Virtuozzo Hybrid Infrastructure

The production-ready OpenStack-based cloud platform for service provider

What is Virtuozzo Hybrid Infrastructure?

Virtuozzo Hybrid Infrastructure is a turnkey cloud platform for service providers. It makes it easy to build, manage and sell your own brand of Infrastructure–as–a–Service cloud – public, private or hybrid – as well as Kubernetes–as–a–Service, Load Balancer-as-a-Service, and Storage–as–a–Service.

The platform includes KVM–based virtualization, OpenStack orchestration, software–defined storage, a self–service portal for end users, and easy–to–use cloud management and monitoring tools, in a single hyperconverged solution.
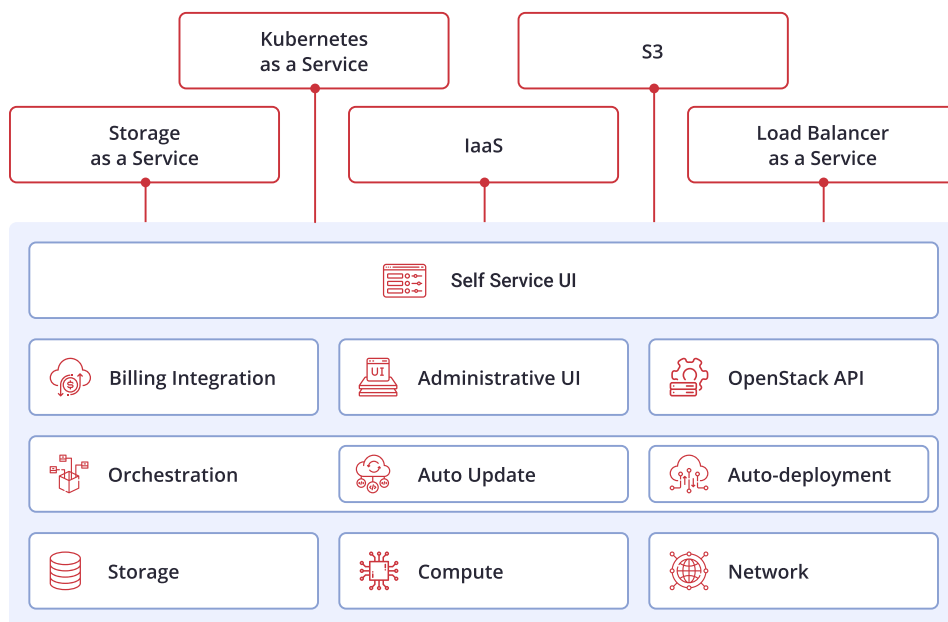

Figure 1. Virtuozzo Hybrid Infrastructure Components

Key Benefits

Fast Time-to-Value
Ready–to–use OpenStack cloud, optimized for service providers, with 24/7 support included. Get to market fast with profitable cloud services.

Minimal Investment
Hyperconverged solution with software–defined storage to reduce your costs – minimal investment needed to launch.

High Availability and Performance
Resilient cloud platform with automatic recovery from server or component failure, and storage performance up to 3.5x in comparison with Ceph.

Flexible Licensing Model
Licensing designed for service providers: pay as you grow, or choose a traditional perpetual license.

Flexible Deployment Options
Deploy in your datacenter, or get fully managed cloud infrastructure so you can focus on business development – it's up to you.

> "Simplicity is a key differentiator for Virtuozzo. While there are other cloud solutions that claim to be easy–to–use, none offer that same level of simplicity. Virtuozzo Hybrid Infrastructure is easy to manage, easy to deploy, flexible and affordable."

**Carlos Pino,** President & CEO, TLine

Key Features and Components of Virtuozzo Hybrid Infrastructure

Resilient Compute and Networking

- **High performance and high availability for Virtual Machines.** With an improved KVM hypervisor, GPU/vGPU support, and the ability to increase vCPU, memory and storage resources without downtime, your cloud is ready for enterprise workloads

- **Secure and isolated networking** with VXLAN networks, distributed virtual routers, Load Balancers, Security Groups and built–in VPN as a Service solution

- **Full Windows guest support** for desktop and server OS with automatic installation of high performance paravirtualization drivers

Simplified Management

- **Single management console** for compute, storage and network services

- **Multi-tenant self-service portal** for end-users with white labeling support

- **Single-click update** for all system components with Maintenance Mode for all services

- **Easy billing integration:** meter and bill for your cloud resources with popular cloud billing platforms such as WHMCS, HostBill and CloudBlue

- **Built-in advanced analytics and monitoring** with an alerting system and enterprise overview dashboards powered by Prometheus and Grafana

- **Comprehensive integration** with third party solutions via a 100% compatible OpenStack API
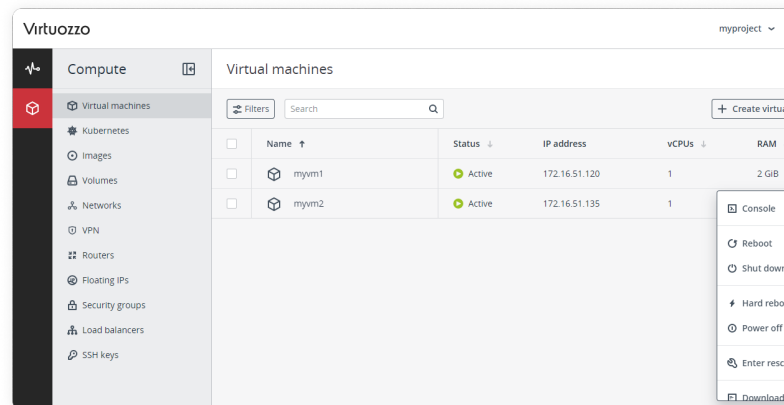
Software-Defined Storage

- **Data redundancy** in case of any type of hardware failure, with support for block storage (VM volumes, iSCSI), file storage (NFS), and object storage (S3)

- **High-performance block storage** for hot data and virtual machines, natively integrated with compute services, including RDMA support and ability to create multiple chunk servers per NVMe/SSD drive

- **Cost-effective cold data storage** with erasure coding that optimizes disk space for storing petabytes of data

- **Easy and smooth scalability for growing clusters** by small steps on one server or disk

Kubernetes as a Service

- **Automated** Kubernetes deployment and updates, as well as horizontal auto scaling based on Cluster Autoscaler

- **High performance** that copes with high disk I/O pressure on a storage subsystem for volumes

- Integration with **Persistent Volumes and Load Balancers**

- **Integrated monitoring** with Prometheus and Grafana

- **Highly available** control plane

- **Flexible customization** using labels

- **CNCF-certified** Kubernetes implementation

FOR MORE INFORMATION virtuozzo.com/hybrid-infrastructure/