Installing Proxmox VE on SimplStor

Zerowait Corporation
707 Kirkwood Hwy
Wilmington DE 19805

Tel: (302) 996-9408
Email: engineering@zerowait.com

Overview

As part of our project to create a containerized SimplStor for AI implementations and other purposes, Zerowait evaluated multiple applications. The two leading solutions were VMware vSphere Hypervisor and ProxMox VE.

After careful consideration, it was decided to install and evaluate ProxMox due to the product being cost-effective (open-source), having network flexibility, and also having Integrated container support.

Technical Benefits of Installing Proxmox VE on a Server

Proxmox Virtual Environment (VE) is an open-source server management platform combining KVM hypervisor and LXC containers, software-defined storage, and networking functionality on a single platform. Here are the key technical benefits:

1. **Robust Virtualization**: Supports both KVM (full virtualization for Windows/Linux) and LXC (lightweight container-based virtualization), offering flexibility for diverse workloads.
2. **High Availability (HA)**: Clustering features ensure minimal downtime by automatically migrating VMs/containers to other nodes in case of hardware failure.
3. **Scalable Storage Options**: Integrates ZFS, and other storage solutions, providing fault-tolerant, scalable, and high-performance storage for VMs and containers.
4. **Centralized Management**: Web-based interface simplifies VM/container management, backups, and monitoring across multiple nodes.
5. **Cost-Effective**: Open-source with no licensing fees, reducing operational costs compared to proprietary solutions like VMware or Hyper-V.
6. **Backup and Restore**: Built-in tools for snapshotting, backup scheduling, and restoration ensure data integrity and disaster recovery.
7. **Networking Flexibility**: Supports advanced networking like VLANs, bonding, and software-defined networking for complex environments.
8. **Community and Enterprise Support**: Active community for free users and enterprise-grade support for mission-critical deployments.

Findings and Conclusion

The installation of Proxmox on the SimplStor was successful and straightforward. The documentation and directions we found proved to be accurate as there were no issues with the installation. Proxmox excels for cost-conscious users, small-to-medium businesses who need a feature-rich, open-source virtualization platform with integrated container support, flexible storage, and robust management tools. VMware's free ESXi is more limited, and its full potential is locked behind expensive licenses, making it better suited for large enterprises already invested in the VMware ecosystem. For users prioritizing affordability, flexibility, and modern virtualization/containerization needs, Proxmox is a compelling alternative.

Contact Zerowait today to learn more about implementing Proxmox on SimplStor. Our experts can offer fast, accurate guidance. Visit our email us at engineering@zerowait.com or call our team at (302) 996-9408 to schedule a consultation.