DATASHEET

Open Source Edge Cloud



AT A GLANCE

OpenNebula brings new innovative edge features to enable companies to build their own private, light and nimble Edge Computing environments based on highly-dispersed edge nodes in close proximity to their end-users, devices, and sources of data. Not only are companies able to easily create their own edge environments, and to manage them with utmost simplicity, but they are able to create these environments without needing to provide or to own those underlying resources at all.

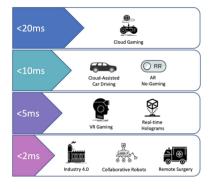
OpenNebula Version: > 5.10

Hypervisors: vCenter | KVM | LXC | Firecracker

Platform Requirements: None

KEY BENEFITS

- Automatic deployment of cloud nodes globally at edge locations in close proximity to end-users.
- Cloud nodes configured and deployed in a few minutes.
- On-demand, pay-per-use allocation and provision of edge resources from bare-metal cloud providers.
- Dynamic addition and removal of resources with ease at a given specific edge location.
- Highly scalable achieving tens of thousands of edge resources.
- Multi-cloud interoperability at the virtualized infrastructure layer; an application can be deployed anywhere on the edge without any additional setup.

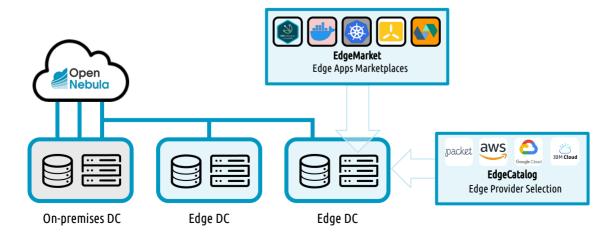


The Need for Low Latency

Many companies, both long-established and newly emerging, from multiple industries like **gaming**, the **Internet of Things** (IoT), **social networking** and **telecommunications**, are focusing their business strategies on being able to provide innovative services and capabilities with absolute immediacy for their customers. Latency is the key factor for quality of experience; even a delay of milliseconds is detrimental if an application requires instantaneous interaction.

The OpenNebula Provision Tool

OpenNebula brings the provisioning tools and methods needed to dynamically grow your private cloud infrastructure with Edge Clusters running on remote bare-metal cloud providers. This **disaggregated cloud approach** allows a seamless transition from centralized private clouds to distributed edge-like cloud environments. Companies are able to grow their private cloud with resources at edge datacenter locations to meet latency and bandwidth requirements This innovation is also used to build **hybrid cloud environments** with all the advantages of private cloud computing, allowing for complete control over the infrastructure and avoiding vendor lock-in.





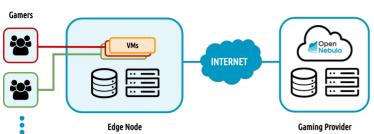
TRY IT NOW!

http://miniONE.opennebula.io

Use Cases



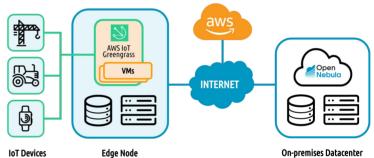




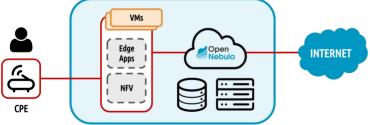
- 1-click deployment in 25 minutes
- Across 17 global edge locations
- Minimizing latency to 10ms
- On-demand infra for \$12 / hour



- Bridge the gap with IoT devices
- 20-minute deployment in 10 edge locations
- Focus on business logic
- Single pane of glass







Telco Central Office

- Minimal footprint
- Simple, yet scalable
- Flexible and powerful
- Edge application with latency < 4ms

Stay Tuned!

This document has been created within the context of the **ONEedge** project, OpenNebula's initiative for democratizing access to Edge Computing. This document shows just some of the key elements of a process that leads to the development of a truly open source Edge Computing platform, available to everyone.



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ONEedge is an OpenNebula project developing the innovative features to bring private cloud computing to the Edge.

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