

General Trends and Themes

- 65,000 people in attendance
- AWS “slowing growth rates” (QoQ and YoY)
- Big Changes come from the top down. Challenge to CEOs
- More of an appeal to Enterprises, less so to Startups
- CEO shoes

AWS Keynote Videos: <https://live.awsevents.com/previous/>

Pre-re:Invent Announcements

Serverless (Lambda)

Serverless (Pre:Invent):

<https://aws.amazon.com/blogs/compute/icymi-serverless-preinvent-2019/>

- Lambda Destinations:
<https://aws.amazon.com/blogs/compute/introducing-aws-lambda-destinations/>

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Storage

<https://aws.amazon.com/blogs/storage/monday-december-2-storage-sessions-today-at-reinvent/>

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Quantum Computing

<https://press.aboutamazon.com/news-releases/news-release-details/aws-announces-new-quantum-computing-service-amazon-braket-along>

- Amazon Braket
- AWS Center for Quantum Computing
- Amazon Quantum Solutions Lab

All the Announcements for 2019:

<https://aws.amazon.com/new/?whats-new-content-all.sort-by=item.additionalFields.postDateTime&whats-new-content-all.sort-order=desc&wn-featured-announcements.sort-by=item.additionalFields.numericSort&wn-featured-announcements.sort-order=asc&awsf.whats-new-year=year%202019>

New Stuff:

Amazon Builders Library:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-builders-library/>

Compute

AWS New EC2 Graviton2 ARM Processors:

<https://aws.amazon.com/about-aws/whats-new/2019/12/announcing-new-amazon-ec2-m6g-c6g-and-r6g-instances-powered-by-next-generation-arm-based-aws-graviton2-processors/> (The new general purpose (M6g), compute optimized (C6g), and memory optimized (R6g) Amazon EC2 instances deliver up to 40% improved price/performance over current generation M5, C5, and R5 instances for a broad spectrum of workloads including application servers, open source databases, in-memory caches, microservices, gaming servers, electronic design automation, high-performance computing, and video encoding.)

EC2 Image Builder:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-ec2-image-builder/> (Amazon Web Services (AWS) announces the availability of EC2 Image Builder, a service that makes it easier and faster to build and maintain secure images. Image Builder simplifies the creation, patching, testing, distribution, and sharing of Linux or Windows Server images.)

AWS Compute Optimizer:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-aws-compute-optimizer/> (Today we are announcing AWS Compute Optimizer, a new machine learning-based recommendation service that makes it easy for you to ensure that you are using optimal AWS Compute resources.)

Outposts

AWS Outposts:

<https://aws.amazon.com/about-aws/whats-new/2019/12/announcing-general-availability-of-aws-outposts/> (Today we are announcing the general availability of AWS Outposts, a new fully managed service that extends AWS infrastructure, AWS services, APIs, and tools to virtually any customer datacenter, co-location space, or on-premises facility for a truly consistent hybrid experience.)

AWS Wavelength:

<https://aws.amazon.com/about-aws/whats-new/2019/12/announcing-aws-wavelength-delivering-ultra-low-latency-applications-5g/> (AWS Wavelength embeds AWS compute and storage services at the edge of telecommunications providers' 5G networks, and provides seamless access to the breadth of AWS services in the region.)

Containers

Amazon ECS Capacity Providers:

<https://aws.amazon.com/about-aws/whats-new/2019/12/amazon-ecs-capacity-providers-now-available/> (Capacity Providers are a new way to manage compute capacity for containers, that allow the application to define its requirements for how it uses the capacity.)

Amazon EKS with Fargate:

<https://aws.amazon.com/about-aws/whats-new/2019/12/run-serverless-kubernetes-pods-using-amazon-eks-and-aws-fargate/> (You can now use Amazon Elastic Kubernetes Service (EKS) to run Kubernetes pods on AWS Fargate, the serverless compute engine built for containers on AWS.)

SageMaker (AI)

AWS SageMaker Studio:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-sagemaker-studio-the-first-integrated-development-environment-ide-for-machine-learning/> (Amazon SageMaker Studio is an integrated development environment (IDE) for machine learning (ML) that lets you easily build, train, debug, deploy and monitor your machine learning models.)

AWS SageMaker Debugger:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-sagemaker-debugger-get-complete-insights-into-the-training-process-of-machine-learning-models/> (Amazon SageMaker Debugger is a new capability of Amazon SageMaker that provides complete insights into the training process of machine learning (ML) models by automating the capture and analysis of data from training runs at real time, with no code changes.)

AWS SageMaker Processing:

<https://aws.amazon.com/about-aws/whats-new/2019/12/amazon-sagemaker-adds-processing-managed-solution-data-processing-model-evaluation-workloads/> (Amazon SageMaker Processing is a new capability of Amazon SageMaker for running pre- or post- processing and model evaluation workloads with a fully managed experience.)

AWS SageMaker AutoPilot:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-sagemaker-autopilot/> (Just provide a tabular dataset and select the target column to predict, and SageMaker AutoPilot automatically explores machine learning solutions with different combinations of data preprocessors, algorithms, and algorithm parameter settings, to find the most accurate model.)

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Databases

Amazon RDS Proxy:

<https://aws.amazon.com/about-aws/whats-new/2019/12/amazon-rds-proxy-available-in-preview/> (Amazon RDS Proxy, a fully managed, highly available database proxy for Amazon Relational Database Service (RDS), is now available in preview. RDS Proxy makes applications more scalable, more resilient to database failures, and more secure.)

Amazon Managed Cassandra:

<https://aws.amazon.com/about-aws/whats-new/2019/12/announcing-amazon-managed-apache-cassandra-service-now-in-preview/> (Amazon Managed Apache Cassandra Service is a scalable, highly available, and managed Apache Cassandra-compatible database service that enables you to run your Cassandra workloads in the AWS Cloud using the same Cassandra application code, Apache 2.0–licensed drivers, and tools that you use today.)

Amazon on AWS

AWS Local Zone:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-aws-local-zone-in-los-angeles-ca/> (Today we are announcing the opening of an AWS Local Zone in Los Angeles (LA), California. The LA Local Zone is a new type of AWS infrastructure deployment that places compute, storage, and other select services closer to customers, giving developers the ability to run applications that require single-digit millisecond latencies to end-users in LA.)

Amazon Fraud Detector:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-fraud-detector-now-in-preview/> (Amazon Fraud Detector is a fully managed service that makes it easy to identify potentially fraudulent online activities such as online payment fraud and the creation of fake accounts.)

Amazon Contact Lens for Connect:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-contact-lens-for-amazon-connect-preview/> (integrated ML analytics capabilities for Amazon Connect that gives contact centers the ability to understand the sentiment, trends, and compliance of customer conversations to improve customer experience and identify crucial customer feedback.)

Enterprise Search

Amazon Kendra:

<https://aws.amazon.com/about-aws/whats-new/2019/12/announcing-amazon-kendra-reinventing-enterprise-search-with-machine-learning/> (Today, AWS announced Amazon Kendra, a new highly accurate and easy to use enterprise search service powered by machine learning.)

Security

Amazon Detective:

<https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-amazon-detective/> (Amazon Detective is a new service in Preview that makes it easy to analyze, investigate, and quickly identify the root cause of potential security issues or suspicious activities.)

