

Accelerating Industrial IoT integration through Asset Administration Shell template implementation









PROBLEM/ISSUE ADDRESSED

As part of the digital transformation and digital shopfloor operations interoperability between software systems and machines becomes more and more important. The adoption of standardized and common protocols is required to keep the European manufacturing industry flexible, sustainable and innovative. One common standard to offer this interoperability is the Asset Administration Shell (AAS) pioneered by the Industrial Digital Twin Association. However, because of the novelty of the standard, today there is no widespread support for the standard.

SOLUTION

The AASHub Component, which is now part of Contact Software's "Elements for IoT", offers accelerated industrial IoT integration and adoption of DT approaches in Product Lifecycle Management (PLM) through a generic AAS implementation for both import and export of the AASX exchange format. This allows manufacturers, suppliers, and customers to quickly and easily exchange different aspects of the digital twin and connect them to the Internet of Things infrastructure on site.

WHY IT IS IMPORTANT FOR SOCIETY

Asset Administration Shell (AAS) establishes cross-company interoperability and is the digital basis for autonomous systems and Al. The AAS supports the complete life cycle of products, devices, machines, and facilities, and this therefore the prime candidate as a basis for human/machine interaction in the future.





Thanks to EIT we were able to validate the innovative IoT approach of AASHub in several industrial pilot use cases ''



MAIN RESULTS & INSIGHTS



AASX exchange format successfully integrated into an industrialgrade software product



Fast and easy setup of IoT-Hardware when combined with the AASX import feature



Exchange of Asset Administration Shells between facilities, manufacturers, suppliers, and customers based on PLM data



MARIO WOLF Senior Researcher and Lecturer for IT and MR in Mechanical Engineering MAIN PRODUCT AASHub and VRPLC projects

AIM: Accelerating the digitalisation through adoption of Digital Twins and Mixed Reality





linkedin.com/in/dr-wolf