AWS Important Releases

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

Global Infrastructure

- New edge locations for Cloudfront
- New edge locations for Route 53

Compute

- New memory optimized instances R5 (Nitro-based)
- GPU P3-family now available in Frankfurt (and others)
- C5d & M5d now available in Frankfurt (and others)

Model	vCPU	Memory (GiB)	Instance Storage (GiB)	Networking Performance	EBS Bandwidth
r5.large	2	16	EBS-Only	up to 10,000 Mbps	up to 3,500 Mbps
r5.xlarge	4	32	EBS-Only	up to 10,000 Mbps	up to 3,500 Mbps
r5.2xlarge	8	64	EBS-Only	up to 10,000 Mbps	up to 3,500 Mbps
r5.4xlarge	16	128	EBS-Only	up to 10,000 Mbps	3,500 Mbps
r5.12xlarge	48	384	EBS-Only	10,000 Mbps	7,000 Mbps
r5.24xlarge	96	768	EBS-Only	25,000 Mbps	14,000 Mbps
r5d.large	2	16	1 x 75 NVMe SSD	up to 10,000 Mbps	up to 3,500 Mbps
r5d.xlarge	4	32	1 x 150 NVMe SSD	up to 10,000 Mbps	up to 3,500 Mbps
r5d.2xlarge	8	64	1 x 300 NVMe SSD	up to 10,000 Mbps	up to 3,500 Mbps
r5d.4xlarge	16	128	2 x 300 NVMe SSD	up to 10,000 Mbps	3,500 Mbps
r5d.12xlarge	48	384	2 x 900 NVMe SSD	10,000 Mbps	7,000 Mbps
r5d.24xlarge	96	768	4 x 900 NVMe SSD	25,000 Mbps	14,000 Mbps

Compute

- **New instance-family z1d (4.0 GHz core frequency, Nitro-based)**

Model	vCPU	Memory (GiB)	Instance Storage (GiB)	Networking Performance	EBS Bandwidth
z1d.large	2	16	1 x 75 NVMe SSD	Up to 10,000 Mbps	Up to 2,333 Mbps
z1d.xlarge	4	32	1 x 150 NVMe SSD	Up to 10,000 Mbps	Up to 2,333 Mbps
z1d.2xlarge	8	64	1 x 300 NVMe SSD	Up to 10,000 Mbps	2,333 Mbps
z1d.3xlarge	12	96	1 x 450 NVMe SSD	Up to 10,000 Mbps	3,500 Mbps
z1d.6xlarge	24	192	1 x 900 NVMe SSD	10,000 Mbps	7,000 Mbps
z1d.12xlarge	48	384	2 x 900 NVMe SSD	25,000 Mbps	14,000 Mbps

- **EC2 and Spot Fleet add On-Demand Prioritized List and Lowest Price as a strategy**
  - Use Prioritized List to specifically determine the order in which EC2 Fleet attempts to fulfill your On-Demand capacity
  - N*Lowest distributes over N spot instance pools

Compute

- New burstable T3 instances (Nitro-based)

Name	vCPUs	RAM (GiB)	Baseline Performance/vCPU	CPU Credits earned/hr	Network burst bandwidth (Gbps)	EBS burst bandwidth (Gbps)
t3.nano	2	0.5	5%	6	5	1.50
t3.micro	2	1.0	10%	12	5	1.50
t3.small	2	2.0	20%	24	5	1.50
t3.medium	2	4.0	20%	24	5	1.50
t3.large	2	8.0	30%	36	5	2.05
t3.xlarge	4	16.0	40%	96	5	2.05
t3.2xlarge	8	32.0	40%	192	5	2.05

Container

- AWS Fargate now available in Frankfurt („serverless containers")
- AWS Fargate now supports time & event based tasks
  - Based on Cloudwatch (scheduled) events
- Amazon EKS now available in Ireland

Serverless

- Amazon Kinesis now with HTTP/2 support and enhanced fan-out (2MB/s) – new KCL available
- Lambda@Edge now provides request body for HTTP POST/PUT

Network

- Expanding AWS PrivateLink support for Amazon Kinesis Data Streams (Frankfurt and London in the EU)
- AWS Config, AWS CloudTrail, AWS Cloudformation now supports AWS PrivateLink

Databases & Big Data

- Redshift adds Advisor and Workload performance metrics
  - Advisor shows recommendations based on your usage
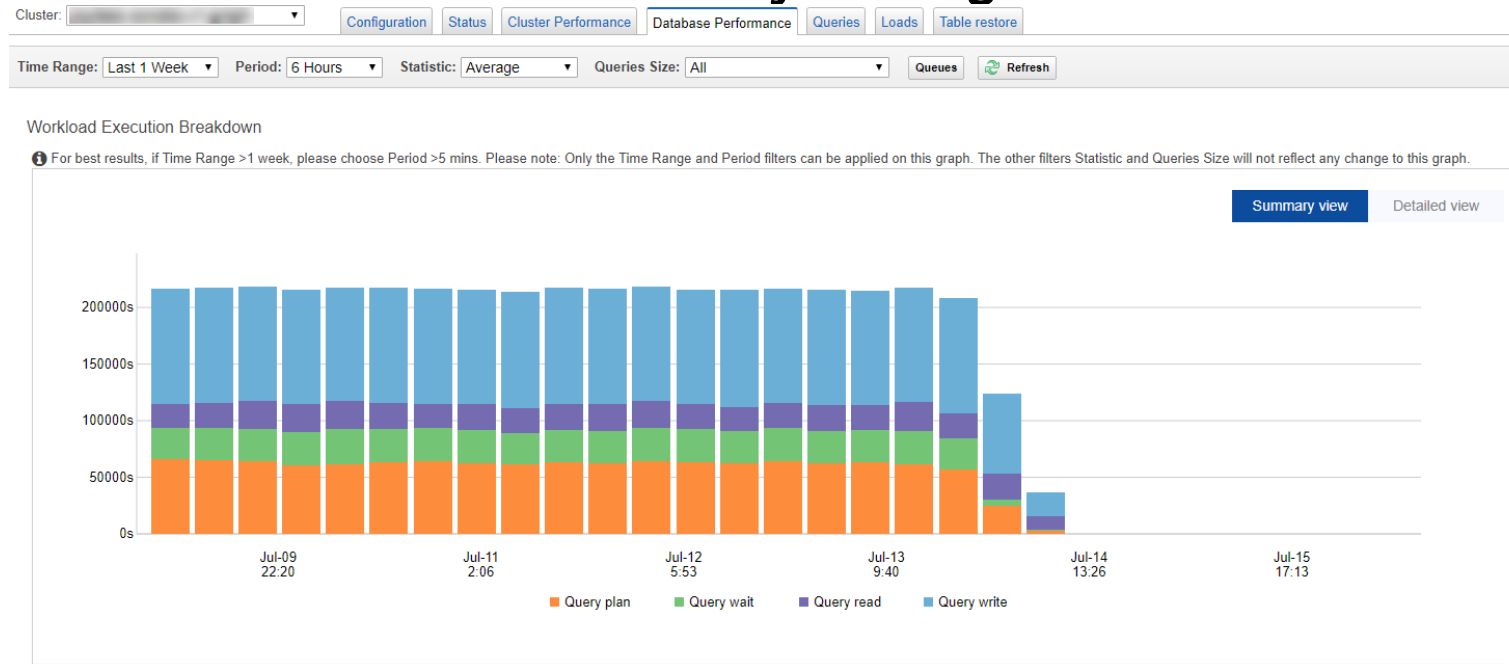
Databases & Big Data

- Amazon Elasticsearch Service adds error logs (needs to be activated)
- Elasticsearch 5.6 and 6.3 is available and zero-downtime version upgrades!
- Aurora Serverless is GA
  - Pay by second and scale dynamically up to defined thresholds
- Elasticache Redis now support in-place version upgrades for Redis Cluster (v3.2 and higher)
- DynamoDB Global Tables in more regions (London and others)

Deployment and Management

- AWS CodeBuild adds build monitoring and notification with Amazon CloudWatch

Analytics

- Amazon Kinesis Data Analytics is now available in the Frankfurt

IoT

- AWS Greengrass now available in Ireland (is already in Frankfurt)
- AWS IoT Device Defender now GA
  - Runs checks for your fleet of devices connected to IoT
- Now 20,000 inbound publish requests per second, increased from 10,000.

Security

- AWS KMS increases req/s limits
  - From 1,200 req/s to 10,000 req/s in US East, US West, and Ireland regions.
  - All other regions limits are increased to 5,500 req/s
- AWS Glue now supports data encryption at rest

AI

- Mutiple version updates for SageMaker and provided AI AMIs

Others

- ALB now supports redirects and fixed responses
- Chime adds web application video conferencing for Chrome
- Amazon MQ now supports Cloudwatch Logs (general and audit logs)

Pricing

- Amazon Redshift: Free upgrade of RIs from DC1 to DC2 (resize or restore your cluster)
- Amazon Lightsail 50% price drop

Events

- **AWS Community Days**
  - 26th & 27th in Frankfurt
  - Agenda: https://aws.amazon.com/de/events/aws-community-days/
  - A few seats are still available
  - Sponsors (Basic package from 1k)!