

 Open
Nebula +  **LINBIT** SDS

Reliable Resilient Block Storage for OpenNebula



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OpenNebula Systems

The company behind OpenNebula

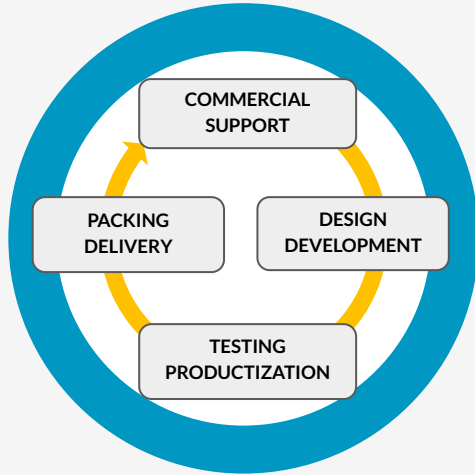


- We are an **Open Source** company.
- **Born in 2005** as the first open source solution for **IaaS**.
- We provide support, professional services & managed cloud services.
- **HQ in Madrid** (Spain).
- Offices in the **US** (Massachusetts) and **Czech Republic**.



Who is Using OpenNebula?

A Widely Adopted Solution to Build Clouds



>100K downloads in the last year



>5K active clouds



Largest 16DC and 300K cores



2K evaluations per month



Vendor

Telco

IT Services

Gaming

Banking

SaaS

Public



ONEedge.io

This work has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement ONEedge 880412

Next Generation Edge Cloud Platform

Build & Manage an On-Demand Edge Cloud
Using Resources from Bare-Metal Providers



OpenNebula Subscription

Unlock the Full Power of Your OpenNebula Cloud



Enterprise Edition

Access to our Enterprise Edition packages and Enterprise Tools



SLA-based Support

Secure and private support options under a commercial SLA



Professional Services

Access to OpenNebula Systems engineering & consulting services



Knowledge Base

Access to exclusive contents, tutorials, and critical notifications



Enterprise Edition provides customers a hardened version, with software patches, bug fixes and minor enhancements.

- ✓ **LTS releases** (i.e. OpenNebula 5.12)



Support provided through a private and secure support portal → 9x5 or 24x7



Knowledge Base with Best Practices, Step-by-Step Guides, and Use Cases.



Professional Services:

- ✓ Cloud Deployment & Upgrade
- ✓ Training
- ✓ Consulting/Engineering
- ✓ **Managed Cloud Services**



OpenNebula's Open Architecture & Storage Support



What is OpenNebula?

The open source Cloud & Edge Computing Platform bringing real freedom to your Enterprise Cloud 🚀

Virtual Machines



Application Containers



Kubernetes Clusters



Virtual Infrastructure Management, Cloud Management Provisioning & Cloud Federation



CORE DATA CENTER



PUBLIC CLOUD

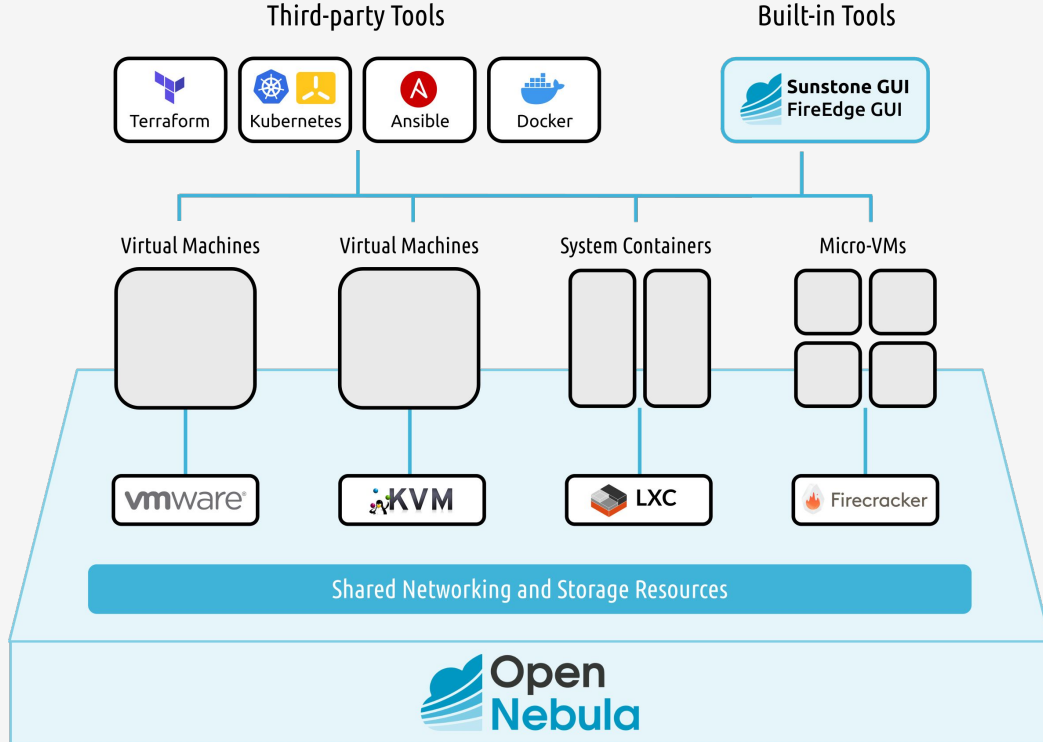


EDGE

- ✓ Avoids "Vendor Lock-in"
- ✓ Minimizes complexity
- ✓ Reduces resource consumption
- ✓ Slashes operating costs

What is OpenNebula?

A unique combination of Virtualization & Container technologies



- ✓ **Multi-Tenancy**
- ✓ **Self-Service**
- ✓ **Elasticity**
- ✓ **Multi-Tier Apps**
- ✓ **High Availability**
- ✓ **Federation**
- ✓ **Provisioning**
- ✓ **Multi-Cloud**
- ✓ **VMs + Containers**

OpenNebula 6.0 “Mutara”

A Quick Overview of Its Main New Features



Clusters as a Service



Edge Cloud Architecture



**Enhanced Docker and
Kubernetes Support**



FireEdge WebUI



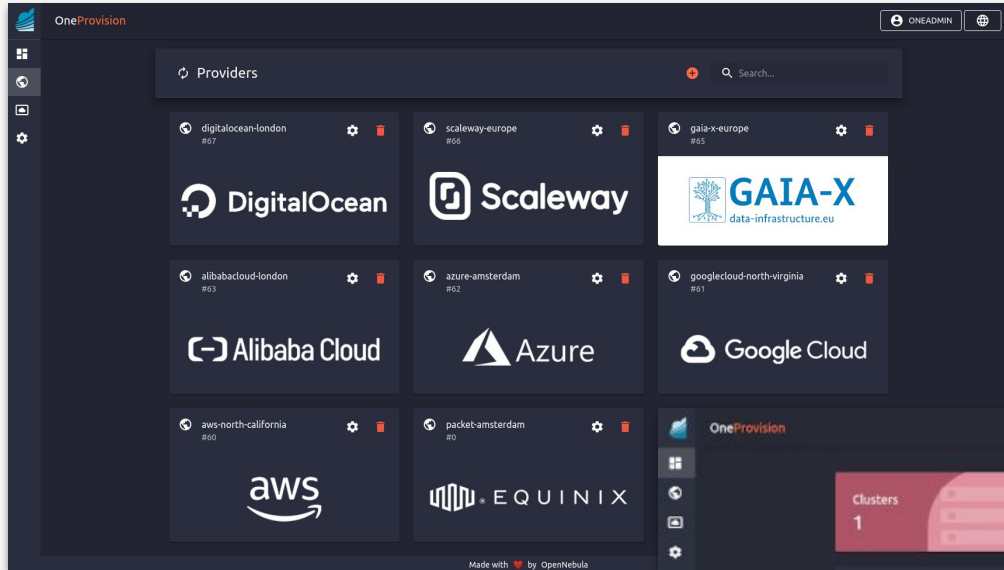
Revamped OneFlow



Backups

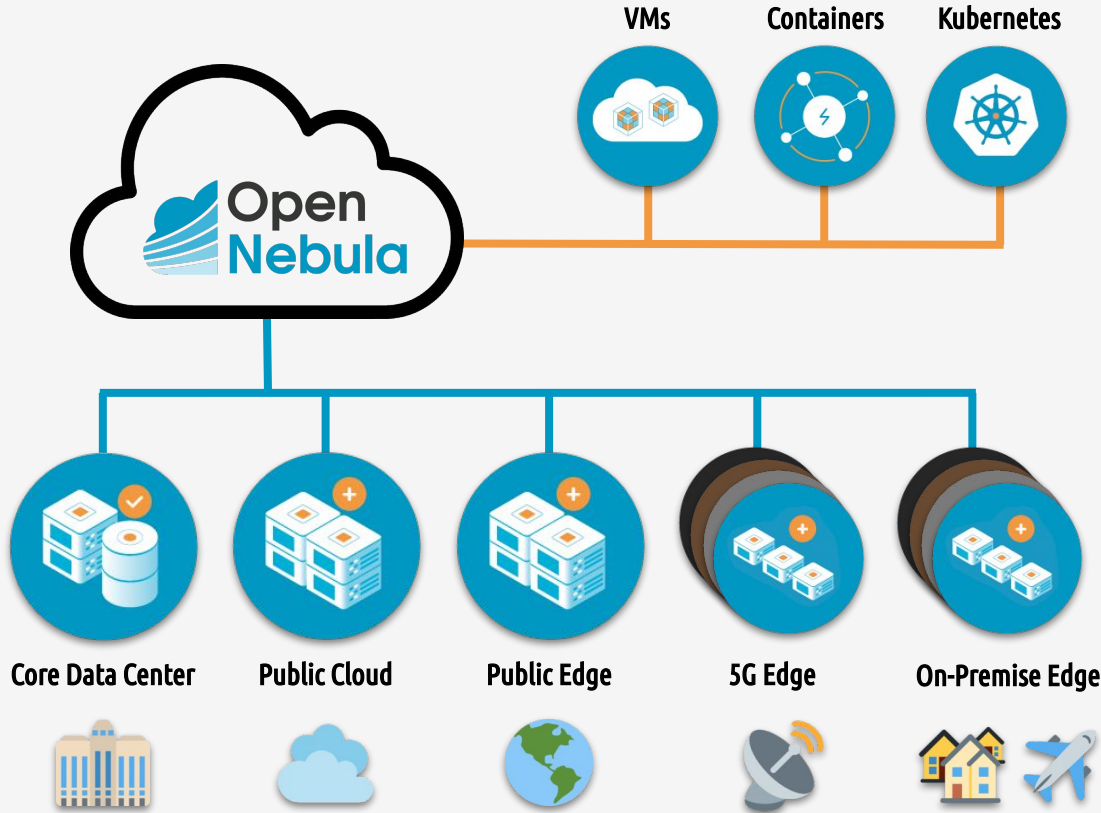
FireEdge WebUI

Easily provision and manage OpenNebula edge clusters on public cloud and edge providers.



Cluster as a Service

A powerful solution to expand your Multi-Cloud to the Edge



ANY APPLICATION

Combine application containers with Virtual Machines and Kubernetes clusters.



ANY INFRASTRUCTURE

Expand your Enterprise Cloud by unlocking the power of a true hybrid, edge and multi-cloud architecture.



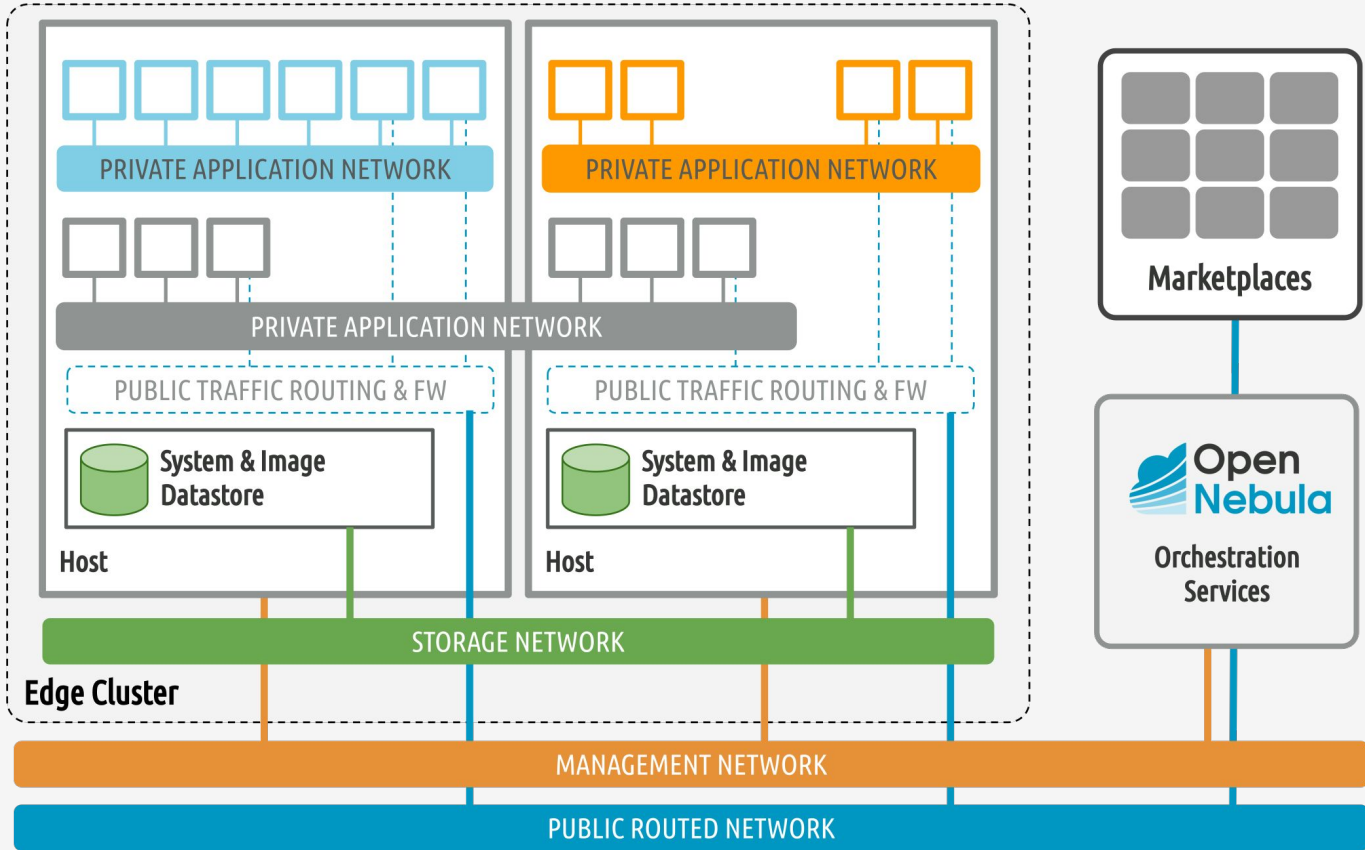
ANY TIME

Add new resources dynamically to meet peaks in demand, or fault tolerance and latency requirements.

<https://opennebula.io/edge-cloud>

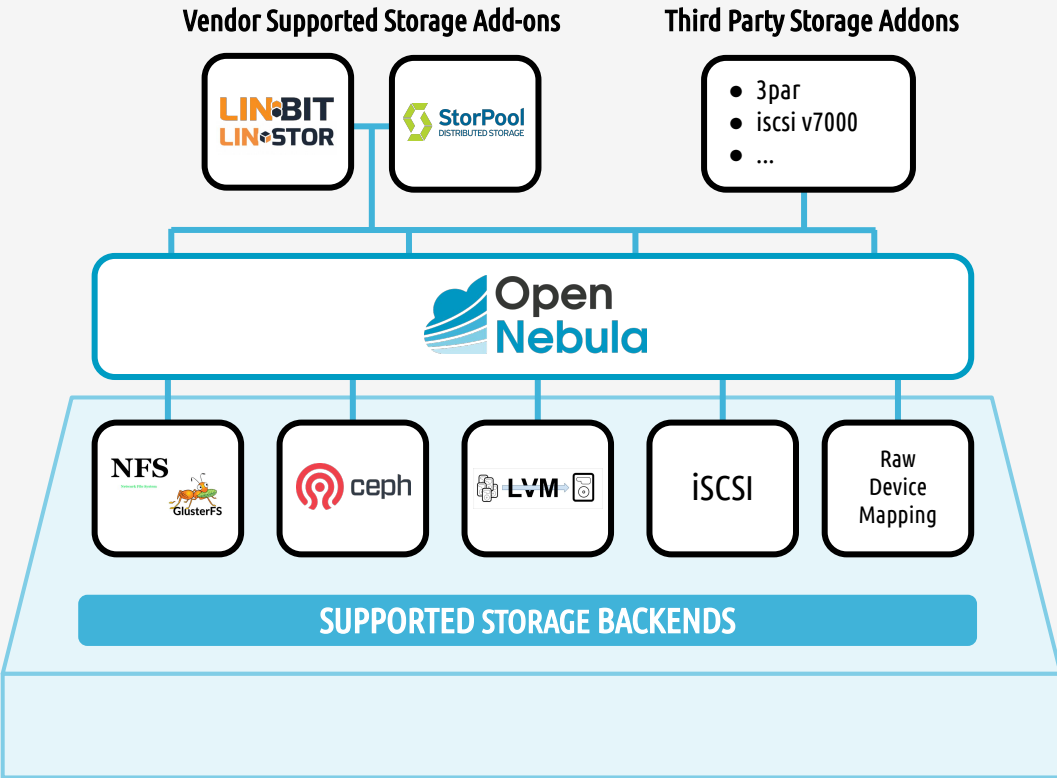
Edge Cloud Architecture

What's Inside?



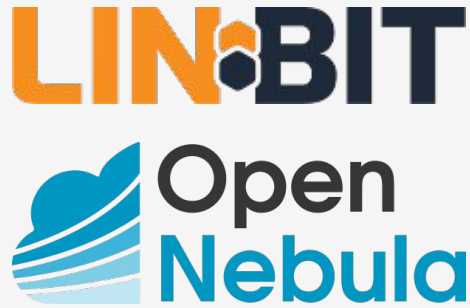
Storage Backends

What Storage Tech is Supported in my OpenNebula Cloud?



LINBIT Add-on

Linstor Storage Driver



<https://github.com/OpenNebula/addon-linstor>

Author 

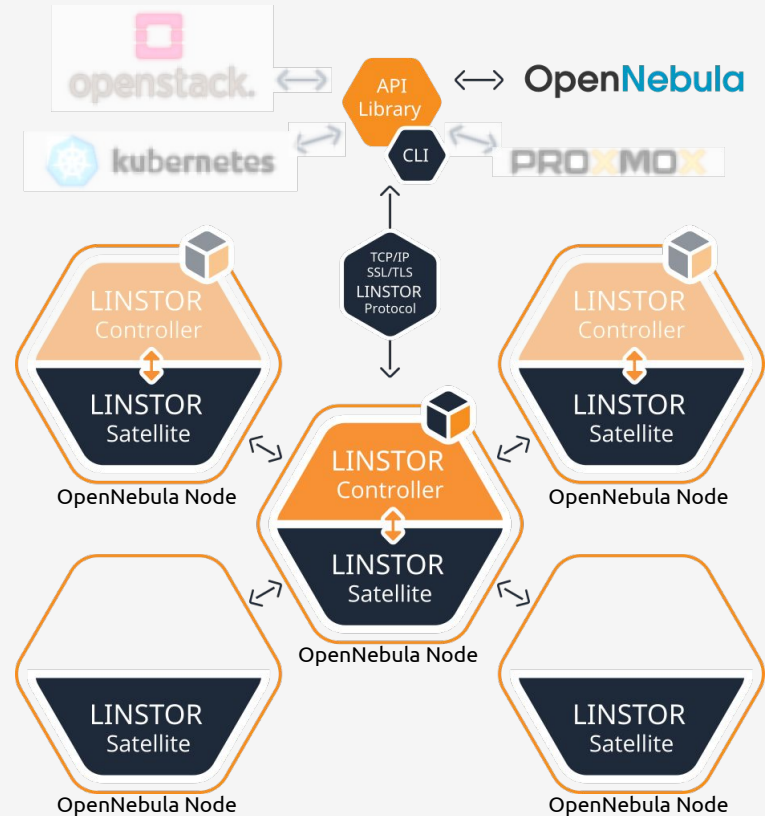
- Rene Peinthor rene.peinthor@linbit.com

Features 

- Leverages DRBD!
- Migrate
- Snapshots
- Fast Image Clones



- LINSTOR Satellite's installed on each node
- LINSTOR Controller is independent and can be anywhere in the cluster. (HA capabilities)
- OpenNebula plugin connects OpenNebula with LINSTOR Controller
- Resource-Volumes in LINSTOR reflected as a backend disk in OpenNebula
- VM's can be "Live Migrate" between hosts
- LINBIT SDS Supports OpenNebula 6 "Mutara" perfectly





- Open Source SDS for especially High Performance Infrastructure
- Available for all main Linux distributions
- Aimed for High Performance, Low-Latency environments as well as Edge Computing
- Millions of Installations
- Supports all kind of workloads
- No Vendor-Lock in
- Support for almost all operators



- Open Source platform for different workloads
- Available for all Linux distributions
- Aimed for different scales of production environments
- Simple / Efficient
- VMs & Containers
- No Vendor-Lock in
- Multi-Hypervisor Support

Q&A



Questions in chat





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