Working Charter

A digital twin is a virtual representation of real-world entities and processes, synchronized at a specified frequency and fidelity. EdgeX Foundry is an open-source software framework that facilitates interoperability between devices and sensors ("real world entities") and applications at the IoT Edge.

EdgeX Foundry (EdgeX) and the Digital Twin Consortium (DTC) form a working alliance in order to:

- Identify and solve common problems in the establishment, management and operation of digital twins through edge computing platforms (such as EdgeX).
- Showcase how a common approach to digital twin technology can allow edge platforms connected to real-world entities to easily and flexibly interoperate with virtual representations.
- Accelerate EdgeX's adoption of digital-twin-enabling technology and techniques. Specifically, explore EdgeX's adoption of the DTC's digital twin reference architecture to demonstrate interoperability between EdgeX and other DTC adopting implementations.
- Create open-source software to be added to EdgeX to allow EdgeX to be used in DTC architected solutions.
- Collaborate on the language, definitions and taxonomy used to discuss digital twin technology.



Press Release/Public Announcement

Today, the <u>Digital Twin Consortium</u>, a global ecosystem of users who are accelerating the digital twin market and demonstrating the value of digital twin technology and <u>EdgeX Foundry</u>, a Linux Foundation open-source project building a common interoperability framework to facilitate an ecosystem for IoT edge computing, announced they have signed a memorandum of understanding an formed a liaison to identify and solve common problems in the establishment, management and operation of digital twins through edge computing platforms like EdgeX.

The liaison has been established to

- Showcase how a common approach to digital twin technology can allow edge platforms connected to real-world entities to easily and flexibly interoperate with virtual representations.
- Accelerate EdgeX's adoption of digital-twin-enabling technology and techniques. Specifically, explore EdgeX's adoption of the DTC's digital twin reference architecture to demonstrate interoperability between EdgeX and other DTC adopting implementations.
- Create open-source software to be added to EdgeX to allow EdgeX to be used in DTC architected solutions.
- Collaborate on the language, definitions and taxonomy used to discuss digital twin technology.

"Our adopters want to know how EdgeX Foundry can be used in digital twin implementations. Because there are no interoperability standards in digital twin technology, use of EdgeX in a digital twin solution has required detailed integration work on the part of our adopters," said Jim White, EdgeX Foundry technical steering committee chairman and project co-founder. "With this liaison, we hope to adopt and showcase the DTC reference architecture and make it easier for adopters to use EdgeX in highly interoperable digital twin solutions."

[quote from DTC here]

About Digital Twin Consortium

<u>Digital Twin Consortium</u> is The Authority in Digital Twin. It coalesces industry, government, and academia to drive consistency in vocabulary, architecture, security, and interoperability of digital twin technology. It advances the use of digital twin technology in many industries from aerospace to natural resources. Digital Twin Consortium is a program of Object Management Group.

About EdgeX Foundry

EdgeX Foundry is an open-source project building an open interoperability framework within a full hardware- and OS-agnostic reference software platform to enable a vendor neutral ecosystem of plugand-play components that unifies the marketplace and accelerates the deployment of IoT solutions. Designed to run on any hardware or operating system and with any combination of application environments, EdgeX technology can quickly and easily deliver interoperability between connected devices, applications and services, across a wide range of industrial and enterprise use cases. It offers the flexibility, security and scalability that businesses need in order to confidently build and deploy IoT solutions that can adapt to changing business needs.

Hosted by The Linux Foundation, EdgeX Foundry has an ecosystem of more than 60 vendors and offers all interested developers or companies the opportunity to collaborate on IoT solutions built using

existing connectivity standards combined with their own proprietary innovations. For more information, visit www.edgexfoundry.org.

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