovative field device management solution.



**Click here to learn more about field device management solutions.**

# The 'full version' DTM collection is now free for everyone



Simplicity for the user — that’s an important guiding principle at VEGA. It also applies to the many tools that are available for operating sensors and other devices. From October 2023, the range of capabilities will be considerably expanded.

## What’s new?

VEGA is making the previously chargeable 'full version' of its DTM Collection the free 'standard version' for everyone: "We want to provide our customers with everything they need for quick and easy setup, diagnosis and maintenance," explains product manager Ralf Höll – i.e. a comprehensive range of operational and maintenance functions at no additional cost. The DTM Collection comes with many valuable functions, including a calculation assistant for complex vessel geometries, extensive instrument documentation, diagnostics, recording and storage onto VEGA DataViewer.

## What are the biggest advantages?

The VEGA DTM Collection is an entire software package that includes many useful features. For example, it enables saving or printing simple instrument set up overview documentation into PDF format. "Another valuable tool is the DataViewer," emphasizes product manager Philipp Ketterer. This Windows-based software is used to conveniently display, analyze, manage and archive field device data that can be stored locally. This includes instrument parameters, measured value records, event data, echo curves and many other important values. An additional

plus: DataViewer data can be easily shared with customer service if necessary. "This simplifies and speeds up analysis enormously," says Ralf Höll.

## What else can the software do?

For some time now, VEGA has been steadily expanding the range and capabilities of the operating tools for its customers. For example, customer service tools have been conveniently and easily accessible, from wherever customers are working on an instrument for quite some time – via either the VEGA Tools-App or the VEGA DTM Collection. Since this spring, the cloud-based Backup & Restore function in VEGA Tools App has also made everyday work easier for users. It allows all sensor and device parameter data to be saved.

## How can this all be linked?

myVEGA serves as the central hub and interface for all adjustment and operational tools. All the data can be conveniently stored and managed there: Whether parameterization, diagnostics, backups, PIN numbers, access codes or test and inspection documents – users have everything important at their fingertips at all times. This is because access is possible via all operating and adjustment devices. "In conjunction with the other tools, this capability ensures simplicity and added value for our customers," say the product managers with absolute certainty.



**Download your 'Full Version' DTM Collection here.**

# CONNECT WITH AN FDT SERVICE PROVIDER TO JUMP START DEVELOPMENT



CodeWrights



Jimmy Chen and Happy Li, from M&M, discuss the importance of FDT as the harmonizing standard for intelligent device management in multivendor, multiprotocol environments, reducing the overall cost of device management within a industrial control system.



Sven Giesecke, Director of Sales and Product Mgmt at CodeWrights discusses why they are proud to be part of the FDT community and how they can help device manufacturers develop FDT-based solutions allowing their customers to save time and money while managing, configuring and maintaining their field devices improving productivity.



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