Containers Attendee Guide 2021

AWS re:Invent
Nov. 29 - Dec. 3, 2021 | Las Vegas, NV
Welcome!

Hi everyone, I am Philipp Garbe. It's great that re:Invent is back in Las Vegas this year. And for those who can't make it in person, there is at least a limited possibility to follow the sessions online.

For my guide, I've picked out a few sessions that I plan to attend myself. If you don't know me, I'm driven by technologies and tools that allow me to deliver and release faster and more often. That include pipelines, Infrastructure as Code (AWS CDK and AWS CloudFormation), and of course containers (specifically Amazon ECS and AWS Fargate).

I would be happy to meet you at re:Invent. Just ping me on Twitter @pgarbe.

Philipp Garbe
AWS Container Hero
Breakout sessions
BOA201
15 years of AWS with Jeff Barr

AWS celebrated two impressive anniversaries this year with Amazon EC2 and Amazon S3. And who could tell you more about the last 15 years at AWS than Jeff Barr?

This is definitely a talk you don't want to miss.

Amazon S3 and Amazon EC2 are turning 15 this year, and Jeff Barr, VP and Chief Evangelist at AWS, has been at Amazon even longer! In this breakout session, have a chat with him about how AWS was born, how the developer experience has evolved over the years, and how customers keep surprising us with their amazing projects. Along the way, Jeff also answers questions sent by the developer community and shares lessons on how to best build on AWS. Last but not least, go back in time as Jeff demos AWS as it was in 2007.

CON201
You have a container image: Now what?

We all know there are 17 (or even 34) different ways to run containers on AWS. I'm curious how many possibilities will be mentioned in this talk. Regardless, it makes sense to join the talk to get an overview.

The richness of AWS container services can sometimes be overwhelming, and this can create analysis paralysis. This session provides an overview of the many AWS options for running containers. It introduces a comparison framework that considers multiple dimensions, such as feature richness, the shared responsibility model, the pricing model, target IT personas, and more. It then includes an analysis of each service under these lenses. Learn how to navigate the options and select the best services or technologies based on your needs and goals.

CON202
Delivering code and architectures through AWS Proton and Git

The idea behind AWS Proton sounds compelling. As a relatively new service, it first needs to prove how well you can use it, and this talk should be perfect for learning what's been going on in recent months.

Infrastructure operators are looking for ways to centrally define and manage the architecture of their services, while developers need to find a way to quickly and safely deploy their code. In this session, learn how to use AWS Proton to define architectural templates and make them available to development teams in a collaborative manner. Also, learn how to enable development teams to customize their templates so that they fit the needs of their services.
DOP310
Enabling decentralized development teams with a shared services platform

Platform teams can deliver real value and make feature teams better and faster. But it can also be difficult to find the right abstraction to not block them. If you are in that situation, find out which AWS services can help you and how to use them.

Speed in software development requires being able to equip development teams with tools and guardrails for DevOps, security, and infrastructure configuration. Too often, central teams find they need to piece together their own custom solutions or compromise the speed of their development organization in order to maintain standards. In this session, dive deep into the crawl, walk, and run options and best practices for building a shared services platform on AWS using tools and services such as AWS Copilot, AWS Proton, and pre-built solutions using AWS CloudFormation.

DOP315
What's new and what's next with AWS CloudFormation and AWS CDK

CloudFormation was the first service I learned when I started with AWS and it's still what I use every day. If something is not supported by CloudFormation it doesn't exist for me. Of course, I no longer write my templates myself, but have them synthesized by CDK. And in this session, you'll learn what's new from both services.

Join this session to learn about new features to up-level your infrastructure-as-code (IaC) experiences on AWS. It covers working with AWS CloudFormation modules and AWS CDK constructs to make working with AWS easier; CloudFormation registry and Construct Hub to streamline creating, publishing, discovering, and using AWS and third-party plugins; CloudFormation StackSets and CDK Pipelines to automate the deployment of resources and applications across multiple AWS Regions and accounts; CloudFormation hooks to attain security and best-practice compliance before deployments reach production; and more. Explore how AWS is improving our IaC coverage of AWS services and features in a scalable, decentralized way and how you can contribute.
Interactive sessions
I like the interactive formats because there are fewer people present, so it feels more intimate. It’s also easier to talk with the speakers.

The sheer number of services on AWS can be overwhelming for beginners. And there are blog posts, news articles, documentation, samples, and so on...

I’m curious about the tips and tricks on how to avoid being buried by the flood of information.

No matter what project you’re building, as a developer, you want to know which building blocks to pick and how to use them. How do you learn, experiment, and build on AWS while keeping your costs low? In this chalk talk, walk through different approaches that you can take to discover AWS and start working with its foundational services. Also learn about best practices, tools, and cost-saving measures to optimize your learning experience in the cloud.

Why not save costs by using Graviton2 instances for your containers? The tooling already exists, and this talk shows what you can do to run your containers on multi architectures.

AWS Graviton2 processors are custom built by AWS to enable improved price-performance for workloads in Amazon EC2. Instances powered by Graviton2 processors can provide up to 40 percent better price-performance over comparable x86-based instances for a wide variety of workloads. Containerized applications, in particular, are great candidates to run on Graviton2-based instances because of their ease of portability. In this chalk talk, learn about building multi-architecture container images and working with popular orchestration services such as Amazon EKS and Amazon ECS to run your containerized workloads with Graviton2.
There are not only many ways to run containers, but also to monitor them. From AWS’s own services like CloudWatch to widely recognized open-source solutions, there’s something for everyone in this talk.

A typical fallacy that many developers have is: The network is reliable. We all know it isn’t and with AWS App Mesh you can get visibility and monitoring of your network. If you haven’t used it, see what’s possible in this talk.

AWS Copilot is one of the many ways to run containers and has seen many new features in recent months. See how quickly a containerized application can be set up with it.

This chalk talk walks through the resources that AWS Copilot builds and manages for you, provides a whiteboard demonstration about the various components, and details the benefits to you.

Having an effective observability architecture for a containerized workload is essential to every business-critical environment running on AWS. By combining open-source technology with managed service experience, AWS provides observability tools that integrate seamlessly with AWS container-based hosting environments, specifically Amazon EKS and Amazon ECS. This session provides hands-on experience on the wide variety of toolsets AWS offers to set up monitoring and observability of your applications using AWS-provided and -supported tooling, such as AWS for Fluent Bit, Container Insights, Amazon Managed Service for Prometheus (AMP), Amazon Managed Service for Grafana (AMG), and AWS Distro for OpenTelemetry.

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While you modernize your existing applications and build microservices that need to work together as an application, it can be challenging to manage these services and have a consistent way to route and monitor traffic between them. Using a service mesh can enable you to manage service-to-service connectivity effectively without having to build language-specific SDKs and tools for your production-ready applications. In this chalk talk, see a demonstration of the connectivity options between the services of a microservices application that is configured to use AWS App Mesh. App Mesh is a managed service mesh that can be used with Amazon ECS, Amazon EKS, Amazon EC2 instances, and self-managed Kubernetes on EC2.
Other recommendations
If you join re:Invent in Las Vegas, it might be different than the years before.

**Campus**
- Some of the venue hotels have changed; there are only 4 now
- Hotels are closer together; distances won’t be as crazy as before

**Networking and Learning**
- Take advantage of the in-person event
- Talk to your peers and learn from them
- Join interactive formats like chalk talks
- Don’t forget the evening events (like restaurant receptions)
- You can sleep on your flight home 😊
Containers Jam

HJS302
AWS Modernization & DevOps Jam

In addition to all the amazing breakout sessions at re:Invent, the AWS Modernization & DevOps Jam will allow you to actually use those AWS and Partner solutions that you have heard about to solve real-world scenarios in a fun and competitive event.

This jam provides an environment for you to try to improve applications and implement DevOps best practices. What are the limitations of the existing solution? How can you architect multiple AWS services together to improve it? Whether you are new to AWS or a cloud expert, join us to demonstrate your existing skills while learning new ones. Jams are structured to accommodate AWS users of all levels. Clues and AWS experts are available to help ramp up your application modernization and DevOps knowledge. A laptop is required to participate.
Containers Bootcamp

TNC204
Running Containers on Amazon EKS

Learn to run Kubernetes on Amazon EKS without needing to install, operate, and maintain your own Kubernetes control plane. Learn by doing with expert guidance, immersive exercises, and self-paced labs.

Amazon EKS makes it easy to run Kubernetes on AWS without needing to install, operate, and maintain your own Kubernetes control plane. In this one-day abridged version of the Running Containers on Amazon EKS course, learn the fundamentals of container management and orchestration for Kubernetes using Amazon EKS. This bootcamp includes instructor lectures, presentations, self-paced labs, and demonstrations. It is intended for anyone who provides container orchestration management in the AWS Cloud, including DevOps engineers and systems administrators.
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*

LaDavia Drane
Director, Inclusion, Diversity & Equity

Francesca Vasquez
Vice President, Technology

*Sessions are subject to change
Leadership sessions*

Stephen Orban  
General Manager, AWS Marketplace

Max Peterson  
Vice President, Worldwide Public Sector

Sandy Carter  
Vice President, Worldwide Public Sector Partners and Programs

Mai-Lan Tomsen-Bukovec  
Vice President, Worldwide Public Sector Partners and Programs

Bratin Saha  
Vice President, Machine Learning

*Sessions are subject to change
Leadership sessions*

Rahul Pathak
Vice President, Analytics

Brian Taptich
Vice President, AWS Worldwide Specialist Organization

Peter Hill
Vice President, Business Applications

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

David Brown
Vice President, Amazon EC2

*Sessions are subject to change
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:

snyk

Edge

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

Enterprise and Migration

Todd Weatherby  
Vice President, Professional Services

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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

**Serverless**

**David Richardson**  
Vice President, Serverless

**Training & Certification**

**Maureen Lonergan**  
Director of AWS Training and Certification

Live stream sponsored by: **TREND MICRO**

*Sessions are subject to change*
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.
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.

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.

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!

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”.
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.
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.
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.
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.
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.
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

Search sessions by keyword

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**

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

**Session type:** Chalk Talk
**Topics:** Artificial Intelligence and Machine Learning
**Session level:** 300 - Advanced

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**BOA201**

Amazon S3 and Amazon EC2 are turning 15 this year, and Jeff Barr, VP and Chief Evangelist for AWS re:Invent, will discuss how the developer experience has evolved over the years, and how customers keep catching up with the pace of innovation. Jeff will share the story of AWS, how the AWS community and shares lessons on how to best build on AWS. Last but not least, go back to your network and see how you can continue to evolve!

**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”.
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.
Make a plan
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.

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.

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

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
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!

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.

FAQs

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