
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

CMP318-R

Scaling performance and lowering cost with the right choice of compute

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Among the broadest and deepest set of instances

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Scaling performance with AWS Nitro System

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Cost optimization techniques

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Among the broadest and deepest set of instances

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Categories

General purpose and burstable

Compute optimized

Memory optimized

Storage optimized

Accelerated computing

Capabilities

Choice of processor
(AWS, Intel, AMD)

Fast processors
(up to 4.5 GHz)

High memory footprint
(up to 24 TiB)

Instance storage
(HDD and NVMe)

Accelerated computing
(GPUs, FPGA, ASIC)

Networking
(up to 800 Gbps)

Bare-metal size
(up to 448 vCPU)

Options

Amazon EBS

Amazon Elastic Inference

Windows, Linux, UNIX, macOS

More than

500

instance types

for virtually every workload and business need

aws

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Broad choice of processors



Intel® Xeon Scalable processors



AMD EPYC processors



AWS Graviton processors

Apple

Apple M1/M2

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Aggressive generational price performance improvements across the portfolio



Gen 6 instances with Intel Ice Lake CPUs

Up to **15%** better price performance than gen 5

20+ Regions worldwide

Disk-based instances with up to 7.6 TB of local storage



Gen 6 instances with **AMD Milan** CPUs

Up to **35%** better price performance than gen 5

10% lower cost than comparable x86 instances

6+ Regions worldwide



Gen 7 instances with **Graviton3** CPUs

Up to **25%** better performance than Graviton2

Graviton2-based instances: 20+ Regions worldwide

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Scaling performance with AWS Nitro System

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The AWS Nitro System architecture

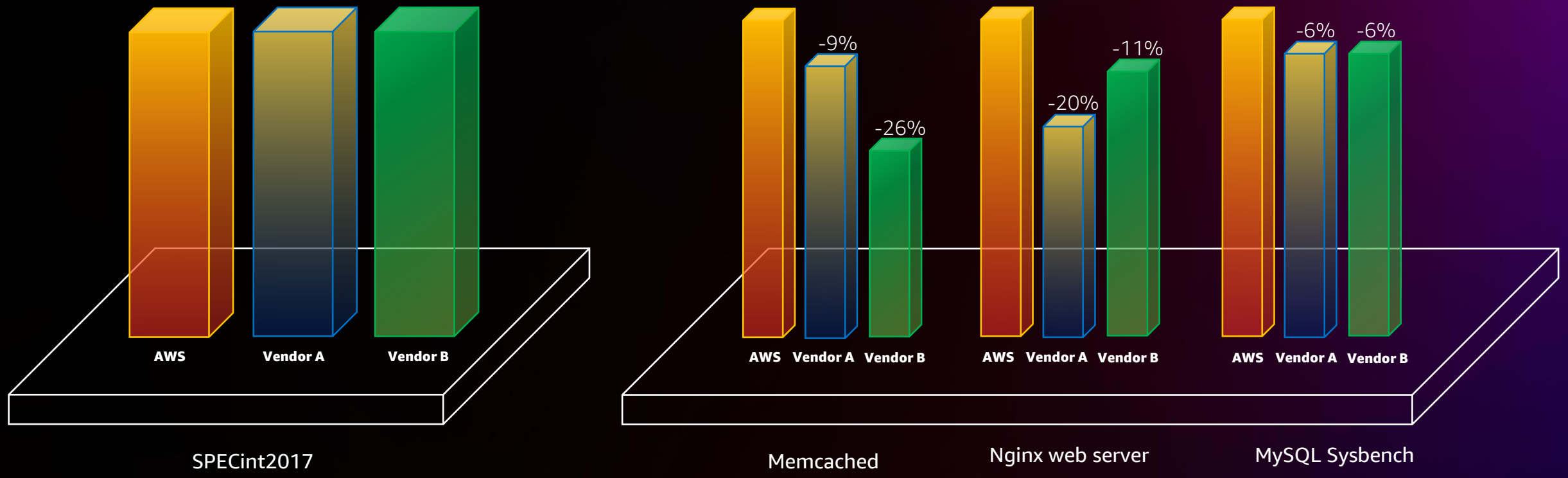
Among the top security, performance, and innovation offerings in the cloud



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Nitro performance for real-world workloads

NITRO SYSTEM PROVIDES AT LEAST 10% BETTER PERFORMANCE ON AVERAGE, ALLOWING TO CONSOLIDATE WORKLOADS AND SAVE COST



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3

Cost-optimization techniques

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Lower your costs with compute options



Flexibility and choice

AWS Graviton is a compelling option for all modern workloads without x86 dependencies by providing great price performance

Customers who run workloads that are dependent on x86 instructions have a choice of instances based on **Intel or AMD** CPUs



Better economics

Graviton-based instances are among the top price performers versus comparable instances

For x86 dependent workloads you can save up to 10% with **AMD**-based instances versus comparable instances



Easy migration

Amazon EC2 **Graviton**-based instances are supported by popular Linux operating systems along with many popular application and services

Seamlessly migrate applications currently running on existing Amazon EC2 x86 based instances to **AMD**-based variants with no modification

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Flexible purchasing options

On-Demand

Pay for compute capacity by the second with no long-term commitments

Savings Plan

Make a 1-year or 3-year commitment and receive significant savings compared to On-Demand pricing

Reserved Instances

Same great discounts as Amazon EC2 Savings Plan with less flexibility

Spot Instances

Use spare Amazon EC2 capacity at a discounted price compared to On-Demand pricing

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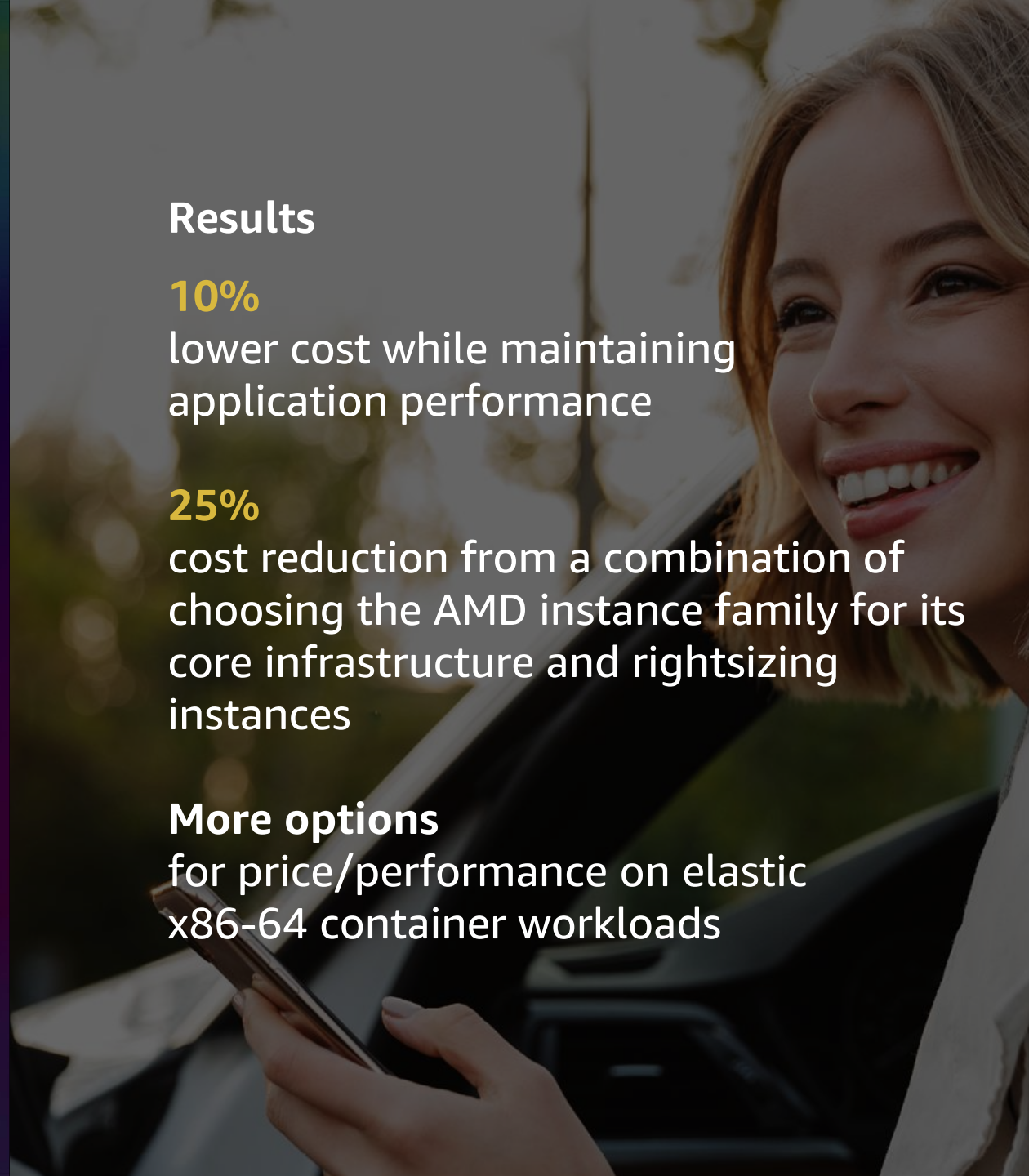
Customer story: TrueCar's journey of modernizing their infrastructure

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TrueCar

- TrueCar wanted to operate more efficiently – both to save money and to free up time for its engineers to innovate for the car buying experience

- The company modernized its infrastructure with AWS and AMD-based Amazon EC2 instances



Results

10%
lower cost while maintaining application performance

25%
cost reduction from a combination of choosing the AMD instance family for its core infrastructure and rightsizing instances

More options
for price/performance on elastic x86-64 container workloads

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Thank you!



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