

# VASKE COMPUTER INC.

## CUSTOMER SUCCESS



**A leading behavioral health and recovery organization was able to seamlessly upgrade from an outdated version to the latest version of OLVM/KVM which runs their entire ERP environment with very little downtime.**

### THE CHALLENGE

A renowned not for profit treatment provider, known for its unwavering commitment to delivering high-quality services, faced several challenges related to their existing virtualization environment. Their critical applications were operating on a three-node Production Oracle Linux Virtualization Manager (OLVM)/Kernel-based Virtual Machine (KVM) 4.3 cluster and a one-node Disaster Recovery (DR) OLVM/KVM 4.3 cluster.

Recognizing the need to stay ahead in performance, security, supportability and compatibility, they decided it was time to upgrade to OLVM/KVM 4.5. However, the complexity of the upgrade process posed multiple risks. The IT team had to ensure minimal downtime for critical applications, maintain data integrity, and coordinate upgrades across distinct environments while minimizing service disruption.

### WHY ORACLE

The organization remained committed to the Oracle platform to maintain strong platform supportability and licensing compatibility. The decision to upgrade OLVM/KVM rather than migrate to an entirely new hypervisor platform allowed them to continue leveraging Oracle's robust support structure and technical stability.

By upgrading within the Oracle ecosystem, the provider ensured:

- Continued alignment with Oracle support structures.
- Seamless integration with Oracle's cloud options, enabling potential future lift-and-shift strategies for DEV/TEST/QA, DR, and Production environments into the Oracle cloud.
- Simplified migration paths, as OLVM/KVM images can be moved to Oracle Cloud Infrastructure (OCI) without conversion — simply by transferring disk images to an OCI storage bucket, creating a VM, and attaching the images.

Their approach leveraged the same proven OLVM/KVM stack utilized by OCI, ensuring long-term support and compatibility.

## RESULTS

The journey to OLVM/KVM 4.5 was a carefully planned and executed process:

- **DR Upgrade First:**  
The IT team first focused on upgrading the DR environment:
  - Updated the OLVM Engine to the latest 4.3 version.
  - Upgraded the Engine to 4.4 on a fresh Engine OS VM.
  - Verified prerequisites, backed up the environment, and restored cleanly.
  - Deployed new KVM 4.4 hosts, migrated VMs, and upgraded the cluster and data center compatibility versions.
  - Disabled old repositories for a clean post-upgrade environment.
- **Production Upgrade:**  
Using the lessons learned from the DR upgrade:
  - The production environment was similarly upgraded to OLVM/KVM 4.4.
  - All VMs were migrated and rebalanced across the updated hosts.
  - Cluster and data center compatibility versions were upgraded.
  - Legacy repositories were disabled to avoid potential conflicts.
- **Final Upgrade to 4.5:**
  - The team completed the upgrade for both DR and Production from 4.4 to 4.5.
  - Verified full service health and VM operability post-upgrade.
  - Achieved the upgrade with minimal downtime and no data loss.

Following the upgrade, the organization realized:

- **Enhanced Performance:** Improved responsiveness and operational efficiency.
- **Increased Security and Stability:** Benefits from the latest KVM/OLVM enhancements.
- **Simplified Management:** Streamlined operations through improved management tools.
- **Future-Ready Infrastructure:** Direct compatibility with Oracle Cloud Infrastructure for any future cloud expansion plans.

The key to their successful upgrade was **thorough planning, effective team coordination, and a robust backup and recovery strategy**. Their journey stands as a testament to the power of meticulous preparation and technical expertise.

