Interview with Dharmaraju B, Engineering Director – Device Integration & OPC Business

Steve Biegacki, FDT Managing Director, recently talked with Dharmaraju B, Engineering Director – Device Integration & OPC Business at Utthunga, an FDT Service Provider and an accredited FDT Testing Site for DTMs.

For 15 years, Utthunga has catered to a wide range of industrial devices & their applications and believes the FDT standard (IEC 62453) is one of the critical device integration standards that advances the integration capabilities in the digital world of automation.

SB   **Steve Biegacki**
FDT Group Managing Director

DB   **Dharmaraju B**
Engineering Director – Device Integration & OPC Business

SB

Thanks for joining me to discuss field device integration challenges, Dharma.

Can you please introduce Utthunga, your mission, and the customer base you serve for the industrial automation market?

DB

Utthunga is a global product engineering and industrial solutions company catering to OEMs, Independent Software Vendors (ISV), and end industries. We provide services for software development, firmware & hardware development, IIoT, and cloud applications. We also specialize in OPC, device integration, IT-OT integration, communication protocols, and testing automation services.

Utthunga believes in delivering best-in-breed solutions that adhere to the reliability demands expected to help our clients improve efficiency and business profitability.

SB

This is a broad list of industrial engineering services, field to cloud!

Focusing on field device integration, what challenges is the industry presented with? Can you explain some of the industry's pain points and how Utthunga is helping the vendor community achieve reliable and interoperable solutions?

DB

In the early days, end-users in industries such as oil and gas, pharmaceutical, and energy encountered significant challenges while utilizing various software and applications focused on the commissioning, configuring, and monitoring field devices. These challenges presented inefficiencies in operational and cost management.

As a trusted partner, Utthunga plays a pivotal role in addressing these challenges. We leverage our expertise in device integration standards and technologies and collaborate with device vendors and OEMs to offer tailored solutions. Our

proficiency in FDT development services directly tackles issues related to disparate protocols, lack of standardization, and complex configurations.

At Utthunga, our approach is to enable seamless device integration through reliable, interoperable solutions. By harnessing the power of FDT/DTM technology, we enhance device integration and maintenance and empower the vendor community to deliver user-friendly and efficient solutions. This strategic focus aligns with our commitment to facilitating a smoother and more streamlined experience for end-users in their day-to-day operations.

SB

Awesome to hear how Utthunga is helping the industrial community focused on interoperable solutions.

Why is the FDTDTM standard (IEC 62453) necessary for device integration?

DB

The FDT/DTM standard (IEC 62453) is pivotal for device integration, providing a standardized communication framework between field devices and end systems. The FDT framework ensures interoperability, allowing seamless integration of devices from diverse manufacturers. FDT/DTM streamlines configuration, monitoring, and maintenance processes, reducing complexity and enhancing overall industrial system reliability.

The introduction of FDT/DTM by the FDT Group addresses and overcomes challenges faced by the end-user community. It provides significant advantages in device integration solutions, with widespread adoption by system integrators and device OEMs. FDT/DTM stands as a stable and enduring standard in the market, effectively resolving pain points and contributing to a more robust device integration landscape.

SB

It's great to highlight the challenges that FDT resolves in the device integration landscape.

Utthunga has been an FDT Service Provider for 15 years; tell us about your lineup of FDT/DTM development tools and services.

DB

Utthunga provides comprehensive FDT Services, including FDT/DTM development, desktop-based host development, FDT UE-based server development, and asset management application development. We also provide technical consultation, pre-compliance & certification support to ensure tailored solutions for industrial device OEMs and end industries.

We have in-house accelerators – uDTMsdk & DD-DTM Conversion tools. The uDTMsdk is a DTM accelerator that helps to develop the DTM quickly. It is a cost-effective and quick time-to-market solution. The uDD-DTM tool is valuable as it automatically

converts a DD/FDI package to an FDT-compliant DTM. It is a comprehensive, robust, cost-effective conversion tool for customer business requirements and goals.

If you struggle with standardizing and consolidating data from diverse devices, Utthunga's uDDx suite provides a unified approach. This suite enables seamless integration of enterprise and IT applications, offering remote operation capabilities for field devices. It facilitates virtual data processing, analysis, diagnostics, and maintenance, providing a comprehensive solution to streamline your operations.

SB

This is great news for system and device vendors who are looking for tools and/or outside help to execute FDT/DTM solution development to reach the market quickly.

Utthunga is an Accredited FDT Test Site for DTMs. Please explain why DTM Certification is essential for the user community and how Utthunga helps device vendors meet this requirement?

DB

FDT/DTM Certification is paramount for users, ensuring device compliance with industry standards while guaranteeing seamless interoperability. Certifying DTMs to the FDT specification involves rigorous testing, ensuring the viability of the

DTM state machine, correct installation and de-installation, multi-user environment capability, interface functionality, robustness, network scanning communication performance, topology import/export, and audit trail capability.

SB

We are grateful to have Utthunga as a certification site for DTMs!

How can Utthunga help device Vendors with DTM Certification?

DB

As an FDT-accredited Test & Certification Centre, Utthunga tests device vendor DTMs to ensure FDT specification conformance. Our FDT/DTM specification experts provide consultation services and troubleshoot certification-related issues, ensuring a smooth and compliant certification process for device vendors.

Thank you, Dharma, for this productive discussion on field device integration and your services available to the vendor community to accelerate FDT-enable interoperable solutions for end industries that will benefit from the unified environment for intelligent device management.

For more information, please reach out to Utthunga at: https://bit.ly/3Rjv4KF