

AWS
re:Invent

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

Recap Guide 2021 for Financial Services Professionals

Thank You

On behalf of the AWS Worldwide Financial Services team, I want to thank you for spending your time with us at re:Invent 2021!

Whether you attended in person or virtually, we hope the information, lessons learned, and best practices shared will inspire you to accelerate your cloud adoption.

This guide will help you access sessions you may have missed during the conference. Learn how leading financial institutions—and companies around the globe—are transforming and innovating on AWS. We've also summarized a selection of new services that are particularly relevant to our industry.

Again, thank you for participating in re:Invent, and best wishes for a healthy and successful 2022!

Frank Fallon

Vice President, AWS Worldwide Financial Services



Let's recap

Access hours of sessions led by AWS experts, hear from customer and partner cloud leaders, and learn what's next and new from AWS.

Click on the links at right to navigate this guide and also use the tabs at the top of each page to jump to a section.

Our recommendations

- ✓ Watch CEO Adam Selipsky's Keynote
- ✓ Check out a few Financial Services sessions
- ✓ Pick a Leadership Session that interests you
- ✓ View our curated list of new service announcements

Quick links:

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FSI announcements & highlights



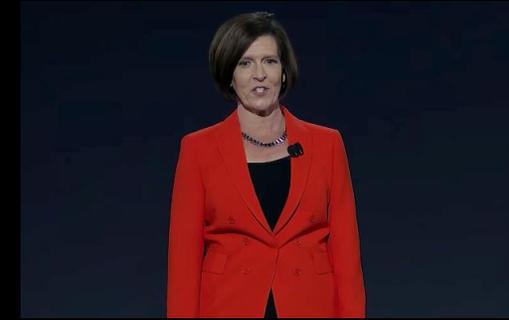
[President & CEO Adena Friedman announces Nasdaq will migrate its first US options market to AWS in 2022](#)



[Liberty Mutual supports rapid innovation with developer solutions powered by AWS](#)



[Fannie Mae uses AWS for insights and innovations in the mortgage process](#)



[Western Union uses AWS to create company-wide digital transformation](#)



[Goldman Sachs launches Financial Cloud for Data with AWS](#)



[AIG selects AWS as its preferred public cloud provider](#)



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[Vanguard, Guidewire leverage new Amazon SageMaker capabilities](#)



Financial Services

Breakout session recap

AWS re:Invent breakout sessions are lecture-style and one hour long.

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FSI202

Watch

How JPMC modernized its core risk management platform

JPMorgan Chase (JPMC) Corporate Investment Bank's Athena platform provides technologists, quantitative analysts, and risk managers with a consistent, cross-asset portfolio of models, frameworks, and tools to use in building financial applications. Having migrated a number of trade desks to AWS and achieved improved performance, the platform owner decided to accelerate Athena's journey to the cloud. This session shares the challenges that JPMC overcame and detail the Athena team's adoption of cloud-native services, including Amazon EKS, Amazon S3, Amazon RDS, and Amazon ElastiCache for Redis, to enable customers to evaluate risk across a broader set of market conditions and scenarios.

Featured speakers: **Michael Elliott**, Managing Director, CIB, JPMorgan Chase & Co.; **Ioana Nistoreanu**, Lead Software Developer, JPMorgan Chase & Co.; **Oli Leach**, Global Accounts Solutions Architect, AWS

FSI203

Watch

State Farm: Enabling rapid deployment with risk automation

Learn how State Farm streamlined deployment approval from months to minutes by implementing an automated, data-driven risk management process for all use cases leveraging AWS services. Approving deployments to production in Financial Services is often a manual, opinion-based, and time-consuming process that frustrates developers, security teams, and executive leadership alike. This solution not only notifies account administrators of potential compliance issues, but it also supports auto-remediation of these issues and provides continuous, real-time testing and monitoring of controls, which accelerates service adoption for developers, delivers assurance to InfoSec professionals, and enables agile executive decision making.

Featured speakers: **Dennis Kampen**, Architect Manager - Public Cloud Adoption Team, State Farm; **Jeff Michels**, Software Developer, State Farm; **John Lucking**, Principal Solutions Architect, Insurance, AWS

FSI204

Watch

Goldman Sachs: Reinventing financial data analytics

Performing sophisticated data management and analytics can create a critical advantage in financial markets, but doing so with speed and scale requires significant time and resources. Learn how Goldman Sachs addressed this challenge by building a cloud-native, modular, and integrated collection of services to enable innovation in financial data analytics. Hear how the bank re-architected its proprietary data and analytics capabilities leveraging AWS services to make it easier to discover, combine, and analyze data in minutes. This session shares how capital markets organizations can adopt this solution through the Goldman Sachs Financial Cloud to accelerate data integration and quantitative analysis.

Featured speakers: **Andy Phillips**, Managing Director, Goldman Sachs; **Francis Giannaros**, Vice President, Goldman Sachs; **Balaji Gopalan**, Principal Solutions Architect, AWS

FSI207

Watch

Itaú: Upgrading platforms to transform customer experience

Itaú Unibanco, Latin America's largest bank, is systematically modernizing its legacy applications, moving from mainframe to open platform, to better serve its 56 million retail customers. For instance, the bank is migrating its transaction-account front end to improve performance and enhancing its account statement application using Amazon OpenSearch, delivering features such as textual search for transactions up to 22 years old. You will learn how the bank organized to accelerate innovation and adoption of services such as AWS Fargate, AWS Lambda, and Amazon DynamoDB, which it used to deploy an instant payment system, Pix, that handles nine million transactions daily.

Featured speakers: **Fabio Napoli**, Director of Technology, Itaú Unibanco; **Wilson Cristoni**, Head of Digital Integration, Itaú Unibanco; **Julio Morais**, Enterprise Sales Executive, AWS

FSI301

Watch

Standard Chartered Bank: Migrating core banking to AWS

Standard Chartered Bank (SCB), a global bank serving customers in 60 markets, is launching a cloud-first strategy. One of SCB's lighthouse projects is the migration of its core banking system, Atlas, to AWS. As a tier 1, highly regulated workload, Atlas requires exceptional levels of security, availability, and auditability. This session shares how SCB migrated Atlas to AWS, lessons that the company learned, and the benefits of this migration, including enhanced reliability and performance. In particular, learn how SCB moved from Db2 to Amazon Aurora PostgreSQL, which has advanced compliance and resilience features that were critical to the successful migration.

Featured speakers: **Mitra Heravizadeh**, Managing Director, Technology & Innovation, Standard Chartered Bank; **Xavier Loup**, Principal Solutions Architect, Financial Services, AWS

FSI305

Watch

Citi: Scaling security guardrail development via AWS CDK

Citi has harnessed AWS CDK to unify software development processes across its AWS environment, using years of experience with infrastructure as code. Still, maintaining templates, writing custom scripts, or learning domain-specific languages can be challenging. In this session, learn how Citi uses AWS CDK to evolve testing, distribute modular infrastructure components across teams, and implement pipelines with high-level programming languages. Discover how this innovative approach has allowed Citi to scale design, engineering, and deployment of preventative, detective, and responsive controls to securely migrate workloads to AWS.

Featured speakers: **Michael Neil**, Senior Vice President, Cloud DevSecOps Lead, Citi; **Richard Julian**, Senior Vice President, Cloud DevSecOps Lead, Citi; **Michael Lysaght**, Senior Vice President, Engineering, Citi; **Freddy Kasprzykowski**, Security Transform Consultant, Financial Services, AWS

FSI306

Watch

CME Group: Enabling data science through event-based design

As one of the world's largest futures exchanges, CME Group faces ever-growing data needs. Through company acquisitions, vendor partnerships, and expanded integrations with external data platforms like Salesforce, CME needed to transform its data management capabilities. In this session, find out how CME built a scalable data-ingestion pipeline using an event-driven, file-based architecture. This versatile solution, which uses AWS Step Functions, Amazon AppFlow, AWS Lambda, Amazon EMR, and AWS Lake Formation, supports compliance data management, commercial data enablement, real-time Kafka publishing, and data-lake optimization. Critically, it enables the company's data science community by making it easier to securely integrate and analyze third-party datasets.

Featured speakers: **Rick Fath**, Senior Director of Cloud Architecture, CME Group; **Keerti Shah**, Global Account Solution Architecture, AWS

FSI307

Watch

Vanguard: Personalization at scale with Amazon SageMaker

Vanguard is using machine learning (ML) on AWS to solve one of the most pressing challenges in financial advice: personalization. In this session, learn how Vanguard's ML engine uses AWS services such as Amazon SageMaker to optimize rule-of-thumb recommendations with more sophisticated financial advice to maximize retirement wealth and spending for investors. Vanguard shares how training the ML models on large Amazon SageMaker instances, including more than 120 instances for data generation, made the unsolvable solvable, accelerating project completion time to less than one month and lowering the cost from \$5 million to less than \$200 thousand.

Featured speakers: **Ayoub Hazrati**, Data Scientist, Vanguard; **John Formento**, Solutions Architect, AWS

FSI308

Watch

Globe Life: Accelerate innovation with self-serve analytics

Learn how Globe Life went from running queries one model at a time to analyzing more than 10 billion records and 200 models simultaneously, deriving business insights in under 30 seconds. Globe Life's self-service analytics framework leverages data from multiple sources using AWS services, including Amazon Redshift. In this session, Globe Life shares how its analytics environment maintains security guardrails to empower its actuarial and business teams to meet time-sensitive regulatory requirements and quickly perform deep analysis for business innovation.

Featured speakers: **Arthur Heezen**, Director, Data Strategy, Globe Life; **Dileep Kumar**, Senior Manager, Data Engineering and Cloud Data Platforms, Globe Life; **Srikanth Sopirala**, Principal Analytics Solutions Architect, AWS

FSI309

Watch

Discover Financial Services: Payments mainframe to cloud platform

Discover Financial Services, a leading digital bank and payments company, transformed its payments business on AWS to enhance card-settlement capabilities and adapt to global market conditions while maintaining a highly secure network. In this session, Discover discusses the opportunity to improve its legacy system, the next-generation platform architecture on AWS, and the benefits of adopting pricing changes within 3 weeks (rather than 6 months). This session shares lessons learned from migrating from a batch-oriented mainframe to an internet-scale, PCI-compliant and resilient platform powered by Amazon EMR, AWS Lambda, Amazon DynamoDB, and Amazon RDS. The result: Discover now processes 4 million transaction records in 9 minutes.

Featured speakers: **Ewen McPherson**, Director - Payment Services BT Application Development, Discover Financial Services; **Don Drake**, Senior US-Central Analytics Solutions Architect

FSI310

Watch

Fannie Mae: Migrating at scale without lifting and shifting

Since 2019, Fannie Mae has been executing large-scale application migrations to AWS to improve operational resilience, scalability, and security, all while reducing total cost of ownership, increasing developer productivity, and driving machine learning adoption across the enterprise. In this session, learn about Fannie Mae's strategy—avoiding lifting and shifting in favor of refactoring and replatforming application components using an AWS multi-account strategy that features modular virtual private cloud design and streamlined network connectivity. Use cases include replatforming OLTP databases to Amazon Aurora PostgreSQL with AWS DMS and rearchitecting applications using microservices patterns with AWS Fargate.

Featured speakers: **Ramon Richards**, Chief Information Officer, Fannie Mae; **Satya Addagarla**, Vice President, Singlefamily Technology Management, Fannie Mae; **Harsha Nippani**, Principal Solutions Architect, AWS

FSI206-S

Watch

How TFS uses Snowflake and AWS to drive mobility financing (sponsored by Snowflake)

Helping millions of people get mobile while driving the vehicle of their dreams has been at the core of the Toyota Financial Services (TFS) mission. In this session, learn how TFS uses AWS and Snowflake for its data platform to provide capital financing at record speed for its customers and partners, like Mazda. Also, discover how TFS completely digitized the customer experience during the pandemic so that customers and partners could have easy access to the relevant data and services. This presentation is brought to you by Snowflake, an AWS Partner.

Featured speaker: **Raphael Mathias**, Domain Information Officer, Toyota Financial Services

AMZ201

Watch

Lumos: Amazon's secure, large-scale serverless payments system

Lumos is an intelligent, secure vault built using over 50 AWS services to store, protect, and process billions of payment transactions at Amazon. Lumos replaces the custom, isolated, on-premises infrastructure previously required for achieving security while processing payments at scale. In this session, learn about how Amazon Pay built a secure and cloud-native solution using AWS and how Lumos simplified the architecture, reduced infrastructure maintenance cost, and improved availability and redundancy.

ANT303

Watch

Democratizing data for self-service analytics and ML

Access to all your data for fast analytics at scale is foundational for 360-degree projects involving data engineers, database developers, data analysts, data scientists, BI professionals, and the line of business. In this session, learn how easy-to-use ML can help your organization imagine new products or services, transform your customer experiences, streamline your business operations, and improve your decision-making. A secure, integrated platform that's easy to use and supports nonproprietary data formats can improve collaboration through data sharing and can also improve customer responsiveness. Learn how AWS developer tools, including Data API, and native support for semi-structured data using standard SQL commands can improve software time to market.

ANT316

Watch

How Coinbase uses Amazon MSK as an event store for applications

In this session, learn how focusing on security, availability, and customer obsession has translated into operational excellence and product innovations with Amazon MSK, a managed service for Apache Kafka. This session features cryptocurrency exchange company Coinbase's experience managing streaming events and analyzing billions of daily cryptocurrency transactions with Amazon MSK. Dive into Coinbase's event streaming architecture to learn how it leverages Amazon MSK as an enterprise event bus to ingest and analyze a huge scale of events from users, applications, databases, and cryptocurrency sources across products.

ANT318

[Watch](#)

Data lakes: Easily build, secure, and share data with AWS Lake Formation

Organizations are breaking down data silos and building petabyte-scale data lakes on AWS to democratize access to thousands of end users. In this session, learn about recent innovations in AWS Lake Formation that make it easy to build, secure, and manage your data lakes. Hear how an AWS customer built their data mesh architecture using Lake Formation to share data across their lines of business and inform data-driven decisions.

AIM201

[Watch](#)

Make sense of your health data with Amazon HealthLake

Health data is frequently incomplete and inconsistent. It is often unstructured, with information contained in clinical notes, laboratory reports, insurance claims, medical images, and recorded conversations across disparate formats and systems. In this session, learn how Amazon HealthLake can help you make sense of health data. Discover how AWS Partners and customers, from population health management to care infrastructure, are finding new ways to apply machine learning technology and unlock new insights to improve care.

AIM203

[Watch](#)

Learn how Aon turned documents into insights with AWS AI services

Learn how organizations worldwide are leveraging intelligent document processing (IDP) to automate manual document-based activities, enabling them to process millions of documents in hours and automating low-value tasks to improve data management and customer satisfaction. In this session, hear from Aon's CTO about how they processed thousands of documents in seconds in order to audit the critical information locked inside.

AIM206

Watch

How Bloomberg invested in smarter search with Amazon Kendra

Many companies struggle to validate new search paradigms alongside incumbent solutions because they have benefited from years of investment, customization, and user socialization. In this session, find out how Bloomberg used Amazon Kendra to build an ML-based search engine for a specific content set without needing to integrate with the legacy search infrastructure. Also, discover how Amazon Kendra fits into Bloomberg's product development strategy, how they implemented Amazon Kendra, and their experience working with the service, including implementation challenges and solutions using Amazon API Gateway, AWS Lambda, and Amazon DynamoDB.

AIM319

Watch

Prepare data for ML with ease, speed, and accuracy (featuring Fidelity)

Learn how to prepare data for ML in minutes using Amazon SageMaker. SageMaker offers tools to simplify data preparation so that you can label, prepare, and understand your data. Walk through a complete data-preparation workflow, including how to label training datasets using SageMaker Ground Truth as well as how to extract data from multiple data sources, transform it using the prebuilt visualization templates in SageMaker Data Wrangler, and create model features. Also, learn how to improve efficiency by using SageMaker Feature Store to create a repository to store, retrieve, and share features.

AIM320

Watch

Implementing MLOps practices with Amazon SageMaker (featuring Vanguard)

Implementing MLOps practices helps data scientists and operations engineers collaborate to prepare, build, train, deploy, and manage models at scale. During this session, explore the breadth of MLOps features in Amazon SageMaker that help you provision consistent model development environments, automate ML workflows, implement CI/CD pipelines for ML, monitor models in production, and standardize model governance capabilities. Then, hear from Vanguard as they share their journey enabling MLOps to achieve ML at scale for their polyglot model development platforms using Amazon SageMaker features, including SageMaker projects, SageMaker Pipelines, SageMaker Model Registry, and SageMaker Model Monitor.

AIM321

Watch

Use AutoML to create high-quality models

Learn about AutoML on AWS and to get an overview of the AWS options for AutoML, including AutoGluon, an open-source library for AutoML. Also, learn how to use Amazon SageMaker Autopilot to automatically build the best machine learning (ML) model based on your dataset. SageMaker Autopilot automatically trains and tunes hundreds of ML models and helps you pick the best model for your use case. You don't need to have a deep background in ML to get started fast. Simply provide your dataset, and SageMaker Autopilot takes care of the heavy lifting, including preparing features, testing algorithms, and optimizing hundreds of model parameters.

AIM408

Watch

Achieve high performance and cost-effective model deployment (featuring Goldman Sachs)

To maximize your ML investments, high performance and cost-effective techniques are needed to scale model deployments. In this session, learn about the deployment options available in Amazon SageMaker, including optimized infrastructure choices; real-time, asynchronous, and batch inferences; multi-container endpoints; multi-model endpoints; auto scaling; model monitoring; and CI/CD integration for your ML workloads. Discover how to choose a better inference option for your ML use case. Then, hear from Goldman Sachs about how they use Amazon SageMaker for fast, low-latency, and scalable deployments to provide relevant research content recommendations for their clients.

CMP333

Watch

Amazon EC2 macOS State of the Union, featuring Goldman Sachs

Managing on-premises macOS environments is a thing of the past. In this session, learn why thousands of AWS customers have chosen Amazon EC2 Mac instances for their macOS build infrastructure. Learn how Apple developers modernized their CI/CD by using other AWS services to build, iterate, and release apps faster. Also, hear from Goldman Sachs about how they migrated their mobile app software development lifecycle to AWS. Discover architectural best practices for managing EC2 Mac at scale, hear what's new and exciting, and see what the future holds for macOS in the cloud.

COP201

Watch

Gain enterprise visibility with AWS Cloud operation dashboards

In this session, learn about the tools you can use to operate your AWS environment at scale. Whether you are in cloud operations, application administration, compliance, security, or all of the above, AWS can help you manage your cloud operations reliably and with observability. Learn how you can manage and operate applications in an environment that is designed to be secure and compliant.

COP203

Watch

Cost control and governance at scale (featuring Morningstar)

Govern cloud usage and avoid cost surprises, all without slowing down innovation within your organization. In this session, learn how to set up guardrails, such as auto-cost-control actions in AWS Budgets or the ML-powered product AWS Cost Anomaly Detection. Discover the latest enhancements in the cost-control space, and learn how you can establish these safeguards to let your builders focus on what they do best—build!

COP212-S

Watch

How Capital One continues to change banking for good at scale (sponsored by Capital One)

It's one thing to move to the cloud, but it's another to operate there at scale. Capital One was the first US bank to migrate out of data centers and move fully to the cloud. Today, Capital One is operating in a highly regulated industry at scale on AWS, focusing on cloud governance and resiliency, culture, and education to deliver intelligent solutions that benefit millions of customers. In this session, Capital One shares some important lessons they learned on this journey and discusses how they are using real-time data to develop some of their flagship applications and operating them at scale. This presentation is brought to you by Capital One.

COP216-S

Watch

Guardian's digital transformation with AWS and Accenture (sponsored by Accenture)

This session details the cloud transformation at Guardian Life, a leader in individual life insurance. Learn about Guardian's aggressive business goals—such as improving time to market, reducing cost, and improving customer engagement—and how a solution powered by AWS and Accenture helped the company achieve high levels of agility and scalability. The session covers Guardian's implementation of the Accenture Life Insurance & Annuity Platform (ALIP), a new-age, cloud-native life insurance policy administration platform that provides the required functional and technical capabilities to streamline Guardian's processes and operations and deliver on their business goals. This presentation is brought to you by Accenture, an AWS Partner.

COP220

Watch

Account provisioning and customization using Terraform with AWS Control Tower

If you create AWS accounts on a regular basis and need to make sure that those accounts meet all of your users' needs while also meeting your business and security policies, infrastructure-as-code (IaC) tools are essential for automation, including the popular IaC solution Terraform. Learn about the newly launched AWS Control Tower Account Factory for Terraform (AFT), which enables you to provision AWS Control Tower managed accounts through Terraform IaC pipelines. Learn how you can use a Terraform IaC pipeline to initiate one-click account creation and then trigger additional customizations to enhance the new account.

COP222

Watch

Remove guesswork when launching new features with CloudWatch Evidently

Avoiding unexpected user behavior and maintaining reliable performance is crucial when launching a new feature. With Amazon CloudWatch Evidently, you can now reduce risk by conducting experiments and identifying unintended consequences before rolling out features for general use. Join this session to see how application developers can safely validate new features across the full software stack before release. Learn how Amazon Alexa uses CloudWatch Evidently to provide an A/B testing platform for skill developers to make data-driven launch decisions and increase in-skill purchases.

COP301

Watch

Cloud compliance, assurance, and auditing

In this session, learn how to continuously assess, manage, and maintain compliance for formalized standards such as those required by the Federal Risk and Authorization Management Program (FedRAMP), National Institute of Standards and Technology (NIST), and others. Also, learn about various auditing options, including auditing privileged access across services like Amazon S3 and Amazon DynamoDB. Dive deep into how you can achieve governance and compliance using preventive and detective guardrails and other AWS services.

COM204

Watch

Building data lakes in highly regulated markets

Building a data lake on historic weather information is easy. Building a data lake for a bank in Europe or the government is a different matter. In this session, learn best practices implemented for customers in highly regulated markets. Dive deep into the overall architecture of a data lake built using cloud-native tools such as AWS Lake Formation and AWS Glue. Finally, discover answers to questions such as which tools are used to ingest various data sources into a data lake? How do you clean the data and make sure all metadata is in place? How do you make a data lake GDPR compliant?

CMP313

Watch

Risk calculations using HPC and Spot Instances with Morgan Stanley

Morgan Stanley has established a cloud-first strategy to create a resilient, scalable, and cost-effective architecture to meet its compute and data challenges. One of those challenges is calculating risk in a timely manner, which is a very compute-intensive operation. In this session, learn how Morgan Stanley is refactoring risk calculation platforms to run at scale on AWS. The team describes how Morgan Stanley is using several AWS services, including Amazon EC2 Spot Instances, to migrate a portion of their on-premises HPC footprint to AWS. Morgan Stanley also highlights lessons learned and cost optimization strategies.

DAT305

Watch

Enabling workloads for high availability and durability with Amazon RDS (featuring Robinhood)

To ensure your application is resilient, it's important to use a highly available and durable database. Amazon RDS is a managed database that makes it easy to set up, operate, and scale relational databases, and it provides access to various high-availability and high-durability features. In this session, learn about Amazon RDS Multi-AZ deployments and how they can provide you with enhanced availability and durability for your database instances. Also, hear from American financial services company Robinhood on how they use Amazon RDS for PostgreSQL and Multi-AZ to scale their business.

DAT311

Watch

What's new in Amazon RDS for Oracle (featuring Goldman Sachs)

Many organizations today are looking to free themselves from the constraints of on-premises databases and take advantage of the power of fully managed databases in the cloud. Amazon RDS for Oracle is a fully managed relational database service that automates time-consuming database administration tasks while cost-effectively running your choice of Oracle database engine on AWS. In this session, dive deep into the new features and best practices that can make your Oracle database deployments highly available, scalable, secure, and manageable.

DOP321-S

Watch

Intentional and empathetic observability (sponsored by Datadog), featuring PayPal/Venmo

Does it feel like your team is always hunting for the right dashboard during an incident? Are you trying to drive long-term engineering improvements? If so, this session is for you. Use dashboards to focus on problems you can solve, rather than worrying about what you can't see. In this session, learn what goes into great dashboards and how minimal investment can drive improvements for operations, security, and recovery time. Whether you're working in a monolith or microservices, on the backend or front end, you can take home simple guidelines to make a positive impact.

ENT319-S

Watch

Accelerate your cloud migration for financial services (sponsored by PagerDuty)

The cloud offers enhanced scalability, business agility, and cost savings. But, did you know that 30 percent of cloud migration projects fail? Learn how to use PagerDuty and AWS to help connect people, processes, and technology and to quickly adapt to a constantly changing cloud infrastructure. This session shows you how financial service teams can use PagerDuty on AWS to up-level their digital operations approaches. Also, discover the new data signals you need to track an automated incident response and how to stay secure and build trust with PagerDuty, Amazon GuardDuty, and AWS Security Hub. This presentation is brought to you by PagerDuty, an AWS Partner.

ENT221-S

Watch

A pragmatic guide to modernizing your mainframe (sponsored by Atos)

Companies have been trying to exit the mainframe for years but have thought it to be too costly or too disruptive. The pressures to retire the mainframe are increasing at a faster pace due to retiring talent, increasing maintenance costs, and needing more agility. In this session, discover a pragmatic, yet impactful way to transform your mainframes to the cloud while delivering a positive ROI, meeting application performance expectations, and delivering the business agility desired by your organization. This presentation is brought to you by Atos, an AWS Partner.

ENT233-S

Watch

Vanguard's modernization journey to cloud native on AWS (sponsored by Capgemini)

Vanguard has embarked on a multi-year journey to modernize their legacy monolith systems that run their industry-leading hybrid advice service, Personal Advisor Services. They are refactoring their business capabilities to an AWS Cloud-native, microservices-based architecture and migrating data to the AWS Cloud. In this session, learn how Capgemini collaborated with AWS to build a scalable, resilient, future-oriented data and application platform that fully embraces modern methods of digitizing products and services. Join Vanguard and Capgemini as they talk through the business need for cloud adoption and the constraints that led them to this approach for their modernization journey. This presentation is brought to you by Capgemini, an AWS Partner.

MKT201

Watch

Use AWS Data Exchange to streamline data processing and analytics (featuring Goldman Sachs & FactSet)

In this session, Goldman Sachs discusses why they've decided to consume their financial data natively through AWS and how they've made data consumption and analytics more efficient and agile through AWS Data Exchange distribution methods. Hear also from FactSet leadership on why they're moving their financial exchange data to the cloud and using AWS Data Exchange to make their data more easily accessible and usable for AWS customers.

QTC301

Watch

Deep dive on quantum computing on AWS with Amazon Braket (featuring JPMorgan Chase & Co.)

Watch this session for a deeper look at the AWS quantum computing service Amazon Braket. Amazon Braket provides access to real quantum computers, an SDK and managed notebook environments, and simulators to support your learning path for quantum research and development. This session explains key information about the different quantum processing units and circuit simulators on the service, shares learnings from an enterprise customer's research, and updates you on the latest features.

STP201

Watch

How BlockFi scales to meet demand for crypto asset services

The demand for crypto asset services is at an all-time high. To build next-generation solutions, blockchain and digital asset fintech startups, like BlockFi, rely on AWS services. In this session, learn from BlockFi, a crypto asset service provider, about what it takes to power a robust suite of financial products in the blockchain ecosystem. BlockFi Chief Security Officer Adam Healy also shares how the company is bringing critical credit services to underserved markets and bridging the gap between traditional and crypto-native firms.

STP207

Watch

Using privacy-first data processing to make drivers smarter (featuring Cambridge Mobile Telematics)

With millions of daily drivers on its platform, Cambridge Mobile Telematics (CMT) uses AWS to process billions of miles driven each week. For smartphone telematics-based insurance and crash detection to be successful, though, drivers need to know their data is private, secure, and cared for. That's why CMT turned to AWS to build the leading privacy-first data processing and analytics platform with the highest-level ISO certifications. As data arrives from millions of smartphones into CMT's database, CMT's platform on AWS ensures data is secure and only used to make drivers smarter and the roads safer.

SVS208

Watch

Building real-world serverless applications with AWS SAM and Capital One

In this session, George Mao, Senior Distinguished Engineer for Capital One, discusses strategies and best practices for serverless development at an enterprise level. Eric Johnson, Principal Developer Advocate for AWS serverless, then demonstrates the latest features of AWS SAM that help developers build and test serverless applications faster and with more accuracy.

STP215

Watch

Building a serverless banking as a service platform on AWS (featuring Solarisbank)

Solarisbank, Europe's leading banking as a service platform, enables other companies to offer their own financial services. Via APIs, partners integrate Solarisbank's modular banking services directly into their own product offering. By migrating all of its core banking systems, digital products, and databases to AWS, it became the first bank in Germany to fully migrate to the cloud. Join Dennis Winter, VP TechOps, as he shares how their all-in on AWS approach allows them to speed up the delivery process and drive more innovation, while simultaneously allowing the company to follow their internal approval processes to ensure compliance, security, and integrity across the overall architecture.

STG208

Watch

AWS Transfer Family: The future of managed file transfer (featuring Goldman Sachs)

AWS Transfer Family modernizes and makes it easy to support recurring file transfers so your data arrives on time, is highly available, and can scale with your growing business. This session discusses the future of Transfer Family and how building a robust managed file transfer (MFT) solution on AWS can boost collaboration, reduce downtime, and break down data silos. Joining the Transfer Family team is Goldman Sachs, a leading global investment banking, securities, and investment management firm that is already shaping MFT use cases.

Other **recommended sessions**

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Other recommended sessions

ANALYTICS

APPLICATION INTEGRATION

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SECURITY, COMPLIANCE, AND IDENTITY

SERVERLESS

STARTUP

STORAGE

ADDITIONAL SESSIONS OF INTEREST

ANALYTICS

BREAKOUT SESSION

Watch

ANT209-S**Connect real-time data to Amazon Redshift with Confluent (sponsored by Confluent)**

Lifting and shifting your traditional data warehouse to Amazon Redshift can take a significant time investment. Join this session to learn how Confluent and Apache Kafka can help accelerate your data-led migration to AWS by building a secure connection across the cloud and hybrid environments. Learn how to connect your Amazon Redshift data to any application.

BREAKOUT SESSION

Watch

ANT310**How VMware Carbon Black uses Amazon Kinesis to detect cybersecurity issues**

VMware Carbon Black's cloud-native intelligent threat detection system uses Amazon Kinesis Data Streams and other AWS services. Join this session to dive deep into how VMware Carbon Black, a leader in cybersecurity, processes trillions of events per day to uncover concerning behavioral patterns and detect and prevent cybersecurity risks.

BREAKOUT SESSION

Watch

ANT210-S**Bold plans, big results: Johnson & Johnson's data warehouse migration**

How can a company balance the risks of organizational disruption with the rewards of ecosystem innovation? Simple—with careful planning, diligent execution, and relentless validation. Learn how Johnson & Johnson is converting its on-premises enterprise data warehouse into a modern cloud showpiece, shifting big challenges into big results.

BREAKOUT SESSION

Watch

ANT317**Serverless data integration with AWS Glue**

The first step in an analytics or machine learning project is to prepare your data to obtain quality results. AWS Glue is a serverless data integration service that makes data preparation simpler, faster, and cheaper. In this session, learn about the latest innovations in AWS Glue and hear how an AWS customer uses AWS Glue to enable self-service data preparation across their organization.

BREAKOUT SESSION

Watch

ANT211-S**Hot, fresh, and fast: Brinker's recipe for analytics success (sponsored by Teradata)**

Migrating the enterprise data warehouse from farm to table (that is, on premises to cloud) is just the start. A "balanced meal" also includes 500,000 daily queries and a full helping of Python and machine learning to optimize scheduling and boost guest satisfaction. In this session, discover how Teradata Vantage on AWS helps Brinker's challenges disappear.

BREAKOUT SESSION

Watch

ANT307**What's new with Amazon Athena**

Amazon Athena is a highly scalable analytics service that makes it easy to analyze data in Amazon S3 and other data stores. Amazon Athena is serverless, so there is no infrastructure to manage, and you pay only for the queries that you run. This session offers a deep dive into the service, customer use cases, best practices, newly launched features, and what is next for Amazon Athena.

APPLICATION
INTEGRATION

BREAKOUT SESSION

Watch

API201**Application integration patterns for microservices**

An implication of applying the microservices architectural style is that a lot of communication between components is done over the network. In order to achieve the full capabilities of microservices, this communication needs to happen in a loosely coupled manner. In this session, explore fundamental application integration patterns based on messaging and connect them to use cases.

BREAKOUT SESSION

Watch

API202**Using an event-driven application pattern to improve customer experience**

In this session, learn how to use location capabilities such as tracking, geofencing, routing, map visualization, and geocoding in your serverless applications in a way that is secure, protects the privacy of your users, is scalable, and improves your customer experience. With Amazon Fresh, Amazon's grocery pickup service, as an example application, discover how to estimate customer arrival time.

API304**Building next-gen applications with event-driven architectures**

Many difficult problems in modern enterprise workloads can be solved with event-driven architectures. In this session, learn how to use event-based architecture to decouple and decentralize application components. You can use AWS messaging services to connect microservices and coordinate data flow, using minimal custom code.

Watch

ARCHITECTURE

BREAKOUT SESSION

Watch

ARC201**Reliable scalability: How Amazon.com scales in the cloud**

Learn how Amazon.com got big fast, and see their evolution from a monolithic architecture to a massively scalable system based on service-oriented architecture and microservices. See how Amazon.com adopted DevOps before it even had that name and how DevOps was crucial to enabling the reliable, scalable architectures that Amazon.com needed.

BREAKOUT SESSION

Watch

ARC325**Architecting for sustainability**

This session dives deep into techniques recommended by the AWS Well-Architected Framework and provides direction on reducing the energy and carbon impact of AWS architectures. Learn about user patterns, software design, and AWS service considerations. As an example, discover how Starbucks optimized its Kubernetes cluster and focused on digital sustainability.

BREAKOUT SESSION

Watch

ARC205**Remote workforce cloud migration patterns**

In this session, learn about remote workforce cloud migration patterns, such as virtual desktop, collaboration tooling, and cloud contact centers, following considerations and best practices from the AWS Well-Architected Framework. For each remote workforce pattern, consider the migration path, deployment approach, and application of the AWS Well-Architected Framework.

BREAKOUT SESSION

Watch

ARC326**Beyond five 9s: Lessons from our highest available data planes**

Every AWS service is designed to be highly available, but a small number Tier 0 services get extra-special attention. In this session, discover how AWS has built and architected Amazon Route 53 and the AWS authentication system, which is designed to survive cataclysmic failures, enormous load increases, and more. Learn our approach to redundancy and resilience at the infrastructure, software, and team levels.

BREAKOUT SESSION

Watch

ARC207**The architect elevator: Connecting IT and the boardroom**

This session prepares architects to “ride the elevator” between the IT engine room, where software is built, and the boardroom, where executive decisions are made. Learn from customer examples how developing a deeper understanding of a system’s architecture allows you to communicate clearly to a diverse set of stakeholders.

BREAKOUT SESSION

Watch

ARC402**Amazon EKS SaaS deep dive: A multi-tenant EKS SaaS solution**

In this session, dig into a complete, end-to-end Amazon EKS SaaS reference solution, looking at how it addresses fundamental multi-tenant considerations. Examine its approach to core SaaS topics, including tenant isolation, identity, onboarding, tenant administration, and data partitioning. The goal is to explore an Amazon EKS SaaS architecture through the lens of working code.

AI/ML

BREAKOUT SESSION

Watch

AIM201**Make sense of your health data with Amazon HealthLake**

Health data is frequently incomplete and inconsistent. In this session, learn how Amazon HealthLake can help you make sense of health data. Discover how AWS Partners and customers, from population health management to care infrastructure, are finding new ways to apply machine learning technology and unlock new insights to improve care.

BREAKOUT SESSION

Watch

AIM301**Use SageMaker to develop ML models faster, featuring Qualtrics**

In this session, learn how to use SageMaker for data labeling, data preparation, feature engineering, statistical bias detection, training, tuning, deployment, monitoring, MLOps, and human review. Then, hear from Qualtrics on how they achieved an ML platform that caters to the complete ML lifecycle using SageMaker capabilities for a variety of use cases, including natural language processing.

BREAKOUT SESSION

Watch

AIM205**How Zillow and Genesys are transforming customer conversations**

In this session, Zillow and Genesys share how they implemented AWS Contact Center Intelligence (CCI) solutions to provide self-service automation, real-time call analytics to assist agents, and post-call analytics. See firsthand how AWS CCI enables them to better understand their customer journey, equip agents with the knowledge they need, and provide customers with effective answers to their questions.

BREAKOUT SESSION

Watch

AIM321**Use AutoML to create high-quality models**

Join this session to learn about AutoML on AWS and to get an overview of the AWS options for AutoML, including AutoGluon, an open-source library for AutoML. Learn how to use Amazon SageMaker Autopilot to automatically build the best machine learning (ML) model based on your dataset. SageMaker Autopilot automatically trains and tunes hundreds of ML models and helps you pick the best model.

BREAKOUT SESSION

Watch

AIM207**AI/ML for sustainability innovation: Insight at the edge**

In this session, learn how the power of AI/ML and IoT can be brought as close as possible to the challenging edge environments that provide data to create insights. Also learn how AWS puts AI/ML in the hands of the largest-scale fisheries on the planet and of the policy makers addressing health equity in the context of climate change.

BREAKOUT SESSION

Watch

AIM326-S**How Pitney Bowes uses Snowflake and SageMaker for on-time delivery**

Scaling within months requires a new approach to operational excellence in terms of staff planning and facility capacity management. In this session, learn how Pitney Bowes quickly met rapidly growing demand while continuing to meet their on-time delivery promise by using machine learning with the Snowflake Data Cloud and Amazon SageMaker. This presentation is sponsored by Snowflake, an AWS Partner.

BUSINESS
APPLICATIONS

BREAKOUT SESSION

Watch

BIZ201**Embed scalable communication services into applications with AWS**

AWS Communication Developer Services, including Amazon SES, Amazon Chime SDK, and Amazon Pinpoint, allow developers to improve communication with their customers. Discover new innovations, customer stories, and tips for engaging customers around the world using email, SMS, push notifications, chat, audio, video, and voice over the Public Switched Telephone Network (PSTN).

BREAKOUT SESSION

Watch

BIZ204**Improving CX with omnichannel contact center interactions**

Delivering cohesive experiences with customer services teams can be challenging. Learn how Amazon Connect, an easy-to-use omnichannel cloud contact center, uses machine learning, automation, and inbound and outbound communication channels across voice and chat to improve business outcomes. Also, hear how to improve customer issue resolutions while saving contact center costs.

BREAKOUT SESSION

Watch

BIZ202**Unlocking continuous CX innovation with Amazon Connect**

Businesses must continuously innovate and adopt new processes to stay ahead of customer expectations. In this session, learn how Amazon Connect, an easy-to-use cloud-based contact center, can help you increase customer satisfaction by delivering an ongoing, scalable customer experience (CX) through continuous innovation.

BREAKOUT SESSION

Watch

BIZ210-S**Improving customer loyalty with Service Cloud Voice (sponsored by Salesforce)**

In this session, learn how to turn voice into a digital channel to elevate customer experiences. Discover how service teams build loyalty by successfully integrating phone with CRM automation and digital channels from anywhere around the world. This presentation is sponsored by Salesforce, an AWS Partner.

BREAKOUT SESSION

Watch

BIZ203**Improve agent performance with ML-powered Amazon Connect**

Empowering your contact center agents is critical to improving customer satisfaction. Learn how Amazon Connect, powered by machine learning, can improve agent performance and productivity, using Contact Lens for Amazon Connect, Amazon Connect Voice ID, and Amazon Connect Wisdom. Discover how to build your own easy-to-use cloud contact center in just a few clicks; no technical expertise needed.

[BUSINESS INTELLIGENCE](#)

BREAKOUT SESSION

[Watch](#)**BSI201****Self-service analytics for everyone with ML-powered Amazon QuickSight Q**

In our increasingly fast-paced world, it is critical for companies to make data-driven business decisions quickly. In order to move fast, teams need the ability to answer business questions without relying on the time-consuming efforts of business intelligence (BI) teams. In this session, the Amazon QuickSight team provides an overview of Q and guidance on how to get started with this new capability.

BREAKOUT SESSION

[Watch](#)**BSI202****Modernize your BI and reporting with Amazon QuickSight**

Organizations increasingly strive to improve data literacy for all their employees and reduce dependence on IT and data scientists while gaining efficiency by moving to the cloud. Join this session to learn how customers have modernized their advanced analytics, self-service, and reporting needs by migrating to Amazon QuickSight.

BREAKOUT SESSION

[Watch](#)**BSI203****Enhance your apps with Amazon QuickSight embedded analytics**

Empower your users by embedding business analytics capabilities directly into your application. Join this session to learn about QuickSight's new capabilities for embedding rich data visualizations within SaaS applications that provide governance and data security. The session also shows how QuickSight can be easily connected to your choice of data services on AWS.

CLOUD
OPERATIONS

BREAKOUT SESSION

Watch

COP201**Gain enterprise visibility with AWS Cloud operation dashboards**

Learn about the tools you can use to operate your AWS environment at scale. Whether you are in cloud operations, application administration, compliance, security, or all of the above, AWS can help you manage your cloud operations reliably and with observability. Join this session to learn how you can manage and operate applications in an environment that is designed to be secure and compliant.

BREAKOUT SESSION

Watch

COP301**Cloud compliance, assurance, and auditing**

Learn how to continuously assess, manage, and maintain compliance for formalized standards such as those required by the Federal Risk and Authorization Management Program (FedRAMP), National Institute of Standards and Technology (NIST), and others. Also, learn about various auditing options, including auditing privileged access across services like Amazon S3 and Amazon DynamoDB.

BREAKOUT SESSION

Watch

COP202**Improving cost visibility and allocation**

Improve financial transparency and define a cost-allocation strategy tailored to meet the complex needs of your business. Join this session and learn how to organize cost and usage for even the most complex of organizations across dimensions specific to your workload. Establish the necessary cost visibility and accountability within your organization and start running your IT shop like a business.

BREAKOUT SESSION

Watch

COP302**Best practices for centralized operations management on AWS**

In this session, learn how to build, manage, and operate your mission-critical applications in a secure, automated, reliable, and cost-effective way. This session covers how you can use a single control plane across multiple AWS solutions to manage and govern resources on AWS, on premises, and in hybrid environments. Join this session to learn compliance management to manage mission-critical applications.

BREAKOUT SESSION

Watch

COP205**Cloud operations at scale with AWS Managed Services**

In early 2021, AWS Managed Services (AMS) added AMS Accelerate, a capability that allows AWS operations engineers to work alongside customer and partner engineering teams to deliver AWS operations services. In this session, hear from GE about why they chose to add AMS to their operations suite and the outcomes they've realized, followed by an overview of AMS Accelerate.

BREAKOUT SESSION

Watch

COP401**Customizing and scaling your AWS Control Tower environment**

AWS Control Tower provides the easiest way to set up and govern a secure, multi-account AWS environment. Discover best practices for deploying a scalable Customizations for AWS Control Tower (CfCT) pipeline. Learn about the most common CfCT customizations you should consider for your landing zone, including identity and network management and governance.

COMPUTE

BREAKOUT SESSION

CMP201**What's new in Amazon EC2**

Amazon EC2, a foundational AWS service, provides resizable compute capacity in the cloud and makes web-scale computing easier. This breakout session provides an overview of what's new to the Amazon EC2 portfolio, including updates on Amazon EC2 capabilities and instance families, Amazon EBS, networking functionality, and edge and hybrid offerings.

Watch

BREAKOUT SESSION

CMP202**HPC on AWS: Innovating without infrastructure constraints**

High performance computing (HPC) has always been about solving the most complex problems, but for far too long, HPC applications and workloads have been constrained by infrastructure capacity. Learn how flexible configuration, virtually unlimited scale, and AWS's HPC-focused solutions enable researchers and engineers to tune and scale infrastructure as their workloads dictate, not the other way around.

Watch

BREAKOUT SESSION

CMP204**Extending AWS to where organizations need it**

Enterprises are adopting the AWS Cloud at a rapid pace to reduce costs, become more agile, and innovate faster. While most workloads can be easily migrated to the cloud, some remain on premises or in edge nodes due to low latency, local data processing, or data residency requirements. Learn how AWS is reinventing hybrid by extending AWS to virtually anywhere organizations need it.

Watch

BREAKOUT SESSION

CMP301**The journey of silicon innovation at AWS**

Organizations are bringing diverse workloads onto AWS at a faster rate than ever before. To run diverse workloads with the performance and costs that users expect, AWS often innovates on their behalf and delivers breakthrough innovations, even at the silicon level. Explore AWS's journey into silicon innovation and discuss some of the thought processes, learnings, and results thus far.

Watch

BREAKOUT SESSION

CMP311**AWS Outposts: Bringing the AWS experience on premises**

AWS Outposts is a fully managed service that brings AWS infrastructure and services to your environments in virtually any data center, collocation space, or on-premises facility using the same hardware, software, and management tooling used in AWS Regions. In this session, closely examine how an Outpost works, including how we modified the AWS Nitro System to work on-premises.

Watch

BREAKOUT SESSION

CMP314**Accelerate innovation with AWS ML infrastructure services**

From Amazon EC2 P3 instances that provide great performance for ML training to Amazon EC2 G4 instances for inference and Amazon EC2 Inf1 instances that provide low-cost ML inference in the cloud, there's a right instance for each of your ML workload needs. In this session, dive deep into these instances, learn about benchmarks, and discover guidelines on ideal use cases for each instance.

Watch

DATABASES

BREAKOUT SESSION

DAT201

Watch

What's new in Amazon RDS

Amazon RDS is a fully managed database service that allows you to launch an optimally configured, secure, and highly available database easily. It manages time-consuming database administration tasks, freeing you to focus on your applications and business. In this session, learn about all the new capabilities launched for Amazon RDS across different engines and review the latest features.

BREAKOUT SESSION

DAT303

Watch

Amazon DynamoDB: Driving innovation at any scale

Hundreds of thousands of AWS customers use DynamoDB because it is fully managed and offers single-digit millisecond performance at any scale. Learn about the latest DynamoDB features and ear from Latin American ecommerce company Mercado Libre about how they migrated 5,000+ Apache Cassandra databases to DynamoDB without changing a line of code.

BREAKOUT SESSION

DAT202

Watch

Real-world use cases with graph databases

Organizations use the relationships in their data to uncover patterns and expand their businesses. They do so by building knowledge graphs to link and discover data, identity graphs to better understand customers and devices, fraud graphs to use relationships to detect fraudulent activities, and many other applications. Explore examples of how organizations are using Amazon Neptune.

BREAKOUT SESSION

DAT305

Watch

Enabling workloads for high availability and durability with Amazon RDS

Amazon RDS is a managed database that makes it easy to set up, operate, and scale relational databases. Learn about Amazon RDS Multi-AZ deployments and how they can provide you with enhanced availability and durability. Hear from American financial services company Robinhood on how they use Amazon RDS for PostgreSQL and Multi-AZ to scale their business.

BREAKOUT SESSION

DAT206-S

Watch

A developer's guide to data modeling with document databases (sponsored by MongoDB)

As the saying goes, with great data modeling flexibility comes even greater responsibility! Join this session to learn how to model your data with document databases and use your data model's flexibility to support your application's development. Also, learn the best practices for developing your document data model.

BREAKOUT SESSION

DAT401

Watch

Deep dive on Amazon Aurora

Amazon Aurora is a modern database service that offers performance and high availability at scale. Dive deep to learn how Aurora is designed, how it operates, and how to get the most out of it so you can power everything from dev/test applications to your most demanding, high-performance database workloads.

DEVOPS

BREAKOUT SESSION

DOP208**DevOps Revolution**

While DevOps has not changed much, the industry has fundamentally transformed over the last decade. In this session, learn about the next phase of DevOps: a distributed model that emphasizes swift development, observable systems, accountable engineers, and resilient applications.

Watch

BREAKOUT SESSION

DOP301**How to reuse patterns when developing infrastructure as code**

Explore the AWS Cloud Development Kit (AWS CDK) constructs and AWS CloudFormation modules and how they can be used to make building applications easier on AWS. Learn how you can extend CloudFormation to include support for third-party resources and how those resource types can be used by AWS Config.

Watch

BREAKOUT SESSION

DOP309**Amazon builders' library: Operational excellence at Amazon**

Senior Principal Engineer David Yanacek describes Amazon's operational practices that he has observed during his 15 years of building and operating services at Amazon. Hear David describe the habits that teams have adopted, such as how teams handle retrospectives, share knowledge, and regularly review operational metrics as a team.

Watch

BREAKOUT SESSION

DOP310**Enabling decentralized development teams with a shared services platform**

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.

Watch

BREAKOUT SESSION

DOP311**Incorporating continuous resilience in your development ecosystem**

In this session, explore various considerations for implementing processes designed to provide continuous improvement through a DevOps methodology. Review various services that can incorporate resilience in the development process in a nearly continuous manner.

Watch

BREAKOUT SESSION

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

Join this session to learn about new features to up-level your infrastructure-as-code (IaC) experiences on AWS. Explore how AWS is improving our IaC coverage of AWS services and features in a scalable, decentralized way and how you can contribute.

Watch

END USER COMPUTING

BREAKOUT SESSION

Watch

EUC201**The future of virtualization and workforce agility**

This session is designed for IT decision-makers and administrators who are thinking about the future of their workforce in a post-COVID-19 world and business decision-makers looking to create SaaS versions of their desktop applications.

BREAKOUT SESSION

Watch

EUC301**Architecting for workforce agility with AWS end user computing**

This session provides an overview of and best practices for Amazon WorkSpaces and Amazon AppStream 2.0. It also dives deep into implementing these services, including how to integrate them with your existing identity, security, networking, and storage solutions.

BREAKOUT SESSION

Watch

EUC305-S**Democratizing drug discovery through the largest-ever known single Region HPC run (sponsored by Intel)**

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. This session provides insight into the computing initiative that Intel and AWS are leading with major social impact organizations.

ENTERPRISE & MIGRATION

BREAKOUT SESSION

Watch

ENT209**Learn how MAP can help you achieve your business outcomes**

For many organizations, a move to the cloud is not only the fastest way to lower the total cost of ownership, but it also increases agility. AWS has migrated thousands of organizations and packaged best practices in a simple framework. In this session, learn about AWS migration and modernization best practices, the framework, and how it can help you achieve business outcomes.

BREAKOUT SESSION

Watch

ENT312**Intelligently automating cloud operations**

Learn how to automate insights intelligently using AWS management, DevOps, and machine learning tools. Operational insights across security, fault tolerance, and performance can be revealed by Amazon Inspector, AWS Config, Service Quotas, AWS Health, AWS Well-Architected Tool, and AWS Trusted Advisor.

BREAKOUT SESSION

Watch

ENT212**Prescriptive enterprise transformation powered by AWS**

Learn about AWS's approach, built from success patterns of other traditional enterprise customers, and the business benefits your organization can achieve. Gain insight into critical success factors for digital transformation and how the AWS team can support your journey. Hear from customers who have completed this journey and how you can get started with AWS.

BREAKOUT SESSION

Watch

ENT314**Pattern-based migrations to AWS**

Establishing technical patterns is critical to drive organization-wide transformation and key to rapid migrations. Identifying application patterns at an abstract portfolio level allows the development of migration plans to deliver rapid and consistent business outcomes for your organization. In this session, hear from an enterprise about how it drove change in its transformation to AWS.

BREAKOUT SESSION

Watch

ENT231**Introducing AWS Mainframe Modernization service**

Hear about AWS Mainframe Modernization service, a new platform for migrating, modernizing, running, and operating mainframe applications. Learn how you can analyze, assess, migrate, and deploy on-premises mainframe workloads onto AWS.

BREAKOUT SESSION

Watch

ENT316**Transforming your technical landscape**

Explore degrees of modernization, rationalizing components that may be common across your technical landscape and considering common templates for teams within your organization. These strategies can help drive fundamental changes to your technical landscape. Also, hear from an enterprise customer on their transformation journey, its challenges, and their unique benefits.

IoT

BREAKOUT SESSION

Watch

IOT201**Predicting equipment health with IoT in power and utilities**

Regardless of whether the source of power is oil and gas, wind, or solar, predictive maintenance is a critical business need for all leaders in the power and utilities (P&U) space. In this session, learn how AWS provides secure, scalable, and cost-effective solutions to help P&U leaders reduce operations and maintenance spend and improve quality metrics and equipment life using insights from equipment data.

BREAKOUT SESSION

Watch

IOT206**Scaling sustainability solutions with IoT**

Organizations are deploying billions of connected devices in commercial buildings, factories, homes, cars, and other locations to improve operational efficiency. They're also building IoT solutions to support sustainability initiatives, including creating intelligent and efficient buildings. Learn how companies are deploying secure IoT solutions on AWS for a more sustainable future.

BREAKOUT SESSION

Watch

IOT202**Migrate and innovate faster with AWS IoT for connected products**

Connected products can range from Roomba vacuum cleaners to Peloton fitness bikes, and more. Transforma Insights estimates that there will be 125 billion connected devices by 2030 with revenue in the trillions of dollars. Discover insights, best practices, and patterns AWS has learned through our experience connecting millions of devices across different regions and industry verticals.

BREAKOUT SESSION

Watch

IOT313**Enhancing telecommunications CPE data collection & analytics with AWS**

Broadband service providers around the world are using customer-premises equipment (CPE) management systems to control large fleets of CPE devices. Learn about common data collection patterns, detailed reference architectures, and analytics use cases that telecommunications customers deployed to reduce operational expenditure and improve customer experiences.

BREAKOUT SESSION

Watch

IOT204**Building connected auto solutions with AWS IoT**

Learn about connected auto and mobility best practices that were discovered through hundreds of engagements and thousands of activations. Find out how to customize different microservices, from the edge to the cloud, to build innovative and differentiated solutions for use cases from in-vehicle personalization to safety monitoring, behavioral analytics, anomaly detection, diagnostics, and more.

NETWORKING AND
CONTENT DELIVERY

BREAKOUT SESSION

Watch

NET206**Advanced Amazon VPC design and new capabilities**

Amazon VPC gives you complete control over your AWS virtual networking environment. Have you ever wondered how new Amazon VPC features affect the way you design your AWS networking infrastructure or change existing architectures that you use today? This session explores the answers to these questions and more.

BREAKOUT SESSION

Watch

NET306**AWS Well-Architected Framework for hybrid networks**

The AWS Well-Architected Framework helps you build a secure, high-performance, resilient, and efficient infrastructure for your applications and workloads. In this session, learn how you can build hybrid networks, and discover the key considerations, best practices, and tips and tricks around operational excellence, security, reliability, performance efficiency, and cost optimization.

BREAKOUT SESSION

Watch

NET208**Integrate Amazon EKS with your networking pattern**

Because of its security, reliability, and scalability capabilities, Amazon EKS is used by organizations in their most sensitive and mission-critical applications. This session focuses on how you can set up networking for Amazon EKS, connect it to Amazon VPC, and expose your Kubernetes application using Elastic Load Balancing and AWS App Mesh.

BREAKOUT SESSION

Watch

NET318**Building resilient and low-latency gaming architectures on AWS**

Global gaming applications have unique requirements when it comes to low latency and resiliency toward distributed denial of service (DDoS) events. Learn how to improve low-latency gaming architecture using AWS edge services. Also, discover how to work with the AWS Shield Response Team to apply custom DDoS mitigations designed for unique challenges you face in the gaming industry.

BREAKOUT SESSION

Watch

NET210**Building low-latency websites with Amazon CloudFront**

Join this session to learn how you can improve your website latency, security, and availability with the Amazon CloudFront content delivery network. Explore how CloudFront Functions and recently introduced integrations such as QUIC, Brotli, and TLS1.3 can enrich your application. Additionally, learn from real-world CloudFront implementations.

BREAKOUT SESSION

Watch

NET324**Web security: 2021 updates and implementations**

In this session, learn about the latest solutions for protecting your websites and APIs against cyberattacks such as DDoS attacks, application bugs, and malicious bots. Explore the updated architectural best practices for resiliency, including latest AWS WAF and AWS Shield features, such as Bot Control. Discover how you can fight millions of bots at scale using advanced AWS WAF automations.

OPEN SOURCE

BREAKOUT SESSION

Watch

OPN201**How Apache Lucene's community built merge-on-refresh**

In 2020, Amazon completed a multiyear migration of its customer-facing product search engine onto a new service based on Apache Lucene, supported by many AWS services. In production, Amazon observed Lucene's segmented nature influencing query latency and had an idea to reduce its segment count. This session dives deep into this year-long journey.

BREAKOUT SESSION

Watch

OPN307**OpenSearch: Building the future of search together**

OpenSearch is a new community-driven, open-source search and analytics suite that makes it easy to securely ingest, search, and analyze data. In this session, gain insight into the new functionalities being built for OpenSearch, including improved performance and reliability, lower cost at scale, observability analytics, machine learning capabilities, and extensibility enhancements.

BREAKOUT SESSION

Watch

OPN204**Introduction to GraphQL**

GraphQL is an open-source API query language. This session provides an introduction to GraphQL theory and practice. Learn the three superpowers of GraphQL, how GraphQL compares to REST API, and how to take GraphQL into production.

BREAKOUT SESSION

Watch

OPN308**ML with Metaflow and Kubernetes: Prototype to production on Amazon EKS**

At AWS re:Invent 2019, Netflix addressed the data science challenge by open-sourcing Metaflow. Now, Metaflow is helping other organizations standardize their data science pipelines and seamlessly move from prototype to production. This session explores data science pipelines on Amazon EKS and other open platforms and how Metaflow is bringing its vision to the Kubernetes ecosystem.

BREAKOUT SESSION

Watch

OPN301**Using Rust to minimize environmental impact**

Rust is one of the most energy-efficient and safe programming languages. With Rust, it may be possible to reduce the environmental impact of the IT industry by 50% and prevent 70% of all high-severity CVEs. In this session, dive into the "super powers" of Rust, hear about the work ahead to give those powers to every engineer, and hear the ways you can contribute.

SECURITY, COMPLIANCE,
IDENTITY

BREAKOUT SESSION

Watch

SEC203**AWS Security Reference Architecture:
Visualize your security**

How do AWS security services work together and how do you deploy them? The new AWS Security Reference Architecture (AWS SRA) provides prescriptive guidance for deploying the full complement of AWS security services in a multi-account environment. Discover an authoritative reference to help you design and implement your own security architecture on AWS.

BREAKOUT SESSION

Watch

SEC221-S**Powering security operations with analytics
and automation (sponsored by Splunk)**

High-performing security teams detect and respond to threats early and quickly. Splunk's deep technical integrations and offerings on AWS help teams gain quantifiable operational improvements. Discover how you can save hours and weeks during data onboarding and configuration. Detect more threats earlier and respond to them instantly.

BREAKOUT SESSION

Watch

SEC317-S**Earning customer trust with GRC and
security programs (sponsored by MongoDB)**

Building and maintaining customer trust in the marketplace is increasingly important, and using governance, risk, and compliance (GRC) frameworks alongside AWS security controls can help you build that trust. Learn how your GRC program can align with your security function.

BREAKOUT SESSION

Watch

SEC326-S**Covert ops on DevOps: Leveraging security to
shift left (sponsored by Check Point Software)**

Working successfully with the cloud requires both effective security and seamless automation. Developers and DevOps teams know this all too well as they launch new applications into the cloud while trying to thwart unapproved third parties. In this session, learn from cloud security experts how you can secure your automation and automate your security, and discover best processes for adopting a security as code mindset for ultra-modern architectures.

BREAKOUT SESSION

Watch

SEC318**Securing your data perimeter with VPC
endpoints**

VPC endpoints enable you to lock your data into your networks as well as assert network-wide security invariants. Learn how to use your network perimeter as a straightforward defensive perimeter around your data in the cloud. This session provides practical guidance on what you can do with VPC endpoints and details how to configure them as part of your data perimeter strategy.

SERVERLESS

BREAKOUT SESSION

Watch

SVS201**Getting started building your first serverless application**

In this session, get first-hand insight and practical steps for getting started building serverless web applications. This session walks you through evolving from a single AWS Lambda function into a fully-featured web application that uses Amazon API Gateway, Lambda, Amazon DynamoDB, the AWS Amplify Console, and more. Learn why serverless is a great toolset for experimenting with new ideas.

BREAKOUT SESSION

Watch

SVS301**Serverless security best practices**

This session explores how to think about security from the front to the back of a typical serverless application. How do you configure AWS serverless services to provide least-privileged access while ensuring functionality? How should you think about managing IAM policies for your AWS Lambda functions? We will leave you with concrete examples applicable to almost any workload.

BREAKOUT SESSION

Watch

SVS210-S**Cloud-native hyperscale with Dynatrace and AWS Lambda (sponsored by Dynatrace)**

This session discusses how Dynatrace can help you deliver better software faster if you are building applications based on AWS Lambda or a microservices architecture. Learn how the Dynatrace software intelligence platform is built to tame the complexity of today's modern cloud and serverless architectures with end-to-end observability for AWS Lambda.

BREAKOUT SESSION

Watch

SVS310**Architecting your serverless applications for hyperscale**

In this session, learn about core principles to prepare your serverless applications for hyperscale, including how to apply these architectural patterns and best practices practically, and explore a major launch use case from start to finish. Learn how techniques such as asynchronous processing, caching, rate limiting, and AWS Lambda performance optimizations can help you scale your serverless workload.

BREAKOUT SESSION

Watch

SVS212**What's new in serverless**

What exciting things about AWS Lambda, Amazon API Gateway, Amazon EventBridge, AWS Step Functions, and AWS SAM might have you missed this year? This session reviews what's new in serverless at AWS. Explore the newest patterns and what's been made possible. Come away from this session ready to make use of the latest features to build better serverless applications.

BREAKOUT SESSION

Watch

SVS402**Best practices of advanced serverless developers**

Are you an experienced serverless developer? Do you want a guide for unleashing the full power of serverless architectures for your production workloads? In this session, learn about architectural best practices, optimizations, and handy cheat codes that you can use to build secure, high-scale, high-performance serverless applications. Real customer scenarios illustrate the benefits.

STARTUP

BREAKOUT SESSION

Watch

STP204**Scalable data architectures for digital natives**

The road to an IPO comes with scale—the ability to build, organize, and govern an offering that continues to deliver on its core promise. Learn how to establish architecture and governance for scale and to prepare the engineering landscape for IPO or acquisition. Embrace must-learn lessons for any startup in late-stage alignment or on the cusp of acceleration in public markets.

BREAKOUT SESSION

Watch

STP212**Improving the human experience in healthcare with Olive**

Learn how Olive used AWS to create a durable, scalable, and reliable infrastructure to harness the game-changing benefits of medtech and the Internet of Medical Things (IoMT). Explore how Olive manages a robust neuron/data lake using AWS Lambda, Amazon SNS, and Amazon SQS to streamline interfaces for providers and patients.

BREAKOUT SESSION

Watch

STP205**How running on AWS is paying off for Starburst Data**

Raising \$164 million in funding and achieving a \$1.2 billion valuation three years after launching on AWS Marketplace indicates that AWS has greatly advanced Starburst Data's ability to offer key solutions at scale. See why Starburst Data uses an AWS-first approach as their go-to-market strategy, how they've benefited from using the latest tech, and what co-marketing strategies have worked well.

BREAKOUT SESSION

Watch

STP213**How startups are building solutions for a sustainable future**

Startups are using AWS to innovate quickly as they develop technologies and materials that enable a low-carbon future. Learn how startups are delivering scalable solutions to support a wide range of programs, including energy efficiency, renewable energy, sustainable transportation, and sustainable agriculture. Also, discover how to manage data needed to gauge and share progress.

BREAKOUT SESSION

Watch

STP206**Drift on AWS: Transforming how businesses buy from businesses**

Drift, a leader in conversational commerce, helps businesses accelerate their revenue via dynamic, personalized sales and marketing experiences. In this session, Drift's Cofounder and CEO David Cancel discusses the important role that AWS plays as his company leads the evolution of enterprise sales.

STORAGE

BREAKOUT SESSION

Watch

STG204**Data archiving and digital preservation solutions with AWS**

Learn how to manage long-term data archiving and digital asset preservation needs with AWS. This session details compliance use cases requiring write-once-read-many (WORM) protection and AWS methods for data validation and fixity checking that help ensure data is available when needed by using Amazon S3 Glacier and S3 Glacier Deep Archive.

BREAKOUT SESSION

Watch

STG302**Deep dive on Amazon FSx for Lustre**

In this session, learn how customers are using Amazon FSx for Lustre high-performance file systems to reduce their compute costs. The session also details how Foundation Medicine is using FSx for Lustre to transform cancer care for their patients. Leave with best practices and tips to accelerate your compute-intensive workloads.

BREAKOUT SESSION

Watch

STG205**AWS storage solutions for containers and serverless applications**

Modern applications have revolutionized application architecture by using containers for greater portability and/or building applications on serverless infrastructure to optimize compute resources. In this session, look at different storage services, including Amazon EFS, Amazon S3, and Amazon EBS, to help determine which storage is the best fit for your modern applications.

BREAKOUT SESSION

Watch

STG305**Best practices for managing Amazon S3 data at scale**

As your organization grows into storing millions to billions of objects and terabytes to petabytes of data on Amazon S3, it becomes increasingly valuable to use tools and automation to handle that scale. This session provides a detailed overview of Amazon S3 Lifecycle management, S3 Batch Operations, S3 inventory reports, S3 Replication, and other features.

BREAKOUT SESSION

Watch

STG207**Best practices for moving your data to AWS, online and offline**

This session explores how you can use AWS DataSync and the AWS Snow Family (AWS Snowcone, AWS Snowball, and AWS Snowmobile) to accelerate moving your data to Amazon S3, Amazon EFS, and Amazon FSx. It also highlights use cases, best practices, and how to use the Snow Family and DataSync together.

BREAKOUT SESSION

Watch

STG315**Deep dive on Amazon S3 security and access management**

Strong adherence to architecture best practices and proactive controls is the foundation of storage security and access controls. In this session, find out the best practices for data security in Amazon S3. Then, learn about the Amazon S3 security architecture fundamentals, and dive deep into the latest enhancements in usability and functionality.

OTHER

BREAKOUT SESSION

ALX202**What's new with Amazon Alexa**

With more than 130,000 published skills, the Alexa Skills Kit (ASK) continues to push forward, making new opportunities for developers who want to build engaging voice experiences with Amazon Alexa. In this session, explore the latest trends in ambient computing, dive deep into some of the most innovative Alexa skills.

Watch

BREAKOUT SESSION

BLC201**Amazon Managed Blockchain: When to use blockchain**

This session helps you identify if blockchain is a good solution for you and what type of blockchain is best suited for your use case. Also, hear customer stories from decentralized finance, financial services, automotive, aviation, gaming, public sector, sustainability, and more. Also hear from AWS customer Global Rockstar about their use case of non-fungible tokens (NFTs).

Watch

BREAKOUT SESSION

FWM201**Accelerate front-end web and mobile development with AWS Amplify**

AWS Amplify helps front-end web and mobile developers build faster front to back. In this session, review Amplify's core capabilities like authentication, data, and file storage and explore new capabilities, such as Amplify Geo and extensibility features for easier app customization with AWS services and better integration with existing deployment pipelines.

Watch

BREAKOUT SESSION

INO201**Amazon's culture of innovation**

In this session, be introduced to Amazon's peculiar culture and how we innovate through four distinct yet interdependent elements: Culture, Mechanisms, Architecture, and Organization. Dive deep on each topic, and learn about practical applications including Leadership Principles, Working Backwards, Two-Pizza Teams, the PRFAQ doc, and more.

Watch

BREAKOUT SESSION

INO202**How Amazon.com transforms customer experiences through AI/ML**

This session is for senior business and technology decision-makers who want to understand Amazon.com's approach to launching and scaling ML-enabled innovations in its core business operations and toward new customer opportunities. See specific examples from various Amazon businesses to learn how Amazon applies AI/ML to shape its customer experience while improving efficiency, increasing speed, and lowering cost.

Watch

BREAKOUT SESSION

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

Achieving quantum advantage for commercially useful applications in industries like life sciences, finance, and manufacturing requires quantum computers that can scale to large numbers of qubits and operate with low error rates. Learn about the AWS Center for Quantum Computing's advancements in both quantum hardware and algorithms and much more.

Watch

Keynotes

Hear the latest from AWS leaders.





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.

[Watch now](#)



Dr. Werner Vogels Keynote

This keynote, presented by Dr. Werner Vogels, Chief Technology Officer, Amazon.com, is a must-see for developers of all levels. Join Werner to get a behind-the-scenes look at AWS, and be inspired by the latest application and architecture ideas worth considering. Throughout the keynote Werner will take you through examples of applications that have been built at AWS that were previously considered impossible, as well as exciting new developer-focused product launches.

[Watch now](#)



Peter DeSantis Keynote

Watch Peter De Santis, Senior Vice President, Utility Computing and Apps, present the Infrastructure Keynote at re:Invent. Peter's keynote will look behind the scenes at how AWS operates, dive deep on our custom silicon, and also cover security and privacy. Watch this keynote to see how AWS thinks and operates differently, and delivers solutions for all our customers.

[Watch now](#)



Machine Learning Keynote

Watch Swami Sivasubramanian, Vice President, Amazon Machine Learning, present the 2021 Machine Learning keynote. You'll learn why you need to start your data journey now, and how to continue it in to the future. Swami's keynote will encompass databases, analytics, and machine learning, and show you how AWS is the obvious choice to modernize, unify, and then innovate with data.

[Watch now](#)



Global Partner Summit Keynote

Watch 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.

[Watch now](#)

Leadership Sessions

Hear directly from AWS leaders as they share the latest advances in AWS technologies, set the future product direction, and motivate you through compelling success stories.



Leadership Sessions*



Redefining corporate citizenship

Modupé Congleton

Director, Inclusion, Diversity & Equity

[Watch now](#)



Leading through uncertainty: Resilience, grit, and courage

Francesca Vasquez

Vice President, Technology

[Watch now](#)



*Sessions and speakers are subject to change

Leadership Sessions*



AWS Marketplace

Stephen Orban

General Manager, AWS Marketplace

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AWS Public Sector

Max Peterson

Vice President, Worldwide Public Sector

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AWS Public Sector Partners

Sandy Carter

Vice President, Worldwide Public Sector Partners and Programs

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AWS Storage

Mai-Lan Tomsen-Bukovec

Vice President, Worldwide Public Sector Partners and Programs

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AI/ML

Bratin Saha

Vice President, Machine Learning

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Leadership Sessions*



Analytics

Rahul Pathak

Vice President, Analytics

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Architecture

Brian Taptich

Vice President, AWS Worldwide Specialist Organization

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Business Applications

Peter Hill

Vice President, Business Applications

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Cloud Operations

Bill Vass

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

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Compute

David Brown

Vice President, Amazon EC2

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Leadership Sessions*



Containers

Deepak Singh

Vice President, Compute Services

Databases

Jeff Carter

Vice President, Relational Databases

Developer

Ken Exner

Director, AWS Developer Tools

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

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Networking & Content Delivery

David Brown
Vice President, Amazon EC2

[Watch now](#)



Security, Compliance, and Identity

Stephen Schmidt
Vice President and Chief Information Security Officer

[Watch now](#)



Serverless

David Richardson
Vice President, Serverless

[Watch now](#)



Training & Certification

Maureen Lonergan
Vice President, AWS Training and Certification

[Watch now](#)



*Sessions and speakers are subject to change

Select New Services

We've selected a set of services announced at AWS re:Invent 2021 that are particularly relevant to financial institutions. ([See here](#) for an overview of all re:Invent 2021 launches.)

[Analytics](#) [Generally Available](#)

Amazon FinSpace

OVERVIEW

Amazon FinSpace is a fully managed analytics service for financial services customers that makes it easy for analysts to access and analyze data from multiple locations, such as internal data stores like portfolio, actuarial, and risk management systems, as well as petabytes of data from third-party data sources, such as historical securities prices from stock exchanges.

FinSpace makes it easy to collect data and catalog it by relevant business concepts such as asset class, risk classification, or geographic region. Then, you define data access policies and FinSpace enforces them while keeping audit logs for compliance and activity reporting. Analysts use an integrated Jupyter notebook and scalable Spark clusters, to prepare data at scale, along with a library of 100+ financial analytics functions, such as time bars and Bollinger bands, to simplify data preparation.

FinSpace includes integration with Amazon Redshift, Snowflake, and Goldman Sachs data services today, with more coming in 2022 to include data lakes and JDBC data stores.

[Product Detail Page](#)

[Getting Started Video](#)

[Request PoC Assistance](#)

FINANCIAL SERVICES USE CASES

- **Deploy quantitative research environment** – Instantly deploy a research environment for analysts at hedge funds and asset managers that provides unified data access, powerful catalog and search, integrated notebook, scalable Spark analytics engine, and a time series data processing framework.
- **Prepare and analyze petabytes of high frequency market data** – Utilize scalable Spark clusters and an integrated time series framework with over 100 financial functions to create derived datasets such as minute bar and Bollinger bands from petabytes of stock market data, including trade and quote (TAQ) or options data.
- **Incorporate data from multiple sources into financial analytics** – Easily access data from marketplaces such as AWS Data Marketplace, Snowflake Financial Cloud, and Goldman Sachs Financial Cloud to incorporate more data, such as curated market data and ESG data, into your quant and analyst financial analytics workflows.

[AI/ML](#) [Generally Available](#)

Amazon SageMaker Canvas

OVERVIEW

Amazon SageMaker Canvas is a visual, point-and-click interface that expands machine learning (ML) access to business analysts, allowing them to generate accurate predictions without writing code or requiring ML expertise. SageMaker Canvas makes it easy to browse and access cloud and on-premises data sources. You can quickly combine, cleanse, and prepare datasets to ensure your data is ready for ML.

SageMaker Canvas then makes it easy to build ML models and generate accurate predictions with just a few clicks. You can also easily export results, explain and interpret models, and share models with data scientists within your organization to review.

[Product Detail Page](#) [AWS Blog](#) [Breakout Session](#)

FINANCIAL SERVICES USE CASES

- **Fraud detection** – Predict suspicious transactions and other anomalous behavior faster so that customers can be alerted in a timely fashion.
- **Customer scoring** – Forecast the likelihood of any event, such as a loan default, to maximize risk-adjusted returns. Predict if a customer will be late on making a payment, and work with the customer to put the right mitigation steps in place.
- **Portfolio optimization** – Predict the right mix of investments based on data, such as historical returns and risk tolerance, to maximize investments.

[AI/ML](#) [Generally Available](#)

Amazon SageMaker Inference Recommender

OVERVIEW

Amazon SageMaker Inference Recommender is a new capability that simplifies the process of identifying and selecting optimal instance types by automating instance selection, load testing, and parameter tuning.

SageMaker Inference Recommender helps you choose the best compute instance and configuration to deploy ML models for optimal inference performance and cost. Selecting an instance with the best price performance for deploying models is a complicated, iterative process that can take weeks of experimentation.

[Product Detail Page](#) [What's New Blog](#) [Breakout Session](#)

FINANCIAL SERVICES USE CASES

- **Banking and Finance** – Improve the efficiency of DevOps teams who want to test and deploy ML models at scale by reducing the deployment time from weeks to hours.

SageMaker Inference Recommender assists DevOps teams by streamlining the process of defining an SLA and cost profile and creating pipelines to automatically deploy models that meet their predefined performance criteria.

Architecture

AWS Well-Architected Tool

OVERVIEW

The AWS Well-Architected Tool is designed to help you review the state of your applications and workloads, and provide a central place for architectural best practices and guidance. The AWS WA Tool is based on the AWS Well-Architected Framework, which was developed to help cloud architects build secure, high-performing, resilient, and efficient application infrastructures.

The Framework has been used in tens of thousands of workload reviews by AWS solutions architects, and provides a consistent approach for evaluating your cloud architecture and implementing designs that will scale with your application needs over time.

CUSTOM LENSES

[Product Detail Page](#) [What's New Blog](#) [Breakout Session](#)

SUSTAINABILITY PILLAR

[Product Detail Page](#) [What's New Blog](#) [Breakout Session](#)

New Capabilities

Custom Lenses: Within a custom lens, customers can create their own pillars, questions, best practices, helpful resources, and improvement plans. They also can specify rules to determine which options, when not followed, result in high or medium risk issues being flagged. Financial Services customers could define a custom lens to review workloads against PCI compliance, SOC 2 compliance, or other national or industry regulations.

Sustainability Pillar: The AWS Well-Architected Sustainability Pillar can help organizations learn, measure, and improve workloads using environmental best practices for cloud computing. The Sustainability Pillar contains questions aimed at evaluating the design, architecture, and implementation of your workloads to reduce their energy consumption and improve their efficiency. The sustainability of the cloud allows AWS customers to reduce associated energy usage by nearly 80% with respect to a typical on-premises deployment.



Business Applications

New Capabilities for Amazon Connect

OVERVIEW

Amazon Connect is an easy to use omnichannel cloud contact center that helps you provide superior customer service at a lower cost.

Over 10 years ago, Amazon's retail business needed a contact center that would give our customers personal, dynamic, and natural experiences. We couldn't find one that met our needs, so we built it.

[Product Detail Page](#) [What's New Blog](#) [Breakout Session](#)

New Capabilities

Generally Available

Automated call summarization: Contact Lens for Amazon Connect with call summarization helps agents and managers become more efficient by automatically generating a summary after customer calls. Using ML, this new call summarization capability automatically identifies key parts of a customer conversation, assigns a tag (such as issue, outcome, or action item), and displays a summary that can be expanded to view the calls full transcript.

In Preview

Automated chatbot designer: The automated chatbot designer in Amazon Lex is a new capability that uses ML to reduce chatbot design times from weeks to hours. A person contacting an insurance company might say, 'My basement is flooded. I need to start a new claim.' Chatbot developers can spend weeks listening to call recordings and analyzing customer service transcripts to find the right intents to design contact center chatbots. Amazon Lex helps customers build, test, and deploy voice and text bots for services like Amazon Connect.

[Compute](#) [In Preview](#)

Amazon EC2 C7g Instances by AWS Graviton3 processors

OVERVIEW

Amazon EC2 C7g instances will provide the best price performance in Amazon EC2 for compute-intensive workloads such as high performance computing (HPC), gaming, video encoding, and CPU-based machine learning inference. These instances are the first in the cloud to feature the cutting edge DDR5 memory technology, which provides 50% more bandwidth compared to DDR4 memory.

C7g instances provide 20% higher networking bandwidth compared to previous generation C6g instances based on AWS Graviton2 processors. They also support Elastic Fabric Adapter (EFA) for applications such as high performance computing that require high levels of inter-node communication.

[What's New Blog](#) [Service Page](#) [Request Access](#)

FINANCIAL SERVICES USE CASES

- **Capital management & reporting** – Regulations such as CCAR, Solvency II, and FRTB require organizations to report capital positions, which calls for increased demand and frequency of simulation-based calculations for market, credit, and counterparty risk.
- **Risk management** – Portfolio managers can quickly conduct simulations that identify risks within their portfolio of products, hedging opportunities, and areas for optimization, and quickly model the impact of hypothetical portfolio change.
- **Product & strategy development** – Accelerate new financial products by spinning up a development environment instantly.

[Enterprise & Migration](#)[In Preview](#)

AWS Mainframe Modernization

OVERVIEW

AWS Mainframe Modernization is a unique platform for Mainframe migration and modernization. It allows you to migrate and modernize your on-premises mainframe workloads to a managed execution environment on AWS.

AWS Mainframe Modernization offers two popular migration patterns: replatforming and automated refactoring. Assess and analyze migration readiness and plan projects. AWS Mainframe Modernization provides the development, build, and test tools for modernization projects. Once implemented and tested, deploy your mainframe workloads into the services managed runtime environment.

[Product Detail Page](#) [Documentation](#) [Breakout Session](#)

FINANCIAL SERVICES USE CASES

- **Create a migration plan** – Financial institutions can access migration readiness and develop a clear migration strategy for every legacy workload using call graphs, dependency maps, and source searching.
- **Migrate mainframe workloads** – Choose from two main options to modernize infrastructure and migrate larger workloads faster: replatform to a mainframe-compatible runtime, or refactor applications to modern agile services.
- **Scale DevOps best practices** – Maintain, enhance, execute, and operate enterprise applications following DevOps best practices and compete more effectively in the market.

[Serverless](#) [In Preview](#)

Amazon EMR Serverless

OVERVIEW

Amazon EMR Serverless is a new deployment option in Amazon EMR that makes it easy and cost effective for data engineers and analysts to run petabyte-scale applications built using open-source frameworks like Spark, Presto, and Hive, without having to tune, operate, secure, optimize, or manage clusters.

With Amazon EMR Serverless, simply specify the framework you want to use and then run your application using APIs, EMR Studio, or JDBC/ODBC clients. Amazon EMR Serverless automatically determines and provisions the compute and memory resources to run the application and scales the resources up and down as needed based on changing requirements.

[Product Detail Page](#) [What's New Blog](#) [Breakout Session](#)

FINANCIAL SERVICES USE CASES

- **Build scalable data pipelines** – Financial institutions can build data pipelines that extract and transform data at scale from a variety of data sources.
- **Accelerate data science & ML** – Develop, debug, and visualize big data applications with Amazon EMR Studio, and use open-source ML frameworks built into Amazon EMR such as Apache Spark MLlib, TensorFlow, and Apache MXNet.
- **Process real-time data streams** – Analyze events from streaming data sources in real time to create long-running, highly available, and fault-tolerant streaming data pipelines, or ingest streams into your data lakes.

[Storage](#)[Generally Available](#)

Amazon S3 Event Notifications with Amazon EventBridge

OVERVIEW

Use Amazon S3 Event Notifications with Amazon EventBridge to build, scale, and deploy event-driven applications based on changes to the data you store in Amazon S3. This makes it easier to act on new data in Amazon S3, build multiple applications that react to object changes simultaneously, and replay past events, all without creating additional copies of objects or developing new software.

With increased flexibility to process events and send them to multiple targets, you can now more confidently create new serverless applications with advanced analytics and machine learning (ML) at scale without writing single-use custom code.

[Product Detail Page](#)[What's New Blog](#)

FINANCIAL SERVICES USE CASES

Deploy event-drive applications – Easily build and deploy event-driven applications without custom software.

Act on new data faster – Make changes to event-driven applications without interruptions, and debug by replaying past events.

Access the largest destinations – Use the largest set of destinations on the internet with API destinations.

Contacts & **resources**

Contact the Team

AWS Financial Services executive and regional business development leaders

If you'd like to arrange a meeting with **AWS subject matter experts**, please reach out to your account teams to coordinate. You can click on the photos to access team member LinkedIn profiles.



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Vice President, Head of Worldwide Financial Services



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Director, Head of Worldwide Financial Services Business & Market Development



Lynne Zeldenryk
Head of Financial Services Business & Market Development for EMEA



Steve Schick
Head of Financial Services Business & Market Development for North America



Laurence Thiery
Head of Financial Services Business & Market Development for Asia



Tetsuo Iida
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Fernando Corbi
Head of Financial Services Business & Market Development for LATAM

Contact the Team

AWS Financial Services market segment and strategic program leaders

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Head of Business & Market Development for Banking & Capital Markets



Tony Jacob
Head of Business & Market Development for Insurance



Mark Smith
Head of Business & Market Development for Payments



Jeff (Axe) Axelrad
Head of Financial Services Compliance



Lynne Zeldenryk
Head of Financial Services Digital Innovation



Adam Honore
Head of Financial Services Service Development

Contact the Team

AWS Financial Services partner leaders

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Charlie Sanderson
Global Alliances, FSI ISVs



Ryan Thomas
Worldwide Lead, Financial Services Consulting Partners



Peter Williams
Head of Partner Technology, Global Financial Services



Vishal Arora
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Addy Dubhashi
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Thank **you!**

