

Proxmox Virtual Environment

Proxmox Virtual Environment (Proxmox VE or PVE) is a hyper-converged infrastructure open-source software. It is a hosted hypervisor that can run operating systems including Linux and Windows on x64 hardware. It is a Debian-based Linux distribution with a modified Ubuntu LTS kernel and allows deployment and management of virtual machines and containers.

Two types of virtualization are supported: container-based with LXC and full virtualization with KVM. It includes a web-based management interface. There is also a mobile application available for controlling PVE environments.

Proxmox Virtual Environment is a complete, open-source server management platform for enterprise virtualization. It tightly integrates the KVM hypervisor and Linux Containers (LXC), software-defined storage and networking functionality, on a single platform. With the integrated web-based user interface one can manage VMs and containers, high availability for clusters or the integrated disaster recovery tools with ease. Proxmox Virtual Environment is based on Debian GNU/Linux and uses a custom Linux Kernel. The Proxmox VE source code is free, released under the GNU Affero General Public License, v3 (GNU AGPLv3).

Benefits of a Hyper-Converged Infrastructure (HCI) with Proxmox VE

A hyper-converged infrastructure (HCI) is especially useful for deployments in which a high infrastructure demand meets a low administration budget, for distributed setups such as remote and branch office environments or for virtual private and public clouds.

HCI provides the following advantages:

- scalability

 - seamless expansion of compute, network and storage devices (scale up servers and storage quickly and independently from each other)

- low cost

 - Proxmox VE is open source and integrates all components you need such as compute, storage, networking, backup, and management center; it can replace an expensive compute/storage infrastructure

- data protection and efficiency

 - services such as backup and disaster recovery are integrated

- simplicity

 - easy configuration and centralized administration

- open Source

 - no vendor lock-in