

AWS
re:Invent

NOV. 29 - DEC. 3, 2021 | LAS VEGAS, NV

Manufacturing & Industrial Attendee Guide 2021

Welcome!

On behalf of the AWS for Industrial Team, welcome to re:Invent 2021! This year's conference is packed with content for the manufacturing, energy, mining, agriculture, transportation and utilities industries. From accelerating engineering design and optimizing operations, to reinventing supply chains, learn how AWS helps leading industrial companies transform their business with the most comprehensive set of cloud services and solutions, an extensive partner network, and the highest standards for privacy and data security.

You can start planning at any time by registering for the event, logging in to your account, visiting the session catalog, and marking sessions of interest.

We look forward to seeing you in person, November 29–December 3 in Las Vegas!

Sanat Joshi
WW Business Development Head
Automotive and Manufacturing Industries



Breakout Sessions

PNU306**Centrica: Balancing the grid with innovative technology**

A carbon-neutral world demands a new approach to energy. Learn about Centrica's drive to reach net zero by 2045, their use of distributed energy resources (DERs) to meet these objectives, and how Centrica is using AWS technology with their energy-optimization software to build the future energy grid.

Mary Wilson (AWS), Alexandra Coleman (Centrica)

CPG202**Improving product experience and manufacturing**

How can consumer packaged goods (CPG) companies use data, analytics, and progressive technology to build brand loyalty? Tyson Foods discusses automating traditional human inspection with AWS Panorama.

David Ahuja (AWS), Jeremy Gerard (Tyson Foods), Justin Honaman (AWS)

AUT201**AWS for autonomous driving with Aurora Innovation**

AWS provides an edge-to-cloud-based integrated development environment that is both open and agile to host hyperscale-natured autonomous tool chains for autonomous vehicle (AV) development needs. Aurora Innovation will explain how they differentiated their offering with AWS infrastructure to run millions of driving simulations per day, and more.

Stefano Marzani (AWS), Tim Kelton (Aurora Innovation)

AUT304**Developing a platform for software-defined vehicles**

Join this session to learn how Continental is accelerating the speed of innovation in automotive software with AWS. With the Continental Automotive Edge Platform enabled by AWS IoT Greengrass, Continental offers OEMs a unified engineering platform to develop, integrate, and deploy software seamlessly from the cloud to the vehicle.

Haydn Peterswald (AWS), Martin Stamm (Continental)

IOT201 Predicting equipment health with IoT in power and utilities

The power and utility industry is undergoing the most significant transformation to its operating and business models since the modern utility structure was developed in the early 20th century. Learn how AWS provides secure, scalable, and cost-effective solutions that support the current infrastructure and the grid model of the future.

Madhuri Susarla (AWS)

IOT207-L Closing the loop: Innovating with IoT on AWS

By using IoT technology as a gateway to big data analytics, image analytics, application modernization, and AI/ML, companies are powering numerous innovations. Learn how AWS is helping its customers send data to the cloud and send actionable insights back to the device to effectively close the loop and deliver business value.

Michael MacKenzie (AWS), Cherie Wong (AWS), Mike Tzamaloukas (AWS), David Gitlin (Carrier)

IOT205 Driving industrial digital transformation with AWS IoT SiteWise

AWS IoT SiteWise is a managed service that simplifies collecting, organizing, and analyzing industrial equipment data. Learn how to build IoT solutions using AWS IoT SiteWise, AWS AI/ML services, and AWS Partner solutions to drive industrial digital transformation and improve key business processes.

Sanjay Chopra (AWS), Thomas Cummins (Bill and Melinda Gates Foundation)

IOT206 Scaling sustainability solutions with IoT

Organizations are building IoT solutions to support a wide range of sustainability initiatives. Learn how companies are deploying secure IoT solutions on AWS that integrate machine learning to enable a more sustainable future. Enlighted (a Siemens company) will talk about how they build sustainable IoT solutions with AWS.

Mark Relph (AWS), Sandy Coleman (Enlighted [Siemens])

CMP209**Harnessing the power of edge computing to innovate**

Learn how AWS customers are using near real-time access to AWS infrastructure via AWS Wavelength and AWS Local Zones to launch new applications in fields ranging from real-time gaming, video streaming, and augmented and virtual reality to autonomous vehicles, robotic manufacturing and assembly, and machine learning inference at the edge.

George Elissaios (AWS)

DOP321-S**Intentional and empathetic observability**

Does it feel like your team is always hunting for the right dashboard during an incident? Learn what goes into great dashboards and how minimal investment can drive improvements for operations, security, and recovery time. This presentation is brought to you by Datadog, an AWS Partner.

Jeff Nickoloff (Datadog)

COP218-L**Cloud operations: Securely manage and govern anywhere**

Learn how the AWS operations model can help you build securely and successfully in the cloud—whether in on-premises, cloud, edge, or hybrid environments. Learn how organizations have successfully used the cloud operations model to speed up innovation.

**Bill Vass (AWS), Nandini Ramani (AWS),
Jahmy J. Hindman (John Deere)**

ENT208**Inside Johnson & Johnson's cloud transformation**

Modernizing enterprise resource planning (ERP) systems is a key pillar in Johnson & Johnson's continued cloud transformation. Learn about their migration journey, using infrastructure as code to increase SAP operational efficiency, and future plans to extend the ERP core to AWS services for advanced use cases such as voice-enabled manufacturing and fraud detection.

**Rowena Yeo (Johnson & Johnson),
Dan Sheeran (AWS)**

DAT213-L**Modernize your data infrastructure at warp speed**

Organizations are reinventing their businesses with data, and the first step is data infrastructure modernization. Learn how HBO Max picked the right database for each unique data requirement for modernization, and how eHealth's migration from Oracle Database to Amazon Aurora was the key to their data center exit journey.

**Jeff Carter (AWS), Arturo Hinojosa (AWS),
Rob Ford (HBO Max), John Chau (eHealth)**

ENT215**Transforming agriculture at John Deere with SAP on AWS**

Get an inside look at Deere's smart industrial transformation, including use of the AWS IoT Core platform and ongoing migration of SAP ECC to AWS. Discover key successes and lessons learned across people, insights, and technology as Deere leads the shift to smarter, safer, more sustainable, and efficient farming.

Siva Ganesh (AWS), Bidwan Baruah (John Deere)

EUC305-S**Engineering for social impact through the power of HPC**

Intel and AWS are collaborating on a new high performance computing (HPC) program to support users who are aiming to find solutions to the world's most urgent social and environmental challenges. Gain insight into the computing initiative in this presentation, brought to you by Intel, an AWS Partner.

Rebecca Weekly (Intel)

ROB302**How cloud-based simulation is advancing robotics space exploration**

Learn how to use AWS RoboMaker to automate running horizontally scalable, physics-based simulations to test a wide-array of scenarios, such as autonomous navigation, in challenging terrains. AWS customer Lunar Outpost joins to discuss building their cloud-enhanced lunar rover to help ensure its survival on the moon.

Jeremy Wallace (AWS), Justin Cyrus (Lunar Outpost)

QTC303**The path to a fault-tolerant quantum computer**

Learn about a path for building a fault-tolerant quantum computer. This session provides an overview of the AWS Center for Quantum Computing's advancements and explains quantum error correction and efficient hardware implementations, both critical requirements for making quantum computing possible at scale.

Nadia Carlsten (AWS), Oskar Painter (AWS)

STP204**Engineering for IPO with scalable architectures**

When the time comes for your startup to go public, you need an infrastructure that's ready to function effectively and to accommodate an influx of users, data, and demand. Embrace must-learn lessons for any startup on how to establish architecture and governance for scale and to prepare the engineering landscape for IPO or acquisition.

Cullen Dejean (AWS), Vinay Wagh (Databricks)

ROB201**Optimizing robotics and autonomous systems with AWS and Amazon**

As interest and use for autonomous robots surges, emerging technology is driving increased efficiency, reliability, and safety of robotics and automated systems. Learn how Amazon uses the latest AWS technology for developing AI-enabled robots at scale and uses generative design to optimize robotics before deploying to production.

Eric Anderson (AWS), Christine Osik (AWS)

MFG202

Industry 4.0 transformation with AWS for industrial

AWS helps accelerate engineering design, optimize industrial operations, and reinvent supply chains. Discover how AWS helps leading industrial companies transform their businesses. AWS customer, Koch Ag & Energy Services (KAES), discusses how they reduced downtime and maintenance costs with anomaly detection and AWS services like Amazon Monitron and Amazon Lookout for Equipment.

**Michel Putnik (AWS), Dave Kroenig (KAES),
Martin Miller (KAES)**

MFG203

AWS innovation within Amazon

Take a virtual tour of an Amazon Fulfillment Center to see how miles of conveyors, advanced automation, robotics, artificial intelligence, and AWS come together to get Amazon Prime customers their packages in as fast as one day, and see how to use that same AWS technology to transform your operations.

**Douglas Bellin (AWS), Cedric Ross
(Amazon Fulfillment)**

Interactive Sessions

MFG201 Industrial OT security best practices at Amazon

Dive deep into AWS OT security best practices for building an industrial hybrid cloud environment. Smart factory technologies are rapidly evolving and allowing industrial companies to deliver solutions that drive business outcomes and address the cybersecurity risks over the life cycle of the solution.

Steve Blackwell (AWS), Shane Thoney (Amazon Fulfillment)

MFG302 Modernizing MES in the cloud

Traditional manufacturing execution systems (MESs) are historically based on rigid, legacy technology-based systems or even more challenging on-paper-based inputs. This chalk talk dives deep into best practices for migrating and building a hybrid, cloud-hosted microservice-based MES application.

Jan Metzner (AWS)

MFG205 Industrial IoT basics: Connecting a PLC to the cloud

Learn how to build an industrial asset monitoring solution by connecting a programmable logic controller (PLC) to AWS using an OPC-UA connector with AWS IoT Greengrass. Model and visualize the PLC data on AWS IoT SiteWise and AWS IoT SiteWise Monitor and discover ways to use the data.

Emilia Brzozowska (AWS), Piyush Batwal (AWS), Michael Brown (AWS), Emad Mankbadi (AWS), Jan Metzner (AWS), Rajesh Gomatam (AWS)

MFG303 Industrial condition monitoring and automated quality inspection

Bring your laptop to this hands-on workshop to get direct experience applying AI/ML to industrial operations use cases. Learn how to use a sample product quality image dataset to build and train an ML model and use a sample compressor dataset to monitor the condition of equipment and build a predictive maintenance program.

Steve Blackwell (AWS), Jan Metzner (AWS)

MFG301 A practical guide to building an industrial data lake on AWS

An industrial data lake is foundational to help manage and store structured and unstructured data, enabling industrial organizations to unlock operational insights. This chalk talk walks through the steps to building an industrial data lake on AWS with a sample reference architecture from an existing AWS industrial customer.

Michael Brown (AWS), Andrea Kirkland (Terex)

MFG304 Building Arm's cloud-native engineering platform

Learn how Arm, a global semiconductor IP company, is taking a cloud-native approach to satisfy their engineering requirements and realize the full value of the cloud. Discussion on the design objective, challenges (like workload migration and governance), workarounds, lessons learned, and future plans beyond the current deployment.

Ludvig Nordstrom (AWS), Allan Carter (AWS), Zhifeng Yun (Arm)

PNU301**Electric load forecasting on AWS**

Load forecasting plays a key role across a utility, from supply chain and market participation to grid planning and customer engagement. The accuracy of these forecasts is of critical importance, so learn how to enable highly accurate and easy-to-implement customer-level and feeder-level load forecasting.

Abhineet Parchure (AWS), Pedram Jahangiri (AWS)

PNU303**Real-time wind farm health:
AWS IoT and Greenko case study**

Greenko, one of the leading renewable energy companies in India, shares the architecture created using AWS IoT services to stream near-real-time turbine data to the cloud, hydrating an IoT data lake and powering live dashboards for real-time situational awareness.

Avneet Singh (AWS)

PNU304**AWS Quick Start: Meter reads to
insights in ML minutes**

In this hands-on workshop, learn how AWS Quick Start Utility Meter Data Analytics on AWS deploys a best-practice architecture and prepackaged processing pipeline to prepare meter data and train ML models for forecasting and anomaly detection and see how easily the platform can be adapted to your business needs.

Sascha Janssen (AWS)

PNU305**How volt-VAR optimization on
AWS can cut utility emissions**

Learn how volt-VAR optimization (VVO) on AWS can help utilities lower their carbon footprint today and meet business goals. VVO is extremely effective, as illustrated by Ameren Illinois's report to the Illinois Commerce Commission, which targets a VVO solution to deliver 422 gigawatt-hours of annual energy savings by 2025.

Abhineet Parchure (AWS)

AUT301

Toyota Racing uses deep learning to predict race outcomes

Deep dive into the architecture and machine learning techniques that Toyota Racing Development (TRD) uses to identify up-and-coming stock car racers and predict race outcomes. Amazon Redshift, Amazon SageMaker, and Apache Airflow are featured in this talk for builders and enthusiasts.

Steven Miller (AWS), Derek Jones (Toyota Racing Development USA)

AUT305

Developing automated driving systems on AWS

Explore the nature of automated driving system (ADS) data using the Audi Autonomous Driving Dataset (A2D2) from the Registry of Open Data on AWS. Discover how to build Robot Operating System (ROS)-centric data-services solutions using modular AWS services and about generalizable recursive divide-and-conquer data-parallel processing patterns.

Ajay Vohra (AWS)



AUT302

Serverless architectures for autonomous fleets

Learn how Torc built a real-time vehicle telemetry dashboard to monitor its autonomous trucking test fleet using Amazon Location Service for real-time fleet tracking and geofencing. Hear Torc's future plans for AWS IoT Greengrass v2 at the edge along with video streaming for displaying data from onboard cameras.

Amit Sinha (AWS)

AUT306

AV data lake reference architecture

Learn how to build an autonomous vehicle (AV) data lake and see how to design and build an end-to-end scene detection pipeline using Spark on Amazon EMR. See how leaders use Webviz running on Amazon ECS for deep video inspection, review large-scale image extraction from ROS bag files, and label data.

Junjie Tang (AWS), Kevin Soucy (AWS)

AUT303

Intelligent vehicle fleet data collection using CMS

Connected Mobility Solution (CMS) on AWS is an efficient and scalable way to collect telemetry data from fleet vehicles. Learn to connect streaming analytics using AWS IoT Core, AWS Lambda, and Amazon Kinesis Data Analytics; and connect a fleet visualization dashboard with metrics and analytics tuned for electric fleets.

Scott Francis (AWS)

AUT307

Supercharge applications with insights from vehicle signals

Learn how to access and process vehicle signals using in-vehicle APIs provided by BlackBerry IVY. Share the result of your processing with applications and services in the vehicle, at scale and in a way that is repeatable across a community of developers.

Michael Garcia (AWS), Sue Ludwig (BlackBerry), Geordie Ferguson (BlackBerry)

AIM303

Improve your operations with computer vision at the edge

AWS Panorama is a machine learning appliance and software development kit (SDK) to bring computer vision (CV) to on-premises cameras to make predictions locally with high accuracy and low latency. Learn how you can automate tasks to improve your operations across a variety of industries, such as retail, hospitality, and industrial.

Imran Moin (AWS), Amit Mukherjee (AWS)

AIM313

Implement predictive maintenance for industrial equipment

Walk through a full end-to-end predictive maintenance model using Amazon Lookout for Equipment, an industrial equipment-monitoring service that detects abnormal equipment behavior. Learn the steps for defining a good application, structuring historical data, building a model, getting real-time results and visualizations, and scaling from one model to 1,000+ models.

Brant Swidler (AWS), Alicia Trent (AWS)

AIM410

Machine learning at the edge with Amazon SageMaker

Explore building computer vision (CV) applications at the edge for predictive maintenance, industrial IoT, and more. Learn how to operate and monitor multiple models across a fleet of devices, and build and train CV models with Amazon SageMaker and how to package, deploy, and manage them with SageMaker Edge Manager.

Sireesha Muppala (AWS), Sean Morgan (AWS)

IOT307**Race to generate IoT-connected wind energy**

Enter a friendly competition where teams race to safely generate clean wind energy. In this workshop, you learn how to connect a virtual wind turbine to AWS by working through the different needs of an engineer, operations person, and data analyst.

Bruno Vitali (AWS)

IOT310**Implementing a Zero Trust security model with AWS IoT**

Get hands-on experience using multiple AWS IoT services to safely and securely deploy commercial and industrial IoT devices at scale, even when you can't physically control the devices. Work through a scenario where you are in charge of deploying devices outside your corporate perimeter with an architecture that leverages Zero Trust principles to help ensure the security of your devices and data.

Ryan Dsouza (AWS)

IOT317**Building digital twins using AWS services**

In this chalk talk, learn how you can integrate data from different data stores and systems, how to derive insights from this data using AI/ML, and how you can run simulations on different scenarios.

Raj Devnath (AWS), Shyam Kariat (AWS)

IOT401**Instrumenting Industry 4.0 with AWS IoT services**

AWS IoT services are designed to simplify the alignment of operational technology (OT) and information technology (IT) to modernize industrial processes. Learn how AWS IoT SiteWise is accelerating adoption of cloud-native industrial solutions, and watch OT and IT experts team up with AWS instructors to deliver an edge solution.

Julia Hu (AWS), Seibou Gounteni (AWS)

ANT207 Smart CraneBot

Learn how to automate industrial robotic cranes to perform various common tasks at a manufacturing facility, like moving items, picking goods, and lifting objects. The robotic crane is powered by Raspberry Pi and connected via AWS IoT services, with Amazon SageMaker and AWS IoT SiteWise.

Dimitri Restaino (AWS), Ninad Shringarpure (AWS), Juan Lamadrid (AWS)

GPS313 Building a manufacturing data and analytics platform on AWS

AWS Partners will learn how to establish a single repository of real-time and historical industrial data to enable innovation and automated workflows through AWS for industrial solutions for advanced analytics, machine learning, and artificial intelligence.

Nishant Sainni (AWS), Adam Frowein (AWS)

DAT327 Build a serverless, event-driven architecture with AWS services

Many manufacturing, retail, gaming, and financial services organizations need critical real-time data aggregation. Learn about an architectural pattern for a serverless data-aggregation pipeline on the AWS Cloud with fully managed services, including Amazon DynamoDB, AWS Lambda, Amazon Kinesis, and AWS CloudFormation.

Lucas Rettenmeier (AWS), Sean Shriver (AWS)

ROB202 Building cloud-connected robots

Learn how to build a cloud-connected dancing robot using the NVIDIA JetBot development kit running Robot Operating System (ROS), and design dance routines in the cloud with AWS RoboMaker Simulation. Bring your dancing shoes for the workshop finale featuring a dance party with your fellow participants and robots!

Kimate Richards (AWS), Massimiliano Angelino (AWS)

GPS203 Building spatial computing experiences on AWS

Augmented, virtual, and extended realities, collectively known as spatial computing, have functional uses beyond gaming. Get a better understanding of how these recombinant technologies are changing industries and how your team can build a spatial computing experience on AWS, complete with a 3D asset pipeline and delivery to edge devices.

Chris Burns (AWS), Roajer Gilbert (AWS)

ROB301 Patterns for building cloud-enabled robots

AWS Robotics provides a specialized set of tools and solutions that makes it easier and faster for robotics developers to build and operate cloud-enhanced autonomous robots. Learn how to manage and deploy software at the edge, build an MLOps pipeline, and ingest and stream live video for robot surveillance and interaction.

Pulkit Kapur (AWS), Jon Slominski (AWS)

ROB303**How to optimize multi-robot fleet performance**

Review architectures that enable interoperability of different types of robots. Learn best practices for optimizing a robotics fleet with AWS robotics, IoT, and ML services.

Ibi Horvath (AWS), Ray Zhu (AWS)

ROB402**Building AI-enabled robots for pick-and-place operations**

As companies scale autonomous operations, robotic arms must be able to operate in highly dynamic environments. Get hands-on experience building, testing, and training AI-enabled robotic arms. Also, learn how to test and train ML models in simulation and then deploy software to robotic arms.

Adi Singh (AWS)

ROB304**Using AWS RoboMaker to run your robotics simulations**

Using AWS RoboMaker for robotics simulation can greatly reduce the time and expense of developing, testing, and training a new robot. Learn how to build and run simulations at scale on AWS RoboMaker using the simulator of your choice, with guidance on how to run and automate a variety of simulation tests.

Vamshi Konduri (AWS), Matt Hansen (AWS)

SEC302-S**Securing your company's next big bang**

Learn how Resilience, a biotech manufacturing company experiencing big bang levels of growth, used security principles, DevSecOps, and technology to explosively grow their business while staying safe. This presentation is brought to you by Datadog, an AWS Partner.

Andrew Krug (Datadog), Nathan Case (Datadog)

ROB401**Closing in on sim2real: How synthetic data can improve robot performance**

Improve your robot performance and learn how to generate and use realistic 3D synthetic images to train a computer vision model for a robot. Review how to set up an MLOps pipeline using synthetic data and discuss solutions for simulated-to-real (sim2real) transfer.

Bhavana Chandrashekhar (AWS), Vamshi Konduri (AWS)

Other recommendations

Keynotes





Adam Selipsky Keynote

Adam Selipsky is the CEO of Amazon Web Services (AWS), the world's most comprehensive and broadly adopted cloud platform. Having previously led AWS Marketing, Sales, and Support for 11 years, from 2005–2016, Selipsky helped launch and grow AWS from a startup into a multi-billion dollar business. Prior to rejoining AWS in 2021, Selipsky was most recently President and CEO of Tableau Software. He led Tableau through its acquisition by Salesforce, in what was the third-largest software industry acquisition at the time. Selipsky has also held various leadership roles at RealNetworks, and before that, was a Principal at strategy consulting firm Mercer Management Consulting. He has an AB in government from Harvard University and an MBA from Harvard Business School.



Dr. Werner Vogels Keynote

Dr. Werner Vogels is Chief Technology Officer at Amazon.com, where he is responsible for driving the company's customer-centric technology vision. As one of the forces behind Amazon's approach to cloud computing, he is passionate about helping young businesses reach global scale and transforming enterprises into fast-moving digital organizations. Vogels joined Amazon in 2004 from Cornell University, where he was a distributed systems researcher.



Peter DeSantis Keynote

Peter DeSantis is the Senior Vice President of AWS Global Infrastructure and Customer Support. In this role, he leads the AWS teams responsible for designing the data centers, servers, and network that underpin our AWS services and for deploying and operating this infrastructure worldwide as well as for the customer-facing organizations providing support for our AWS products.

Live stream sponsored by:



Machine Learning Keynote

Swami Sivasubramanian is Vice President at AWS in charge of all Amazon AI and machine learning services. His team's mission is "to put machine learning capabilities in the hands of every developer and data scientist." Swami and the AWS AI and ML organization work on all aspects of machine learning, from ML frameworks (TensorFlow, Apache MXNet, and PyTorch) and infrastructure, to Amazon SageMaker (an end-to-end service for building, training, and deploying ML models in the cloud and at the edge), and finally AI services that make it easier for app developers to incorporate ML into their apps with no ML experience required.



Global Partner Summit Keynote

Join us for the Global Partner Summit keynote, presented by Doug Yeum, Head of AWS Partner Organization, Sandy Carter, Vice President, Worldwide Public Sector Partners and Programs, and Stephen Orban, General Manager of AWS Marketplace and Control Services. You'll learn about cloud-powered innovation and the opportunity it creates for AWS Partners, as well as how AWS Partners use the AWS Cloud to build innovative solutions and services, differentiate their businesses, and enable customers in virtually every industry to transform their businesses.

Live stream sponsored by:



Leadership sessions



Leadership sessions*



SPOTLIGHT SESSION

All Builders Welcome

LaDavia Drane

Director, Inclusion, Diversity & Equity



SPOTLIGHT SESSION

AWS Executive Panel

Francesca Vasquez

Vice President, Technology



*Sessions are subject to change

Leadership sessions*



AWS Marketplace

Stephen Orban

General Manager, AWS Marketplace



AWS Public Sector

Max Peterson

Vice President, Worldwide Public Sector



AWS Public Sector Partners

Sandy Carter

Vice President, Worldwide Public Sector
Partners and Programs



AWS Storage

Mai-Lan Tomsen-Bukovec

Vice President, Worldwide Public Sector
Partners and Programs



AI/ML

Bratin Saha

Vice President, Machine Learning

Leadership sessions*



Analytics

Rahul Pathak

Vice President, Analytics



Architecture

Brian Taptich

Vice President, AWS Worldwide
Specialist Organization



Business Applications

Peter Hill

Vice President, Business Applications



Cloud Operations

Bill Vass

Vice President, Engineering – Storage,
Automation, Streaming & Management



Compute

David Brown

Vice President, Amazon EC2

Leadership sessions*



Containers

Deepak Singh

Vice President, Compute Services



Databases

Jeff Carter

Vice President, Relational Databases



Developer

Ken Exner

Director, AWS Developer Tools

Live stream sponsored by:



Edge

Bill Vass

Vice President, Engineering – Storage,
Automation, Streaming & Management



Enterprise and Migration

Todd Weatherby

Vice President, Professional Services

Leadership sessions*



IoT

Michael MacKenzie
General Manager, AWS IoT



Networking & Content Delivery

David Brown
Vice President, Amazon EC2



Security, Compliance, and Identity

Stephen Schmidt
Vice President and Chief Information
Security Officer

Live stream sponsored by:



Serverless

David Richardson
Vice President, Serverless



Training & Certification

Maureen Lonergan
Director of AWS Training and Certification

Learn



Choose the learning methods that work for you



Breakout sessions

Available from intermediate (200) through expert levels (400), so you can grow your skills, no matter where you are in your career. Select from any track, level, or available session type to tailor your re:Invent experience.



Workshops

Workshops are two-hour hands-on sessions where you work in teams to solve problems using AWS services. Workshops organize attendees into small groups and provide scenarios to encourage interaction, giving you the opportunity to learn from and teach each other.



Chalk talks

Chalk talks are a highly interactive content format with a small audience. Each begins with a short lecture (10–15 minutes) delivered by an AWS expert, followed by a 45- or 50-minute Q&A session with the audience.



Builders' sessions

These are 60-minute small group sessions with up to six attendees per table, and one AWS expert, who is there to answer questions and provide guidance. It's just you, your laptop, and the AWS expert.

Choose the learning methods that work for you



Training and Certification

Learn directly from AWS experts and get practical experience with real-world cloud scenarios. Skill up fast with a bootcamp, show your expertise by earning an AWS Certification, and practice your craft with one of our labs.

AWS DeepRacer

Developers of all skill levels can compete in virtual races during re:Invent for a chance to win prizes and glory! Tune in to AWS DeepRacer TV throughout re:Invent to catch the championship action.

Jams and GameDays

Test your skills in implementing AWS solutions by solving real-world problems in a gamified, risk-free environment. Take part in collaborative and interactive learning exercises—and win prizes!

Expo

Learn from AWS experts and partners. The Expo at The Venetian will be host to AWS Village, AWS Partner Network, AWS Marketplace, Builders' Fair, Developer Lounge, a demo theater, Jam Lounge, Startup Central, and sponsor booths.

Play



Play



Midnight Madness

Once again this year, we will be hosting an AWS-style pep rally to kick off the week and welcome our most dedicated fans. Midnight Madness provides a sneak peek into re:Invent, complete with the first product launch of re:Invent 2021.

Quirky

Experience Amazon's unique culture at one (or more!) of our Quirky events. Whether it's board games, bingo, or a sneak peek of one of your favorite Amazon TV shows, we've got something for everyone.

re:Play party

For our 10th annual re:Play party, we have an amazing lineup, featuring all the classic re:Play activities like dodgeball and office chair grand prix, and we have a very special musical headliner. Stay tuned for more information!

Restaurant receptions

Join the conversation at our vibrant restaurant receptions. Meet people from across the tech world and connect on topics of interest to you at a range of wonderful venues.

Reserved seating

RESERVED SEATING WALKTHROUGH

Navigate to the session catalog

After logging in to the event portal, click on the side nav and click "Sessions".

The screenshot shows the AWS re:Invent 2021 event portal. The browser address bar displays `portal.awsevents.com/events/reInvent2021/dashboard/event/sessions`. The page header includes "AWS Events" and a navigation menu with "Sessions" highlighted. A pink arrow points to the "Sessions" link in the side navigation. The main content area shows the "Sessions" page with a search bar and filter options for "Cost" (Paid sessions, Free sessions) and "Days" (Monday). A featured session titled "15 years of AWS with J..." is visible on the right.

RESERVED SEATING WALKTHROUGH

Using catalog filters

When viewing the session catalog, there is a set of filters available on the left sidebar of the sessions catalog that shows a variety of filters you can use while browsing. Filters include: price, day of the week, difficulty level, session type, topic, AWS service, and industry.



AWS re:Invent 2021 > Event > Sessions

Sessions

All sessions

My favorites

My reservations

Showing 25 of 881 sessions

▼ Cost

- Paid sessions
- Free sessions

▼ Days

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday

▼ Session level

- 100 - Foundational
- 200 - Intermediate
- 300 - Advanced
- 400 - Expert

▼ Session type**★ 15 years of AWS with Jeff Barr**

BOA201

Amazon S3 and Amazon EC2 are turning 15 this year, and in this breakout session, have a chat with him about how AWS customers keep surprising us with their amazing projects and shares lessons on how to best build on AWS. Last but

Session type: Breakout Session
Topics: BuildOn.AWS
Session level: 200 - Intermediate
Job Role: Developers, Architect

★ 5 ways to stay on top of your cloud learnBOA202-R1 Repeat

No matter what project you're building, as a developer, you learn, experiment, and build on AWS while keeping your eyes on the prize to discover AWS and start working with its foundational services to optimize your learning experience in the cloud.

Session type: Chalk Talk
Topics: BuildOn.AWS

RESERVED SEATING WALKTHROUGH

Using catalog search

At the top of the session catalog, there is a search bar where you can enter freeform text to search the full catalog. The search box searches through all of the displayed text fields of a session, including session ID, title, abstract, and level.

AWS re:Invent 2021 > Event > Sessions

Sessions

All sessions

My favorites

My reservations

Showing 25 of 881 sessions

▼ Cost

- Paid sessions
- Free sessions

▼ Days

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday

▼ Session level

★ 15 years of AWS

BOA201

Amazon S3 and Amazon S3 Glacier customers keep surprising us with their use cases and shares lessons on how to optimize your storage.

Session type: Breakout**Topics:** BuildOn.AWS**Session level:** 200 - Intro**Job Role:** Developers, Architects

★ 5 ways to stay

RESERVED SEATING WALKTHROUGH

Favoriting and un-favoriting a session

When viewing the session catalog, any session shown in the results has a star icon on it. Clicking that star will mark it as a favorite. To un-favorite it, simply click the star again.



ations



15 years of AWS with Jeff Barr

BCA201

Amazon S3 and Amazon EC2 are turning 15 this year, and Jeff Barr, VP of this breakout session, have a chat with him about how AWS was born, how customers keep surprising us with their amazing projects. Along the way, and shares lessons on how to best build on AWS. Last but not least, go

Session type: Breakout Session

Topics: BuildOn.AWS

Session level: 200 - Intermediate

Job Role: Developers, Architect

RESERVED SEATING WALKTHROUGH

Reserving a session

For events with reserved seating, when a session has available seats, the button on the session card will say “Reserve seat”.

For sessions with a price greater than zero, the button will say “Buy for <price>”. Clicking purchase will open up the purchase form where you can complete your transaction. Once the transaction is complete, that session will show on your reservations list.



A practical guide to building an industrial data lake on AWS

MFG301

Analyzing the massive quantities and types of data generated in an industrial setting can enable effective into production optimization opportunities. An industrial data lake is foundational to help manage and st insights for their factory digital transformation efforts. This chalk talk walks through the steps to building industrial customer.

Session type: Chalk Talk

Topics: Manufacturing

Session level: 300 - Advanced

Reserve a seat

Date

Time

Local



AWS Cloud Technical Essentials (option 1)

TNC101-R2 Repeat

This bootcamp introduces you to essential AWS services and common solutions. The bootcamp covers fun security. It also explores concepts that increase your understanding of AWS services, so you can make mor apply highly available, fault-tolerant, scalable, and cost-effective cloud solutions.

Session type: Bootcamp

Topics: Training and Certification

Session level: 100 - Beginner

Buy for \$1.00

Date

Time

Local

RESERVED SEATING WALKTHROUGH

Waitlisting a session

When a session has no seats available, because the capacity has already been met, then the button will say "Join waitlist". If you join a waitlist for a session, and a seat becomes available in that session, you may automatically be placed in that session and we will notify you via email.



15 years of AWS with Jeff Barr

BOA201

Amazon S3 and Amazon EC2 are turning 15 this year, and Jeff Barr, VP and Chief Evangelist at AWS, has shared his perspective on how the developer experience has evolved over the years, and how customers keep surprising us with their creativity. Jeff will share stories from the community and shares lessons on how to best build on AWS. Last but not least, go back in time as Jeff

Session type: Breakout Session

Topics: None

Session level: 200 - Intermediate

Join waitlist

RESERVED SEATING WALKTHROUGH

Viewing your favorites, reservations, and waitlisted sessions

Along the top of the catalog page, there are 3 tabs: 1) All sessions, 2) My favorites, and 3) My reservations. Clicking on "My favorites" will show you a list of only sessions you have favorited. Clicking on "My reservations" will show you a list of items you have reserved or waitlisted.



[AWS re:Invent 2021](#) > [Event](#) > [Sessions](#)

Sessions

All sessions

My favorites

My reservations

Showing 25 of 881 sessions

▼ **Cost**

RESERVED SEATING WALKTHROUGH

Cancelling a reservation or waitlist

When viewing a session, in any tab, if you have reserved or waitlisted, you can cancel that action by simply clicking the button again. It will show a dropdown that says "Cancel reservation" or "Leave waitlist".

★ Automating content moderation to improve digital safety

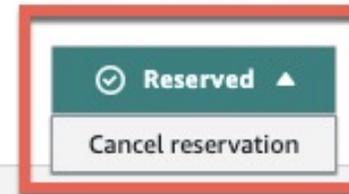
AIM307

The volume of user-generated content and third-party content has been exploding in social media, online end users, companies need to find a way to review audio, image, video, and text content at scale for potential content. This chalk talk provides hands-on experience to implement a multimodal AI content moderation solution using speech (Amazon Transcribe), and text (Amazon Comprehend).

Session type: Chalk Talk

Topics: Artificial Intelligence and Machine Learning

Session level: 300 - Advanced



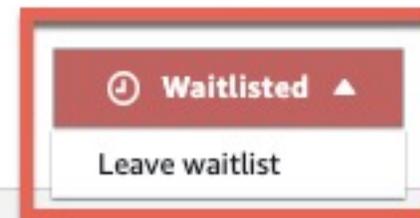
BOA201

Amazon S3 and Amazon EC2 are turning 15 this year, and Jeff Barr, VP and Chief Evangelist, shares how the developer experience has evolved over the years, and how customers keep the community and shares lessons on how to best build on AWS. Last but not least, go back to the beginning.

Session type: Breakout Session

Topics: None

Session level: 200 - Intermediate



RESERVED SEATING WALKTHROUGH

Viewing your calendar

In the main navbar on the left of the session catalog, you will see a link that says "My calendar".

AWS Events

Reserved Seating Demo 2021

Event

[My calendar](#)[Sessions](#)[Speaker dashboard](#)[Registration information](#)[Payment](#)[Contact us](#)[AWS Code of Conduct](#)

Reserved Seating Demo 2021 > Event > My calendar

< November 2021 >

	Mon	Tue
	29	30
12 am		
1 am		
2 am		
3 am		

RESERVED SEATING WALKTHROUGH

Viewing your calendar

If you navigate to the calendar, you will see all of your favorites, reserved seats, and waitlisted seats on the corresponding days that those sessions are scheduled.



Reserved Seating Demo 2021 > Event > My calendar

< November 2021 >

	Mon 29	Tue 30	Wed 01	Thu 02
12 am				
1 am				
2 am				
3 am				
4 am				
5 am				
6 am				
7 am				
8 am				
9 am				
10 am			Achieve high performance and cost-e... 10:00 AM – 11:00 AM	Amazon Lightsail: Move your first ap... 10:00 AM – 11:00 AM
11 am				
12 pm				
1 pm			Automating content moderation to i... 1:00 PM – 2:00 PM	
2 pm				
3 pm				

Make a plan

Building your agenda

SESSIONS

Breakout sessions are lecture-style and one hour long. Sessions are delivered by AWS experts, customers, and partners, and they typically include 10–15 minutes at the end for Q&A.

WORKSHOPS

Workshops organize attendees into small groups and provide scenarios to encourage interaction, giving you the opportunity to learn from and teach each other.

50%

25%

15%

10%

CHALK TALKS

Chalk talks are one hour long and contain expert-level content presented by AWS experts. The goal is to foster a technical discussion around real-world architecture challenges

BUILDERS' SESSIONS

These are 60-minute small group sessions with up to six attendees per table, and one AWS expert, who is there to answer questions and provide guidance.



PRO TIP:

Breakout sessions should make up the bulk of your plan. You can find customers directly speaking about their real-world experiences of using AWS products and services in sessions!

Building your agenda



PRO TIPS:

- Make sure to watch the leadership sessions that are most relevant to your areas of interest to get the most strategic updates.
- Be sure to not miss out on all the keynotes, as that's where you'll catch the biggest AWS launches.
- re:Invent always tries to feature many customers directly speaking about their real-world experiences of using AWS products and services. You'll find them in many breakout sessions, as well as keynotes.
- Think about topics that are currently mission critical to your team, and topics you're interested in learning more about.
- Breakout sessions will be available to watch virtually, even if you are registered for in-person re:Invent.
- Make an extensive list of sessions to watch! Favorite lots of sessions so when reserved seating goes live, you have lots of options.

Got free time on your schedule?

There are many learning opportunities across the re:Invent campus in Las Vegas that require no reservation. Drop by the Expo, visit a content hub, or practice your craft in one of our labs.



Expo

Learn from AWS experts and partners. The Expo at The Venetian will be host to AWS Village, AWS Partner Network, AWS Marketplace, Builders' Fair, Developer Lounge, a demo theater, Jam Lounge, Startup Central, and sponsor booths. Come by and see all that the Expo has to offer!



Content hubs

Breakout session repeats will take place all week in all re:Invent venues, along with overflow sessions in our content hubs (centralized overflow rooms in every venue). We will also stream live content to the content hubs as the sessions fill up.



Labs

Practice your craft in a live AWS sandbox environment. Try any of our 100+ self-paced labs on your own, or reserve time with an AWS expert who can coach and guide you. Whether you're just starting out or honing your technical skills, learn by doing with labs.

Your re:Invent checklist

- Register for re:Invent / Book your hotel / Book your travel reservations / Upload your badge photo
- If attending in person, review the [health measures](#) in place for this year's re:Invent
- Visit the [re:Invent website](#) to stay up to date on announcements
- Add all five [keynotes](#) to your agenda
Pro Tip: This is where you'll catch the biggest AWS launches
- Add your favorite leadership sessions to your agenda
- Get ready for reserved seating: favorite the learning sessions of interest to you
- Familiarize yourself with sponsors in the [Expo](#), along with the Expo map
- If you're attending with a team, connect with your colleagues to plan how to conquer the many hours of content
Pro Tip: Don't forget to find time to reconvene with your team and debrief on everyone's learnings
- Check out the [Play](#) activities and add them to your agenda
- Watch all the [How to re:Invent](#) videos to prepare for the week
- Follow Amazon Web Services on Instagram, Facebook, LinkedIn, and Twitter

Useful resources

Useful resources

How to re:Invent

Everything you need to know about how to re:Invent. Insider tips, planning advice, and interviews with re:Invent experts. Stay tuned for more episodes on the road to re:Invent!

[How to re:Invent](#)

Health measures

The health and safety of our customers, partners, and employees remains our top priority. Review our updated COVID-19 vaccination requirements for attending re:Invent in Las Vegas.

[Health measures](#)

FAQs

Get all the info you need on topics such as health and safety, registration, accessibility, and much more.

[FAQs](#)

Thank **you!**

