AWS Important Releases

Markus Ostertag
Team Internet AG

also available in a few days at: https://github.com/Osterjour/aws-ug-announcements

Global Infrastructure

- CloudFront adds new locations in Asia

Compute

- EC2 Fleet available in all public regions
  - On-Demand, reserved, spot and different instance types with a single API call
  - Only CLI and API right now
  - No auto-scaling integration at the moment
- Introducing Optimize CPUs for EC2
  - Disable CPUs (to save license costs) or disable Intel Hyper-Threading (i.e. for HPC workloads)
- Get latest console output on EC2
- X1e instances now available in Frankfurt (SAP HANA!!!)

Compute

- C5d & M5d Instances with NVMe-based SSD storage (not in Frankfurt but Ireland)
- I3.metal are now GA

Container

- AWS Fargate is now available in us-east1, us-west2 and eu-west1
- Amazon EKS (Elastic Container Service for Kubernetes) now GA
  - Managed Kubernetes infrastructure across multiple AZs

Serverless

- Lambda@Edge now with node.js v8.10
- Step functions now with higher throughput
  - state transitions per second from 400 to 1000 (burst 5000)
  - state machine executions per second from 25 to 200 (burst 1000)

Network

- ALB now add slow start option
- WAF adds two new features:
  - enhanced pattern matching against Query String arguments
  - support for non-octet CIDR boundaries (everything between /16 and /32) for IPv4

Storage

- S3 adds support for Glacier and S3 One Zone-IA to CloudWatch metrics
- Copying encrypted (with customer master key) EBS Snapshots is now incremental (saving time and storage)

Databases & Big Data

- EMR now supports M5 and C5 instances
- DynamoDB encryption at rest now available in Frankfurt, London, and other regions
- AWS Glue now available in London
- Aurora for MySQL introduces Backtrack
  - move to a prior point in time without needing to restore from a backup within seconds
- Aurora for MySQL is able to publish general logs, slow query logs, and error logs to Cloudwatch Logs

Databases & Big Data

- Redshift adds new metrics to Cloudwatch (query throughput and duration)
- AWS Neptune is GA
  - Graph database service
  - Apache TinkerPop Gremlin 3.3.2 and SPARQL 1.1
- Redshift is able to COPY from Parquet and ORC

Deployment and Management

- AWS CodeCommit is now available in Paris
- AWS CodeCommit now with branch-level permissions
- AWS CodeBuild supports VPC Endpoints

Analytics

- Kinesis Analytics monitoring using CloudWatch
  - Kinesis Processing Units (KPU) used is now available as a metric

IoT

- IoT Analytics is GA now – us-west2, us-east1, us-east2 and eu-west1

Security

- IAM new global condition keys:
  - "aws:RequestedRegion" to control access for specific regions
  - "aws:PrincipalOrgID" to control access from accounts within your organization (AWS Organizations)
- AWS Config adds support for Lambda and X-Ray
- ALB & NLB now support resource and tag-based permissions

AI

Others

- AWS Organizations starts getting useful
  - AWS Config & AWS Firewall Manager
- AWS AutoScaling adds discovery via tags for EC2, Spot Fleets, DynamoDB tables and GSI, and Aurora Replicas
- Kinesis Firehose now with Apache Parquet and ORC as output format
- Amazon Chime now with browser-based application
- SQS SSE is now available in Frankfurt, London, Paris, Ireland, and others

Others

- ALB adds support for user authentication via Cognito (which enables you to use Google, Facebook, Amazon, OpenID, SAML 2.0 etc.)

Pricing

- H1 instances down by 15%
- Elastisearch now with RI for C4, M4, R4, and I3 instance families