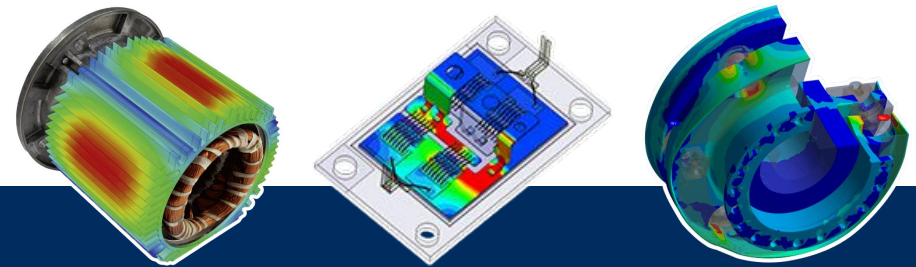


CADFEM[®]



Simulation is more than Software.



CADFEM Amazon Cloud

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CADFEM Amazon Cloud

What is AWS?

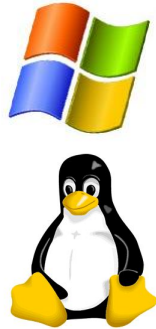
- AWS (Amazon Web Services) is the delivery of on-demand compute power and IT resources via the internet with pay-as-you-go-pricing



What is CADFEM Amazon Cloud?

- Secure access to AWS through the CADFEM Self Service Portal
- All ANSYS software pre-installed and configured
- Launch single Windows/Linux Machines
- Launch Windows/Linux Clusters and dynamically add slaves
- Add hard disk space
- Monitor and control usage costs
- Hybrid model – combine with on premise resources

CADFEM Amazon Cloud



What you Want, When you Want it, Pay-as-you-use

- Windows and Linux
- Single Machines with 4GB to 1952 GB RAM
- Single Machine with 2 to 64 cpus
- Build clusters up to and beyond 1024 cores
- NVIDIA K520, M60, V100



Typical High Value Use Cases

- Very Large Models – more RAM, more cpus
- Meet Short Term Project Demands
- NVIDIA for Discovery Live, ROCKY...



Costs

- €500 Account Set Up, then pay for what you use
- Windows €0.20 per cpu hour - €0.10 using Spot Pricing
- Linux €0.10 per cpu hour - €0.02 using Spot Pricing
- g3 (suitable for Discovery) - €1.8 per hour
- p3 (suitable for ROCKY) - €3.6 per hour



The Need for Speed – HPC Value Statement : Mechanical

np	run time	Mechanical Premium	HPC	AWS	Total Cost per Simulation	Simulations per Day
4	7.1	€26.66	€0.00	€2.86	€29.52	3.4
12	2.4	€8.89	€5.66	€2.86	€17.41	10.1
36	0.8	€2.96	€3.78	€2.86	€9.60	30.2
132	0.2	€0.81	€1.54	€2.86	€5.21	110.9

The Need for Speed – HPC Value Statement : CFD

np	run time	ANSYS CFD	ANSYS HPC	AWS	Total Cost per Simulation	Simulations per Day
4	55.6	€280.44	€0.00	€22.22	€302.66	0.4
12	18.5	€93.48	€44.06	€22.22	€159.76	1.3
36	6.2	€31.16	€29.37	€22.22	€82.75	3.9
132	1.7	€8.50	€12.02	€22.22	€42.74	14.3
516	0.4	€2.17	€4.10	€22.22	€28.49	55.7