



| GUIDE

Hosted Service

Edgify - Elastic Edge As a Service

Hosted, fully-managed OpenNebula control plane - the fastest, most cost-effective and vendor-neutral path to private, public, and edge clouds for a true hybrid multi-cloud experience



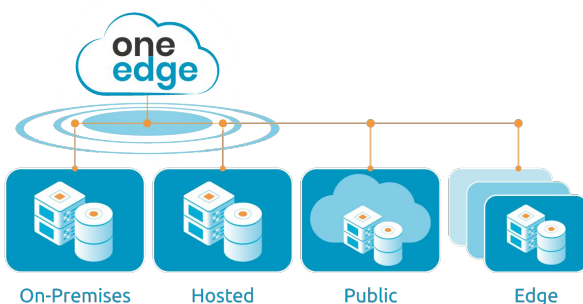
At OpenNebula Systems we operate many OpenNebula clouds on behalf of customers, enabling them to reap the benefits of OpenNebula while their team focuses on business workloads rather than infrastructure. We ensure that your cloud is ready for production demands, providing the reliability and stability, and all the features you need to support your organization now and into the future. You don't need new staff, skills, or even hardware; just engage with OpenNebula Systems to provision and manage your OpenNebula cloud.

Our OpenNebula Hosted Services allow you to retain complete control of your unique and differentiated workloads while at the same time eliminating any need to deal with management, maintenance, or future upgrade costs for the associated infrastructure and services. The OpenNebula Hosted Services add-on converts your OpenNebula Software Subscription into a **Hosted Cloud Subscription** that:

- Extends the coverage of the support portal to any incidents with the OpenNebula Hosted control plane and not only the software stack.
- Includes periodic capacity planning, tuning, maintenance, updates, and upgrades of the OpenNebula Hosted Service.
- Implements continuous monitoring for availability of cloud service and commits to an uptime service level.

A Proven Cloud Architecture to Run Any Workload, Anywhere

From the experience of working with hundreds of users and client engagements, we have defined an **Edge Cloud Architecture**¹ that builds a single distributed cloud platform to run **any workload** — both virtualized and container workflows — on **any resource** — physical or virtual — **anywhere** — on-premises and on the cloud — with unparalleled availability, performance, and simplicity.



The edge cloud implements enterprise-grade cloud features for performance, availability, and scalability with a streamlined design that avoids vendor lock-in and reduces complexity, resource consumption, and operational costs.

¹ <https://support.opennebula.pro/hc/en-us/articles/360050302811>

Benefits

Edgify is a new service that builds a hosted cloud, with a fully-managed OpenNebula Front-end ready to automatically deploy as a service, in just a few minutes, a distributed edge multi-cloud environment using resources from your preferred cloud provider and on-premises locations.



Fully-managed

Cloud Front-end hosted in your geographic region, backed by an enterprise class 99.9% uptime SLA and with 24/7 enterprise support SLA.



Stress-free

Installation, monitoring, maintenance, and upgrades performed by our expert team.



Edge and Cloud Choice

Automatically deploy in minutes your cloud clusters on your servers, at your location for data sovereignty and security, or on physical and virtual resources on your cloud and edge providers for low latency or cost optimization.



Optimized Configuration

Customize your configuration and instance types to meet your needs and follow your security best practices.



Maximum Availability

The Front-end can be deployed across geographic zones and the cloud clusters can be deployed across geographic locations and providers to maximize availability.



Elasticity and Flexible Pricing

Scale according to your business needs and pay-as-you-go for unlimited guest instances with flexible pricing with an on-demand hourly, monthly, or annual billing model.

How It Works

- **Fully-managed Cloud Control Plane**
Fully-managed OpenNebula Front-end, hosted in a supported geographic region, and backed by an enterprise class 99.9% uptime SLA and 24/7 support.
- **Integration with your Directory Services and Application Marketplaces**
Integrate the OpenNebula Front-end with your AD or LDAP based directory service, and with your private or public marketplaces, like Docker Hub or Linux Containers.
- **Private Cloud with Secure Connection with your Corporate Network**
Each OpenNebula Front-end instance is dedicated to a given customer, completely isolated from each other, and with endpoint access done through HTTPS and VPN.
- **Self-service Distributed Cloud Infrastructure**
Automatically deploy in minutes your cloud clusters on your servers, at your location, or on physical and virtual resources from any location of supported cloud and edge providers to maximize availability and response time.
- **Optimized Configuration**
Customize your configuration and choose from memory-optimized, compute-optimized, or general purpose instance types, with clusters sized to meet your needs; and follow your security best practices for application isolation.
- **Maximum availability**
The OpenNebula Front-end HA cluster can be deployed across geographic zones, and the cloud clusters can be deployed across multiple geographic locations and cloud providers to maximize availability.
- **Flexible Consumption-based Pricing**
Scale according to your business needs and pay-as-you-go for unlimited guest instances with flexible pricing with an on-demand hourly, monthly, or annual billing model.

Use Cases

Customers use our OpenNebula Hosted service mostly for:



Hybrid cloud combining cloud resources with on-premises



Orchestration of multi-provider clouds



Building geo-distributed edge cloud environments



Environments for testing and development



Addressing compliance regulations



Building DR/HA architectures across zones

What Is Included

OpenNebula Hosted includes all you need so your team can forget about infrastructure and focus on business workloads. We will help you maximize the uptime and the value of your solution. OpenNebula Systems takes care of the entire OpenNebula lifecycle—deployment, 24/7 health monitoring, alerting, troubleshooting, maintenance and upgrades—so you don't have to.

Feature:	Service
Installation and configuration of cloud control plane	✓
Secure connection with corporate network	✓
Integration with corporate Active Directory or LDAP service	✓
Connection to widely used appliance and container marketplaces	✓
Periodic updates and security patches for cloud control plane	✓
Periodic maintenance of cloud control plane	✓
Continuous checking and monitoring for uptime and availability of the cloud	99.9%
Financially-backed uptime SLA	9/5 and 24/7

An Elastic Approach - Also for Pricing

OpenNebula Edgify is **currently available as a technology preview service for evaluation and PoC purposes**. The new OpenNebula Hosted Service will soon be offered as an extension to the OpenNebula Subscription. As a customer and subscription holder, the Hosted Services will incur an additional Front-end fee and a per-node fee, which can be charged annually, quarterly, monthly, or hourly. Cloud clusters are deployed in your cloud provider account.

Scope of Service

OpenNebula Hosted Services are an extension of the Standard and Premium Software Subscriptions and so all of the subscription benefits, terms and conditions apply.

1. SLA-based Enterprise Support and Customer Portal

OpenNebula Hosted Services extend the coverage of the SLA-based enterprise support available from the Customer Portal to any incidents with the hosted cloud control plane, rather than merely product errors or general usage, installation or configuration questions about the software stack.

2. Cloud Infrastructure Architecture and Maintenance

OpenNebula Hosted Services include support and maintenance of the OpenNebula control plane as part of an Edge Cloud Architecture, and will install applicable (e.g. security) patches, updates and upgrades of the operating system, OpenNebula and its dependencies, and other software deployed as part of the cloud control plane. The OpenNebula Hosted Services will ensure the customer's cloud always remains on a supported version of OpenNebula. In most cases, OpenNebula will upgrade only to LTS releases where applicable.

OpenNebula Hosted Services do not include any architectural changes to the cloud, the installation of packages or software other than those needed to maintain the Edge Cloud Reference Architecture, or the installation of additional components (e.g. LBaaS, VPNaaS, SDN or SDS) beyond the software installed as part of the building of the cloud control plane.

3. Cloud Infrastructure Access

OpenNebula Hosted Services will provide the customer with **access to the OpenNebula dashboard, API and CLI, and the monitoring and logging system** (restricted to read-only access). Only OpenNebula Systems will have login access to cloud Front-end and nodes. We retain exclusive administrative access to the hardware and virtualization infrastructure of the Hosted Private Cloud for the duration of the agreement.

The Hosted Services may require the customer to procure Infrastructure Services from a third party cloud provider to provision cloud clusters. The customer is solely responsible for complying with any terms and conditions between them and the provider of the Infrastructure Services, paying any fees associated with the Infrastructure Services and obtaining any applicable permissions from the third party provider to allow OpenNebula Systems to provide the Hosted Services offered herein.

If the OpenNebula Hosted Service includes on-premises clusters in client facilities, OpenNebula requires:

- Continuous SSH access for OpenNebula support personnel to the cloud.
- Utilization parameters per node to be kept below the maximum specified in the design document provided by OpenNebula when the cloud is delivered to the customer.
- The facility where the cloud is hosted to comply with the minimum required measures to function, including but not limited to, connectivity, sufficient power supply, sufficient cooling system, and physical access control to the environment.
- The minimum size requirement for the cloud or cluster is maintained at all times.
- Contact information of your hardware team (on-premises) or the provider support team (on-cloud) so we can contact them in the event of hardware failure to restore the service to normal operations.

4. Scheduled Maintenance

Based on the Hosted Private Cloud configuration, we will perform scheduled maintenance activities on the software stack supporting the service. You will be notified in advance for all scheduled maintenance. OpenNebula Hosted Services will provide planned updates, upgrades, and maintenance Monday to Friday during business days.

Emergency maintenance may be required and performed without advance notice. Should a service-impacting emergency maintenance be required, we will use commercially reasonable efforts to notify you upon execution of the maintenance.

5. Cloud Service Operation and Application Management

While we are fully responsible for cloud infrastructure operation, your Operations Team is responsible for:

- **Cloud Service Operation:** Creating, maintaining, and managing any user accounts, VDCs, Virtual Machines, Virtual Machine templates, ISO or image catalogs, and IP address tracking of assigned IP pools.
- **Application Management:** Installing, monitoring, managing, and securing the guest operating systems or container instances including any script, application, or operating system updates in the Virtual Machines. OpenNebula does not troubleshoot or provide any support relating to malfunctioning custom scripts or applications, and does not provide security auditing or disinfection of exploited software or servers.
- **Integration Services:** Installing, integrating, configuring, and maintaining all customer-operated infrastructure and applications connected to the cloud.
- **Customer Backups:** Backup or recovery of customer generated data (e.g. any applications or databases running) within guest instances or container instances.
- **End User Support:** Generating and maintaining any guides for end users or operators, and providing support for end user operation problems.



Uptime Service Level

The Hosted Service includes the following uptime **service levels**:

	Service Level
DATA PLANE: Virtualization, network and storage for instances.	99.9%
CONTROL PLANE: Submission and management of running instances.	99.9%

Our services team manages a private cloud on behalf of the customer on third party infrastructure owned by the customer or leased to a third party. We are not responsible for any network switches, general Internet connectivity, servers, storage devices, or any other equipment necessary to run and provide the Hosted Private Cloud service.

We commit to the above uptime service level for any troubleshooting issue, product error or configuration aspect in the software stack, and to use commercially reasonable efforts to keep the hosted private cloud operational and available, and to help your team or the cloud provider team fix any issue with the hardware or the general Internet connectivity.

Service Credits

Downtime must be directly attributable to OpenNebula in order for it to count against the service level (please refer to the Managed Services SLA Policy). Planned maintenance windows and any requests by the customer are not taken into account when calculating uptime.

In the event OpenNebula does not meet the uptime service level, you will be eligible to receive a Service Credit as described below:

Service Availability Percentage	Service Credit
99% - 99.9%	10% of Monthly Charges
90%- 99%	25% of Monthly Charges
< 90%	50% of Monthly Charges

Service Conclusion

In cases where the customer decides to assume management responsibilities of their cloud, at the end of the subscription term the Hosted Service will initiate an operational transfer that includes:

- Handover of all credentials of the hosts and management software to the customer.
- Handover of the administrative credentials of Customer Portal and Enterprise Repository (subject to purchase and agreement of appropriate subscription).
- Coordination of any applicable training (subject to purchase and agreement of appropriate services).



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Reference: OpenNebula Subscription - Rev20230112