

# GUIDE

## Support Subscriptions



An annual support subscription opens the gate to **stability** and **excellence** within your OpenNebula infrastructure at many levels. First, it provides the **assurance** of having the OpenNebula experts steadily involved, under SLA guidelines, backing your solution. On top of this, Support Subscribers have **additional benefits** including gaining access to an enterprise repository with hotfix releases and exclusive enterprise tools, as well as access to **Professional Services** provided by our OpenNebula Systems engineers.

Based on your needs, we offer three types of support models:

- **Community Support** is a subscription-free model, available through our highly engaged open source community, and provides the backing and reinforcement for developers and enthusiasts who build clouds for research purposes.
- **Enterprise Basic Support** is a support model provided with basic SLAs for organizations during customization and building phases or to operate small cloud environments for testing/development applications.
- **Enterprise Production Support**: is a support model for Corporations, research centers and governments that require expert support assistance with production SLAs to operate a cloud environment for production applications.

Benefit	Community Support	Enterprise Basic	Enterprise Production
<b>SOFTWARE</b>			
Certified Software	✓	✓	✓
Open Source Code	✓	✓	✓
Regular Updates and Migration Path	✓	✓	✓
Maintenance Releases	✓	✓	✓
Hotfix Releases		✓	✓
Enterprise Tools		✓	✓
Product Influence			✓
Minor Enhancements			✓
<b>DOCUMENTATION AND TRAINING</b>			
Online	✓	✓	✓
PDFs	✓	✓	✓
Discount in Public Events and Training		✓	✓
<b>SUPPORT</b>			
Latest Version Support	✓	✓	✓
Enterprise Portal		✓	✓
Enterprise Repository		✓	✓
Privacy and Security		✓	✓
Expert Support		✓	✓
Commercial Support Service Levels		Basic	Standard & Premium
Previous Version Support			✓
Remote Access (via ssh)			✓
Live Support (extension)			✓
Extended Life Support (extension)			✓
<b>SERVICES</b>			
Feature Development	✓	✓	✓
Cloud Deployment, Upgrade and Training		✓	✓
Managed Cloud, Consulting & Engineering			✓
<b>LEGAL</b>			
OpenNebula Powered Logo		✓	✓
Indemnification & Licensing Flexibility			✓
Annual Subscription Starts at	Free	€4.000 (\$5,000)	€6.000 (\$7,500)

More details about OpenNebula and its features at [OpenNebula.io](https://OpenNebula.io)

## Levels of Enterprise Support

Enterprise Support Subscriptions provide access to our exclusive repository with hotfix releases and enterprise tools, and to Professional Services provided by our OpenNebula experts, in addition to granting support available at three different levels:

- **Basic Level:** Expert support with basic SLAs within regular business hours.
- **Standard Production Level:** Expert support with production SLAs within regular business hours.
- **Premium Production Level:** Expert support with production SLAs 24x7.

SUPPORT MATRIX			Basic	Standard	Premium
<b>LEVEL OF PRIORITY</b>					
Severity 1			Normal (1 business day)	Urgent (2 business hours)	Urgent (2 hours)
Severity 2			Normal (1 business day)	High (4 business hours)	High (4 hours)
Severity 3			Low (2 business days)	Normal (1 business day)	Normal (1 business day)
Severity 4			Low (2 business days)	Low (2 business days)	Low (2 business days)
<b>FEATURES</b>					
Tickets, VM, Cores, Memory			Unlimited	Unlimited	Unlimited
Support Channel			Web	Web	Web
Hours of Coverage			9x5 (CET and EST)	9x5 (CET and EST)	24x7 (Sever 1 and 2)
Number of Named Accounts			1 per zone	1 per zone	2 per zone
LXD Servers	KVM Servers	vCenter Clusters	ANNUAL COST PER OPENNEBULA ZONE		
1-10	1-10	1	€4.000 (\$5,000)	€6.000 (\$7,500)	€9.000 (\$11,250)
11-20	11-20	2	€6.400 (\$8,000)	€9.600 (\$12,000)	€14.400 (\$18,000)
21-30	21-30	3	€8.800 (\$11,000)	€13.200 (\$16,500)	€19.800 (\$24,750)
31-40	31-40	4	€11.200 (\$14,000)	€16.800 (\$21,000)	€25.200 (\$31,500)
41-50	41-50	5	€13.600 (\$17,000)	€20.400 (\$25,500)	€30.600 (\$38,250)
51-100	51-100	6-10	€16.000 (\$20,000)	€24.000 (\$30,000)	€36.000 (\$45,000)
101-200	101-200	11-20	€24.000 (\$30,000)	€36.000 (\$45,000)	€54.000 (\$67,500)
>200	>200	>21	€32.000 (\$40,000)	€48.000 (\$60,000)	€72.000 (\$90,000)

## How to Calculate Support Cost per OpenNebula Instance ("Zone")

Our support plans are simple and transparent. Associated cost is calculated according to the size of your physical infrastructure using the table above.

- Subscriptions are offered per pack of 10 servers ("hosts") for KVM|LXD clouds and per vCenter cluster for VMware clouds.
- Beyond the first 10 KVM|LXD servers and vCenter cluster, the cost of additional packs and instances is **gradually reduced**.
- **There is no extra cost beyond 200 KVM|LXD servers and 20 vCenter clusters.** This avoids having to track and manage individual server or vCenter cluster count allowing you to create a true elastic, scalable cloud environment.
- The maximum number of servers that can be managed within a single zone strongly depends on the performance and scalability of the underlying platform infrastructure, mainly the storage subsystem and the execution profile of the workload. The scalability of OpenNebula has been **thoroughly tested with 10.000 VMs on 2.500 servers**. There are multiple customers running production zones with more than 500 servers. Contact us to evaluate your infrastructure and the maximum number of servers we can commercially support.
- We offer optional **Support Extensions** (next page) for extending the features and coverage of the support subscription.

## Heterogeneous OpenNebula Instances

Contact us if you are planning to run different types of hypervisor within the same zone.

## Multiple OpenNebula Instances

Contact us if you are planning to run several instances in a **federated** environment. A progressive discount is applied for additional zones under the same administration.

## Services

Contact us if you are interested in any of our **Professional Services** (next page) to enhance the OpenNebula support subscription with value-added services to simplify cloud design, deployment, upgrade, training and operation.

## Discounts

OpenNebula Systems applies discounts for multi-year terms, 10% for 2-year terms and 20% for 3-year terms, and for Education, Government and Non-Profit institutions, an additional 10%.

**More details about OpenNebula and its features at [OpenNebula.io](https://OpenNebula.io)**

## Support Extensions

Support Extensions extend the features of the OpenNebula subscription and its platform coverage to support other components or services of the cloud infrastructure.

### Hybrid Cloud

OpenNebula provides native support for hybrid cloud computing with connectors for main public cloud providers. OpenNebula Systems provides expert guidance of any issue and/or incident arising in the operation of the supported public cloud providers from the OpenNebula cloud manager. Hybrid Cloud support implies an additional cost in accordance with the number of public cloud regions (each region is represented by a single cloud bursting host in OpenNebula). Beyond the first cloud region the cost of additional regions is **reduced by 40%**, and there is no extra cost beyond 6 cloud regions.

SUPPORT MATRIX	Basic	Standard	Premium
EXTERNAL PUBLIC CLOUDS	ADDITIONAL ANNUAL COST PER OPENNEBULA ZONE		
1 Cloud Region	€2.000 (\$2,500)	€3.000 (\$3,750)	€4.500 (\$5,625)
2 Cloud Regions	€3.200 (\$4,000)	€4.800 (\$6,000)	€7.200 (\$9,000)
3 Cloud Regions	€4.400 (\$5,500)	€6.600 (\$8,250)	€9.900 (\$12,375)
4 Cloud Regions	€5.600 (\$7,000)	€8.400 (\$10,500)	€12.600 (\$15,750)
5 Cloud Regions	€6.800 (\$8,500)	€10.200 (\$12,750)	€15.300 (\$19,125)
>5 Cloud Regions	€8.000 (\$10,000)	€12.000 (\$15,000)	€18.000 (\$22,500)

### Front-end HA

OpenNebula uses a distributed consensus protocol to provide fault-tolerance and state consistency across OpenNebula services. The Front-end HA Extension provides commercial support for setting up and operating a highly available cluster for OpenNebula core services using this built-in protocol.

- The Front-end HA Extension increases the cost of the support subscription by 25%.

### Hypervisor Hosts

The Hypervisor Hosts Extension broadens the OpenNebula Support subscription to the virtualization hosts by providing expert guidance of any issue and/or incident arising in the configuration and operation of the software running in the virtualization nodes of the infrastructure required to work with OpenNebula, namely the operating system (Ubuntu/CentOS), the hypervisor (libvirt/KVM and LXD) and the networking tools (VXLAN/VLAN 802.1Q). Any bug discovered in the kernel or Linux packages while resolving a customer support request, if there is no existing bug fix, is reported to the affected upstream component. OpenNebula Systems follows-up its resolution and a workaround may be provided.

- The Hypervisor Hosts Extension increases the cost of the support subscription by 25%.

### Elastic Cloud

OpenNebula brings the tools and methods needed to dynamically grow your private cloud infrastructure with physical resources running on remote bare-metal cloud providers. Support for the DDC (Disaggregated Data Center) functionality implies an additional cost in relation to the number of data center locations and their size.

- The cost of each location is calculated separately in packs of 10 servers where the cost of each pack is €2.000 (\$2,500) for Basic SLA, €4.000 (\$5,000) for Standard SLA and €6.000 (\$7,500) for Premium SLA. No extra cost beyond 50 servers.

## Professional Services

Support Subscribers can take advantage of Professional Services designed to simplify cloud design, deployment, operation and management. Our OpenNebula Systems experts help customers springboard their productivity, speed up time to deployment, and reduce business and technical risks through professional assistance. Pricing depends on the scope of the service, and the size, heterogeneity and complexity of the infrastructure. *(Review individual Professional Service Guides for more details)*

- **Cloud Deployment:** The Cloud Deployment service focuses on designing, planning, and deploying your OpenNebula cloud on your premises or in a hosted environment. From start-to-finish, the OpenNebula experts will lead the way.
- **Upgrade:** Our professionals will assess, upgrade, and validate your cloud instance in a streamlined process that minimizes errors and downtime, and maximizes stability.
- **Training:** Take part in our public or private training classes conducted by the authorities on OpenNebula.
- **Consulting and Engineering:** Whenever you need assistance, get the expert help from our OpenNebula professionals—from best practices across evaluation, design, and operation of your cloud architectures, to the optimal configuration and customization of OpenNebula to fit your solution needs.
- **Development:** Contribute and drive the development and direction of the OpenNebula roadmap. All new code must be contributed upstream under Apache 2.0 license into the next OpenNebula release. There are no custom distributions.
- **Managed Cloud:** Avoid having to deal with management, maintenance, or future upgrade costs for your associated infrastructure and services and let OpenNebula Systems operate your OpenNebula cloud.

## Scope of Support

### Supported Infrastructure Environments

Enterprise support is provided exclusively for the certified versions of the software infrastructure components, as described in the Release Notes of OpenNebula. These combinations of components have been through the complete OpenNebula Quality Assurance and Certification activities, and have been tested together to ensure that these various software pieces work bug-free as a whole.

### Supported OpenNebula Distributions

OpenNebula Systems provides commercial support exclusively for product versions available at the OpenNebula websites and strongly recommends to install the packages available from the enterprise repository. We also recommend to keep your OpenNebula version up to date to increase stability by running the latest bug fixes and performance improvements. Although our full support is delivered to the latest version of OpenNebula only, OpenNebula Systems continues providing maintenance support to a prior software version for three months after the release of the latest version to allow time to update. This period is six months when the latest version is an upgrade. In the case of version upgrades (major), OpenNebula Systems offers optional Extended Life Support for customers interested in longer term support of older versions.

Redistributing Software packages received under a Subscription Agreement to a third party or using any of the subscription services for the benefit of a third party is a material breach of the agreement. Even though the open source license applicable to individual software packages may give you the right to distribute those packages (this limitation is not intended to interfere with your rights under those individual licenses).

### What Support Includes

Commercial Support Subscriptions provide expert integration and production support on supported platforms and include:

- Problem diagnosis, resolution and bug fixing
- Solving unexpected problems when using, installing or configuring the software
- Guidance about tuning for optimal and scalable performance in your environment
- Answering "how to" questions related to standard and intended product usage
- Offering hints about how to go around missing features
- Answering questions about product adaptation and integration

Customers with an active subscription can rebrand the OpenNebula graphical interface to include their company logo or use the OpenNebula Powered logo to help users quickly identify cloud infrastructures that are powered by OpenNebula and supported by OpenNebula Systems.

### What Support Excludes

Support excludes:

- Modified software and code not distributed as part of an official Product distribution
- Releases not available at OpenNebula Websites
- Technology preview features and unsupported platforms
- Third-party drivers
- System design and training
- Issues arising from non-standard usage of Product
- On-site services, remote access services, and development services, but in those cases stated in the benefits

OpenNebula support plans provide commercial support for OpenNebula but not for the hardware devices and the rest of software components and platform services needed to build a cloud.

The supported components with a Support Extension should be used exclusively as part of an OpenNebula cloud. OpenNebula Systems cannot provide immediate minor enhancements and hot fixes for the supported component as it provides with OpenNebula.

Because OpenNebula leverages the functionality exposed by the underlying platform services, its functionality and performance may be affected by the limitations imposed by those components. Contact us if you are interested in having support for other components in the cloud infrastructure stack and not only for the OpenNebula orchestrator.

### Support Case Priority Definitions

- A **Severity 1** problem represents a **catastrophic problem** in production systems that is determined to be a Product Error. Examples include a complete loss of service, production systems that are crashed, or a production system that hangs indefinitely. System cannot continue essential operations.
- A **Severity 2** problem represents a **high-impact problem** in production systems that is determined to be a Product Error. Essential operations are seriously disrupted.
- A **Severity 3** problem represents a **lower impact problem** on a production system that is determined to be a Product Error. The problem involves a partial or limited loss of non-critical functionality, or some other problem involving no loss in functionality. System can continue essential operations.
- A **Severity 4** problem represents a **general usage, installation or configuration** question, or any problem due to configuration changes in production systems (Technical Assistance). This level also includes questions about **integration** (Integration Assistance) and all problems on non-production systems, such as test and development systems; and feature requests (Feature Enhancement).

## Description of Benefits

**Certified Software:** OpenNebula is thoroughly tested and certified for the most common Linux distributions and on the most popular open source and commercial hypervisors. The release notes of each update or upgrade release include a table with the certified platform components.

**Open Source Code:** OpenNebula is fully open source software released under Apache v2.0 license that is completely available in a public repository.

**Regular Updates:** Regular updates and upgrades with software packages for most common distributions.

**Migration Path:** Upgrade process to easily migrate your production environment to new versions of the software.

**Maintenance Releases:** Incremental updates between minor/major releases to fix outstanding issues. Both code and packages are publicly available.

**Hotfix Releases:** Incremental updates to fix specific critical impact issues. Although all code in OpenNebula is fully open, packages from hotfix incremental versions are not publicly released, and are only available in the enterprise repository for users with an active enterprise subscription.

**Enterprise Tools:** Software components that complement OpenNebula and are only available in the enterprise repository for users with an active enterprise subscription.

**Product Influence:** We listen to all users when determining our product roadmap, but the feature requests by users with an active Basic and Production subscription get bumped up to the front of the line.

**Minor Enhancements:** Delivery of software patches to provide minor enhancements.

**Online Guides:** All guides for developers, integrators, users and operators are available at the OpenNebula site.

**PDF Guides:** PDF version of the online guides.

**Discounts in Public Events and Training:** Discount in public training classes on cloud design, deployment, integration and operation.

**Latest Version Support:** OpenNebula Systems offers full support and maintenance for the latest stable major or minor release.

**Enterprise Portal:** The OpenNebula.pro Support Portal provides all of the benefits of an enterprise subscription such as security and privacy, direct interactions with the experts, real-time tracking of incidents, and critical issue notifications.

**Enterprise Repository:** Repository exclusive for users with an active support subscription to download the recommended OpenNebula packages and the enterprise tools.

**Privacy and Security:** IT assets often provide a critical competitive advantage, so enterprises are understandably concerned that using public forums or mailing lists for technical support may reveal confidential corporate information. The privacy and security of the OpenNebula.pro Support Portal ensure that your confidential corporate information always remains private.

**Expert Support:** The OpenNebula Systems engineering team wrote most of the source code of OpenNebula, thus being in a unique position to provide support and services that require commercial SLAs.

**Enterprise Support SLAs:** Enterprise Support Subscriptions at 9x5 and 24x7 SLAs.

**Previous Version Support:** OpenNebula Systems provides Maintenance Support for a prior software version for three months since the release of the latest version to allow time to update. This Maintenance Support period is extended to six months when the latest version is an upgrade (major version).

**Remote Access (via ssh):** As part of an incident resolution, and only when the incident cannot be diagnosed and solved through the portal, OpenNebula Systems support engineers will remotely access your system through an ssh connection.

**Extended Life Support (extension):** OpenNebula Systems offers optional Extended Life Support for customers interested in longer term support of older upgrade (major) versions.

**Live Support (extension):** Live Support is an extension to the Standard and Premium Support Subscriptions, so Severity 1 (Catastrophic Problem) and Severity 2 (High Impact Problem) Incidents can be managed through a scheduled live chat and screen sharing.

**Feature Development:** The Fund a Feature (FaF) Program can be used to accelerate the features that are planned in the roadmap.

**Cloud Training:** Private Training services are only available for customers with an active support subscription.

**Cloud Deployment:** The Cloud Deployment service is only available for customers with an active support subscription.

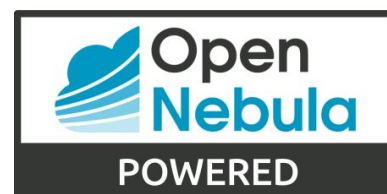
**Cloud Upgrade:** The Cloud Upgrade service is only available for customers with an active support subscription.

**Managed Cloud:** The Managed Cloud service is only available for customers with an active standard or premium support subscription.

**Indemnification:** OpenNebula Systems offers indemnification for copyright infringement claims made by third parties against customers and partners with an active subscription, so you can deploy OpenNebula in your business without complex legal concerns.

**Licensing Flexibility:** OpenNebula is available under Apache v2.0 license, and can be released under a different license to meet customer's and partner's needs and requirements.

**OpenNebula Powered Logo:** Users with an active subscription can use the OpenNebula Powered logo to help cloud consumers quickly identify cloud infrastructures that are powered by OpenNebula and supported by OpenNebula Systems.



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