The Nimbix Cloud
Featuring NVIDIA® DGX-1™
Cloud-Based Deep Learning and Analytics

Nimbix Cloud Platform
The Nimbix Cloud is a purpose-built cloud for Analytics, Deep Learning, and HPC applications. It delivers service in two models: Software-as-a-Service (SaaS, for enterprise data scientists and end users) and Platform-as-a-Service (PaaS, for developers). The Nimbix platform offers customer selectable systems featuring the NVIDIA® DGX-1™, the world’s first AI supercomputer in a box, delivering the most powerful option for deep learning workloads available in the cloud.

Introducing the NVIDIA® DGX-1 in the Nimbix Cloud
Enterprise companies and Developers now have access to the most powerful Deep Learning system through the Nimbix Cloud. At $29.50/hr, customers can access DGX-1 to develop deep learning frameworks, neural nets, and training sets to advance state-of-the-art. With 8 NVIDIA® Tesla® P100 GPU accelerators interconnected via NVIDIA NVLink™, DGX-1 delivers revolutionary performance equivalent to 250 x86 servers in a single DGX-1 host, for dramatic acceleration of deep learning training time.

Enterprise Software-as-a-Service
From the Nimbix Cloud portal, end users focus on generating results rather than deploying software. It allows domain experts in different fields to realize value immediately, without first having to acquire IT or cloud computing skills in order to set up their workflows. It also ensures that the best resources for the job at hand are automatically selected, properly configured, and deployed for optimum efficiency. The Nimbix Cloud portal presents users with easy to launch workflows capable of delivering both commercial and open source applications. Workflows consist of application selection, action, data, and scale (number of machines and/or cores). Applications automatically request hardware capabilities, such as the DGX-1, based on their configuration and optionally present the user with additional capabilities required by the applications. Users see the price they pay based on the workflow and configuration selected.

The Nimbix Cloud brings an unprecedented level of performance and ease of use in running high performance applications and workflows. The Nimbix Cloud is powered by JARVICE™, a cloud operating system designed to run applications on accelerated hardware without the overhead of virtualization. This means customers get faster access, native hardware performance and ultimately superior economics versus other cloud solutions.
**PushToCompute™ for Developers**

For developers and ISVs, Nimbin provides platform-level access using Nimbin's innovative cloud capability called PushToCompute™, a container packaging mechanism used for building application environments on the Nimbin Cloud. Compatible with NVIDIA's docker packaged environments, developers create, install, and maintain applications in industry standard containers, then test or run at scale using the Nimbin processing API. A simple JSON-based application definition language provides the mechanism to automatically generate user interfaces in a SaaS model for deployment on the web portal. Once an application image is created and defined, end users consume the application via the cloud portal from any device on any network.

Unlike "instances" in other cloud computing platforms, Nimbin Application Environments are not coupled to hardware and can be launched with a different configuration and scale without image modification. Nimbin's API provides mechanisms to applications to query machine capabilities, scale, and cluster configuration without having to implement the orchestration in the application, greatly simplifying application development and deployment. Nimbin Cloud applications also enjoy seamless access to preconfigured toolkits such as OpenCL, CUDA, or OpenGL. PushToCompute™ supports multiple flavors and versions of Linux, including Ubuntu and CentOS.

**Enterprise Cloud Features:**
- Summary and itemized billing reports, including job parameters
- Multi-level encryption for storage, including user-managed keys
- Role-based access controls (user, developer, administrator)
- Team capabilities

**To Learn More:**
To learn more: Talk to your Nimbin representative, or visit us on the web: [www.nimbix.net](http://www.nimbix.net)

Follow us on Twitter: @Nimbix

Learn more about DGX-1: [www.nvidia.com/dgx1](http://www.nvidia.com/dgx1)

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