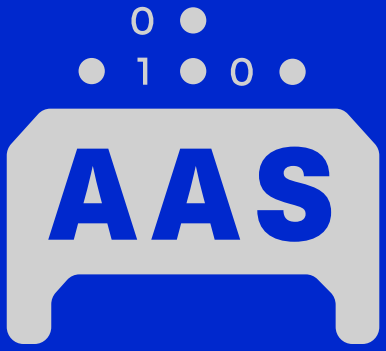
The Asset Administration Shell (AAS) in action



AAS Guide

SPS 2025

IDTA

AAS exhibits

CIRPASS-2 – Electronics Pilot using DPP4.0
In this pilot, DDCC and ZVEI collaborate with various industry partners to demonstrate how DPP4.0 is used to manage product information in a fluid system, while meeting the European Digital Product Passport (DPP) requirements. As part of the CIRPASS-2 project, we also emphasize how DPP4.0 provides companies with an independent and interoperable solution to make product data accessible both upstream and downstream, fostering transparency and circularity.

Hall 3
Booth 321

zvei.org | stefan.schork@zvei.org

MX Port Leo for AAS-based data exchange in Factory-X
Factory-X creates cross-company benefits for factory outfitters and operators through a digital ecosystem. In the project, the AAS plays an important role as it is a key standard for interorganizational interoperability and data exchange. This demonstrator illustrates how companies can collaborate effectively along the product lifecycle – from engineering to end-of-life – through standardized data exchange.

Hall 3
Booth 321

zvei.org | laura.schelenz@fe-zvei.org

Antrieb 4.0 – interoperable solutions and common standards
Antrieb 4.0 relies on manufacturer-independent data provision and semantically uniform information models. This enables the horizontal networking of drives from different manufacturers at different locations and production facilities, as well as vertical integration from the field to edge systems and into the cloud. The AAS forms the digital backbone: it creates transparency across components and enables structured access to data – securely, traceably, and in a standardized manner.

Hall 3
Booth 321

antrieb40.org | falk.eckert@fe-zvei.org

MCP-based communication with the AAS
In our showcase, we demonstrate how MCP (Model Context Protocol) enables intuitive communication with Administration Shells using the example of a Quality Control Module. Through MCP, information can be presented in an understandable way via human-readable queries or chatbots. At the same time, MCP allows machines to be controlled through the integration of OPC UA. This creates a uniform interface for humans and machines – standardised, automated and interoperable.

Hall 3
Booth 420

smartfactory.de

Product Change Notification
Eplan demonstrates how the AAS is used to integrate data of component manufacturers to engineering projects and collaboration between software tools. Component manufacturers provide type and instance data in the form of AAS in the Cloud. “Product Change Notifications” (PCN) for end-of-life announcements, expired certifications, firmware updates, or other relevant changes are assigned to specific projects, machines, or systems directly via the documentation in EPLAN.

Hall 3C
Booth 321

eplan.com | geyrhalter.j@eplan.de

Service Request via AAS – Integration in a Service Portal
The demonstrator illustrates an end-to-end digital service request: A service request for a motor is generated via a smartphone app and automatically transmitted to the Dunkermotoren service portal using the AAS. This makes the service process efficient and seamless.

Hall 3C
Booth 321

dunkermotoren.de | christoph.baschnagel@ametek.com

Digital Twin Portal Platform
The Digital Twin Portal by R.STAHL based on twinsphere by conplement, demonstrates six real-world use cases. It showcases how industrial companies can leverage Digital Twins to take the next step into the future. It illustrates how companies are already preparing their data infrastructure for the upcoming Digital Product Passport (DPP) requirements, optimizing spare part and successor product processes, and simultaneously enhancing efficiency in production, maintenance, and sustainability.

Hall 5
Booth 160

dt.r-stahl.com | christian.guenther@conplement.de

conplement
the digital enablers

twinsphere AAS Platform

twinsphere is the unique SaaS platform for Digital Twins based on the AAS. It offers flexible solutions for companies (from SME to large enterprises) to simplify their digital transformation, increase process efficiency and securely manage digital assets. Highly scalable, it supports companies with a wide range of use cases along the value chain like Digital Nameplate, Digital Calibration Certificate, Edge Device Onboarding, the Digital Product Passport or Document Exchange.

Hall 5
Booth 160

twinsphere.de | christian.guenther@conplement.de

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conplement
the digital enablers

twinstudio – streamlined AAS creation

twinstudio is the integrated solution for assisted, manual creation of Digital Twins. With twinstudio, users can create and publish AASs, submodels, and submodel templates.
It allows users to generate blueprints for likewise AAS and integrate both self-created and IDTA-standard submodel templates.
This makes twinstudio a comprehensive tool for optimizing data exchange or advancing digital transformation in brownfield environments.

Hall 5
Booth 160

conplement.de/twinstudio | christian.guenther@conplement.de

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umati

Real-time plug & work with the umati demonstrator

The demonstrator showcases high-level interoperability with hot-swappable scales that communicate via OPC UA companion specifications for industrial automation, machinery and weighing. At startup, static device data is loaded. When an item is placed on the scale, it is weighed and sorted according to preset criteria. A dashboard displays real-time process states and values via OPC UA, while an AAS digital nameplate provides detailed information on device connectivity and performance.

Hall 5
Booth 238

umati.org | info@umati.org

OBJECTIVE PARTNER

BaSyx Enterprise

BaSyx Enterprise demonstrates a digital battery passport that ensures compliance, integrates lifecycle data, and provides a scalable backbone for product transparency. Built on a flexible platform approach, it enables future product passports and supports transparent processes across the entire product lifecycle, including after-sales scenarios.

Hall 5
Booth 350

basyx-enterprise.com | thomas.weis@objective-partner.com

Home of the AAS Hall 5 Booth 358

IDTA

Asset Data eXchange Hub (ADX Hub)

The ADX Hub simplifies exchange of product data. It enables fast, automated access to constantly updated information and ensures faster processes, higher data quality and reduced data management effort. The system offers a decisive advantage for companies that want to increase their efficiency and advance their digital business models.

Hall 5
Booth 358

adx-hub.admin-shell-io.com | Sandeep.Rudra@idtwin.org

IDTA

Interoperability connecting the value chain

The AAS enables interoperability across companies. This live demonstrator presents cross-company data exchange, thanks to standardization. Each step in the value chain showcases different toolchains – connected through a common UI and central registry & discovery service. Changes such as CO_2 footprint updates or added documents are instantly propagated, demonstrating the power of the AAS for seamless collaboration and integration.

Hall 5
Booth 358

juilee.tikekar@idtwin.org

IDTA

OPC FOUNDATION

Unifying AAS and OPC UA: Common Communication

The AAS–OPC UA Joint Working Group presents a Proof of Concept uniting the AAS and OPC UA in one communication stack. The demonstrator showcases a common information model combining AAS Submodels with OPC UA specifications, along with modern web-based communication mechanisms such as REST, WebSocket, and OpenAPI, enabling seamless interoperability across industrial systems.

Hall 5
Booth 358

juilee.tikekar@idtwin.org

Home of the AAS Hall 5 Booth 358

AAS Dataspace for Everybody – Making Dataspaces easy!
The Fraunhofer IESE exhibit shows how dataspace-based use cases can be implemented in line with Manufacturing-X and M-X Port Leo. Using interactive, hands-on examples, it illustrates how AAS technologies enable simple, standards-based data exchange across organizational boundaries. Visitors can see how this approach supports the creation of new business models and revenue streams, making the benefits of interoperable and sovereign data sharing tangible and easy to understand.

Hall 5
Booth 358

iese.fraunhofer.de | frank.schnicke@iese.fraunhofer.de

AAS: Standardised Data Provision for Industrial Ecosystems
The AAS offers extensive application support for the development of open data ecosystems in the industry and, as an interoperable standard, enables implementation in almost all sub-projects of the Manufacturing-X initiative for the implementation and adaptation of technological and semantic interoperability. The AAS is used as a basic data structure in the use cases of Factory-X, Prozess-X, Robot-X and Catena-X. This makes cross-company use cases possible in different industries.

Hall 5
Booth 358

industrialdigitaltwin.org | info@idtwin.org

Future of Efficient Engineering
As part of the “Collaborative Engineering” working group, EPLAN and leading component manufacturers present a demonstrator showcasing the potential of digital collaboration. It illustrates how manufacturers can automatically send Product Change Notifications (PCNs) via EPLAN documentation. The use of the AAS highlights standardized technologies enabling cross-system engineering collaboration.

Hall 5
Booth 358

industrialdigitaltwin.org | geyrhalter.j@eplan.de

Collaboration & Change Notification in the Supply Chain
Collaborative Engineering enables seamless cooperation between component suppliers, product designers, and machine builders, driving faster time-to-market, improved quality, and fewer errors. The demo showcases how CAD, PLM, and design tools leverage the AAS for efficient data exchange. PCN handling and component import from AAS are key highlights, demonstrating the power of digital collaboration.

Hall 5
Booth 358

ptc.com

DPP4.0 easy & efficient – creation and provisioning of DPP4.0
Our platform enables you to create, visualize and exchange Digital Twins based on the DPP4.0 approach. With our Asset Data Creator, we demonstrate the AI-powered creation of AAS instances in brownfield environments, based on a conventional nameplate of an asset.

Hall 5
Booth 358

aas.codewerk.de | sales@codewerk.de

Real Time Data with AAS – Find, Replace, Create.
With D&TS, the AAS becomes a gamechanger: master data is created directly in the ERP, classified, updated in real time, and enriched by AI-powered search. Automated handling of notifications such as End-of-Life (EoL) reduces manual effort, increases data quality, and ensures maximum transparency – ideal for machine builders and manufacturers aiming to boost efficiency.

Hall 5
Booth 358

dundts.com | info@dundts.com

AAS.TwinEngine
AAS.TwinEngine is an open-source framework with a plugin architecture that enables data access to the customer's data layer. This allows customers to implement AAS cost-effectively in their system archtiecture.
In addition to a range of generic plugins, any bespoke plugin can be developed based on customer's need. This approach perfectly supports modern data-driven architectures and allows users to develop advanced and new digital services across different data sources in the company.

Hall 5
Booth 358

mm-software.com | Jens Achenbach | jah@mm-software.com

Home of the AAS Hall 5 Booth 358

Neoception® Digital Twin Infrastructure

The Go-To for your AAS ecosystem – Realize new business potential.Our enterprise software lets you configure and automate dozens of AAS use cases with high business impact and ensures compliance and readiness for the Digital Product Passport going forward.Create, update and provide AASs directly from your data sources on demand. Benefit from robust lifecycle management, security updates and intuitive configuration – turning data into real business value without costly development cycles.

Hall 5
Booth 358

neoception.com | contact@neoception.com

BaSyx Enterprise

BaSyx Enterprise demonstrates a digital battery passport that ensures compliance, integrates lifecycle data, and provides a scalable backbone for product transparency. Built on a flexible platform approach, it enables future product passports and supports transparent processes across the entire product lifecycle, including after-sales scenarios.

Hall 5
Booth 358

basyx-enterprise.com | thomas.weis@objective-partner.com

Time to Accelerate Innovation

This exhibit presents how PTC supports the AAS as the instance for managing and applying Digital Twin data. It illustrates the connection of engineering information from Windchill PLM with service data in the ServiceMax Asset Hub. Through this integration, Digital Twin data becomes usable in concrete lifecycle tasks such as the Digital Product Passport, highlighting the role of the AAS as an operational data instance.

Hall 5
Booth 358

ptc.com

AAS and DPP with SAP BNAC: Collaborate efficiently in business processes

Discover how SAP Business Network Asset Collaboration (BNAC) streamlines data exchange with AAS with BNAC as an AAS Server and ensures DPP compliance – empowering component suppliers, manufacturers, operators, and service providers to collaborate seamlessly across the asset lifecycle.

Hall 5
Booth 358

sap.com | thiago.weber.martins@sap.com

DPP4.0 enables data services – Ready for EU Data Act

Learn how to use the DPP4.0 (Digital Product Passport) to comply with regulatory frameworks, demonstrated for Siemens products. Based on AAS, DPP4.0 enables the provision of structured, interoperable, and machine-readable asset data that align with several regulatory requirements (e.g. EU Data Act, ESPR) making it the “swiss army knife” for regulatory compliance. At the same time DPP4.0 enables you to access and share live OT data of an asset, paving the way towards digital service offerings.

Hall 5
Booth 358

xcelerator.siemens.com | battery-passport.industry@siemens.com

Orchestra: Seamless integration of AAS concepts into system landscapes

The integration solution Orchestra serves as an AAS Data Hub, supporting the integration of AAS data from various sources and systems. Orchestra enables the consolidation of data for all common different AAS models and instances to ensure a comprehensive and consistent view of assets. This facilitates the exchange of data between different partners and systems. The integration solution provides several mechanisms for accessing and automatically delivering AAS data.

Hall 5
Booth 358

soffico.de | customer@soffico.de

Easy-to-use AI integration for AAS repository

Unlock faster insights with the new AI Assistant in Eclipse Mnestix. Chat directly with your AASs of your repository to instantly explore data, relationships, and metadata in natural language. Skip manual searches and boost productivity with smarter, faster, and more

Hall 5

xitaso.com/mnestix | Dr. Alwin Hoffmann | alwin.hoffmann@xitaso.com

Professional AAS infrastructure using Eclipse BaSyx

XITASO, Fraunhofer IESE, and NetApp explain how the open-source AAS infrastructure Eclipse BaSyx can be seamlessly integrated, deployed, and operated in industrial environments. We illustrate how Eclipse BaSyx enables professional, scalable, and secure real-world applications using the AAS for your digital transformation.

Hall 5
Booth 358

xitaso.com/aas | Dr. Alwin Hoffmann | alwin.hoffmann@xitaso.com

HEITEC

HEITEC Battery Pass

Battery Pass by HEITEC is the Digital Product Passport in the AAS for sustainable, traceable data, driven by EU regulations for batteries with a capacity 2+ kWh effective 2027.
The Battery Pass ensures access to all relevant product data, such as manufacturer information, sustainability metrics, or usage history and is facilitated by not more than QR-code scanning – easy to use, proven technology.

Hall 6
Booth 220

heitec.de | michael.roegner@heitec.de

BCON²
BUSINESS CONTENT CONSULTING

BCON² BEATS AAS Generator

BEATS offers a powerful AAS generator with seamless ECLASS integration. Create custom AAS and DPP templates in just a few clicks. Choose predefined or user-defined submodels, add semantic elements, assign QR codes, and convert BMEcat files – all in a flexible, modular system designed for speed and ease of use.

Hall 6
Booth 221

bcon2.de | info@bcon2.com

IPI Institute of Production and Informatics | Hochschule Kempten University of Applied Sciences

AAS-Based KPI Comparison

The demonstrator shows how the AAS enables a standardized comparison of KPIs between a real machine and its virtual counterpart. Real machine data are accessed via OPC UA, while the virtual AAS mirrors the same submodels and parameters for synchronized evaluation and visualization in a unified dashboard.

Hall 6
Booth 240 | 7

poojakumari.gupta@hs-kempten.de

ISW

Stuttgarter Maschinenfabrik –
A software-defined value network.

The ISW is rethinking fragile value chains towards software-defined value networks to achieve resilience advantages in a VUCA world. The AAS is used as a core technology to enable the orchestration of these networks as well as the secure exchange of product and process information.

Hall 6
Booth 340

isw.uni-stuttgart.de | nicolai.maisch@isw.uni-stuttgart.de

MITSUBISHI ELECTRIC

Seamless and collaborative data flow in Engineering based on AAS

The demonstrator shows how component data can be automatically retrieved and used in engineering. The data is used in various engineering tools to create the respective projects. These are shared with the ICONICS GENESIS IoT platform in the further workflow, significantly simplifying and accelerating the creation of IoT applications. All this is possible thanks to standardized data exchange based on AAS.

Hall 6
Booth 348

mitsubishielectric.com | matthias.mueller@meg.mee.com

STAHL

Digital Twin Portal as SaaS

Market launch of the leading Digital Twin portal as a white label solution. The portal is available as a SaaS solution. Personalisation is easily done via a self-service portal. The portal can be tested live at the exhibition stand.

Hall 7
Booth 170

dt.r-stahl.com | digital.twin@r-stahl.com

Lenze
engineered to win

Demonstrator Electric Drive 4.0

A Digital Twin of a remotely operated axis showcases the interaction between electric drives and administration shells via OPC UA and an edge server. The setup demonstrates manufacturer-independent data exchange and seamless integration into cloud environments. By leveraging standardized information models, it facilitates centralized energy data management and drive sizing optimization through live data verification.

Hall 7
Booth 391

lenze.com

SICK
Sensor Intelligence

Next Generation Prime, No. 01 / 242
(IoT platform & base business)

All sensor solutions from SICK come with their own AAS. With the new photoelectric sensor series W12 SICK starts to integrate Sensor Simulation Models into AAS. These FMU-based simulation models offer a close-to-reality functional representation of the sensor e. g. for virtual engineering or virtual commissioning use cases. Failures like wrong product selection or incompatibilities are detected earlier which reduces costs and speeds up physical commissioning.

Hall 7A
Booth 340

sick.com | Daniel Schmitz | daniel.schmitz@sick.de

FESTO

Digital Twin in Engineering and Operation

Discover how Digital Twins transform automation industry by enhancing simplicity, efficiency and quality in engineering and operation. Experience this innovation firsthand in our interactive demonstrator. Learn how Festo provides Digital Twins. Find out how AASs can be used seamlessly in the IT- and engineering system of our customers. Discuss your demands with our Digital Twin experts.

Hall 9
Booth 305

festo.com | digital_twin@festo.com

Weidmüller

AAS in Practice: From Paperless Documentation to the Digital Product Passport

The exhibit presents a control cabinet fully modeled as an AAS with detailed submodels. It demonstrates how paperless documentation, transparent product carbon footprint reporting, and the Digital Product Passport can be realized today using AAS technologies to deliver tangible benefits for users.

Hall 9
Booth 351

weidmueller.com | alexander.boschmann@weidmueller.com

HARTING

Digital Product Passport for Connectors

How it can be looked like: Digital Product Passport with Product Carbon Footprint using AAS for connector components and assemblies.

Hall 10
Booth 210

harting.com | sebastian.eicke@harting.com

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smartFactory

The AAS with Hercules, Eclipse BaSyx, OPC UA connection and LEO modules

We show the AAS as an enabler for interoperable production. The Hercules configuration of the MX port and the Eclipse BaSyx platform create a scalable and future-proof basis for standardised data exchange. The integration of OPC UA enables seamless access to production data and direct connection & control of systems. In addition, we are testing components of the LEO configuration, such as QR-based access to AAS, in order to illustrate the practical implementation of flexible & secure data rooms.

Hall 10
Booth 210

smartfactory.de

SIEMENS

Efficient Digital Twin Data Exchange through Siemens Teamcenter

In the contemporary industrial context, the unstructured and dispersed nature of Digital Twin data can present significant challenges for engineers, who must dedicate a substantial amount of manual effort to identifying, structuring, converting, and completing data for both engineering purposes and regulatory compliance. Teamcenter Supplier Connect for AAS offers a solution that empowers customers to enhance engineering efficiency by leveraging AAS search, import, export and update capabilities.

Hall 11
Booth 100

constantin.liepert@siemens.com

Guide SPS 2025

AAS @ Technology Stage

HALL 3 - 329

TUE 25.11.

11:05 – 11:50	**Durchgängig, smart, interoperabel: MX-Port Leo für den AAS-basierten Datenaustausch in Factory-X** | Johannes Kalhoff | PHOENIX CONTACT, Dr. Björn Sautter | Festo | Dipl.-Ing. Dietlof von Arnim | TÜV SÜD Industrie Service
11:50 – 12:35	**Industrie vernetzt denken: Wie Manufacturing-X Kollaboration, Effizienz und Innovation fördert** Panel Discussion
12:35 – 12:55	**Datenökosysteme in der europäischen Fertigungsindustrie (Part I): Das internationale Projekt SM4RTENANCE** | Oscar Lazaro
13:15 – 13:35	**Standardisierte Zusammenarbeit im digitalen Ökosystem für KI-basierte Robotik – RoX** | Dr. Lukas Sohlbach | VDMA, Felix Weidinger | VDMA
13:55 – 14:15	**DPP 4.0 – Der digitale Produktpass für die Industrie 4.0** | Prof. Dr. Dieter Wegener | Siemens

WED 26.11.

14:10 – 14:55	**Interoperabilität im Maschinen- und Anlagenbau – Wo geht es hin?** | Andreas Faath | VDMA, Ralf Neubert | Schneider Electric, Miguel Rodriguez | Komax, David Tobon | HUAWEI

THU 27.11.

12:10 – 12:55	**Standardization and interoperability are key: opportunities and challenges for the industrial hall of the future** | Dr. Falk Eckert | ZVEI., Dr. Jan Hofmann | Fraunhofer IIS, Michael Klipphahn | ABB, Tomás López Mendez | Fraunhofer IIS, Bernd Wacker | Siemens
15:10 – 15:55	**Nutzen der AAS im Maschinenbau am Beispiel der Antriebstechnik** Panel Discussion

AAS @ Automation meets IT

HALL 6 - 148

TUE 25.11.

16:20 – 17:00	**From AAS to DPP: Enabling Scalable Asset Collaboration with SAP Business Network** | Oleksandra Ostapenko | SAP

WED 26.11.

16:20 – 17:00	**Von der Vision zur Anwendung – Asset Administration Shell im Realbetrieb** | Panel Discussion | Christian Barth | Festo, Patrick Bornstein | Sick, Florian Harzenetter | PTC, Christoph Kelzenberg | Phoenix Contact, Christian Mosch | IDTA, Sebastian Schneider | DMG Mori

HALL 5 - 358

TUE 25.11.

16:30	**IDTA Community Get-together**

Industrial Digital Twin Association e. V.

Lyoner Straße 18
60528 Frankfurt am Main
Germany

Phone: +49 69 6603 1939
E-mail: info@idtwin.org
Web: www.idtwin.org