

Scalable Digital Twin of Products and Production from Edge to Cloud

11:00AM - 11:30AM | SIEMENS

Siemens is the leader in delivering solutions that leverage digital twins to provide true business value. Learn how Siemens is working with AWS to develop new services—like AWS IoT TwinMaker—that Siemens can leverage within their Xcelerator portfolio. These new services makes it easier for customers to create digital twin solutions that can scale from the simplest to the most complex use cases.

How KAMAX Connected Their Industrial Machines to AWS in Hours Instead of Weeks

11:30AM - 12:00PM | CLOUDRAIL

KAMAX, a leading manufacturer for complex cold-formed parts, has optimized their process for output assessment. Learn how KAMAX leveraged CloudRail solutions to connect their assets within hours to AWS IoT services. This industrial IoT collaboration increased manufacturing effectiveness within their plants by automating and optimizing traditionally manual tasks, increasing production capacity, and implementing real-time condition monitoring. This solution has helped KAMAX realize quantifiable time savings of 2.5%-3.5%.

From a Manufacturing Expert to a Digital Service Provider in 6 Months

12:00PM - 12:30PM | REPLY

Schenck Process, the global technology and market leader in material handling and control, transformed from a manufacturing expert into a digital service provider by building its own IoT platform on AWS. In this session, we will share the strategy behind this successful journey by showing you how AWS technology can be translated into actual business values once you look beyond technical complexity.

How to Transform Your Factory and Get Better Data with IIoT

12:30PM - 1:00PM | TELIT

The Industrial Internet of Things (IIoT) is changing manufacturing. Connecting assets together empowers manufacturers to deliver new business opportunities and gain complete visibility into their data. IIoT also enables increased uptime, quality, and productivity. Hear how Pirelli implemented the Telit and AWS solution to enable the high-volume collection of complex machine data, orchestrate time series data, and integrate data into the AWS Enterprise Data Platform. The outcome empowers intra- and inter-factory services at Pirelli to improve their access to data, operational intelligence, and identify and execute action items.

Artificial Intelligence to Ensure Quality Management in Manufacturing

1:00PM - 1:30PM | SYNTAX

During this presentation, learn how the Syntax digital platform automatically analyzes the quality of goods produced. This platform automates tasks that are still a predominantly manual process, thus eliminating errors and reducing costs.

The Evolution of the Plant Connectivity

1:30PM - 2:00PM | AWS

Plant connectivity and mass data ingestion has been a core driver for successful manufacturing automation use cases online, delivering valuable business outcomes to the plant. Participants in this session will build an understanding around the technical constraints and tradeoffs between different architectures used when connecting modern manufacturing facilities to the AWS cloud. We will also cover best-practices to build efficient and bidirectional communication between the plant and the cloud for controlling and automating production processes.

Visualize Invisibility – Human: Machine Collaboration by Digital Twin IAPM

2:00PM - 2:30PM | BOSCH

Imagine one large turbomachinery asset: A multistage centrifugal blower, running 24/7 throughout the whole year. You are the responsible maintainer of this machine and know that it will eventually fail...again, but you will not know when or why.

How do you feel? Stressed? Digital Twin IAPM resolves these business problems and can help identify the root cause of a failure, eliminating the stress and diagnostic time.

Turn Factories into Micro Services

2:30PM - 3:00PM | SOFTWARE DEFINED AUTOMATION

Software Defined Automation is a new concept for control engineers that can help overcome the tight coupling of hardware and software in factory automation, as well as the limited spillover of innovations from information technology to industrial real-time control. Learn how automation engineers are able to manage PLCs from vendors like Siemens, Bosch Rexroth, Beckhoff, and other cloud-based software systems with full transparency of deployed code, complete traceability of changes, and the ability to automate code updates in minutes. This session will provide hands-on experience to show how Git-based version control for PLCs increase developer collaboration and PLC code quality.

Demystifying the Cloud for the OT Engineer and How to Get Started in Your Cloud Journey

3:00PM - 3:30PM | AWS

With cloud applications becoming omnipresent in the manufacturing world, it is critical for the OT engineer to understand the benefits of the cloud and how it will change their day-to-day job. This session will cover the basics of AWS Cloud, Edge, and IoT with a focus on manufacturing. We will also provide guidance on how to start a cloud learning journey.

Energy Management: How Companies can Systematically Capture, Understand, and Optimize Their Energy Performance

3:30PM - 4:00PM | SOFTSERVE

Learn how Softserve helps customers reduce energy and carbon consumption. View use cases that demonstrate success and encourage the transition to greener energy to combat climate change.

Best Practice: On the Road to a Fully Automated End-To-End Material Flow

4:00PM - 4:30PM | KINEXON

To remain competitive in today's times, companies must seek continuous improvements like optimizing processes, increasing efficiency, and significantly saving costs. In this session, gain insights into a current project with the automotive supplier, Continental. Learn how location-based process automation can pave the way to a fully automated end-to-end material flow, helping companies meet their needed requirements.

Digital Transformation Win-Win: Increasing Output While Decreasing Energy Use

4:30PM - 5:00PM | TENSORIOT

Whether counting products, detecting performance changes, or simply knowing when machines are doing value-adding work, increasing situational awareness of the production environment is an important first step in the digital transformation of industrial operations. In this session, learn how one manufacturer was able to gain insight to improve throughput over 15% while reducing energy consumption over 10% as part of its digital transformation journey. This initial improvement was made possible through the visualization of equipment telemetry. Further improvements were achieved with the use of machine learning, leading to even greater benefits for both production and sustainability.

Automate Visual Inspection of Product Defects at the Edge

11:00AM - 11:30AM | AWS

Spotting product defects during the manufacturing process in a near real-time becomes possible with AI technologies, but deploying and running AI models on the edge requires high compute power in very compact devices. Customers can kick-off and automate visual inspection in production by leveraging the integrated and pre-configured Siemens Tensorbox with AWS Lookout for Vision capabilities. With AWS Lookout for Vision, customer can easily create a machine learning model to spot anomalies from the live process line within as few as 30 images. This allows Industrial customers the ability to deploy and run visual inspections in a quick and secure way out-of-the-box.

How Machine Learning and IIoT on AWS Improves Sustainability for Plastic Packaging Leader

11:30AM - 12:00PM | SYNTAX

This session's customer story features a manufacturer of sustainable and recyclable plastic films and protective packaging. Attendees will learn the approach used to implement predictive quality, reduce scrap rate production, and improve predictive maintenance for overall equipment effectiveness (OEE) and energy efficiency using ML and IIoT AWS services.

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Digital Execution at the Speed of Innovation with Cloud-Native Low-Code

12:30PM - 1:00PM | SIEMENS

Many initiatives stall due to the high costs associated with IT management, business and IT divide, application customizations, and processes, organizational change management, and developing integrations into existing, complex disparate systems. Join Mendix and AWS to learn more about new technologies for manufacturers that can accelerate their digital transformation journey by scaling industrial use cases with purpose-built machine learning and cloud services integrated into a low-code app development platform. We will also cover use case example of how to achieve greater agility in the quality inspection process.

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2:30PM - 3:00PM | SOFTWARE DEFINED AUTOMATION

Join us to learn how you can do PLC engineering from your browser with connectivity to your shop floor assets. We will cover how to manage industrial controls like software systems with full transparency of deployed code and automated application changes. Learn how to reduce manual effort for automation engineers and increase the traceability of the changes.

How Covestro has Achieved Significant Benefits from Migrating and Operating SAP on AWS

3:00PM - 3:30PM | LEMONGRASS

In this session, discover how Covestro achieved significant benefits from migrating and operating SAP on AWS with Lemongrass. Learn how to achieve near-zero downtime with an SAP migration, the significant financial/non-financial benefits to be achieved from migrating and operating SAP on AWS, and how cloud technologies can support a greener, more sustainable business approach.

How Covestro has Achieved Significant Benefits from Migrating and Operating SAP on AWS

3:30PM - 4:00PM | SPRYKER

In this presentation, we will discuss five concrete approaches on how B2B industrial companies can address new customer requirements and decisively advance their business through digital commerce.

More Efficiency and Deeper Insights through Smart Wearables on the Shopfloor

4:00PM - 4:30PM | AUCOBO

Communication and collaboration on the shop floor still runs like it did 30 years ago, with long reaction times and unplanned downtimes. Digital shop floor collaboration, including smart wearables, enables new ways of working which significantly increases machine and worker productivity and reduces stress on workers. Learn how to bring the right information to the right worker at the right time. Get to know an agile approach to CI—and implement solutions for workers within minutes.

Leveraging AI/IIoT to Reduce up to 30% Energy Consumption and Waste/Scrap of Automobile Factories

4:30PM - 5:00PM | TVARIT

Ongoing geopolitical tensions have triggered global energy prices. To address this, AWS focused on reducing high energy/waste for industrial factories through our Hybrid AI approach-TiA. This solution combines physical simulations with AI modeling, providing realistic predictions that optimize production. Learn how Tvarit, powered by AWS, has helped benefit 55 plants by successfully reducing 50% of scrap, 30% of energy savings, and boosting machine availability by 20%.

Connect and Control Your Machiners with Siemens LOGO! and AWS IoT Core: Customer Story

11:00AM - 11:30AM | AWS

Connect and control machines with Siemens LOGO! and AWS IoT Core. Customer Story: Tecnoelectric is a panel builder/builder of small machines. The application is about big hoods for restaurants. Tecnoelectric provides the ability for their customers to control all the parameters of their hoods, troubleshooting, and data analytics capabilities. They connected each hood with a Siemens LOGO! to AWS, allowing customers the ability to view and track their hood data remotely.

Siemens, NavVis and AWS: Leveraging Large-scale Reality Capture and Computer Vision to Enable a Digital Building Twin

11:30AM - 12:00PM | NAVVIS

Managing existing brownfield buildings is a challenging task, as it usually provides inaccurate or lacking data. Large-scale, fast, and accurate reality capture and object detection algorithms are key technologies to automate and scale the creation of a digital building twin and providing a solution to this challenge. To create a solution for detecting objects in indoor environments with machine learning, Siemens, NavVis and AWS formed a close partnership. Learn more about this solution with the NavVis team at the AWS booth.

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Io-key & Apollo: 20,000 Industrial Sensors via Plug & Play in AWS

12:30PM - 1:00PM | AUTOSEN

In the session, we will address the challenges a commissioning engineer faces when bringing industrial sensors to the cloud. Discover how AWS IoT Core, AWS IoT SiteWise, and CloudFormation Templates are used in combination with io-key and apollo to solve these challenges. This creates a unique user experience that enables sensor data to be made available to AWS customers in minutes via plug and play.

Business-Ready Industrial Metaverse – Scaling AR/VR Use Cases via Cloud

1:00PM - 1:30PM | HOLO LIGHT

In this session, Holo-Light will introduce a platform approach to help enterprises scale their AR/VR use cases in the industrial metaverse. Via remote rendering from AWS cloud, XR applications are streamed to XR devices with high-performance while the data remains secure. Holo-Light will provide real-world examples of enterprises from the engineering and healthcare sector and will demonstrate how to unleash the full potential of XR.

Uplifting the Security Posture of AWS IoT Greengrass Systems with a Retrofit Hardware Security Module (HSM)

1:30PM - 2:00PM | SWISSBIT

IoT device identities are important assets that need to be securely protected. Consequently, AWS IoT Greengrass uses Hardware Security Integration (HSI) to prevent cryptographic keys from being exposed or duplicated in software—but many host platforms are lacking the necessary security chips. Learn about Swissbit's USB security anchor that provides a retrofit hardware security module (HSM), allowing system integrators to upgrade finished designs and in-field devices. This solution uses PKCS#11, and seamlessly integrates with AWS IoT Greengrass.

Akron, the Most Affordable Real-time Monitoring Platform for Oil Retailers

2:00PM - 2:30PM | PENTASOFT

In this session, learn how ANDAMUR leveraged the Pentasoft Akron offering to monitor pumps, flow-rates, tanks, price-poles, alarms, sales, etc., from desktops, tablets and mobiles, with the security, reliability, and performance of AWS IoT. Join us to hear how to reduce operation cost with no additional hardware to install.