Proxmox Virtual Environment is an easy to use
Open Source virtualization platform for running
Virtual Appliances and Virtual Machines

PROXMOX

DATASHEET

Proxmox Virtual Environment

AT A GLANCE

- Complete enterprise virtualization solution

- HA without SPOF

- VM Templates and Clones

- KVM hypervisor with an enterprise class management system

- OpenVZ—Container-based virtualization

- Comprehensive management feature set

- Open source solution

OVERVIEW

Proxmox VE is a complete virtualization management solution for servers. You can virtualize even the most demanding application workloads running on Linux and Windows Servers. It combines the leading Kernel-based Virtual Machine (KVM) hypervisor and container-based virtualization with OpenVZ on one management platform.

The unique multi-master design eliminates the need of an additional management server like seen on other solutions. This saves ressources and also allows high availabilty without single point of failures (no SPOF).

The included web-based management empowers the user (and admin) to control all functionalities easily. This includes full access to all logs from all nodes in a cluster, including task logs like running backup/restore processes, live-migration or High Availability (HA) triggered activities.

ENTERPRISE-READY

Proxmox VE includes all the functionalities you need to deploy an enterprise-class virtualization environment in your company. Multiple authentication sources combined with role based user- and permission management enables full control of your virtualization cluster. The RESTful web API enables easy integration for third party management tools like custom hosting environments.

The future-proof open source development model guarantees full access to the source code and maximum flexibility.

ABOUT PROXMOX

SALES AND INQUIRIES

Proxmox Server Solutions GmbH is a privately held corporation based in Vienna, Austria.

http://www.proxmox.com

Proxmox Customer Portal
https://my.proxmox.com

OVA MEMBER
OPEN VIRTUALIZATION ALLIANCE

LINUX FOUNDATION
SILVER MEMBER

Feature	Description
Leading Enterprise Virtualization Technologies	• Linux and Windows Servers, 32 and 64 bit operation systems • Support for the latest Intel and AMD server chipsets for great VM performance • Leading performance relative to bare metal for real-world enterprise workloads • Management layer contains all the capabilities required to create and manage a virtual infrastructure
Live Migration	• Move your running servers from one physical host to another one without downtime.
Open Source	• Licensed under GNU Affero General Public License, version 3 (AGPL, V3: http://www.gnu.org/licenses/agpl-3.0.html) • Public code repository (GIT) • Bugtracker • Community Forum • Wiki for documention and HowTo´s
High Availability Cluster	• No single point of failure (no SPOF) • GUI for managing KVM and OpenVZ HA settings • Based on proven Linux HA technologies, providing stable and reliable HA service • Resource agents for KVM and OpenVZ • Support for reliable hardware fencing devices
RESTful web API	• Easy integration for third party management tools like custom hosting enviroments • REST like API (JSON as primary data format, and the whole API is formally defined using JSON Schema) • Easy and human readable data format (native web browser format) • Automatic parameter verification (we can also verify return values) • Automatic generation of API documentation • Easy way to create command line tools (use the same API) • Resource Oriented Architecture (ROA) • Declarative API definition using JSON Schema
Rich web app for Management	• No need to install a separate management tool or any additional management node • Fast search-driven interface, capable of handling thousands of VM´s • Secure VNC console, supporting SSL • Wizard based creation of virtual servers and containers • Seamless integration and management of Proxmox VE 2.x Cluster • Support subscription management • Role based permission management for all objects (VM´s and CT´s, storages, etc.) • Support for multiple authentication sources (e.g. local, MS ADS, LDAP, ...) • AJAX technologies for dynamic updates of resources • Based on Ext JS 4.x JavaScript framework. • Cluster-wide Task and Cluster logs—The GUI shows all running tasks from the whole cluster but also the history and the syslog of each node. This includes running backup or restore jobs, live-migration or HA triggered activities
Backup and Restore	• Full backups of OpenVZ containers and KVM VMs • Live Backups via LVM snapshot • Multiple schedules and backup storages • GUI integrations, but also via CLI • "Backup Now" and restore via GUI • All jobs from all nodes can be monitored via "Tasks"
VM Templates and Clones	• Deploying virtual machines from templates is blazing fast, very comfortable and if you use linked clones you can optimize your storage by using base images and thin-provisioning. • Linked and Full Clones
Role-based Administration	• User- and permission management for all objects (VM´s, storages, nodes, etc.) • A role is simply a list of privileges. Proxmox VE comes with a number of predefined roles which satisfies most needs. The whole set of predefined roles can be seen on the GUI. • Permissions are the way to control access to objects. In technical terms they are simply a triple containing <path,user,role>. This concept is also known as access control lists. Each permission specifies a subject (user or group) and a role (set of privileges) on a specific path.
Multiple Authentication Sources	• Proxmox VE supports multiple authentication sources • Linux PAM standard authentication (e.g. 'root' and other local users) • Proxmox VE authentication server (built-in) • Microsoft Active Directory (MS ADS) • LDAP