TEAMRGE EVENT 2024
WHERE FUTURE OF END USER COMPUTING MEETS REALITY

10+ community sessions around GPUs, VDI, DaaS, DEX, Remoting Protocols and AI

15th February 2024
16:00 CEST / 10:00AM EDT / 07:00AM PDT

Register Now

www.teamrge.com/events

Dr. Benny Tritsch
Managing Director at
Dr. Tritsch IT Consulting

Bram Wolfs
Consultant at
Wolfs IT Solutions

Eltjo van Gulik
Principal Product Manager
for HDX Graphics & Seamless
at Citrix

Esther Barthel
Solutions Architect
at Cognition IT

Joe DaSilva
PMTS, Solutions Architect, Cloud
Graphics at AMD

Johan van Amersfoort
Technologist EUC & AI
at ITQ

Magnar Johnson
Manager | Solution Architect
Sopra Steria

Rody Kossen
Senior Principal Quality
Engineer at Citrix

Ruben Spruijt
Field CTO
at Dizzion

Ryan Ververs-Bijkerk
Technical Evangelist
at GO-INIT

Shawn Bass
Start-up advisor and
former EUC CTO of Desktop
Technologies at VMware

Thomas Poppelgaard
Independent Consultant and
Technology Evangelist at
Poppelgaard.com

This FREE community event is made possible with support of:

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TeamRGE
Remoting Graphics Experts

DEEPDIVE WITH AZURE NGADSV620 POWERED BY AMD RADEON V620 GPU

Joe DaSilva
PMTS, Solutions Architect,
Cloud Graphics at AMD

Ruben Spruijt
Field CTO at Dizzion

TeamRGE
Remoting Graphics Experts

This FREE community event is made possible with support of:

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AGENDA

1. **AMD GPU-accelerated Instances for AAA Gaming and Design**
2. User Experience, Performance and Costs with the Azure NGadsV620

TeamRGE
Remoting Graphics Experts

[Public]

Azure NGads V620-series

AMD GPU-accelerated Instances for AAA Gaming and Design

[Public]

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Video codec acceleration (including at least the HEVC (H.265), H.264, VP9, and AV1 codecs) is subject to and not operable without inclusion/installation of compatible media players. GD-176.

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[Public]

The AMD Radeon™ PRO V620 GPU

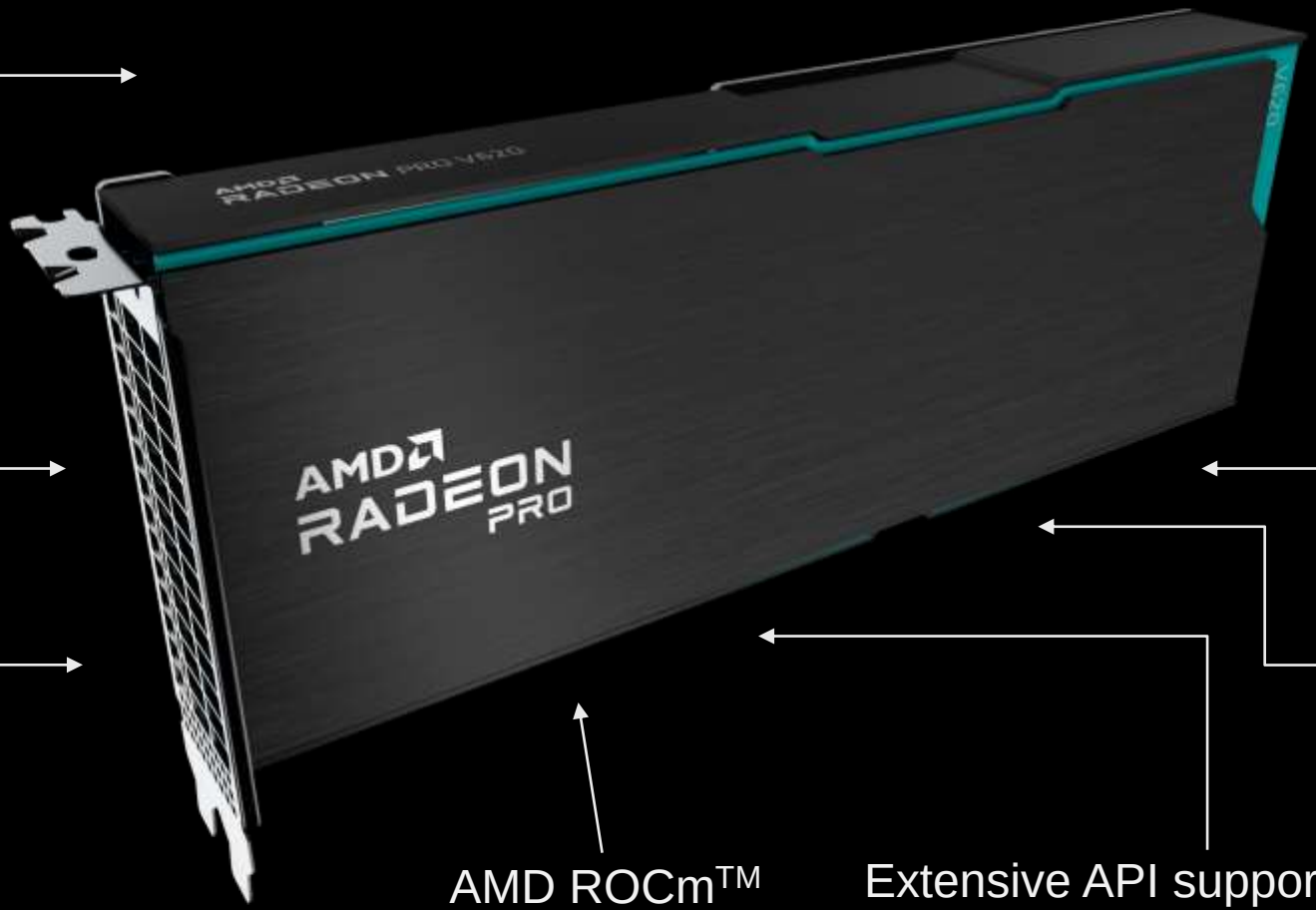
300W, full height, dual-slot, 10.5” Length, PCIe Gen4 x16

AMD RDNA™ 2 Architecture

32GB GDDR6 memory

2x VCN3.0 H.264, H.265

Built-in hardware Ray-tracing



SR-IOV GPU Virtualization

72 Compute Units

4,608 Stream processors

2,000 MHz Memory Clock

AMD ROCm™ Platform Support

Extensive API support: DirectX® 9-12, Vulkan, OpenGL OpenCL, HIP

[Public]

Azure® NGads V620 - Powered by AMD Radeon™ & AMD EPYC™ processors

Perfect for applications with…

- ✓ Graphics-intensive workloads
- ✓ Differing GPU requirements based on user type

Example workloads…

- ✓ Cloud Gaming
- ✓ GPU-accelerated VDI
- ✓ Multi-session remote desktop
- ✓ Professional Rendering

AMD Radeon™ PRO V620 GPU // EPYC™ 7763 CPU

Regularly updated AMD Windows Gaming Drivers

Support for Windows Server, Windows Desktop, and Linux

Bi-annual AMD PRO Drivers (Windows and Linux)

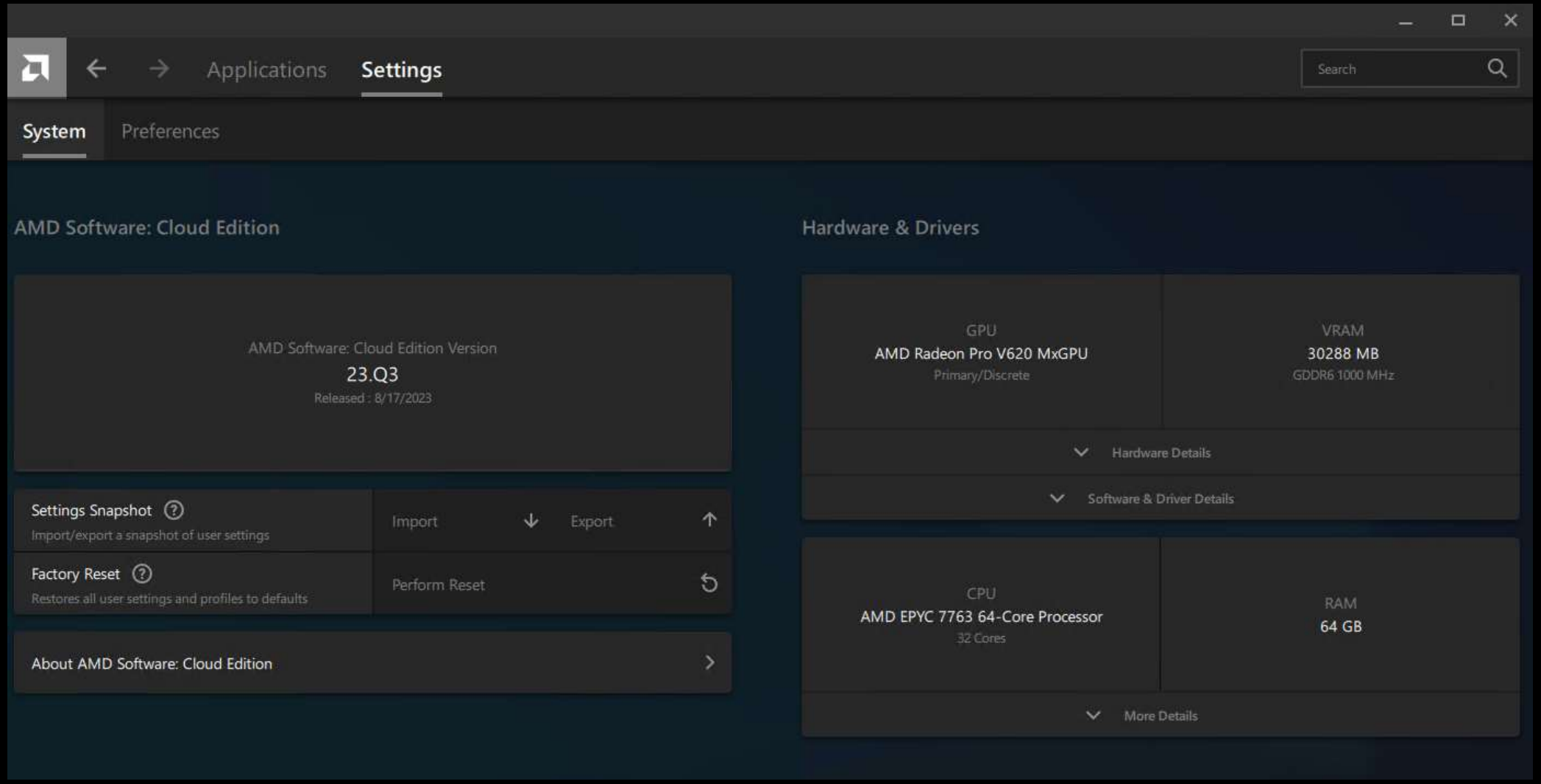
VM Name	NG8ads_V620	NG16ads_V620	NG32ads_V620	NG32adms_V620
GPU	1/4 V620 PCIe®	1/2 V620 PCIe®	1x V620 PCIe®	1x V620 PCIe®
GPU Memory per VM	8 GB	16 GB	32 GB	32 GB
CPU Cores	8	16	32	32
RAM	16 GB	32 GB	64 GB	176 GB
Temp Disk	256 GB	512 GB	1024 GB	1024 GB
NVMe Direct Disks	1x 960 GB	2x 960 GB	4x 960 GB	4x 960 GB
Max NICs / Expected b/w	2 / 10 GB/s	4 / 20 GB/s	8 / 40 GB/s	8 / 40 GB/s

Further NGads V620 details: https://learn.microsoft.com/en-us/azure/virtual-machines/ngads-v-620-series

[Public]

AMD Software: Cloud Edition

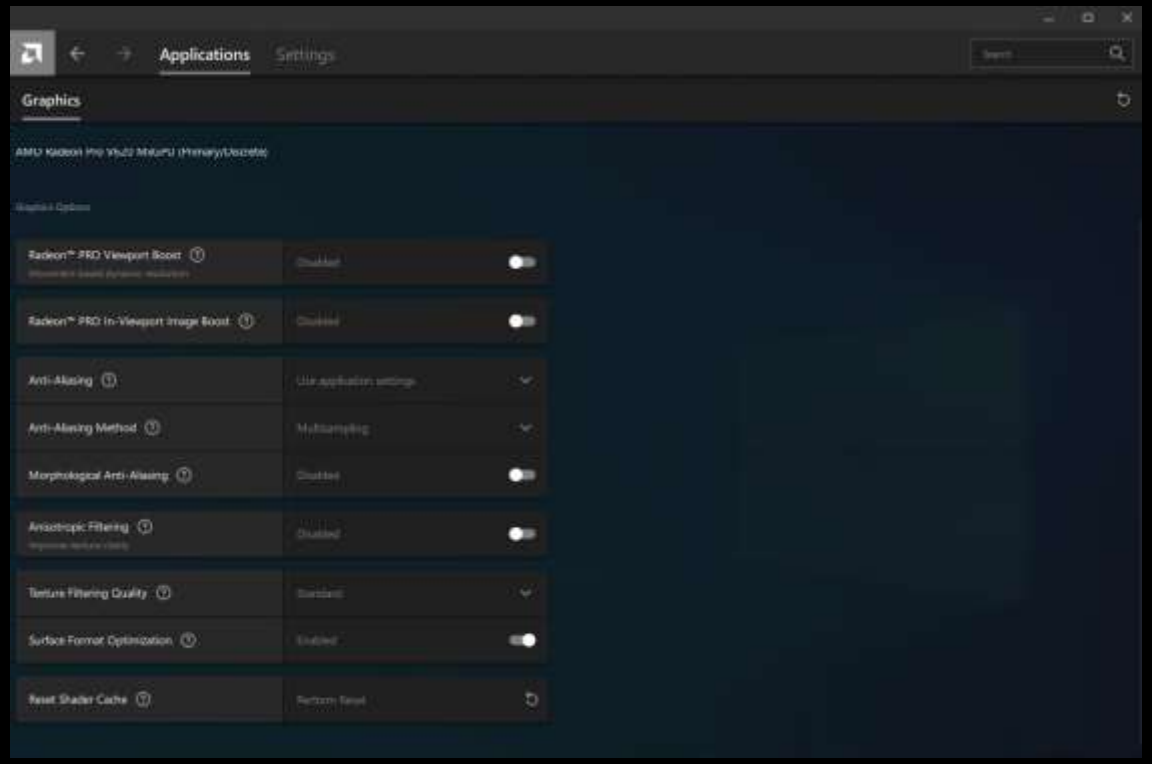
GPU and CPU Information



[Public]

AMD Software: Cloud Edition

Global and application-specific graphics settings



[Public]

AMD VIDEO ENCODER SUMMARY

Video Encoders	NAVI21
IP versions	VCN3.0
MM IPs	2 VCNs
H264 Encode	Bare Metal and SR-IOV 8-bit color depth
HEVC Encode	Bare Metal and SR-IOV 10-bit color depth
AV1 Encode	Not supported
SR-IOV Virtualized Encode	Yes
HW 2-pass encode	Yes
HW VBAQ – Variance based adaptive quantization	Yes
MB level RC for low-latency cloud gaming	Yes
HDR/WCG pre-processor for encode	Yes
Re-loadable search window	Yes
VP9 Encode	No

TOTAL THROUGHPUT

	NAVI21 2VCN
H.264 Encode	Up to 8b
1080p30	24 streams
1080p60	12 streams
4K60	2 streams
4K90	2 streams
H.265/HEVC Encode	Up to 10b
1080p30	24 streams
1080p60	12 streams
4K60	2 streams
4K90	2 streams

See endnote(s): GD-176.

[Public]

VIRTUAL DISPLAYS

NGads Instance	Virtual Displays
NG8ads, ¼ GPU	1 - 2 displays, 1080p up to 60 fps
NG16ads, ½ GPU	1 display, 4K up to 60 fps 2 - 4 displays, 1080p up to 60 fps
NG32ads, Full GPU	1 - 2 displays, 4K up to 60 fps 3 - 4 displays, 1080p up to 60 fps

[Public]

GPU MONITORING WITH AMD SMI

- System Management Interface (SMI) is a standard capability for future CG/VDI GPUs
  - API-based interface for simple integration with existing monitoring tools
- Provides consistent mechanism to access GPU information
  - Available from both host and guest (limited functionality from guest)
- Provides both static and dynamic data
  - Static data – Board, VBIOS, firmware info, etc.
  - Dynamic data – GPU and memory utilization, ECC error counts, etc

[Public]

```
C:\Users\amd>amdsmi.exe static
GPU 0:
VALUES:
    ASIC:
        MARKET_NAME: NAVI21
        VENDOR_ID: 0x1002
        DEVICE_ID: 0x73ae
        REV_ID: 0x0
        ASIC_SERIAL: 0x55fc1b2e19c2595
    BUS:
        BDF: 0002:00:00.0
        PCIE_LANES: 16
        PCIE_SPEED: 16000 MT/s
    VBIOS:
        NAME:
        VERSION: 020.001.000.071
        BUILD_DATE: 2023/02/06 10:09
        PART_NUMBER: 113-D6030120-104
    DRIVER:
        DRIVER_VERSION: 23.Q3
    RAS:
        SUPPORTED:
            DRAM_ECC: N/A
            SRAM_ECC: N/A
            POISONING: N/A
        ENABLED:
            DRAM_ECC: N/A
            SRAM_ECC: N/A
            POISONING: N/A
            NEEDS_REBOOT: N/A
    CAPS:
        GFX_IP_COUNT: 2
        DMA_IP_COUNT: 4
        GFX:
            GFXIP_MAJOR: 10
            GFXIP_MINOR: 3
            GFXIP_CU_COUNT: 72
```

```
C:\Users\amd>amdsmi.exe metric
GPU 0:
VALUES:
    USAGE:
        GFX_USAGE: 54 %
        MEM_USAGE: N/A
        MM_USAGE_LIST: [0] %
    FB_USAGE:
        FB_TOTAL: 15136 MB
        FB_USED: 417 MB
```

AGENDA

1. AMD GPU-accelerated Instances for AAA Gaming and Design
2. **User Experience, Performance and Costs with the Azure NGadsV620**

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System Performance
User Experience

System Performance
Applications/Tools Used

CPU-Z

CineBench

Crystal Disk Mark

Blender BenchMark CPU/GPU

EUC Score

IOMeter

EUX Score – Login Enterprise

SPEC 2020

Enscape

Autodesk Inventor

Autodesk Revit

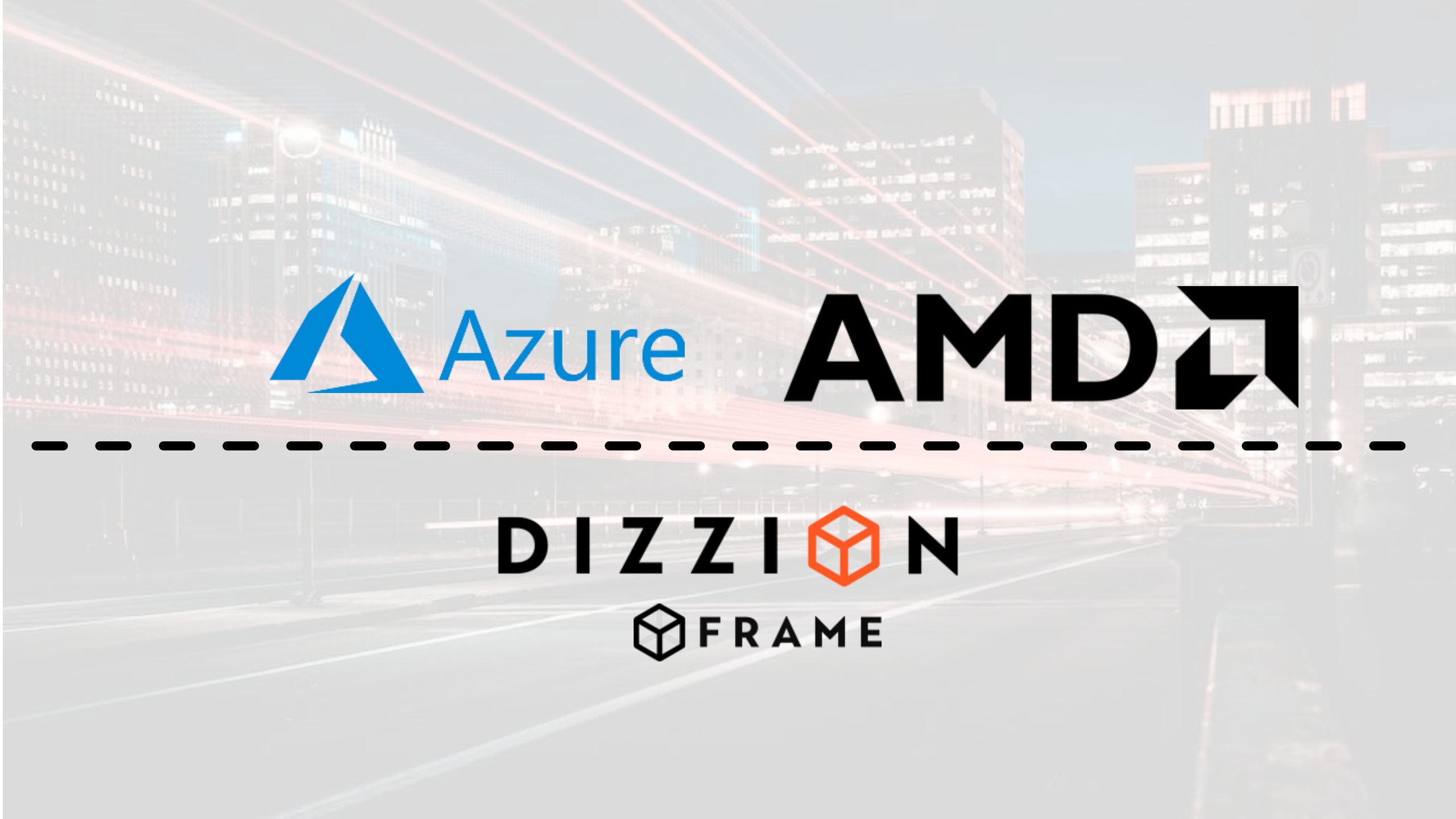
Autodesk VRED

Unreal Engine

vRay

KeyShot

MacroRecorder


Azure
AMD
DIZZION
FRAME

Cloud Workstations with GPU

GPU INSTANCE PERFORMANCE & COSTS - FULLHD

Instance	GPU	CPU Base Clock Speed	Max CPU Speed - single core	vCPUs	RAM	Storage Type	Storage Size	GPU	GPU RAM	GPU Driver	Display	OS	vRay 5 - CPU	vRay 5 - RTX GPU	Keyshot 11 - CPU	Keyshot 11 - GPU	Revit 2021 RFO - update (sec)	Revit 2021 RFO - create (sec)	Revit 2021 RFO - export (sec)	Revit 2021 RFO - Render (sec)	Revit 2021 RFO - Graphics (sec)	Revit 2021 RFO - Rotate (sec)	VRED 2023 - no AA	VRED 2023 - med AA	VRED 2023 - ultra high AA	Enscape 3.1 - sample	Unreal Engine 4.26 Audi - RT ON	Unreal Engine 4.26 Audi - RT OFF	Inventor 2023 - Modelling	Inventor 2023 - Drawing	Inventor 2023 - FEA	Inventor 2023 - MM	Inventor 2023 - Graphics	Inventor 2023 - IDT	Inventor 2023 - Data Translate	Inventor 2023 - Assy Pattern	Inventor 2023 - Assy Constraint	Inventor 2023 - ST	Inventor 2023 - IMT	Price
Microsoft Azure								rubengilfix.me																																		
Azure NV6_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	6	55 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2	1594	FAIL	5.49	4.8	18.7	187.8	346.9	141.7	48.6	4.13	34.0	23.6	9.2	41.0	FAIL	26.2	748	338	788	865	1714	312	557	826	834	7578	3197	1.32
Azure NV12_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	12	112 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2	1425	FAIL	5.66	4.6	14.4	178.9	321.9	104.9	49.2	3.96	34.0	23.6	9.2	42.1	FAIL	29.3	809	290	724	871	1778	760	749	679	851	7542	4080	1.84
Azure NV8as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	28 GiB	Premium-SSD	256GB	AMD MI25	4GB	22.10.01.11	FHD	Win10 22H2	6275	FAIL	8.64	FAIL	12.7	160.4	480.3	115.6	58.5	3.63	18.1	4.8	2.8	15.4	FAIL	6.8	396	177	670	539	1318	489	516	558	572	7312	4002	0.84
Azure NV16as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	56 GiB	Premium-SSD	256GB	AMD MI25	8GB	22.10.01.11	FHD	Win10 22H2	6208	FAIL	3.24	FAIL	13.0	149.4	455.1	92.8	44.5	3.49	17.4	9.4	4.9	27.1	FAIL	18.9	1236	491	879	774	1916	1382	934	897	783	9069	5407	1.38
Azure NC4asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	4	28 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	1903	580	8.44	15.5	12.7	147.3	480.9	190.1	61.2	3.84	65.6	27.7	18.2	74.6	25.1	41.1	776	502	669	1259	2251	889	626	901	1114	10164	3452	0.81
Azure NC8asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	56 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	4954	662	8.39	11.8	12.4	141.4	452.7	81.6	37.5	3.28	64.7	37.0	17.9	71.7	21.9	41.8	1000	755	987	1246	2243	854	678	908	1148	10473	3584	1.24
Azure NC16asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	110 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	9551	794	3.79	24.4	11.6	143.6	495.1	67.4	39.9	3.24	68.5	37.9	17.9	77.5	24.8	40.9	1321	857	681	1717	2313	1981	941	895	1162	10180	4179	2.14
Azure NV36adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	6	55 GiB	Premium-SSD	256GB	NVIDIA A10-4Q	4GB	512.78	FHD	Win10 22H2	3406	FAIL	8.67	8.8	9.2	115.0	351.2	112.6	37.1	2.78	19.5	12.6	7.5	2.1	FAIL	2.4	961	811	1005	1184	1968	715	865	1258	1367	12230	4953	0.82
Azure NV12adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	12	110 GiB	Premium-SSD	256GB	NVIDIA A10-8Q	8GB	512.78	FHD	Win10 22H2	7030	951	1.32	13.9	8.8	101.2	314.9	59.4	31.8	2.28	19.7	20.4	13.1	31.9	9.6	27.8	1274	1027	1101	1525	2618	1411	993	1169	1436	12755	7068	1.67
Azure NV36adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	36	440 GiB	Premium-SSD	256GB	NVIDIA A10 24Q	24GB	512.78	FHD	Win10 22H2	10289	1584	0.99	12.4	9.2	98.5	426.9	57.8	29.9	2.89	130.3	76.5	43.1	134.2	47.1	68.9	1702	1268	1668	1690	2617	1928	939	1312	1470	12439	9280	1.47
Azure NG8ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	8	16 GiB	Premium-SSD	256GB	AMD V620 1/4	6 GB	23.Q3	FHD	Win10 22H2	8023	FAIL	1.08	FAIL	10.5	125.8	426.9	78.4	45.9	3.15	31.9	17.8	10.7	30.5	1.9	26.2	1111	878	1094	1342	2452	950	817	952	1137	10579	5702	1.41
Azure NG16ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	16	64 GiB	Premium-SSD	256GB	AMD V620 1/12	16 GB	23.Q3	FHD	Win10 22H2	12127	FAIL	2.16	FAIL	10.5	122.7	385.4	63.9	39.3	3.29	56.3	44.5	29.4	69.7	19.4	50.6	1521	1026	992	1421	2506	1992	848	1165	1295	11740	7641	2.82
Azure NG32ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	32	64 GiB	Premium-SSD	256GB	AMD V620 1/1	32 GB	23.Q3	FHD	Win10 22H2	24664	FAIL	2.16	FAIL	10.5	131.8	370.4	27.0	31.1	2.43	66.0	80.0	44.1	31.7	40.4	128.0	1818	1128	962	1386	2624	1606	852	1109	1337	11456	6785	5.60
Physical Workstation								rubengilfix.me																																		
HP Z2 Mini G8	Intel Core i7-12700K	3.6 GHz	5.0 GHz	8P + 4E	32 GB	SSD	1TB	NVIDIA T1000	4GB	511.65	FHD	Win11	13288	N/A	2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.7	16.4	7.8	36.7	N/A	13.1	1913	1765	1328	2171	N/A	2707	1448	1675	2163	N/A	N/A	N/A
Scan 3XS GWP-ME A13C	Intel Core i9-11900K	3.0 GHz	5.3 GHz	8P-16E	64 GB	NVMe	2TB	NVIDIA RTX A2000	12GB	517.4	FHD	Win11	30952	3013	33.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	68.2	30.2	18.7	72.2	N/A	43.3	1907	2106	1475	2611	N/A	5796	1743	2327	2652	N/A	N/A	N/A
Armari Magnetar MA6TP-RW10B63	AMD Ryzen Threadripper Pro 5995WX	2.7 GHz	4.5 GHz	64	128 GB	NVMe	2TB	AMD Radeon Pro W6800	32GB	22.Q1	FHD	Win11	86481	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	44.3	44.9	25.0	80.4	N/A	101.4	1941	1894	1132	1449	N/A	11766	1118	1424	1701	N/A	N/A	N/A
Scan 3XS GWP-ME A11Z8T	AMD Ryzen Threadripper Pro 5995WX	2.7 GHz	4.5 GHz	64	128 GB	NVMe	2TB	NVIDIA RTX 6000 ada	48GB	526.24	FHD	Win11	33982	5277	187.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DIZZION

DIZZION

Date: 11/03/2023
Author: ruben@rfx.me
Credits: Greg Corke - Managing Editor and Co-Founder at AEC Magazine, DEVELOPED, NXT BLD; Director X3D Media
Version: v20032023
Notes: Results are indication - not exact science
results might vary
Copyright, contact us if you want to use content

Notes about pricing:
Price $/hour
On-demand pricing
Average composite price across all regions
Windows OS License included
Storage costs not included

TeamRGE
Remoting Graphics Experts

Instance	CPU	CPU Base Clock Speed	Max CPU Speed - single-core	vCPUs	RAM	Storage Type	Storage Size	GPU	GPU RAM	GPU Driver	Display	OS
Microsoft Azure								ruben@fra.me				
Azure NV6_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	6	55 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2
Azure NV12_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	12	112 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2
Azure NV8as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	28 GiB	Premium-SSD	256GB	AMD MI25	4GB	22.10.01.11	FHD	Win10 22H2
Azure NV16as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	56 GiB	Premium-SSD	256GB	AMD MI25	8GB	22.10.01.11	FHD	Win10 22H2
Azure NC4asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	4	28 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NC8asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	56 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NC16asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	110 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NV6adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	6	55 GiB	Premium-SSD	256GB	NVIDIA A10 4Q	4GB	512.78	FHD	Win10 22H2
Azure NV12adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	12	110 GiB	Premium-SSD	256GB	NVIDIA A10 8Q	8GB	512.78	FHD	Win10 22H2
Azure NV36adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	36	440 GiB	Premium-SSD	256GB	NVIDIA A10 24Q	24GB	512.78	FHD	Win10 22H2
Azure NG8ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	8	16 GiB	Premium-SSD	256GB	AMD V620 1/4	8 GB	23.Q3	FHD	Win10 22H2
Azure NG16ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	16	64 GiB	Premium-SSD	256GB	AMD V620 1/12	16 GB	23.Q3	FHD	Win10 22H2
Azure NG32ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	32	64 GiB	Premium-SSD	256GB	AMD V620 1/1	32 GB	23.Q3	FHD	Win10 22H2

GPU INSTANCE PERFORMANCE & COSTS - FULLHD

Instance	vRay 5 - CPU	vRay 5 - RTX GPU	Keyshot 11 - CPU	Keyshot 11 - GPU	Revit 2021 RFO - update (sec)	Revit 2021 RFO - create (sec)	Revit 2021 RFO - export (sec)	Revit 2021 RFO - Render (sec)	Revit 2021 RFO - Graphics (sec)	Revit 2021 RFO - Rotate (sec)	VRED 2023 - no AA	VRED 2023 - med AA	VRED 2023 - ultra high AA	Enscape 3.1 - sample	Unreal Engine 4.26 Audi - RT ON	Unreal Engine 4.26 Audi - RT OFF	Inventor 2023 - Modelling	Inventor 2023 - Drawing	Inventor 2023 - FEA	Inventor 2023 - SIM	Inventor 2023 - Graphics	Inventor 2023 - RT	Inventor 2023 - Data Translate	Inventor 2023 - Assy Pattern	Inventor 2023 - Assy Constraint	Inventor 2023 - ST	Inventor 2023 - MT	Price
Microsoft Azure					ruben@fra.me																			ruben@fra.me				
Azure NV6_v3	2594	FAIL	0.49	4.6	16.5	187.8	546.9	143.7	48.6	4.15	34.0	19.6	9.2	41.0	FAIL	26.2	748	539	709	865	1714	512	557	626	824	7576	3397	1.32
Azure NV12_v3	3425	FAIL	0.66	4.6	14.4	178.9	521.0	104.9	46.1	3.96	34.0	19.6	9.2	42.5	FAIL	26.5	806	590	724	891	1736	765	580	676	831	7942	4088	1.84
Azure NV8as_v4	3275	FAIL	0.64	FAIL	12.7	160.4	488.2	115.6	56.5	5.63	10.1	4.8	2.8	15.4	FAIL	4.4	896	577	876	539	1318	689	616	558	572	7312	4012	0.94
Azure NV16as_v4	6288	FAIL	1.24	FAIL	12.8	149.4	455.1	61.6	44.5	3.69	17.4	9.4	4.9	27.1	FAIL	18.5	1136	693	879	774	1936	1382	654	697	783	8669	5407	1.88
Azure NC4asT4_v3	2301	589	0.44	23.5	12.7	147.3	490.9	150.1	41.2	3.84	65.8	37.7	18.2	74.6	25.1	41.1	770	581	869	1259	2251	469	620	981	1116	10164	3452	0.81
Azure NC8asT4_v3	4954	662	0.89	23.6	12.4	141.4	452.7	81.6	37.5	3.28	64.7	37.0	17.9	71.7	23.9	41.8	1000	755	907	1244	2345	954	670	988	1148	10473	5064	1.24
Azure NC16asT4_v3	9533	734	1.79	24.6	12.6	143.6	455.1	47.4	39.9	3.23	63.5	37.9	17.9	77.5	24.8	40.9	1321	857	881	1217	2523	1981	681	895	1162	10240	6379	2.14
Azure NV6adsA10_v5	3404	FAIL	0.67	6.6	9.2	115.0	351.2	112.6	37.1	2.78	19.5	12.6	7.5	2.1	FAIL	2.6	961	811	1095	1384	1988	715	865	1256	1387	12236	4953	0.82
Azure NV12adsA10_v5	7030	351	1.32	13.9	8.8	101.2	314.3	56.4	31.0	2.28	39.7	25.4	15.1	51.5	FAIL	27.6	1274	1027	1101	1525	2616	1411	933	1165	1450	12735	7068	1.63
Azure NV36adsA10_v5	20283	1544	3.99	52.4	9.2	98.5	316.4	27.3	25.9	2.09	138.3	78.1	41.1	134.2	47.1	88.9	1742	1194	1040	1480	2937	3928	929	1312	1470	12409	9280	5.47
Azure NG8ads_V620_v1	6023	FAIL	1.08	FAIL	10.5	125.8	426.8	76.4	45.9	3.15	31.0	17.8	10.7	10.5	1.5	26.2	1111	870	1004	1342	2453	958	817	952	1137	10579	5702	1.41
Azure NG16ads_V620_v1	12127	FAIL	2.15	FAIL	10.5	122.2	385.4	43.0	36.3	3.26	56.3	34.5	20.6	20.7	19.4	50.6	1521	1026	992	1421	2906	1992	848	1045	1285	11740	7660	2.82
Azure NG32ads_V620_v1	24864	FAIL	2.16	FAIL	10.5	121.8	370.4	27.0	31.1	2.45	60.0	60.0	44.1	31.7	42.4	120.0	1616	1126	962	1366	2924	3308	852	1109	1337	11656	8785	5.60
Physical Workstation																								ruben@fra.me				
HP Z2 Mini G9	13288	N/A	2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30.7	16.4	7.8	36.7	N/A	13.1	1912	1745	1328	2171	N/A	2707	1440	1975	2163	N/A	N/A	N/A
Scan 3XS GWP-ME A13C	26952	1012	32.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	68.2	38.2	18.7	72.2	N/A	43.3	2307	2166	1473	2611	N/A	5706	1743	2327	2652	N/A	N/A	N/A
Armari Magnetar M64TP-RW1300G3	66461	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	44.3	38.9	29.0	40.4	N/A	101.4	1941	1394	1132	1449	N/A	11744	1124	1424	1701	N/A	N/A	N/A
Scan 3XS GWP-ME A1128T	59982	5277	187.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DIZZION

Date: 11/03/2023
Author: ruben@fra.me
Credits: Greg Corke - Managing Editor and Co-founder at AEC Magazine, DEVELOP3D, NXT BLD. Director X3D Media
Version v10312023
Notes: Results are indication - not exact science
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Price $/hour
On-demand pricing
Average compute price across all regions
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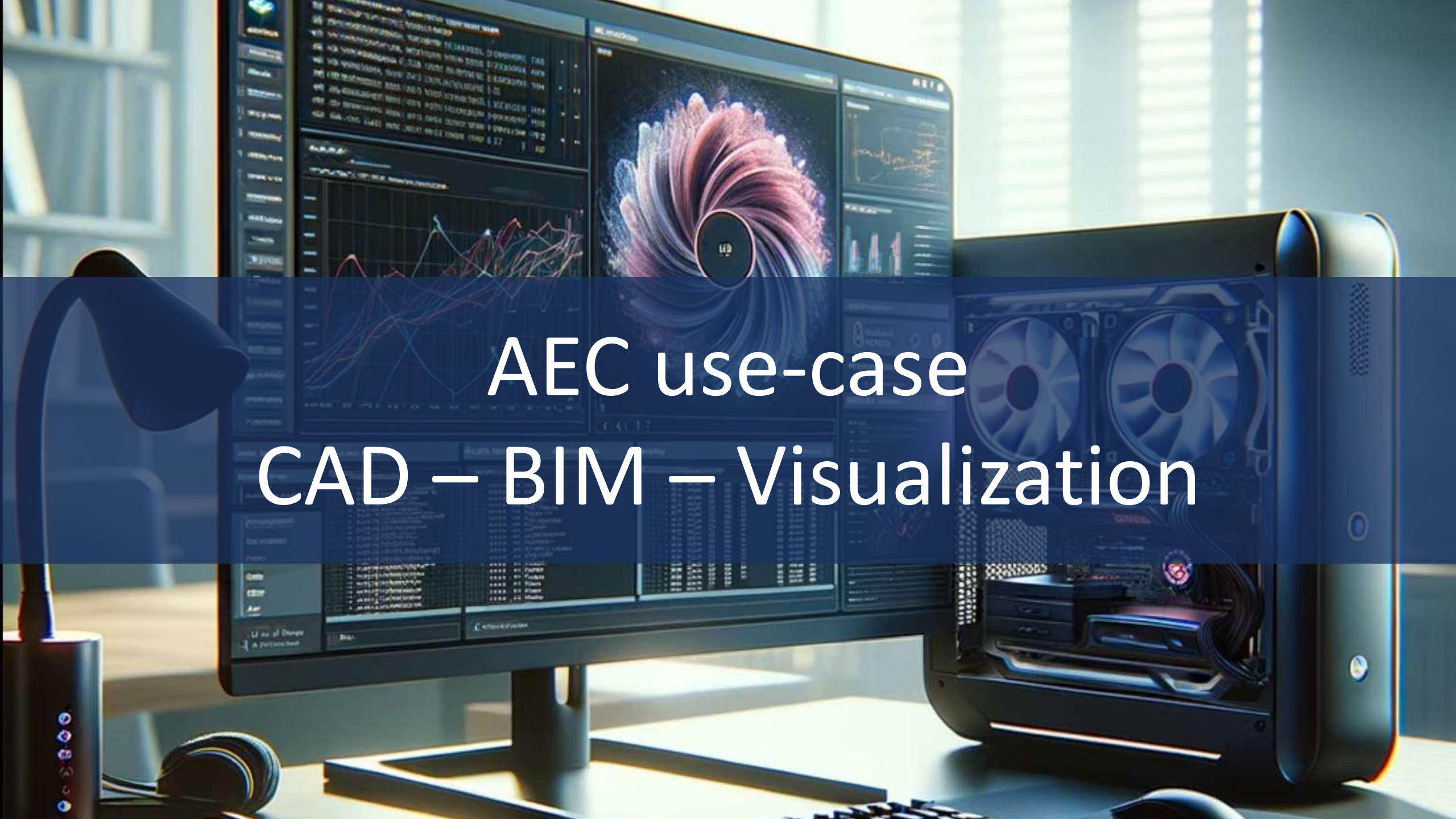

AEC use-case
CAD – BIM – Visualization

GPU INSTANCE PERFORMANCE & COSTS – FULLHD - **AEC**

Instance	CPU	CPU Base Clock Speed	Max CPU Speed - Single core	vCPUs	RAM	Storage Type	Storage Size	GPU	GPU RAM	GPU Driver	Display	OS	vRay 5 - CPU	vRay 5 - RTX GPU	Keyshot 11 - CPU	Keyshot 11 - GPU	Revit 2023 RFO - update (sec)	Revit 2023 RFO - create (sec)	Revit 2023 RFO - export (sec)	Revit 2023 RFO - Render (sec)	Revit 2023 RFO - Graphics (sec)	Revit 2023 RFO - Rotate (sec)	VRED 2023 - no AA	VRED 2023 - med AA	VRED 2023 - ultra high AA	Lmscape 3.1 - sample	Unreal Engine 4.26 Audi - RT ON	Unreal Engine 4.26 Audi - RT OFF	Inventor 2023 - Modelling	Inventor 2023 - Drawing	Inventor 2023 - FEA	Inventor 2023 - MBD	Inventor 2023 - Graphics	Inventor 2023 - RT	Inventor 2023 - Data Translate	Inventor 2023 - Assy Pattern	Inventor 2023 - Assy Constraint	Inventor 2023 - ST	Inventor 2023 - MT	Price
Microsoft Azure								rubengriffin.me																																
Azure NV6_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	6	55 GB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2	2284	FAIL	0.49	4.6	28.2	287.8	546.9	143.7	48.6	4.15	34.3	19.8	9.2	41.0	FAIL	26.2	748	589	709	865	1734	312	337	628	824	7176	1337	1.32
Azure NV12_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	12	112 GB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2	1429	FAIL	0.66	8.8	14.4	178.9	321.0	104.9	46.1	3.96	34.0	19.6	9.2	42.5	FAIL	35.5	886	690	724	891	1736	465	390	676	831	7042	4000	1.84
Azure NV36ai_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	28 GiB	Premium-SSD	256GB	AMD MI25	4GB	22.10.01.11	FHD	Win10 22H2	1275	FAIL	0.84	FAIL	12.7	180.6	408.2	115.6	56.3	5.63	40.1	4.6	2.8	15.4	FAIL	4.4	886	577	976	934	1358	488	636	558	772	7212	4812	0.94
Azure NV18ds_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	18	56 GiB	Premium-SSD	256GB	AMD MI25	8GB	22.10.01.11	FHD	Win10 22H2	6288	FAIL	1.24	FAIL	12.8	149.4	455.1	81.8	44.3	5.49	37.4	8.4	4.9	27.1	FAIL	18.9	1139	893	875	774	1936	1302	694	857	781	8689	5407	1.86
Azure NC4asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	4	28 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	2181	188	0.44	20.3	12.7	147.1	406.0	158.1	41.2	3.84	45.8	17.7	18.3	74.8	28.1	41.1	730	581	869	1259	2251	469	620	986	1118	10104	3412	0.81
Azure NC8asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	56 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	4894	382	0.89	25.0	12.4	141.6	452.7	81.8	37.3	3.28	84.7	17.0	17.9	71.7	23.9	41.8	1008	759	937	1244	2340	934	670	788	1148	16473	5004	1.24
Azure NC16asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	110 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2	9593	768	1.79	26.6	12.8	165.6	495.1	87.8	39.9	3.25	84.5	17.9	17.9	77.5	24.8	40.9	1325	897	891	1217	2523	1901	681	899	1162	16388	6179	2.56
Azure NV6adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	6	55 GiB	Premium-SSD	256GB	NVIDIA A10 4Q	4GB	512.78	FHD	Win10 22H2	3494	FAIL	0.67	8.6	8.3	115.0	351.2	112.6	37.1	2.76	29.1	12.6	9.3	8.3	FAIL	3.8	941	611	6095	1336	1988	713	665	1258	1367	12258	4553	0.82
Azure NV12ads_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	12	110 GiB	Premium-SSD	256GB	NVIDIA A10 8Q	8GB	512.78	FHD	Win10 22H2	7030	353	1.32	13.9	8.8	101.2	314.5	96.4	31.0	2.28	89.7	29.4	19.1	51.9	FAIL	27.8	1274	1027	1191	1319	2616	1411	993	1165	1408	12759	7990	1.49
Azure NV18adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	18	440 GiB	Premium-SSD	256GB	NVIDIA A10 24Q	24GB	512.78	FHD	Win10 22H2	20203	1544	3.98	52.4	8.3	84.3	316.4	77.3	25.9	2.09	136.3	78.1	41.1	144.3	47.1	66.9	1742	1184	1048	1460	2917	2428	920	1312	1478	12409	9295	3.47
Azure NG8ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	8	16 GiB	Premium-SSD	256GB	AMD V620 1/4	4 GB	23.Q3	FHD	Win10 22H2	8023	FAIL	1.38	FAIL	10.5	125.8	426.8	76.4	45.9	3.15	81.8	17.8	10.7	10.5	3.8	20.2	1111	870	1004	1342	2453	918	817	952	1137	10579	5702	1.41
Azure NG16ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	16	64 GiB	Premium-SSD	256GB	AMD V620 1/12	16 GB	23.Q3	FHD	Win10 22H2	12127	FAIL	2.15	FAIL	10.1	122.2	389.4	83.8	46.3	3.26	96.4	34.3	20.4	20.7	19.4	30.6	1521	1026	992	1421	2998	1992	840	1060	1265	11788	7660	2.82
Azure NG32ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	32	64 GiB	Premium-SSD	256GB	AMD V620 1/1	32 GB	23.Q3	FHD	Win10 22H2	24894	FAIL	2.16	FAIL	10.3	121.8	370.4	77.0	33.1	2.40	80.0	68.0	44.1	51.7	42.4	120.8	1618	1128	961	1308	2894	1308	852	1109	1337	13456	8785	5.89
Physical Workstations								rubengriffin.me																																
HP Z2 Mini G9	Intel Core i7-12700K	3.6 GHz	5.0 GHz	8P - 4E	32 GB	SSD	1TB	NVIDIA T1000	4GB	511.65	FHD	Win11	11288	N/A	2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30.7	18.4	7.9	36.7	N/A	13.1	1912	1745	1328	2171	N/A	2707	1440	1975	2163	N/A	N/A	N/A
Scan 3XS GWP-ME A13C	Intel Core i5-13900K	3.0 GHz	5.8 GHz	8P-16E	64 GB	NVMe	2TB	NVIDIA RTX A2000	12GB	517.4	FHD	Win11	26952	1012	52.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88.2	58.2	38.7	72.2	N/A	45.5	2507	2188	1475	2811	N/A	5708	1743	2327	2852	N/A	N/A	N/A
Armari Magnetar M64TP-RW1300G3	AMD Ryzen Threadripper Pro 5995WX	2.7 GHz	4.5 GHz	64	128 GB	NVMe	2TB	AMD Radeon Pro W6800	32GB	22.Q3	FHD	Win11	66461	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.3	38.9	29.0	80.6	N/A	101.4	1941	1394	1132	1469	N/A	11744	1128	1424	1701	N/A	N/A	N/A
Scan 3XS GWP-ME A1128T	AMD Ryzen Threadripper Pro 5995WX	2.7 GHz	4.5 GHz	64	128 GB	NVMe	2TB	NVIDIA RTX 6000 ada	48GB	528.24	FHD	Win11	59563	5277	107.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DIZZION

DIZZION

Date: 11/01/2023
Author: ruben@fix.me
Credits: Greg Corke - Managing Editor and Co-Founder at AEC Magazine, DEVELOPER, NXT BLD. Director XSD Media
Version: v10012023
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Notes about pricing:
Price $/hour
On-demand pricing
Average compute price across all regions
Windows OS License included
Storage costs not included

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Instance	CPU	CPU Base Clock Speed	Max CPU Speed - single-core	vCPUs	RAM	Storage Type	Storage Size	GPU	GPU RAM	GPU Driver	Display	OS
Microsoft Azure								ruben@fra.me				
Azure NV6_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	6	55 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2
Azure NV12_v3	Intel Xeon E5-2690v3 - Haswell	2.60 GHz	3.5 GHz	12	112 GiB	Standard-SSD	256GB	NVIDIA M60	8GB	512.78	FHD	Win10 22H2
Azure NV8as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	28 GiB	Premium-SSD	256GB	AMD MI25	4GB	22.10.01.11	FHD	Win10 22H2
Azure NV16as_v4	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	56 GiB	Premium-SSD	256GB	AMD MI25	8GB	22.10.01.11	FHD	Win10 22H2
Azure NC4asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	4	28 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NC8asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	8	56 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NC16asT4_v3	AMD EPYC 7V12 - Rome	2.45 GHz	3.3 GHz	16	110 GiB	Premium-SSD	256GB	NVIDIA T4	16GB	512.78	FHD	Win10 22H2
Azure NV6adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	6	55 GiB	Premium-SSD	256GB	NVIDIA A10 4Q	4GB	512.78	FHD	Win10 22H2
Azure NV12adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	12	110 GiB	Premium-SSD	256GB	NVIDIA A10 8Q	8GB	512.78	FHD	Win10 22H2
Azure NV36adsA10_v5	AMD EPYC 74F3 - Milan	3.2 GHz	4.0 GHz	36	440 GiB	Premium-SSD	256GB	NVIDIA A10 24Q	24GB	512.78	FHD	Win10 22H2
Azure NG8ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	8	16 GiB	Premium-SSD	256GB	AMD V620 1/4	8 GB	23.Q3	FHD	Win10 22H2
Azure NG16ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	16	64 GiB	Premium-SSD	256GB	AMD V620 1/12	16 GB	23.Q3	FHD	Win10 22H2
Azure NG32ads_V620_v1	AMD EPYC 7763 - Genoa	2.45 GHz	3.5 GHz	32	64 GiB	Premium-SSD	256GB	AMD V620 1/1	32 GB	23.Q3	FHD	Win10 22H2

Instance	vRay 5 - CPU	vRay 5 - RTX GPU	Keyshot 11 - CPU	Keyshot 11 - GPU	Revit 2021 RFO - update (sec)	Revit 2021 RFO - create (sec)	Revit 2021 RFO - export (sec)	Revit 2021 RFO - Render (sec)	Revit 2021 RFO - Graphics (sec)	Revit 2021 RFO - Rotate (sec)	VRED 2023 - no AA	VRED 2023 - med AA	VRED 2023 - ultra high AA	Enscape 3.1 - sample	Unreal Engine 4.26 Audi - RT ON	Unreal Engine 4.26 Audi - RT OFF	Inventor 2023 - Modelling	Inventor 2023 - Drawing	Inventor 2023 - FEA	Inventor 2023 - SIM	Inventor 2023 - Graphics	Inventor 2023 - RT	Inventor 2023 - Data Translate	Inventor 2023 - Assy Pattern	Inventor 2023 - Assy Constraint	Inventor 2023 - ST	Inventor 2023 - MT	Price
Microsoft Azure					ruben@fra.me																			ruben@fra.me				
Azure NV6_v3	2594	FAIL	0.49	4.6	16.5	187.8	546.9	143.7	48.6	4.15	34.0	19.6	9.2	41.0	FAIL	26.2	748	539	709	865	1714	512	557	626	824	7576	3397	1.32
Azure NV12_v3	3425	FAIL	0.66	4.6	14.4	178.9	521.0	104.9	46.1	3.96	34.0	19.6	9.2	42.5	FAIL	26.5	806	590	724	891	1736	765	580	676	831	7942	4088	1.84
Azure NV8as_v4	3275	FAIL	0.64	FAIL	12.7	160.4	488.2	115.6	56.5	5.63	10.1	4.8	2.8	15.4	FAIL	4.4	896	577	876	539	1318	689	616	558	572	7312	4012	0.94
Azure NV16as_v4	6288	FAIL	1.24	FAIL	12.8	149.4	455.1	61.6	44.5	3.69	17.4	9.4	4.9	27.1	FAIL	18.5	1136	693	879	774	1936	1382	654	697	783	8669	5407	1.88
Azure NC4asT4_v3	2301	589	0.44	23.5	12.7	147.3	490.9	150.1	41.2	3.84	65.8	37.7	18.2	74.6	25.1	41.1	770	581	869	1259	2251	469	620	981	1116	10164	3452	0.81
Azure NC8asT4_v3	4954	662	0.89	23.6	12.4	141.4	452.7	81.6	37.5	3.28	64.7	37.0	17.9	71.7	23.9	41.8	1000	755	907	1244	2345	954	670	988	1148	10473	5064	1.24
Azure NC16asT4_v3	9533	734	1.79	24.6	12.6	143.6	455.1	47.4	39.9	3.23	63.5	37.9	17.9	77.5	24.8	40.9	1321	857	881	1217	2523	1981	681	895	1162	10240	6379	2.14
Azure NV6adsA10_v5	3404	FAIL	0.67	6.6	9.2	115.0	351.2	112.6	37.1	2.78	19.5	12.6	7.5	2.1	FAIL	2.6	961	811	1095	1384	1988	715	865	1256	1387	12236	4953	0.82
Azure NV12adsA10_v5	7030	351	1.32	13.9	8.8	101.2	314.3	56.4	31.0	2.28	39.7	25.4	15.1	51.5	FAIL	27.6	1274	1027	1101	1525	2616	1411	933	1165	1450	12735	7068	1.63
Azure NV36adsA10_v5	20283	1544	3.99	52.4	9.2	98.5	316.4	27.3	25.9	2.09	138.3	78.1	41.1	134.2	47.1	88.9	1742	1194	1040	1480	2937	3928	929	1312	1470	12409	9280	5.47
Azure NG8ads_V620_v1	6023	FAIL	1.08	FAIL	10.5	125.8	426.8	76.4	45.9	3.15	31.0	17.8	10.7	10.5	1.5	26.2	1111	870	1004	1342	2453	958	817	952	1137	10579	5702	1.41
Azure NG16ads_V620_v1	12127	FAIL	2.15	FAIL	10.5	122.2	385.4	43.0	36.3	3.26	56.3	34.5	20.6	20.7	19.4	50.6	1521	1026	992	1421	2906	1992	848	1045	1285	11740	7660	2.82
Azure NG32ads_V620_v1	24864	FAIL	2.16	FAIL	10.5	121.8	370.4	27.0	31.1	2.45	60.0	60.0	44.1	31.7	42.4	120.0	1616	1126	962	1366	2924	3308	852	1109	1337	11656	8785	5.60
Physical Workstation																								ruben@fra.me				
HP Z2 Mini G9	13288	N/A	2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30.7	16.4	7.8	36.7	N/A	13.1	1912	1745	1328	2171	N/A	2707	1440	1975	2163	N/A	N/A	N/A
Scan 3XS GWP-ME A13C	26952	1012	32.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	68.2	38.2	18.7	72.2	N/A	43.3	2307	2166	1473	2611	N/A	5706	1743	2327	2652	N/A	N/A	N/A
Armari Magnetar M64TP-RW1300G3	66461	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	44.3	38.9	29.0	40.4	N/A	101.4	1941	1394	1132	1449	N/A	11744	1124	1424	1701	N/A	N/A	N/A
Scan 3XS GWP-ME A1128T	59982	5277	187.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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System Performance
User Experience

User Experience and Performance Data

IaaS: AWS, Azure, GCP GPU instances

Apps: Autodesk Revit, Inventor, VRED, Unreal Engine and Enscape

Network: LAN, WAN (2/4/8 Mbps – 10/60/110ms RTT)

Resolution: Full HD and 4K resolution

Color space: YUV420 & YUV444

Results: 40+ studies, 200+ scores

END USER EXPERIENCE TESTING - THE EUC SCORE PLAYER INTERFACE

1. Cloud and instance type (e.g. Azure NC8asT4_V3)
2. Latency and network bandwidth
3. Click for detailed information about the VM specs, connection and endpoint
4. Click to maximimise the viewport
5. Viewport playback (examine for compression / responsiveness to mouse movements, etc)
6. Task Manager showing resources used at the endpoint (not the cloud workstation)
7. Timeline (play back in real time or scrub up and down, as necessary)

a. Actual CPU utilisation
b. Quantisation Priority (QP) (level of compression being applied to the video stream)
c. Performance in the viewport (Frames Per Second)
d. Round trip network latency
e. Actual network bandwidth used
f. Actual GPU utilisation of Nvidia GPUs with select applications
g. GPU memory utilisation
h. GPU utilisation for encoding the video stream (H.264)

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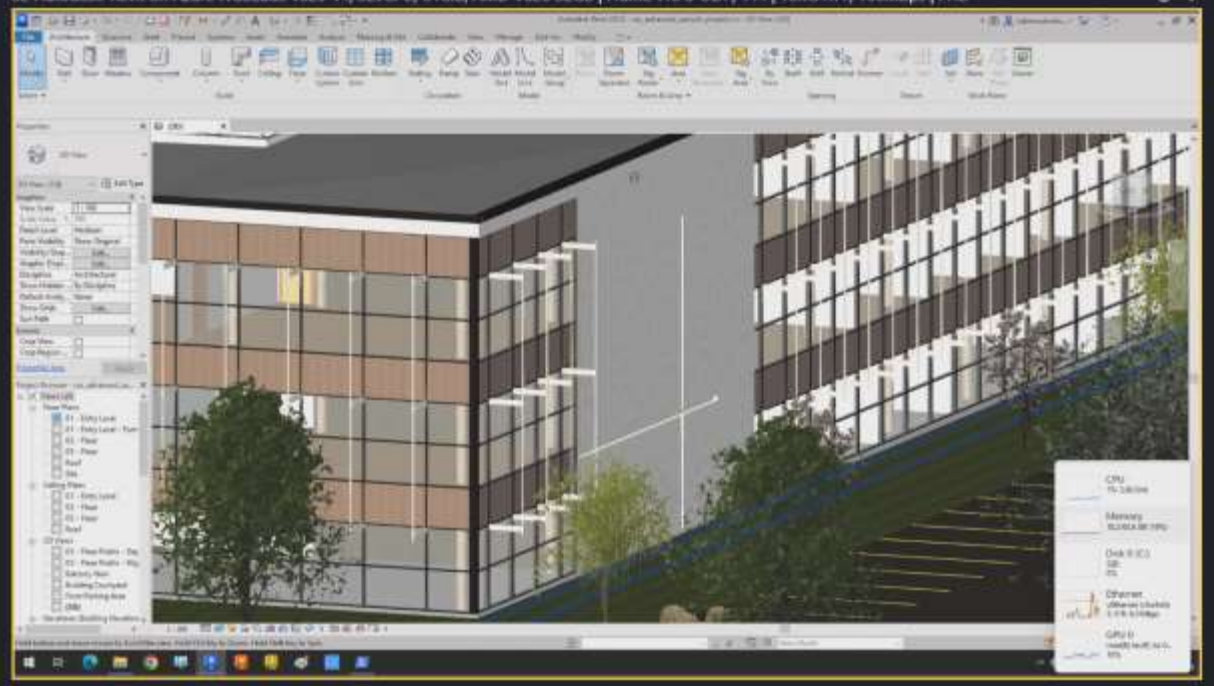
Remoting Graphics Experts

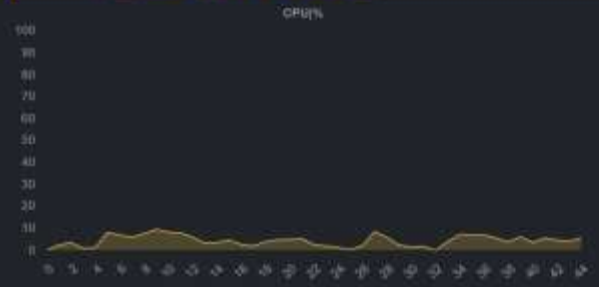
DIZZION Autodesk-Revit Available Telemetry Data: FRAME CPU GPU STD

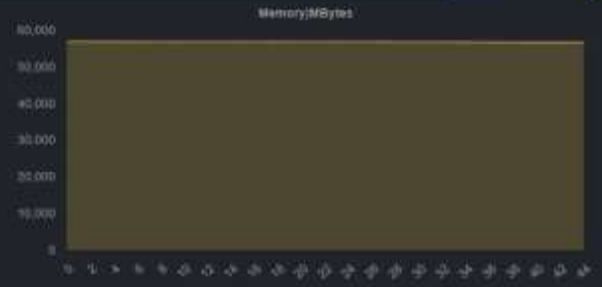
SL-Autodesk-Revit on Azure NG32ads-v620-v1, 32vCPU, 64GiB, AMD V620 32GB | Frame-FRPB-UDP, 444 | 10ms RTT, 100Mbps | FHD

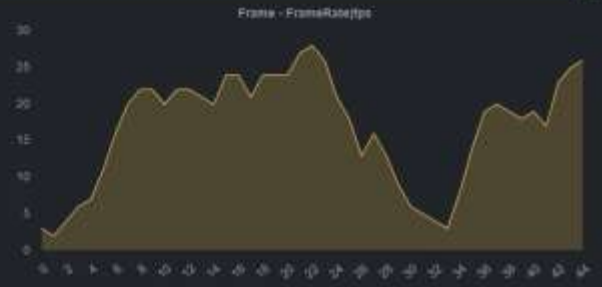


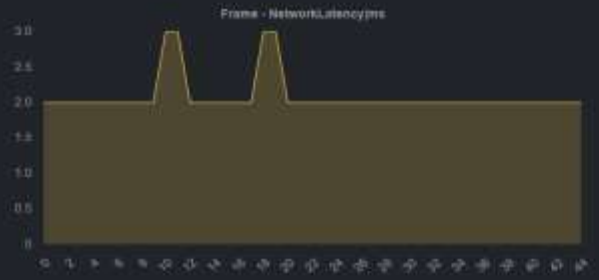
SL-Autodesk-Revit on Azure NG32ads-v620-v1, 32vCPU, 64GiB, AMD V620 32GB | Frame-FRPB-UDP, 444 | 10ms RTT, 100Mbps | FHD

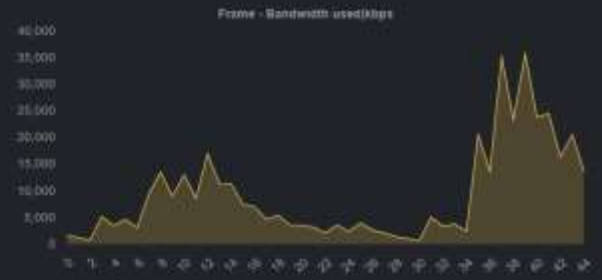
```
00:00:01.000  Date: 2023/05/03 Time: 09:30:00.000 AppName: Unknown
00:00:01.015  SL-Dummy: Start custom workload
00:00:11.000  10 seconds
00:00:21.000  20 seconds
00:00:31.000  30 seconds
00:00:41.000  40 seconds
```

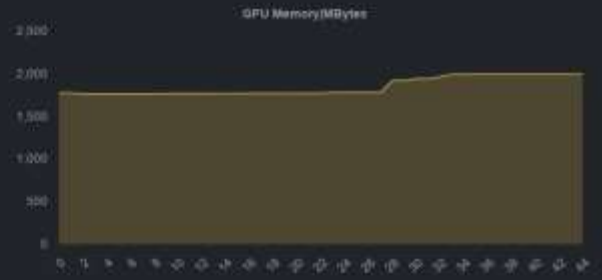




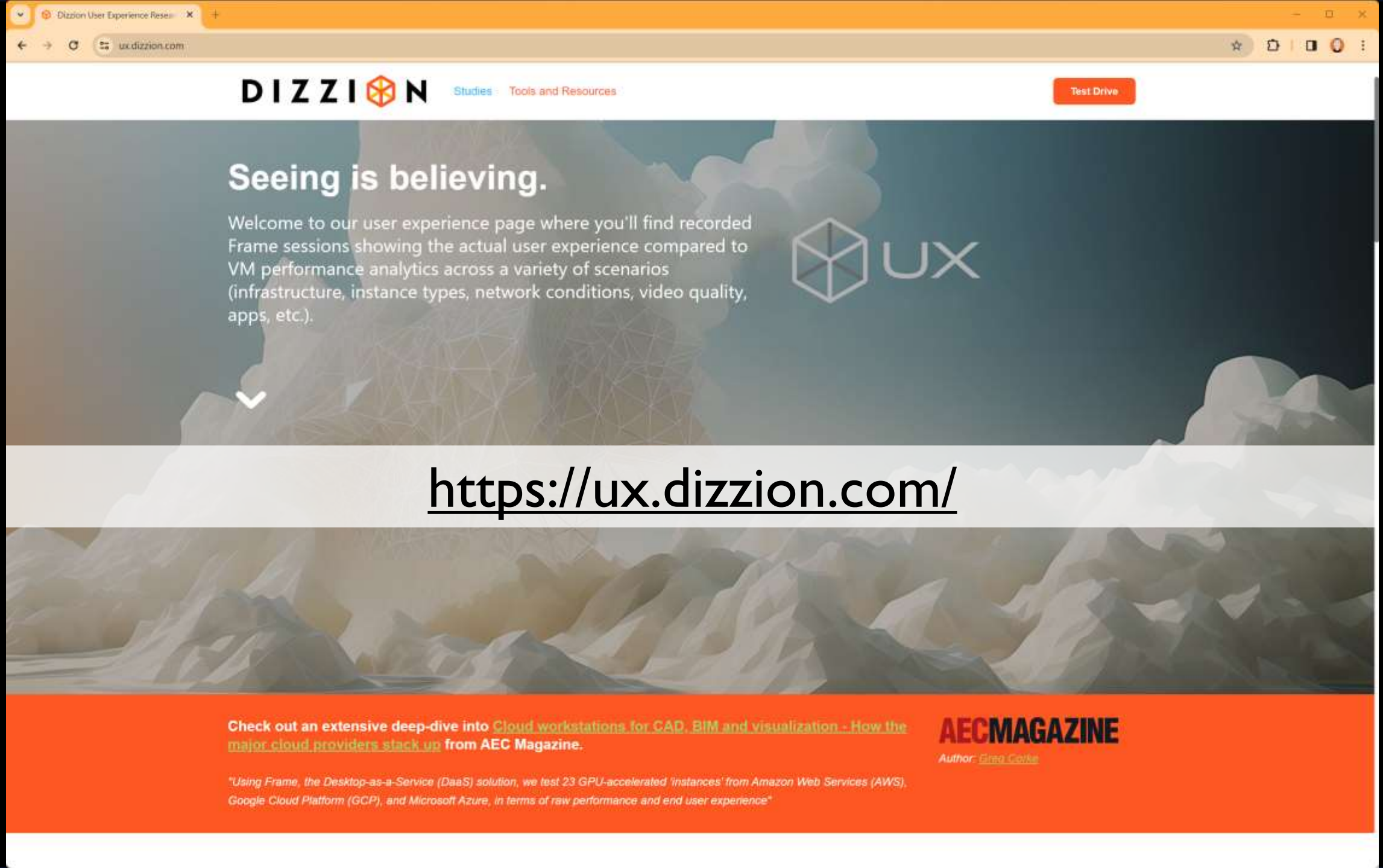








00:00:46 00:00:46 Help Report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Studies
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Test Drive
Seeing is believing.
Welcome to our user experience page where you'll find recorded Frame sessions showing the actual user experience compared to VM performance analytics across a variety of scenarios (infrastructure, instance types, network conditions, video quality, apps, etc.).
UX
https://ux.dizzion.com/
Check out an extensive deep-dive into Cloud workstations for CAD, BIM and visualization - How the major cloud providers stack up from AEC Magazine.
"Using Frame, the Desktop-as-a-Service (DaaS) solution, we test 23 GPU-accelerated 'instances' from Amazon Web Services (AWS), Google Cloud Platform (GCP), and Microsoft Azure, in terms of raw performance and end user experience"
AECMAGAZINE
Author: Greg Corke

FINDINGS

- Azure NGads_V620 (AMD V620 GPU) has great CPU and GPU; Performance is great.
- Entry level NG8ads_V620 with ¼ of GPU is great for AEC Design Apps.
- The NG16ads_V620 with ½ of GPU is great for AEC Design and Visualization
- Azure NGads_V620 ¼ and ½ GPU – understand limitations with regards to MultiMonitor and FHD/4K resolution, encoding/decoding.
- Azure Ngads_V620 with full GPU is providing great performance at FHD and 4K
- RealTime RayTracing (RT), check application updates, check AMD driver – often doesn't work.

FINDINGS

- Overall the NGads_V620 with AMD Genoa CPU at 2.45 GHz and AMD Radeon V620 GPU provides slightly better performance than the Azure NCasT4_v3 with AMD 7V12 Rome CPU at 2.45 GHz and a dedicated NVIDIA T4 GPU.
- Overall the NGads_V620 with AMD Genoa CPU at 2.45 GHz and AMD Radeon V620 GPU provides slightly better performance than the Azure NVadsA10_v5 machines with AMD 74F3 Milan CPU with an NVIDIA A10 GPU.
- NG32adms_V620_v1 has 176GB of RAM (32 vCPU and dedicated V620) – don't see much usage for EUC here
- Azure NGads_V620 (AMD V620 GPU) price isn't as great / low as expected (since no GPU licensing). Power consumption … ?!
- Availability of Ngads_V620 is attention! (quota and regions)

THANK YOU

Ruben Spruijt
Field CTO at Dizzion
ruben@dizzion.com

Joe DaSilva
PMTS, Solutions Architect,
Cloud Graphics at AMD

TeamRGE
Remoting Graphics Experts
WWW.TEAMRGE.COM

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