

## PEER 1 Hosting GPU Cloud powered by NVIDIA®

Massive Processing Power – Zero Administration - Affordable for Everyone

PEER 1 Hosting leads the way in High Performance Cloud Computing using the latest Graphics Processing Units (GPU).

Mention Supercomputing—or High Performance Computing (HPC)—and invariably people think of the enormous, infrastructure and power needed to take advantage of HPC performance. Supercomputers have traditionally been built on a simple principle of massive amounts of CPUs engaged in massive parallel processing. Huge numbers of CPUs mean enormous costs—environmental, infrastructural and operational—and demand significant expertise in managing, monitoring and maintaining them. Given that model, it's clear why HPC has traditionally been something only big budget organizations could exploit.

### HIGH PERFORMANCE CLOUD COMPUTING FOR ALL

In early 2010, two technologies—and the innovative people at PEER 1 Hosting—changed all that.

- 1 *NVIDIA's Tesla™ family of Graphic Processing Units (GPUs) provided the processing power of many CPUs on a single card.*
- 2 *Private clouds made critical computing without an in-house infrastructure fast, reliable and safe.*

PEER 1 Hosting brings the two together to deliver affordable High Performance Cloud Computing (HPCC) we call the **PEER 1 Hosting GPU Cloud**, to industries as diverse as financial services, entertainment, pharmaceuticals, oil and gas, biomedical, automotive, and scientific computing. Now, companies and organizations of all types and sizes can take advantage of the same processing speed and power that drives research, empowers analysis, and creates blockbuster movies.

### BENEFITS

**Utility-based Pricing.** Avoid the huge capital expenditures and start up costs of building your own supercomputing datacenter. That means no ongoing equipment upgrades or maintenance costs. With PEER 1 Hosting's GPU Cloud, pay only for what you use and enjoy all the same benefits of in-house hosting:

- **Dedicated and Private Infrastructure** - your GPU cloud computing is done as a dedicated hardware unit and fully customizable by you. Only you have access to it. Only you use it.
- **Security** – a single-tenant solution means your data never leaves the PEER 1 Hosting FastFiber Network™, you can be certain that it's protected at every crucial point by multiple layers of security.

**Fast Results.** With the power and speed of our GPU Cloud, your entire product development cycle can now be expedited. Manufacturers can render simulations faster; software developers have the ability to run deep test buckets faster; pharmaceutical companies experiment and analyze faster. The end result? Companies and industries are able to spend more time focused on their core competencies rather than compute cycles.

**Managed Service Levels.** 24x7x365 FirstCall Support™ and a dedicated TAM are just the tip of the iceberg in your GPU Cloud hosting experience. PEER 1 Hosting has over 10 years of expertise in delivering a world-class hosting experience to companies of every size, industry and complexity. Why settle for outdated FAQs or forums when you have the power of PEER 1 Hosting's seasoned professionals at your disposal?

## FEATURES

**Multi-teraflop Performance.** Our Tesla GPUs each deliver peak performance of between 2 and 4 million teraflops (floating point operations per second). That means complex processing tasks that need days to complete are now finished in a few hours. Those that need hours are done in just minutes.

**Available As Needed.** GPU Cloud is ideal whether you need constant maximum processing power—for uses like game development or atmospheric research—or power in bursts like end-of-month or end-of-quarter financial analysis.

**Dedicated GPUs.** Your GPU(s) will be used solely by you.

**FastFiber Network™.** Our network ensures the optimal performance and security of your HPC infrastructure. All 17 of our datacenters and all 21 network points of presence are connected by over 15,000 miles of fiber through a series of dedicated links. We strengthen that with peering relationships with over 1,000 networks and multiple Tier 1 upstream providers. This ensures peak computing performance—backed by our zero-downtime guarantee.

**Unlimited FirstCall Support™.** FirstCall Support means you have to make only one call to us to be certain of a rapid resolution. We do that through our talented support team, formed of Level II and III system administrators with an average of five years tenure with us. And that team is available to all our GPU Cloud customers, every minute of every day.

## NVIDIA TESLA® GRAPHIC PROCESSOR UNIT

### *NVIDIA Tesla M2050 GPU*

NVIDIA partner solutions, powered by the NVIDIA Tesla M2050 GPU Computing Module deliver supercomputing power at 1/10th the cost and 1/20th the power consumption, and provide the world's highest compute density for departmental clusters and datacenter deployments.

- 515 Gigaflops of double-precision peak performance.
- FERMI-based.
- 2 Teraflops of double precision performance.
- More than a Teraflop of single precision peak performance.
- Asynchronous data transfer even when the computing cores are busy.
- High speed, PCI-E Gen 2.0 data transfer maximizes bandwidth between host GPU.



## REALITYSERVER 3D

### *From Mental Images*

PEER 1 Hosting offers a world-class solution for delivering interactive, photorealistic applications over the web.

RealityServer 3D web application software and iray® rendering technology developed by Mental Images enable product designers, animators, and architects to easily visualize 3D scenes with remarkable realism. PEER 1 Hosting will install, manage and support RealityServer 3D for GPU Cloud customers.

## WHO USES GPU COMPUTING?

*Bio-Informatics and Life Sciences*

*Computational Finance*

*Computational Fluid Dynamics*

*Data Mining, Analytics, and Databases*

*Electromagnetics and Electrodynamics*

*Imaging and Computer Vision*

*Media*

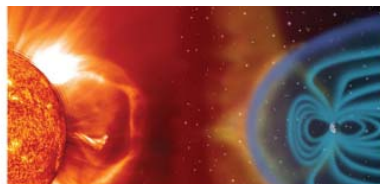
*Medical Imaging*

*Molecular Dynamics*

*Weather, Atmospheric, Ocean Modeling*



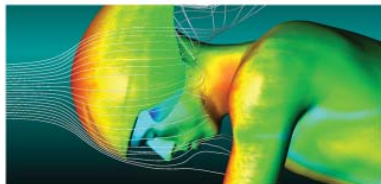
Bio-Informatics and Life Sciences



Electromagnetics and Electrodynamics



Computational Finance



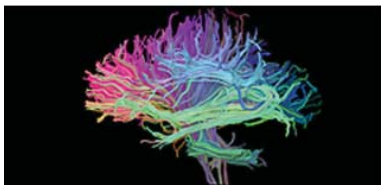
Computational Fluid Dynamics



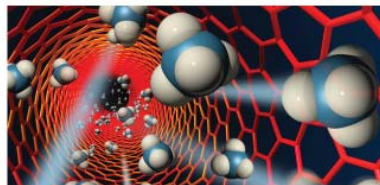
Data Mining, Analytics, and Databases



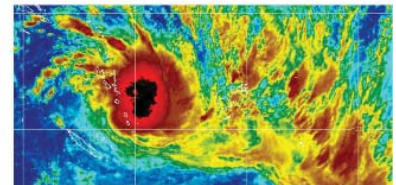
Imaging and Computer Vision



Medical Imaging



Molecular Dynamics



Weather, Atmospheric, Ocean Modeling

## PRICING

Pricing is on a monthly, daily or hourly basis and is based on your precise GPU configuration.

## CONTACT US TODAY

- Call us at **1.866.579.9690**
- Go to **[www.peer1.com](http://www.peer1.com)** and chat with an online sales assistant.