

Optimizing Resource Utilization With Any Cloud

- Integrate existing workflow into Clouds
- Configuration Flexibility
 - Cloud Cluster
 - Cloud Bursting
 - Hybrid Cloud
- One Click HPC
- Synchronized Infrastructure Automation

Free Trial!

Build your own cluster in Amazon or integrate Grid Engine into your cloud platform.

Visit www.univa.com/demo-request.php



Overview

UniCloud 3.0 is software that plugs Univa Grid Engine into any cloud management system or service. UniCloud enables public and private cloud resources to be utilized with existing HPC workflow and seamlessly extends the reach of cloud systems to the largest HPC user community - Grid Engine - with over 10,000 deployments.

Now, optimizing data center resources to their fullest capacity through **easy workload integration** and policy-driven automation **with any cloud** is possible.

OneClick HPC is Finally Here!

Integrating Grid Engine Workflow to Clouds

UniCloud simplifies the configuration and management of HPC compute infrastructure across any cloud - private, public and hybrid - by plugging into leading systems management products and clouds. With UniCloud organizations will reduce mistakes through the automation and synchronization of management tools and eliminate coding through the integration of existing workflow into cloud resources.

By integrating existing workflow into cloud resources, Univa extends the applicability of cloud to the largest HPC user community - Grid Engine - with over 10,000 installations. The advantages of meshing grid and cloud systems management include ubiquitous resources, system and workload mobility and the unleashing of advanced features like seamless cloud bursting and check-pointing.

The unique adapter plug-in design of UniCloud makes connecting new management tools or cloud services simple. Out-of-the-box UniCloud includes adapters to all the leading public cloud and private cloud providers.

UniCloud Integrations:

- Public Cloud Providers
 - Amazon AWS
 - Rackspace
 - GoGrid
- Private Cloud Infrastructure
 - Oracle VM
 - VMware vSphere

Watch UniCloud build a cluster in Amazon in under 10 minutes.

http://www.univa.com/resources/video/hpc_cloud_video.php

UniCloud enables organizations to connect HPC to dynamic and scalable Cloud platforms better and faster by tying those actions directly to workload needs/requirements. This superior approach delivers policy-based automation based on what clients care about most: application performance and cost, both of which drive business results.

Public Cloud Features

Univa brings improved simplicity to HPC in the Cloud. Never before has extending Grid Engine to the cloud been easier or more affordable. One product offers the flexibility of preserved workflow integration, choice of configurations, choice of cloud provider to provision workload and the simplest one click HPC offering.

Key Features:

- Automation
- Policy control

What our customers are saying:

- *“The decision to use UniCloud was basically a no-brainer.”*
- *“Thanks to UniCloud, we’re able to meet our peak computational demands without investing in new hardware.”*
- *“Without UniCloud, some of our most advanced research would simply not be feasible.”*
- *“We’re getting exactly what we need. We pay for HPC power only when we use it, using a cluster management system that’s easy to use.”*
- *“UniCloud minimizes both our initial and long-term investments in HPC.”*

Find out more at
<http://www.univa.com/products/unicloud.php>.

- **Choice of configuration**
 - Cloud Cluster
 - Cloud Bursting
 - Hybrid Cloud
- **Choice of Cloud Providers**
 - Multi-cloud provisioning

Univa creates workload mobility with Multi-Cloud provisioning. By removing the dependencies on where jobs can run - rather than locking users in to specific hypervisors or cloud APIs - UniCloud can provision Grid Engine to any server or hypervisor, anywhere.

Private Cloud Features

UniCloud optimizes resource utilization by ensuring applications are matched to the optimal data center resources. By connecting to private cloud management systems Univa helps to accelerate the benefits of cloud while reducing the barriers and risks.

Using its built-in policy engine, UniCloud make decisions about where applications should run in the infrastructure and what machines and memory combinations are needed to support optimal performance. If those machines (physical or virtual) do not exist, UniCloud requests or creates them to meet the needs of the application, ensuring memory and cores are not wasted.

Once new machines are created and the infrastructure has been shaped to meet the needs of the application, UniCloud can then automate the configuration of those new machines so all software is installed and ready to deploy – including the application.

Finally, UniCloud dynamically optimizes this new infrastructure to automatically respond to user and project demands by continually repeating the process described above.

Key Features:

- **Infrastructure Automation:** Univa’s unique approach enables users to easily connect Grid Engine clusters to any private cloud better and faster.
- **Policy-Based Environment Shaping:** Univa’s policy management governs the conditions that determine workload placement. This rules-based approach moves workload according to factors like work priority, fastest machine, proximity to data source, most expensive license, CPU speed and more. To match these needs, Univa reshapes the environment by taking actions like requesting or adding physical, virtual or cloud servers, adding/removing CPUs or memory, creating or moving storage, and provisioning and managing the network.
- **Workload Mobilization:** Univa creates workload mobility by removing the dependencies on where jobs can run through plug-in integration to leading systems and cloud management products. Rather than locking users in to specific hypervisors, Univa can integrate Grid Engine workload with existing management tools: Bare metal, VMware ESXi, Oracle VM and more.

About Univa

Univa, the Data Center Optimization Company, is the leading provider of optimization and management software for traditional, dynamic and cloud data centers. Our award-winning products are used by Global 2500 companies to improve resource sharing, amplify the efficiency of people and processes, and increase application and license utilization. Univa offers the industry’s broadest, most innovative and integrated product set for managing shared, high-demand data center resources. From workload management to policy-driven provisioning across physical, virtual and cloud resources, only Univa provides a proven combination of enterprise-class capabilities, industry expertise, and community sponsorship. Univa is headquartered in Lisle, Illinois with offices worldwide. Visit us at www.univa.com.

