



**ASSET
MANAGEMENT**



DEVICE INTEGRATION STRATEGIES

Empowering the Intelligent Enterprise

CONTENTS

- 03. Editorial: FDT Server to Become Pivotal IIoT Hub
- 05. FITS™ Platform Moves Asset Management to the Cloud

- 11. NGL Producer Improves Commissioning, Troubleshooting and Safety with FDT® Technology



What is FDT® Technology?

The FDT Group AISBL is an international non-profit corporation consisting of leading worldwide member companies active in industrial automation and manufacturing. The major purpose of the FDT Group is to provide an open standard for enterprise-wide network and asset integration, innovating the way automation architectures connect and communicate sensor to cloud for the process, hybrid and factory automation markets. FDT technology benefits both manufacturers and end users, with advancements such as the Industrial Internet of Things (IIoT) and Industry 4.0 delivered out-of-the-box – enabling modernized asset integration and access to performance data for visualizing crucial operational problems. Around the world, end users, manufacturers, universities, and research organizations are working together to develop the technology; provide development tools, support, and training; coordinate field trials and demonstrations; and enable product interoperability.

FDT Technology is comprised of two primary software components—the FDT Device Type Manager (FDT/DTM™) the driver for an intelligent device, and the FDT FRAME Application (FDT/FRAME™), which can be a stand-alone configuration application or embedded in engineering applications such as a DCS, PLC or asset management solution. DTMs developed by instrumentation suppliers provide a graphical interface to support configuration, diagnostics and troubleshooting of critical measurement devices and other assets. The FRAME Application provided by the system supplier, hosts DTMs used for management of all the devices on a wide variety of process and factory networks within a facility. Together, an FDT/FRAME and a collection of DTMs and/or other device drivers create an FDT-enabled application, which can be scaled from a small collection of devices to tens of thousands of devices controlled by a single FRAME throughout the automation communication pyramid.

Newsletter Contributors



Learn More

- >> [FDT/DTM™ Catalog](#)
- >> [Become a Member](#)
- >> [FDT/FRAME™ Catalog](#)
- >> [Events](#)
- >> [Newsletter Registration](#)
- >> [Contact Us](#)

Visit www.fdtgroup.org for more information.

Join Us



Editorial: FDT Server to Become Pivotal IIoT Hub

FITS™ standard to release year-end empowering a comprehensive information exchange platform supporting the Fourth Industrial Revolution while preserving today's installed base



Lee Lane, FDT Group Chairman of the Board of Directors

Our final membership review of the emerging FDT 3.0 technology platform known as the FDT IIoT Server™ (FITS™) standard is now complete. The Architecture and Specification committee has been busy reviewing all remaining comments that have been received and has given the green light to proceed. With this major milestone behind us, I am pleased to report that we remain on schedule for an end of year release of the FITS specification.

Since 2016, FDT leadership, technical teams and industry-wide experts have taken the time to evaluate and carefully build the next chapter of FDT based off a wealth of industry-driven, feature rich feedback. After much collaboration and understanding that industrial solutions tend to stay in service for long periods of time, imperative use cases to protect your investment for the future were defined — platform independence, a comprehensive security solution, OPC UA integration, mobile device management, and a repository for DTMs. While there are a host of other important features included, all these requested use cases have taken shape within the emerging FITS platform. This supports FDT's heritage and

future as the open, standardized, platform independent architecture for universal device integration and asset management.

Let's look. Within a FITS architecture, the FDT Server becomes the heartbeat, the pivotal IIoT hub empowering the intelligent enterprise. The Server boasts a web services portal allowing access from authenticated mobile devices or any major browser along with an OPC UA interface for IT/OT convergence and enterprise access. Additionally, rich control features allow for any industrial communication protocol or vendor device to be seamlessly integrated supporting smart manufacturing practices for the process, hybrid and discrete industries. Developed from the ground up with security at the core and an operating system agnostic environment, an FDT Server is fully deployable in the cloud, on-premise, edge or in a desktop environment. This makes the FITS solution a true information exchange platform and a key enabler for IIoT and Industrie 4.0 applications.

Continued

FDT Server to Become Pivotal IIoT Hub

With all the excitement around the new architecture, take comfort that we have preserved the FDT legacy installed base investment. We have calculated that more than 10 million DTMs and several hundred thousand FDT/FRAME-enabled applications are deployed and in use. As the vendor community advances their FDT-enabled stand-alone/desktop applications and system offerings, make note that all legacy DTMs will function in a single user Microsoft FDT Desktop environment updated to the FITS standard. You will be able to freely mix FDT 1.2.x, 2.0, 2.1 and 3.0 DTMs within that Desktop application. If you plan to continue to use a desktop application, check with your system provider about their update plans for that application so that as you begin to receive new FDT 3.0 (FITS) DTMs.

With the launch in sight, now is the time to evaluate your business strategy solutions and to think about exploring how a FITS-empowered solution will provide investment protection as you evolve your system and/or device portfolio offerings to meet the desired needs of your customers for the new era of automation. While our technical teams are prepping the FITS standard for final release, our development tools for DTMs, Servers, and Desktop applications are near final form. To help prepare you, we have scheduled a FITS Developer Workshop event geared towards system architects, product managers, and software developers on the 8th

and 9th of October in Stuttgart, Germany. Day one will provide a deep dive into the FITS architecture and deployment scenarios, while day two offers hands-on programming time using the official developer tools. We have had requests from end users to attend the first day of this seminar and we welcome these participants on a space available basis. You must sign up in advance for this event on our website at <https://www.fdtgroup.org/event/fits-developer-workshop/>.

FITS™ Platform Moves Asset Management to the Cloud

Explore how the FDT Server connects plants, people and data in new ways

Suriya Selvaraj, VP of Technology - FDT Group

For industrial organizations, asset management practices are critical to ensure the reliability and availability of critical equipment while keeping maintenance costs to a minimum, and to capitalize on short-term opportunities in the market.

FDT Group has long focused on bringing plants, people and data together. The organization's latest development effort transitions its integration standard to an information exchange platform. This enables cloud-based asset monitoring for field devices, which reduces maintenance costs, improves asset reliability and provides useful information to personnel in a timely manner.

Today's reliability challenges

In today's industrial facilities, "smart" field devices are the eyes and ears of automation. They are able to provide more and more information and transmit it via bus systems to other components in the control network. However, the failure of a device can quickly lead to a malfunction of production equipment.



Traditionally, asset performance monitoring approaches involved monitoring devices for evidence of incorrect operation, pending failure or the need for calibration. This activity was undertaken with asset management programs or custom-written programs hosted on a desktop or client/server architecture based within a single facility. Users received reports for actionable items, and could utilize status displays showing where attention was required.

FieldCare SFE500

Universal Device Configuration

- Access field devices of all protocols and vendors using DTMs and DDs
- Touch enhanced GUI for tablet use
- Supports 21 languages and Windows10
- Monitor asset health or connect to Life Cycle Management system

www.endress.com/fieldcare



Endress+Hauser 
People for Process Automation

Continued FITS™ Platform Moves Asset Management to the Cloud

Emergence of the IIoT

The Industrial Internet of Things (IIoT), along with Industry 4.0, is one of the most significant trends in industrial automation. IIoT-based asset management solutions typically include condition monitoring, predictive maintenance, asset integrity management and reliability-centered maintenance, and often involve technologies such as asset health data collection, visualization, and analytics. They improve upon traditional asset management through deeper integration with enterprise resource planning (ERP) and computerized maintenance management systems (CMMS) – driving efficient and accurate maintenance work orders.

Accessible from a mobile device such as a smart phone or tablet, the latest IIoT-based solutions provide immediate awareness of performance/health issues by alerting engineering/maintenance personnel of an asset needing

attention when they are near the installed equipment. The tools also make documentation and diagnostics immediately available. Technicians can view current versions of electronic manuals and device status while in the field.

Growth of cloud-based applications

The collection of data at a central point in the cloud has key benefits for the transparency and analysis of asset performance information. By establishing a single infrastructure to support multiple facilities, industrial organizations can leverage global expertise, spread costs between different stakeholders, and improve overall system availability. With this approach, it does not matter if data comes from multiple locations within one plant or several facilities that may even be distributed around the world; centralized data access allows users to run various statistics for a comparison/benchmarking of individ-

Continued FITS™ Platform Moves Asset Management to the Cloud

ual production lines or plants. An expert at one location can provide more value by being able to consult with other facilities as well.

In addition, the use of mobile devices for viewing data allows industrial operators to react very quickly to unexpected events, changing environments, and continually optimize their bottom-line results. This development also fits closely with modern workers' expectation of connectivity to their data with easy access to it; and having a collaborative environment, so they can share information with their colleagues on the plant or factory floor.

Using FITS to optimize assets

The specialized equipment required for industrial manufacturing has become a focal point for concerns about operational efficiency, preventive maintenance, and costly failures that can harm business relationships and finances. This explains why cloud-based asset management solutions are becoming an essential tool for operating companies of all sizes.

FDT Group, an independent, international, not-for-profit industry association supporting the evolution of FDT® technology, has demonstrated that open industry standards bring value. FDT is the industry's most widely deployed asset management solution, with tens of millions of FDT/DTM-enabled devices in use and hundreds of thousands

FDT/FRAME-enabled host/systems installed worldwide. All major control system and device vendors support the technology.

Experience has shown that FDT/DTMs are a universal tool for lifecycle management of any device/network in the process and discrete automation markets. Indeed, they are intended for smart devices providing data-driven business intelligence. Their data allows for predictive maintenance models for effective asset support strategies.

The emerging FDT IIoT Server™ (FITS™) standard, set for release as part of the FDT 3.0 offering by year-end, will further empower the intelligent industrial enterprise with native integration of the OPC Unified Architecture (OPC UA), as well as Control and Web Services interfaces for mobile applications. FITS also encompasses a robust security solution to safeguard critical automation information and operating data. The standard provides enhanced protection measured via robust multi-layered security, and leverages vetted industry standards such as Transport Layer Security (TLS), Web Sockets Secure (WSS) and Hyper Text Transfer Protocol Secure (HTTPS).

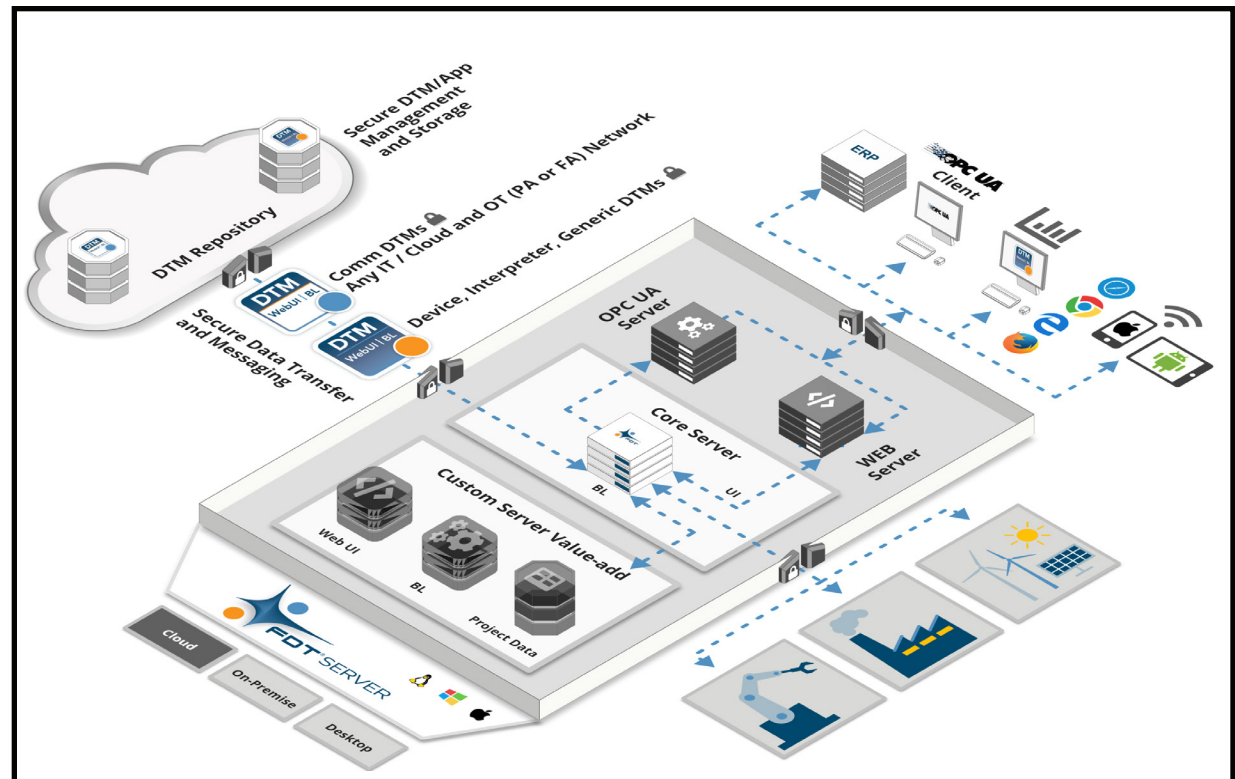
FITS can be utilized in a host of diverse operating environments due to its platform independence within the .NET Core framework. This results in an FDT Server that is deployable on a Microsoft-, Linux- or iOS-based operating system. The solution enables cloud, on-premise,

Continued FITS™ Platform Moves Asset Management to the Cloud

edge and desktop deployment methods meeting the needs of the process, hybrid and discrete sectors.

The FDT Server is built around a Core Server, which serves as a center point for wide range of client/server interactions. It includes an OPC UA Server providing access to DTM data with authenticated OPC UA Clients, and a Web Server enabling the use of web user interfaces on remotely connected, browser-based clients and other mobile device such as smart phones, tablets, and PCs. The solution also supports the use of apps that improve workforce productivity and plant availability.

Users can connect an FDT Server in the cloud to one or more plants with a secure virtual private network (VPN). This approach ensures full authentication and data encryption, and automatic tunneling through networks allows the system to directly talk with devices in the field. It also enables remote diagnostics by authorized users, so supervisors, managers and other stakeholders can monitor status on a remote basis.



FITS Platform | Cloud to Cloud Architecture

FDT Group's latest development allows for the creation of web-based DTMs™ that will seamlessly integrate with any FDT Server (multi-user) or desktop (single-user) hosting environment. These DTM-enabled devices serve as the source of data driving robust asset management capabilities. At the same time, integration with OPC UA



Easy to Integrate

- There are **no changes required on your DTMs**. Sign up, install the *fielddevice.cloud* Plug-in for PACTware and you are ready to go.
- Easily Gain DTM Insights in Isolated Databases with Configurable Reports.

OPC UA



PACTware

OPC UA for PACTware

The OPC UA Plug-in for PACTware adds an OPC UA Server to PACTware and brings IIoT to DTM-based field devices.

Continued FITS™ Platform Moves Asset Management to the Cloud

provides an ongoing infrastructure to make this information available to thousands of other applications and platforms.

A key feature of the FITS platform is a cloud-based DTM repository, which enables all certified DTMs (based on FDT 3.0) to be automatically downloaded from the cloud for use in on-/off-premise and desktop applications. The repository provides convenient DTM/App storage and device management, as well as secure data transfer and messaging with proactive user alerts when DTM updates are available. The repository eliminates the headache of distributing DTMs, and instead provides a secure portal allowing vendors to authorize/de-authorize customers; view reports and download history; and upload, update, remove, or suspend DTMs as needed.

Advantages for industrial operations

With the FITS solution, industrial asset management becomes much more empowered thanks to better diagnostics and easier access to device information, reducing downtime improving meantime to repair (MTTR) performance. Users will be able to take advantage of secure and seamless data exchange/interrogation from sensor to cloud, and achieve new levels of information technology (IT) and operational technology (OT) integration. For device vendors, next generation DTMs will provide fit-for-purpose solutions for tasks such as deep inspection diagnostics and prognostics enhanced driven by artificial intelligence.



Continued

FITS™ Platform Moves Asset Management to the Cloud

All DTMs based on FITS comply with the NAMUR NE-107 recommendation, which stipulates that operators need a view of the process including the status of the instrumentation in a simple and uniform way – regardless of source device – to support predictive maintenance strategies. The DTMs will be an important enabler for apps intended to view the health of field devices, and subsequently improve maintenance workflows.

As a platform-independent solution, FITS will benefit companies that operate plants with a diverse array (or brands) of automation systems and devices. It supports real-time monitoring and predictive maintenance applications requiring uniform access to field devices across platforms. The technology also supports enterprise control so that a single cloud instance can address multiple facilities to reduce costs, minimize overhead and centralize administrative tasks.

With FITS, field device data and information can be automatically provided for transport into cloud-based applications. This opens up the way for condition monitoring functions to be realized as cloud-based applications – independent of the automation system. The collected data can also be transferred using an export function for further processing in enterprise asset management or cloud-based condition monitoring systems.

The FITS solution will empower plants and factories with important benefits such as:

- Low total cost of ownership via truly open technology
- Robust device configuration, commissioning and diagnostic support
- Simplified engineering and increased productivity
- Reduced downtime (no more wasted maintenance)
- Predictive device maintenance approach to help identify problems before they become severe

Going forward, adoption of the versatile FITS platform will create opportunities for asset management as a service, with service providers completely managing the cloud environment and implementing a variable cost model based on the number of users and assets to be covered.

Conclusion

FDT Group's technology, as advanced by its FITS solution, holds the key to monitoring critical plant and factory operations to reduce costs associated with facility maintenance and installed smart devices. It makes device data available when and where it's needed for automation, asset management and engineering systems, delivering important performance information to support operational excellence.

NGL Producer Improves Commissioning, Troubleshooting and Safety with FDT® Technology

Canadian company Inter Pipeline streamlines plant start-up and safety procedures with smart instrumentation information monitoring and asset management solutions

Device configuration and commissioning tasks are traditionally time-consuming, tedious, manual, and prone to errors. Yet, they are vital to ensure the reliability and safety of an industrial facility.

It has also been recognized time again that the ability to have open access to device intelligence is essential to enhanced reliability, reduced failures, and faster start-up times.

The following article describes how Inter Pipeline Ltd. recently commissioned a new liquids extraction plant with smart HART® devices, and used FDT® technology to access information so as to effectively streamline pre-commissioning, configuration and troubleshooting of field instruments.

Background

Inter Pipeline is a major petroleum transportation, storage and natural gas liquids processing company based in Calgary, Alberta, Canada. It owns and operates facilities throughout western Canada and Europe.

In 2016, Inter Pipeline acquired a Canadian midstream business. The company now operates the Pioneer 1 and Pioneer 2 liquids extraction plants located near Fort McMurray, Alberta; a fractionator near Redwater, Alberta; and a pipeline system that connects these facilities.

The Pioneer 1 extraction plant, which began operations in 2002, processes offgas from oil sands upgraders. The Pioneer 2 plant began production in February 2016 and is committed to boosting domestic NGL production while reducing emissions of carbon dioxide (CO₂) and sulphur dioxide (SO₂).



Figure 1: Inter Pipeline's Pioneer 2 plant is a testament to innovation in the production of NGLs and Olefins, and the reduction of emissions.

Can you manage configuration and diagnostic information remotely?



Get more from your HART devices with our new I/O DTMs. **Join us at the Rockwell Automation PSUG event on Nov. 18 & 19th, 2019.**



Continued NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

Challenges with Field Devices

The “Connected Plant,” with its promises of smart equipment sharing data and allowing manufacturers to make informed business decisions, can only be a reality if instruments are properly set up and connected successfully to the plant’s network.

Commissioning and configuring field devices typically is one of the final, critical tasks before a plant can be formally started up. Accurate and timely completion of these tasks winds up being a critical hurdle prior to actual production.

Configuration and commissioning must be performed for each device – each with many configurable parameters. With countless devices in a typical process plant installation, technicians have mountains of data to enter and verify. For example, a typical guided wave

radar level and interface transmitter has more than 500 parameters to configure.

During commissioning and start-up at Inter Pipeline’s Pioneer 2 facility, approximately 700 HART instruments from different suppliers were connected throughout the plant. However, intermittent failures occurred with specialized radar and magnetic level measurement instruments. These devices are part of a crucial safety control system in voted configuration, whereby taking sensor signals and comparing them in the central processing unit (CPU) executing the application logic accomplishes the voting elements.

Inter Pipeline’s Lead I&C Engineer, Japan Shah, stated, “Voting degradation on Pioneer 2’s safety system had the potential to cause unwanted downtime and also lowered confidence in the installed instrumentation. This situation

Continued

NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

was unacceptable to plant management, and created an urgent need to an effective device troubleshooting and maintenance solution.”

Integration and Data Delivery Agility

In order to optimize device configuration and commissioning, and ensure the continued safety of plant personnel and assets, Inter Pipeline’s project team employed FDT® for smart instrumentation information monitoring. Recognized as an international (IEC 62453), North America (ISA 103), and China (GB/T 29618) standard, this enabling technology creates a common communication method between devices and control or monitoring systems for lifecycle management – to configure, operate, maintain, and diagnose intelligent assets.

FDT remains one of the automation industry’s best-kept embedded software secrets. It isn’t a communication protocol, but rather an integration and data delivery technology powered by an open architecture built independent of protocols and vendors to enable seamless interoperability and integration agility in support of fully connected operations. The data collected by various management systems from field instruments and other assets can be used to schedule preventive maintenance – avoiding costly plant downtime due to breakdowns.

Ongoing advancement of the FDT solution is leveraging major developments like the Industrial Internet of Things (IIoT) and Industrie 4.0 through the FDT IIoT Server™ (FITS™) to help end users realize the true potential of decentralization, interoperability, integration, as well as a unified view of all data and functions across process, factory and hybrid control applications.



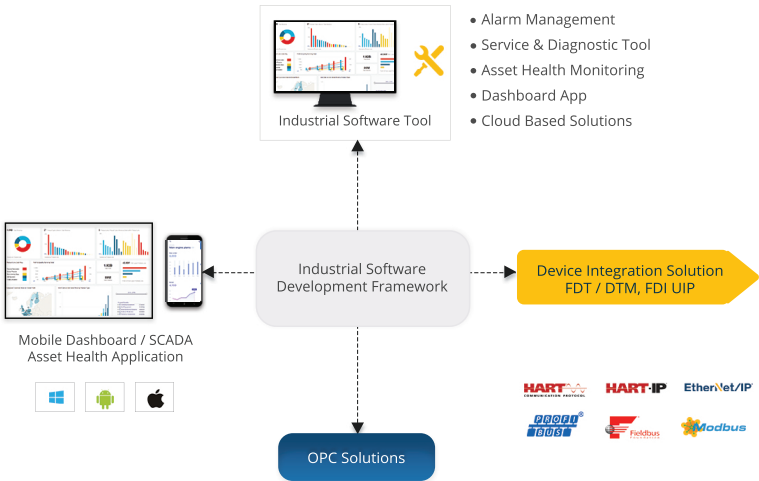
Figure 2: Today’s “Connected Plant” can only be a reality if instruments are properly set up and connected successfully to the plant’s network.



Utthunga being an industry expert combining all its industry and technical expertise gained over years has developed Industrial Software Development framework called **Device Programming Interface(DPI)**. This framework ensures faster time to market and better ROI with ample extensibility and scalability options. It rapidly builds the prototypes, Simulators and Applications that suits every OEMs and End user's need. DPI is the right choice for any Industrial Software application development for OEMs as well as End users.

Key Features Include:

- Simulation and Offline built in capability
- Device scan/rescan capability
- Audit Trail and logging capability
- Client/Server architecture with/without OPC plug-in
- Data Logging module
- Built in communication protocol for HART serial, HART-IP, HART MUX, FF, EtherNet/IP, Modbus Slave, MODBUS RTU/TCP/IP, PROFIBUS



* Product logos, image all rights reserved by owning companies Visit us at: <https://utthunga.com/dpi-device-programming-interface-solutions/>

Continued NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

FDT technology is comprised of two main software components: the FDT Device Type Manager™ (FDT/DTM™) and the FDT FRAME™ (FDT/FRAME™). The FDT/DTM is a software component for an intelligent device or communication component within a digital network. It is similar to a device driver (like the driver used to set up a new printer), which is created by the instrument supplier who has the most knowledge of the full capability of the device. DTMs can range from a simple graphical user interface for setting device parameters up to a highly sophisticated application that can perform complex calculations for diagnostics and maintenance purposes. They include a rich and user-friendly graphical interface to make device configuration, maintenance, and troubleshooting fast and easy. Their simple and clear interface standardizes

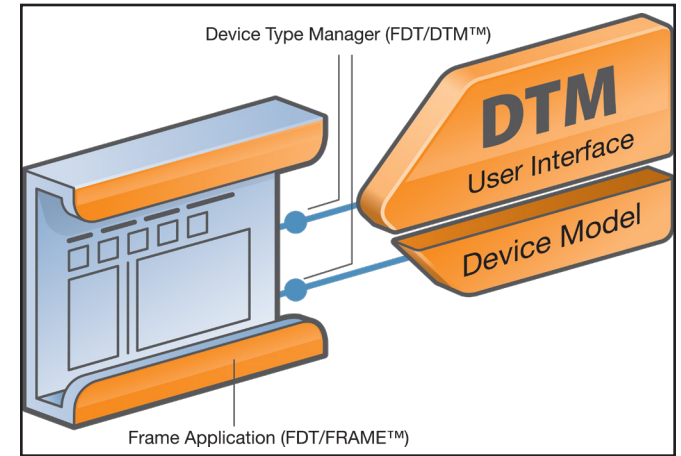


Figure 3: The FDT/DTM includes a rich and user-friendly graphical interface to make device configuration, maintenance and troubleshooting fast and easy.

the training required to configure an intelligent field device – shortening set-up time and reducing configuration errors. Conversely, the FDT/FRAME™ provides access to all devices, gateways and communication components with single-point access to operational assets. It can be embedded in any control system, configuration tool or engineering application that needs seamless access to the installed base of intelligent devices.

Continued

NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

This component allows DTMs to extract performance driven data from all connected devices and multiplexers on a control network.

Inter Pipeline used FDT/DTMs to ensure field devices were pre-commissioned and configured properly. Device manufacturers provide FDT/DTM software for their products, and the FDT/FDAME communicates and read those DTMs – regardless of protocol – for each device. This enables complete lifecycle access for configuration, operation and maintenance, no matter the supplier, device type/function, or communication protocol.

Monitoring and troubleshooting of multi-vendor instruments at the Pioneer 2 facility was performed using PACTware™ software. An open source program available to members of the PACTware Consortium, PACTware functions as an FDAME™ or “container” application that instantiates DTM driver objects (including displaying the device user interfaces) and allows connections between them. It is intended for flexible parameter adjustment of field instruments, remote I/O and communication modules in digital bus systems and networks, and supports powerful integration and interoperability capabilities allowing users to operate field devices of different manufacturers and communication protocols with a single standard PC-based application.

PACTware is a simple solution for device configuration, and at the same time, it provides a path from basic applications to complex asset management. The incorporation of .Net technology not only enables greater independence from the hardware platform, but also opens up new opportunities for a more advanced graphical user interface.

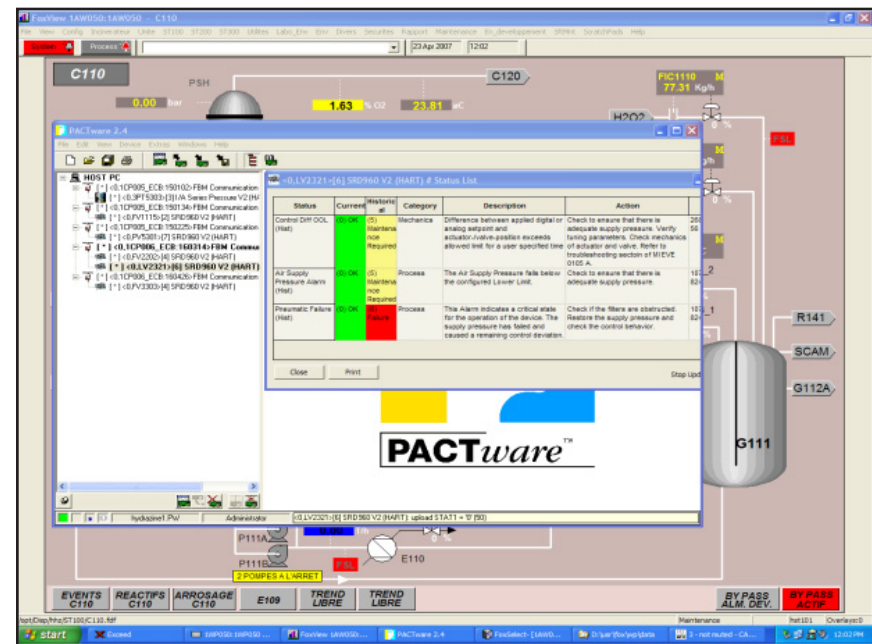


Figure 4: Monitoring and troubleshooting of multi-vendor instruments at the Pioneer 2 facility was performed using PACTware software.

Continued

NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

Addressing Instrument Failures

Inter Pipeline Instrument Technicians relied on a solution integrating DTMs with PACTware software to investigate, analyze and correct instrument failures, and in doing so eliminate spurious trips, during start-up of the Pioneer 2 facility.

According to Shah, personnel at the Pioneer 2 facility found that the use of DTMs didn't require a high level of technology expertise, but rather provided graphical access to smart device measurements and diagnostics for quick problem identification and resolution. "Device DTMs proved to be valuable when configuring and troubleshooting complex instruments like radar and magnetic level gauges," Shah said. "Technicians were able to see the devices clearly, know their condition in advance, and act with agility throughout their workflows."

DTMs support a more robust diagnostic capability than Device Descriptions (DDs) and Electronic Device Description Language (EDDL), which provide minimal information on how to address malfunctions and configuration issues with smart instrumentation. The DTMs provide a handy tool for less experienced technicians to solve instrument problems in a short amount of time.

Device suppliers are able to embed intelligence in a DTM in a way that is very difficult to accomplish with DD files, such as a number of graphical constructs that cannot be expressed within DD technology. Moreover, the DTM is device and revision specific so that it has knowledge about the particular version of each device on the control network.

For example, magnetic level gauges installed at the Pioneer 2 plant have a DTM interface that provides a user-friendly troubleshooting menu. The ability to set sensitivity values through the intuitive DTMs helped resolve device performance issues and allowed for remote configuration, trending, and diagnostics.

In another instance, guided wave radar instruments had problems during tank filling. Personnel were able to adjust signal suppression and other parameters via DTMs. They gained visualization of echo curves, trends, and vessel configuration, along with the ability to store, review, save and e-mail data on instrument configuration.

Simon Huang, Lead E&I Tech for Inter Pipeline, believes FDT technology will provide an effective, long-term maintenance and operations solution for the Pioneer 2 facility. He said, "Our site maintenance teams now use DTMs as a day-to-day tool to tune a wide range of process and safety instruments – ensuring the plant runs without downtime,

Continued

NLG Producer improves Commissioning, Troubleshooting, and Safety with FDT® Technology

and, most importantly, stays safe. Personnel can remotely monitor the health of installed assets from a laptop in the control room without having to ensure harsh conditions in the field.”

Rakesh Keezhuveetil, DCS Engineer at the Pioneer 2 site, stated, “The combination of measured values and device diagnostics helps in identifying specific deviations in operation and instrument performance, and has substantially reduced troubleshooting time. This capability also allows the rapid segregation of the team that must act to address issues involving maintenance, operation, or processes. When an adverse situation arises, online information is crucial to mitigate the source of the problem.”

Conclusion

Inter Pipeline has continued to advance the innovation of the Pioneer 2 plant by achieving a flexible device configuration and commissioning capability, as well as a higher level of efficiency across its maintenance and troubleshooting work practices. Key to these improvements was the implementation of FDT technology to make certain all installed assets are used to the best of their ability. The facility has significantly reduced device commissioning cycle times and improved the quality of configuration. Operators, engineers and technicians can now be confident in the reliability of their plant’s safety system and instrumentation loops.

Join the FDT Group

FDT Technology continues to be at the forefront of industrial automation advancement, with a truly open and standardized architecture to address the critical needs of the ‘Connected World’ of the Industrial Internet of Things (IIoT) and Industry 4.0. FDT Group has a strategic vision focused on the “Connected World” enabling a FDT/IIoT architecture supporting mobility, on-the-wire security, and comprehensive interoperability through an ecosystem of automation vendors providing tomorrow’s new adaptive manufacturing assets.

Join other leading companies in the FDT Group today. There are unique advantages for the entire industrial automation industry – end users, suppliers/developers, service providers, universities, and individuals.

For membership information, please visit www.fdtgroup.org



FDT Group Members



www.fdtgroup.org

FDT Group AISBL • 5 Industrieweg • 3001 Heverlee • Belgium

Phone: +32 (0)10 22 22 51 - Email: businessoffice@fdtgroup.org

©2019 FDT Group AISBL - All product brands or product names may be trademarks of their respective owners

August 2019 Issue

