ARM Linux on AWS

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- **Amazon Talks Up Big Performance Gains For Their 7nm Graviton2 CPUs [5]**

  If Amazon's numbers are accurate, Graviton2 should deliver a big performance boost for Amazon's ARM Linux cloud potential. Graviton2 processors are 7nm designs making use of Arm Neoverse cores. Amazon says they can deliver up to seven times the performance of current A1 instances, twice the FP performance, and support more memory channels as well as doubling the per-core cache.

- **AWS announces new ARM-based instances with Graviton2 processors [6]**

  AWS has been working with operating system vendors and independent software vendors to help them release software that runs on ARM. ARM-based EC2 instances support Amazon Linux 2, Ubuntu, Red Hat, SUSE, Fedora, Debian and FreeBSD. It also works with multiple

container services (Docker, Amazon ECS, and Amazon Elastic Kubernetes Service).

- **Coming Soon ? Graviton2-Powered General Purpose, Compute-Optimized, & Memory-Optimized EC2 Instances[7]**

  We launched the first generation (A1) of Arm-based, Graviton-powered EC2 instances at re:Invent 2018. Since that launch, thousands of our customers have used them to run many different types of scale-out workloads including containerized microservices, web servers, and data/log processing.

- **AWS EC2 6th Gen Arm Instances are 7x Faster thanks to Graviton 2 Arm Neoverse N1 Custom Processor[8]**

  Last year Amazon introduced their first 64-bit Arm-based ECS2 ?A1? instances which were found to deliver up to 45% cost savings over x86 Instances for the right workloads.

- **AWS launches Braket, its quantum computing service [9]**

  With Braket, developers can get started on building quantum algorithms and basic applications and then test them in simulations on AWS, as well as the quantum hardware from its partners. That?s a smart move on AWS?s part, as it?s hedging its bets without incurring the cost of trying to build a quantum computer itself. And for its partners, AWS provides them with the kind of reach that would be hard to achieve otherwise. Developers and researchers, on the other hand, get access to all of these tools through a single interface, making it easier for them to figure out what works best for them.

GNU Linux Server Hardware

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[3] http://www.tuxmachines.org/taxonomy/term/147
[4] http://www.tuxmachines.org/taxonomy/term/39
[5] https://www.phoronix.com/scan.php?page=news_item&px=Amazon-Graviton2-Coming
[6] https://techcrunch.com/2019/12/03/aws-announces-new-arm-based-instances-with-graviton2-processors/
[7] https://aws.amazon.com/blogs/aws/coming-soon-graviton2-powered-general-purpose-compute-optimized-memory-optimized-ec2-instances/
[8] https://www.cnx-software.com/2019/12/04/aws-ec2-6th-gen-arm-instances-are-7x-faster-thanks-to-graviton-2-arm-neoverse-n1-custom-processor/

[9] https://techcrunch.com/2019/12/02/aws-launches-braket-its-quantum-computing-service/