OPC Companion Spec Version 2.0: OPC Foundation and MTConnect Institute Announce Release of the OPC UA Companion Specification for MTConnect®

McLean, Va. & Scottsdale, Az. (September 10, 2019) – The OPC Foundation in conjunction with the MTConnect Institute announce the release of the jointly developed “OPC Unified Architecture for MTConnect Companion Specification Part 1”. This companion specification makes the MTConnect semantic information model for machine tools accessible to a global audience leveraging the OPC UA Service Oriented Architecture. This OPC UA MTConnect Companion Specification incorporates all the features and functions of the XML based MTConnect standard.

The MTConnect OPC UA Companion Specification expresses the MTConnect stream and device information models via the OPC UA modeling language. This brings the benefits of data type enforcement, separation of the information model definition from its implementation, and improved MTConnect security via OPC UA end-to-end security.

“Critical manufacturing data needs both semantic definitions from MTConnect and the protocol and security features of OPC UA,” said MTConnect Institute President Douglas K. Woods. “This specification will benefit the large and growing user bases of both OPC and MTConnect by improving interoperability between the standards and the devices using them.”

Industry response to the OPC UA MTConnect Companion Specification has been positive and proactive. “As an innovator in automation and IoT solutions, GE is proud to release our new driver based on the draft OPC
UA MTConnect Companion Specification, enabling HMI/SCADA, historian, and edge applications to collect data from CNC machines, robots, and other machine tool equipment,” said Matt Wells, Vice President – Digital Product Management, GE Digital. “By applying the MTConnect data model to OPC UA, we’re significantly increasing connectivity and interoperability. Manufacturers will benefit from faster configuration, secure-by-design communication, and data that provides a foundation for IOT-fueled efficiency and productivity.”

Stefan Hoppe, President and Executive Director of the OPC Foundation commented, “With the release of this “UA for MTConnect” companion specification, the MTConnect Institute joins a growing community of standards bodies using OPC UA as the basis for their specifications. Beyond empowering end-users and vendors with the ability to leverage the technical benefits of using OPC UA, these standards bodies are increasingly collaborating to harmonize overlapping OPC UA based information models for improved interoperability. This is a key prerequisite for implementing and harnessing the full value of the IIoT and I4.0 in the near future.”

All required documentation and supporting files for the MTConnect Companion Specification are publicly available at https://opcfoundation.org/developer-tools/specifications-opc-ua-information-models/opc-unified-architecture-for-mtconnect/

MTConnect is an open, royalty-free standard that provides a semantic vocabulary for manufacturing devices. It reduces the cost and complexity of system integration and fosters interoperability for the factory.

The MTConnect Institute is a 501(c)(6) not-for-profit standards development organization for the MTConnect standard. The Institute is a subsidiary of AMT – The Association For Manufacturing Technology. Its mission is to create open standards to foster greater interoperability between devices and clients by defining the structure and terminology used in communications in the discrete parts manufacturing sector.

Since 1996, the OPC Foundation has facilitated the development and adoption of the OPC information exchange standards. As both advocate and custodian of these specifications, the Foundation’s mission is to help industry vendors, end-users, and software developers maintain interoperability in their manufacturing and automation assets. The OPC Foundation is dedicated to providing the best specifications, technology, process and certification to achieve multivendor, multiplatform, secure, reliable interoperability for moving data and information from the embedded world to the enterprise cloud. The Foundation serves over 600 members worldwide in the Industrial Automation, IT, IoT, IIoT, M2M, Industrie 4.0, Building Automation, machine tools, pharmaceutical, petrochemical, and Smart Energy sectors. For more information about the OPC Foundation, please visit https://opcfoundation.org.