
AWS
re:Invent

EMB027

Introducing EC2 G4ad instances for graphics-intensive applications

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AWS

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Broadest and deepest platform choice

Categories

- General purpose
- Burstable
- Compute intensive
- Memory Intensive
- Storage (High I/O)
- Dense storage
- HW-accelerated compute
- Graphics intensive

Capabilities

- Choice of processor (AWS Graviton2, Intel, AMD)
- Fast processors (up to 4.5 GHz)
- High memory footprint (up to 24 TiB)
- Instance storage (HDD and SDD)
- Accelerated computing (AWS Inferentia, GPUs, and FGPA)
- Networking (up to 400 Gbps)
- Bare metal

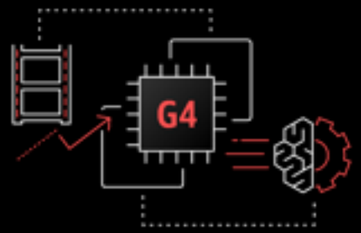
MORE THAN

400

INSTANCE TYPES

for virtually every workload and business need

Graphics on AWS



Amazon EC2 G4dn / G3

- Amazon EC2 G4dn instances powered by NVIDIA T4 GPUs
- Amazon EC2 G3 instances powered by NVIDIA M60 GPUs
- NVIDIA GRID licenses

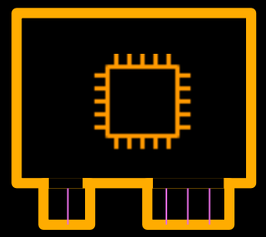
Amazon AppStream

- Graphics G4dn instances
- Graphics Pro instances powered by NVIDIA Tesla M60 GPUs
- Graphics design instances powered by AMD FirePro S7150x2 Server GPUs

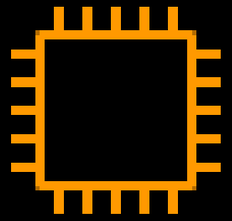
Amazon WorkSpaces

- GraphicsPro bundles powered by NVIDIA M60 GPUs
- Graphics bundles powered by NVIDIA K520 GPUs

Introducing Amazon EC2 G4ad instances



AMD Radeon Pro V520 GPUs



AMD 2nd generation EPYC processors





Higher performance



Lower cost

Up to **45%** better price-performance

AMD Radeon Pro V520 GPUs

36
Compute units

8 GB HBM2
GPU memory

7 nm
Process size

RDNA
Architecture

Use cases



Remote workstations



Game streaming



Rendering

“We used AWS to partner with 505 Games to bring Control Ultimate Edition to a highly popular portable gaming device. With the new EC2 G4ad instances, we have a lower cost structure, which will enable us to bring more games like Control Ultimate Edition to the mobile users globally.”

Wesley Kuo

CEO of Ubitus



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Performance

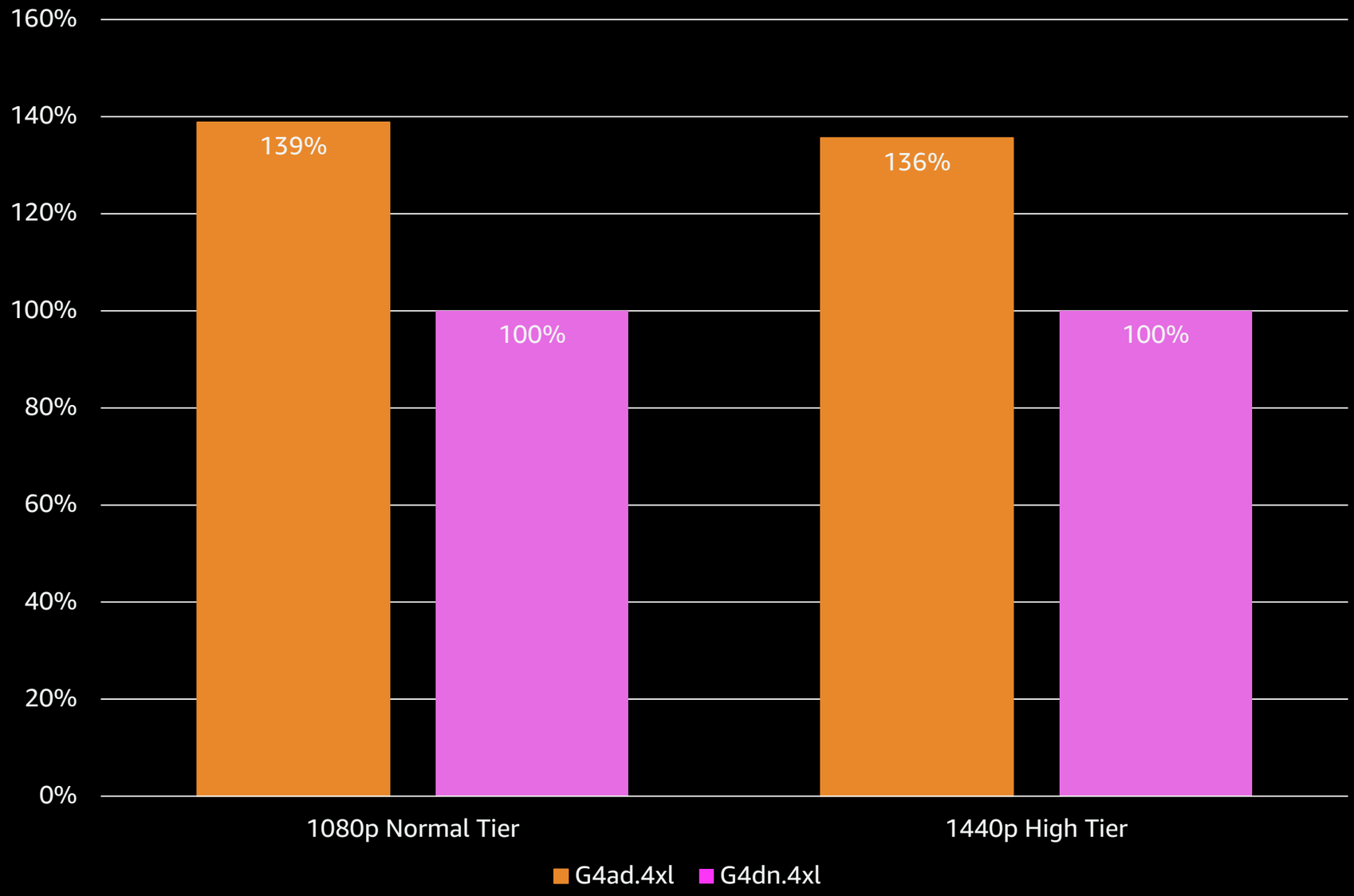


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GFXBench Aztec Ruins benchmark

Vulkan API

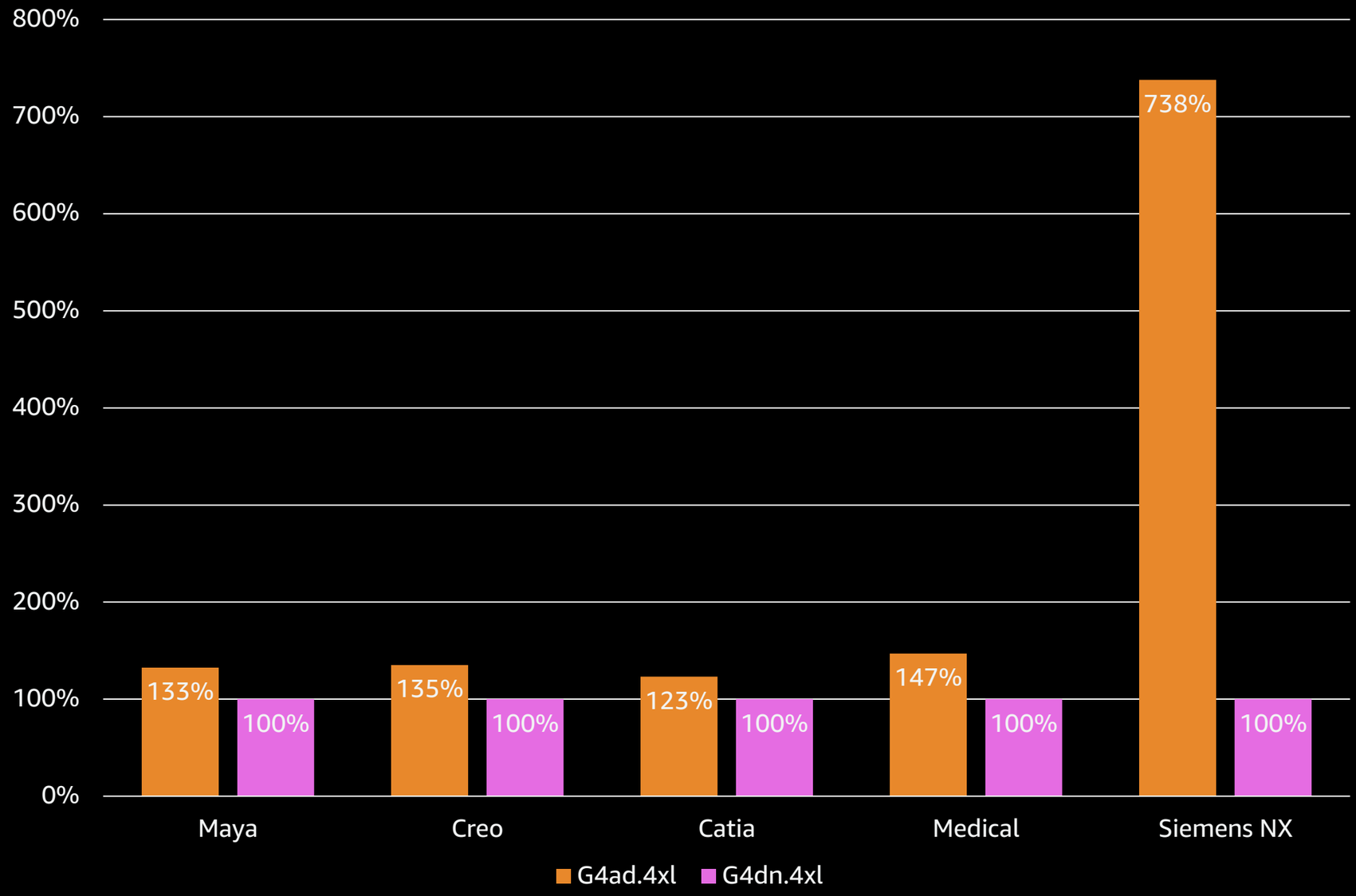
Measures FPS rendered



SPECviewperf 13

Benchmarking professional applications

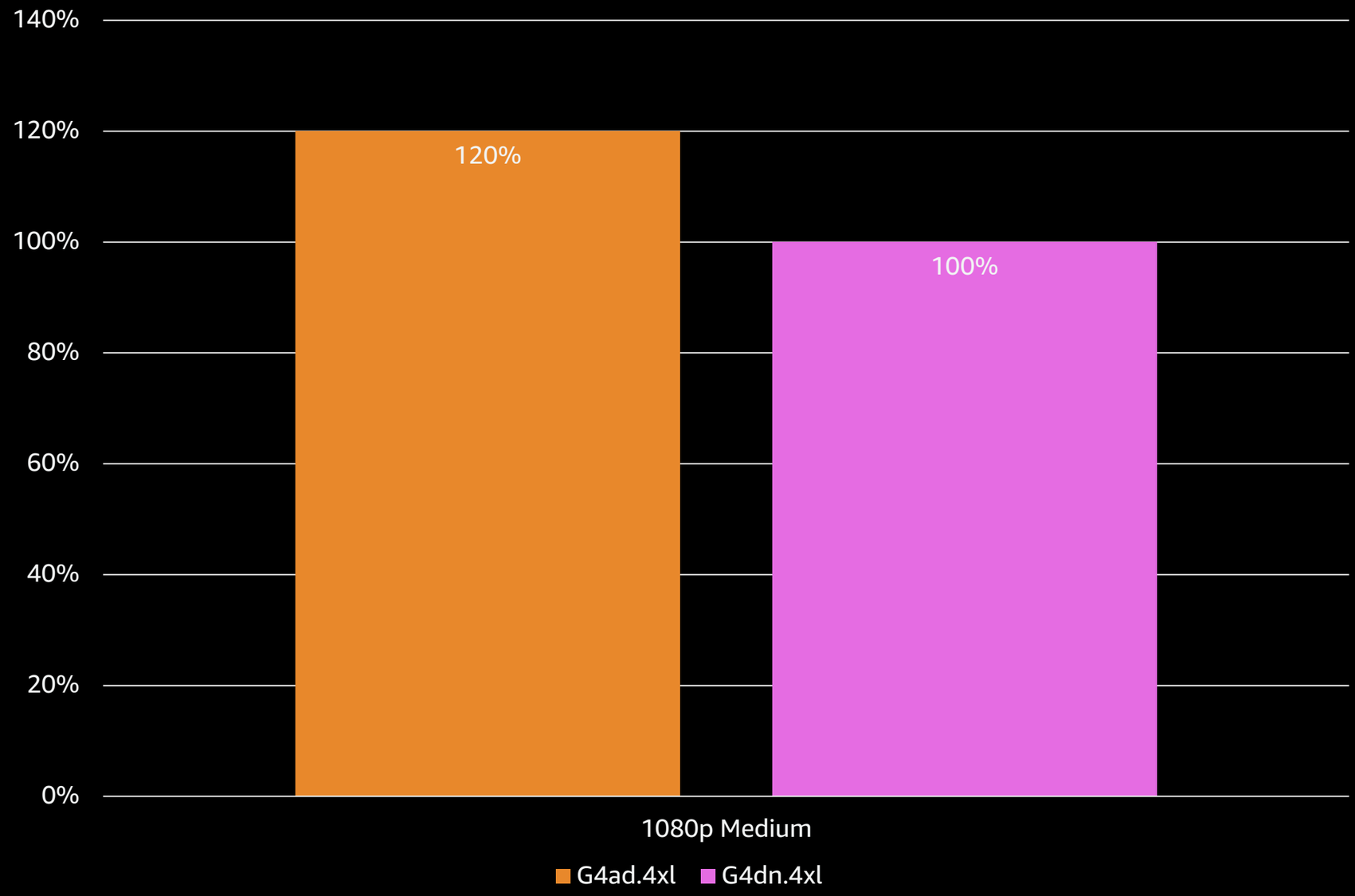
Displaying composite score



SuperPosition

DirectX API

Measures FPS rendered



Instance sizes

	GPUs	vCPUs	Memory (GiB)	Storage (GiB)	Network B/W (Gbps)	Amazon EBS B/W (Gbps)
G4ad.4xlarge	1	16	64	600	Up to 10	Up to 3
G4ad.8xlarge	2	32	128	1200	15	3
G4ad.16xlarge	4	64	256	2400	25	6

AMD 2nd generation EPYC processor with frequencies up to 3.3 GHz

Demo



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Content creation workstations



Kevin Ashman
Senior Partner SA, AWS Game Tech

Getting started

- Available in US-East-1 (N. Virginia), US-West-2 (Oregon), and EU-West-1 (Ireland)
- Supporting Windows Server 2019/2016, Amazon Linux 2, Ubuntu, CentOS
- Supporting DirectX12/11/10/9, Vulkan, and OpenGL
- Get up to two 4K monitors per GPU using NICE DCV and Teradici



To learn more

https://aws.amazon.com/

Pricing

	On-Demand (Linux)	On-Demand (Windows)	1-year instance Savings Plan (Windows)	3-year instance Savings Plan (Windows)
G4ad.4xlarge	$0.867	$1.603	$1.256	$1.143
G4ad.8xlarge	$1.735	$3.207	$2.513	$2.286
G4ad.16xlarge	$3.470	$6.414	$5.026	$4.572

Thank you!



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