



Success Story

Adapture Optimizes AMD with AWS

Overview

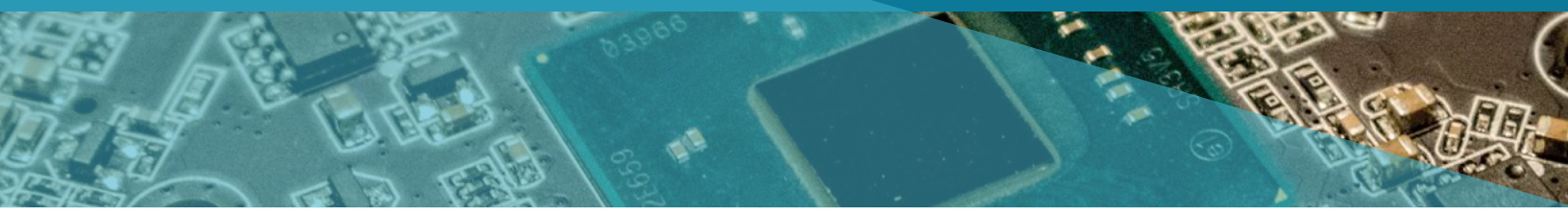
In response to the increasing demand for cloud performance optimization, AMD sought to enhance the efficiency of its chipsets under diverse workload scenarios. The collaboration with Adapture aimed to create a comprehensive program for testing and evaluating chipsets, utilizing simulated workloads and targeted instruction sets. Adapture used AWS cloud infrastructure to benchmark and perform load testing against various EC2 instances. The benchmarking established a baseline comparing various EC2 instance types.

Solution Requirements

AMD needed to develop a comprehensive testing program to evaluate chipsets under various workload scenarios within AWS. AMD needed to demonstrate advantages over competitors in terms of pricing, performance and sustainability. The benchmark testing also needed to highlight the specific benefits of AMD chipsets compared to Graviton and Intel.

The solution needed to take into account the collaborative definition of workload objectives, capturing customer use cases. It would use the Adapture Synthetic Integration Platform (SIP) for technical workflows. The execution of tests needed to take place across various instance types, including compute and memory.

Given the emphasis on comprehensive testing, AMD recognized the importance of utilizing AWS cloud infrastructure to leverage the scalability and flexibility it offers. Choosing AWS cloud infrastructure allowed for seamless benchmarking and load testing against various EC2 instances, ensuring a realistic evaluation of chipsets under diverse conditions.



Our Solution

Using its Synthetic Integration Platform (SIP) for implementation, Adapture tuned simulation parameters to fit specific use cases, developed a customer benchmark for future executions, and created Terraform recipes for workload and application deployment. The iterative testing process was executed at least five times for each configuration.

The Adapture team set up the platform in the target cloud environment, executed tests across various virtual instance sizes, and collected metrics for performance measurement. Using the Terraform blueprints, this test harness ran in Kubernetes and provided the ability to define, monitor and scale custom workloads against containerized applications inside Kubernetes as well as integrated applications running outside Kubernetes.

The implementation of the solution on AWS provided a robust foundation for testing and evaluating AMD chipsets. Leveraging AWS cloud infrastructure, our team executed tests seamlessly across a range of virtual instance sizes, ensuring a thorough examination of chipset performance under diverse conditions. The scalability and reliability of AWS were instrumental in achieving consistent and reliable results throughout the testing process. The variety of instance types available in AWS made it ideal for these tests—223 AWS instance types were used during the testing. For each use case, each test was run against C/M/R instances consisting of instance sizes 2x, 4x, 8x, 12x, 24x, 32x and 48x where applicable across AMD, Graviton and Intel instances.

Benefits of Solution

After collaborating with Adapture to extensively test AMD, Graviton and Intel instances, our analysis strongly supports AMD as the optimal choice for cloud computing. The project's meticulous evaluation—covering diverse workload scenarios and customer use cases—demonstrated the consistent advantages of AMD in pricing, performance and sustainability. The collaboration with Adapture, coupled with AWS infrastructure reinforces the competitive edge of AMD in conjunction with AWS in the dynamic realm of cloud computing.

Take your environment to the next level with the cloud experts at Adapture.

With more than 20 AWS certified experts on our team, Adapture is committed to finding the solutions you need to stay on the cutting edge, maintain compliance and manage spend. Schedule a consultation to learn more.