

Virtuozzo Hybrid Server

System Containers™, Virtual Machines, Software-Defined Storage... All in One Solution

What is Virtuozzo?

Virtuozzo delivers a mix of system containers, hypervisor based on optimized KVM, and software-defined storage. With Virtuozzo, service providers and enterprises can efficiently use existing hardware—at a minimal total cost of ownership—during any part of its lifecycle. Secure by design, Virtuozzo has a 15-year track record in development, and today Virtuozzo powers more than 5 million virtual environments.

What's New in Virtuozzo Hybrid Server?



Virtuozzo Containers

Based on new Linux kernel, our containers are setting new performance standards.

- Secure: encrypted containers protect production workloads
- Efficient: up to 60% better performance compared to VM
- Lightweight: up to 2x greater density compared to VM
- AES-256 at-rest encryption



Virtuozzo Hypervisor

We rebuilt our hypervisor core on top of open-source KVM.

- 100% upstream KVM compatibility
- Up to 40% better performance for latest Linux and Windows OS
- 200+ Virtuozzo patches, including backup, out-of-the-box high availability, and AMM



Virtuozzo Storage

Convert local disks into high performance, scalable, and failure-tolerant storage.

- Up to 10x better performance compared to Ceph
- Block, file, S3 and volume storage in a single solution
- Highly available storage pool with less than 30% overhead

Key Features

Encryption

Full transparent, AES-256 disk encryption stores data in LUKS format, with extensive KMS support.

Native Docker Support

Compatibility with mainstream Docker versions and OverlayFS storage driver.

Backups

Backups for containers and KVM are available by default. We enable “always incremental” backup, where the user only has to perform a full backup the first time.

High Availability

Both virtual instances and storage are highly available by design. When a node fails, all running containers and VMs will be restarted and distributed among the cluster.

ReadyKernel™

Keep your cluster updated with the latest security patches without downtime. Kpatch technology applies a patch in seconds; it won't freeze running processes.

Advanced Memory Management

Run containers and VMs side-by-side on the same node. Memory usage prediction and auto ballooning reduce your overall memory footprint.

Improved Live Migration

With support from the CRIU™ project, the migration process in user space is reliable, secure, and void of excessive restrictions.

"Virtuozzo Hybrid Server provides us with one consistent platform, regardless of where our infrastructure resides. Whether it's public or private, Virtuozzo arms us with the portability, flexibility and elasticity to support our clients' requirements effectively and efficiently."

— Dave Idle, VP of product marketing, Web.com

How Does Virtuozzo Work?

Virtuozzo converges the virtualization technology you need—system containers, hypervisor, and software-defined storage—into one efficient platform. By supporting different types of scenarios, our platform gives you the freedom to choose how and where you run your workloads, so you can achieve the greatest density and performance within your public or private data center. It enables legacy workload, bare-metal performance, secure isolation and encryption, and portability typically only seen with app containers. Virtuozzo also enables live migration and high availability and mutability between containers and VMs.

How Can You Use Virtuozzo?

Hosting and Service Providers

Are you operating large public clouds to deliver efficient and profitable services to SMB customers? Virtuozzo gives you the toolset from which to build targeted, competitive services. Virtuozzo delivers everything you need for production: highly available encrypted virtualization and storage, backups, an application catalog, and support.

Independent Software Vendors (ISV)

If you need to deploy secure, multi-tenant SaaS platforms, performance compromises are not an option. Virtuozzo containers provide bare-metal performance required for response-time-critical applications.

Enterprises

With Virtuozzo Hypervisor, you can replace your expensive virtual machine deployments with optimized KVM. To get even more from your hardware, run your legacy workload within a system container without the need to modify it. Virtuozzo storage is a next-generation replacement for expensive hardware SAN solutions.

Native Docker Support

System containers provide security isolation for Docker-based platforms, allowing you to run application containers in privileged mode without any restrictions. Add an extra security layer without the performance penalty of a hypervisor. There's no need to modify your Docker tools and infrastructure for production use. Virtuozzo storage provides a highly available backend for data volumes.

Key Benefits

- 24x7 experienced support service. We'll help you with installation, performance optimization, and scaling your setup
- Freedom to choose the best technology for the job
- Power to deliver exceptional performance to your customers
- Low total cost of ownership

FOR MORE INFORMATION

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