

Unicloud

Integrate Cloud Resources into Existing Workflows

ACCESS CLOUD RESOURCES ON-DEMAND

Univa Unicloud™ is the solution for organizations experiencing increasing volumes of high priority workloads, where response speed and accuracy is critical. Unicloud delivers extreme flexibility so that infrastructure cost savings are realized even as the enterprise grows and evolves. Unicloud plugs Univa® Grid Engine® into leading cloud services, harnessing public and private cloud resources to meet increasing workload demands, while delivering heightened operational efficiencies.

Unicloud users can select optimum configurations and cloud providers to execute unique workloads. Out-of-the box adapters enable easy use of all leading public and private cloud providers.

KEY FEATURES AND CAPABILITIES

App and Cloud Neutral

Automate the use of leading cloud providers, allowing flexible deployment of Univa Grid Engine in private, public or hybrid use cases for any application. Multiple cloud providers can even be combined for additional capacity and capability to achieve improved business continuity, performance and cost efficiencies.

Reusable, Interoperable Components

Configuration specifics for hardware, software and services need only be

detailed once through template-based profiles that can be easily modified for reuse - includes reuse of customized images, instances and VMs.

Automated Configuration

Cloud-based compute nodes are automatically configured to specification for use by Univa Grid Engine by leveraging Puppet for configuration management. Automated orchestration through Puppet also ensures configurations remain in sync as the cluster changes and/or needs evolve.

Cloud On-Demand

Scaling up or scaling down of cloud-based infrastructures is dynamically adjusted according to workload through use of a flexible rules engine that captures the specifics of cloud use cases for Univa Grid Engine.

Complete Visibility

Regardless of cloud use case, or where workloads actually execute, integration with Univa Unisight™ ensures that all workloads are monitored and reported upon via a GUI for producing and sharing workload-centric tables and charts.

Compatible Services

From network services for name resolution and identity management, to use-case specific solutions for managing networks, data and security, Unicloud's inherent flexibility ensures use of existing compatible services - whether they are provided in house or by cloud providers.

Univa® Unicloud Highlights

- Lower total cost of ownership
- Accelerated time-to-results with improved quality
- Enhanced capacity and capability on demand
- Fully automated deployment and scaling
- Optimal flexibility to ensure maximal reuse
- Experience-based best practices for successful deployments

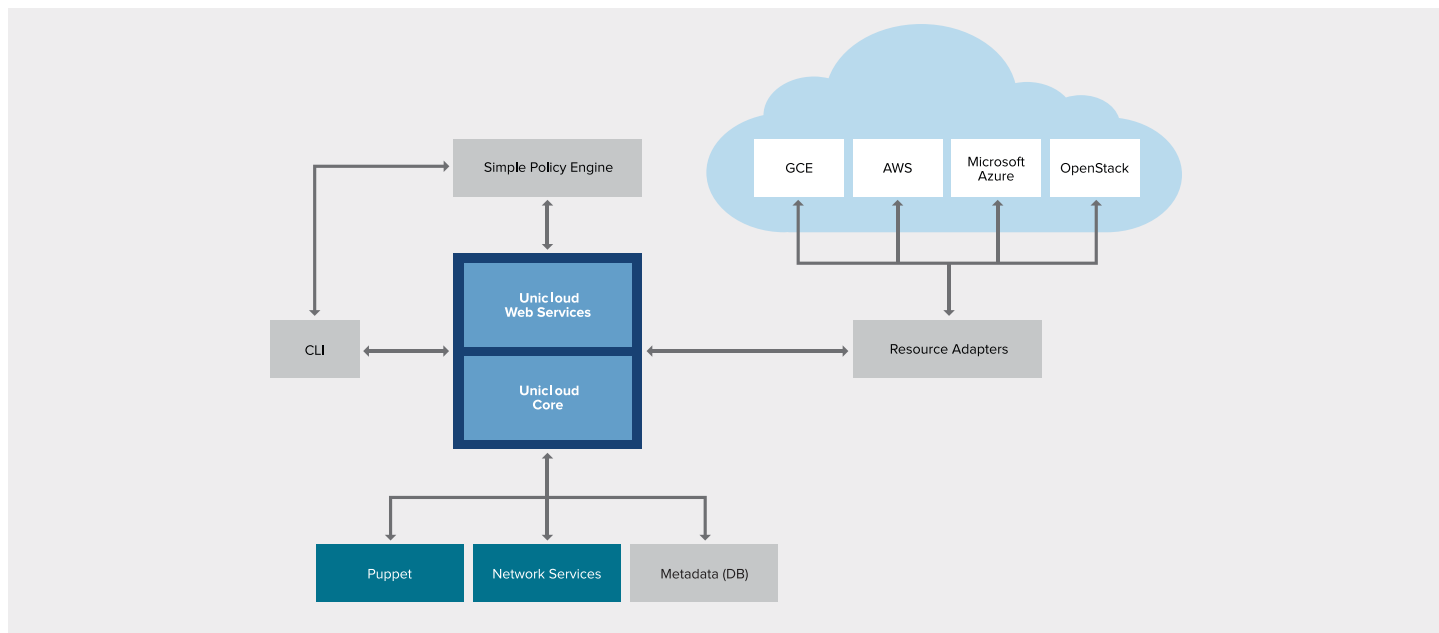
Supported Platforms

- Amazon Elastic Compute Cloud (EC2)
- Google Compute Engine
- Microsoft Azure
- OpenStack
- On-premise (physical) nodes
- VMware vSphere

Compatible Services

- Name resolution - in-house, Unicloud, cloud provider
- Identity management - NIS, LDAP, Microsoft Active Directory
- Networking - direct uplinks, VPNs, Amazon VPN/DirectConnect
- Data/storage - cloud provider (e.g., Amazon EFS or S3, Azure Storage) or third-party (e.g., Aspera, Avere, Ceph or Gluster)
- Containerization - Docker
- Big Data - Apache Hadoop, Apache Spark, GPU-based Deep Learning

Unicloud Component Architecture



CAPACITY-ON-DEMAND USE CASE

Challenges

- Substantially reduce and better manage overall costs and expenditures
- Improve quality and shorten application deployment timeframes

Solution

- From basic to highly complex, use-case nuances are addressed with solutions from Univa and its partners
- Employ Univa Grid Engine via Univa Unicloud to fully automate deployment and scaling using customized software images on cloud-based nodes of choice (including GPUs)

Results

- Numerous 'cloud bursting' scenarios have been deployed in production across multiple enterprise market segments
- Sensibly manage overall expenditures by deferring, reducing, or eliminating on-premise Capex via cloud-based Opex
- Reduce time-to-market and improve quality by intelligently leveraging the cloud during peak usage periods

About Univa

Univa is the leading innovator of workload management products that optimize performance of applications, services and containers. Univa enables enterprises to fully utilize and scale compute resources across on-premise, cloud, and hybrid infrastructures. Advanced reporting and monitoring capabilities provide insights to make scheduling decisions and achieve even faster time-to-results. Univa's solutions help hundreds of companies to manage thousands of applications and run billions of tasks every day. Univa is headquartered in Chicago, with offices in Canada and Germany. For more information, please visit univa.com.



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