SOLUTION BRIEF

VergeIO + Cirrus Data: A Practical Guide for VMware and Mixed-Platform

verge.io

VMware's new ownership is pushing IT budgets harder than ever with higher licensing fees and forced bundles. Traditional virtualization and SAN-based designs do not fix the issue. They add complexity and keep organizations stuck in refresh cycles. Exiting VMware is now an imperative. However, moving off an embedded layer, such as the hypervisor, is more complex than even a storage migration.

The challenge is clear: how does an organization transition out of the old model without risking business operations or spending months on manual work? Success requires advanced tools and planning.

When transitioning an enterprise from VMware to another hypervisor, every second of downtime costs. Mission-critical applications, databases, and virtual desktops must remain online during the transition. If the final cutover requires downtime, then it must be measured in seconds, not hours.

This guide provides a direct plan for transitioning from legacy virtualization to VergeOS with near-zero disruption. It introduces our partner, Cirrus Data Solution (CDS), as the solution when any of the following are a consideration: you are migrating more than 100 virtual machines (VM), downtime is a concern, migrating from an older VMware product or a 3rd-party hypervisor, speed to completion is a priority, automated migration would be valuable, or additional capabilities like Raw Device Mapping (RDM) mapping or persistent volumes is necessary. Cirrus Data provides a checklist that makes migrating to VergeOS faster, easier, safer, and more predictable.

WHAT VERGEOS DELIVERS

VergeIO provides an Ultraconverged Infrastructure platform, VergeOS, built on a single codebase for compute, storage, and networking. Virtual Data Centers establish clear boundaries for tenants, projects, and departments, providing support for effective policy control. Core capabilities include global inline deduplication, snapshots, replication, and fault-tolerant clustering. Organizations can run VergeOS on current x86 servers, allowing capital to stretch further and easing the pressure to refresh. One operating system manages core, edge, and remote sites under a common infrastructure backplane, reducing tool sprawl and training overhead.

WHAT CIRRUS DATA DELIVERS

Cirrus Data is a leading provider of block storage data mobility. The company's software-only solutions, Cirrus Migrate Cloud and MigrateOps™, together enable the seamless migration of any Windows or Linux block storage solution, whether physical or virtual, across nearly any hypervisor, private cloud, or public cloud to VergeOS. Cirrus Data can migrate virtual machines with Raw Device Mappings (RDMs) and handle environments where a hypervisor snapshot is not desirable. Migrating from even older virtual machines in VMware environments that do not support native migration is possible with Cirrus Data software.

MigrateOps™ is a purpose-built data mobility-as-code automation platform designed to make enterprise-scale migrations easier, safer, and more predictable. Its data mobility orchestration extends beyond storage to-include storage copies, coordinating with operating systems, applications, and cloud infrastructure. With MigrateOps from Cirrus Data, organizations can link data mobility migration steps together with automations that are often managed externally, including things such as OS automation, application automation, public and private cloud automation, virtualization platform automation, enterprise storage management automation, and SAN automation. These would typically be handled and migrated manually, but with Cirrus Data and VergeIO, the organization can automate the entire process.

MigrateOps uses domain-specific configuration files in YAML format. YAML is a data serialization language that uses the English language to mirror how people communicate, making it easy to understand. For VergeIO, Cirrus Data offers a prebuilt compute migration recipe to VergeOS. From the recipe page in MigrateOps, there is a complete guide and configuration reference for migrations to VergeIO.

During the migration, Cirrus Data leverages its intelligent quality of service (iQoS) software to ensure the I/O rates align with the previously defined dynamic bandwidth allocation thresholds. iQoS enables the migration to use all available bandwidth when applications are idle, or it dynamically slows the migration as application traffic increases, ensuring users are not disrupted.

Finally, when the migration is complete MigrateOps prepares the compute cutover and configures the system so that essential drivers and settings are enabled for the VergeIO instance according to best practices. Cirrus Data installs the required VergeIO guest tools and sets the VergeIO-specific drivers for optimal performance. The organization can generate a migration report at any time.

MARKETS THAT BENEFIT

Enterprises with large estates will gain a predictable exit path that respects business hours and service levels. Service providers and MSPs require robust tenant isolation and rapid onboarding, supporting any hypervisor their customers may be using, while maintaining stable client workloads as they expand their capacity. The public sector and education IT face budget pressure and small staff counts; hardware reuse, straightforward operations, and short learning curves are crucial. Regulated industries require traceable changes, scheduled cutovers, and consistent reporting, and the joint toolset delivers that structure from pilot to scale-out.

WHY USE BOTH TOGETHER

VergeOS is the target state, and Cirrus Data is the fastest, predictable, secure path to reach it. Cirrus Data synchronizes data into VergeOS as applications continue to serve users, and teams schedule cutovers in narrow, well-understood windows. The approach avoids snapshot limits and cross-array quirks, since Cirrus Data's lift-and-shift approach to virtual migration non-disruptively transfers the complete system state, including the entire operating system stack, to the new target platform while preserving all existing data and configurations. Projects finish sooner, service levels remain steady, and stacked licenses roll off as workloads consolidate, which produces clear savings and simpler support.

WHEN TO USE IOMIGRATE VS CIRRUS DATA

Use **VergeOS ioMigrate** when the source is a current version of VMware, the scope is contained, and a short maintenance window is acceptable. The tool connects to vCenter, performs a complete copy, and then tracks changes for fast incrementals, allowing batches of VMs to move cleanly with minimal downtime once synchronization is stabilized.

Use Cirrus Data when the estate is large, when near-zero or zero downtime is required, or when the source is an older version of VMware or not VMware. Cirrus Data handles mixed platforms, RDMs, supports calendar-driven approvals, and manages bandwidth during synchronization, so teams can run parallel waves without disrupting daytime users. Not to mention, Cirrus Data automatically handles critical system remediations and detects and applies appropriate settings when specific configurations are not provided. It is a significant time saver for organizations.

Platform coverage

Cirrus Migrate Cloud supports migrating VMware ESXi, Microsoft Hyper-V, Nutanix AHV, Proxmox, and Red Hat OpenShift Virtualization to VergeOS. It can also migrate Apache CloudStack, OpenStack, Oracle Linux Virtualization Manager, Red Hat Virtualization, VMware-based clouds like AVS and VMware Cloud on AWS, and AWS Outposts to VergeOS. It works across any block storage and cloud targets like Azure and AWS without snapshot requirements on source disks.

EXECUTION PLAN (CHECKLIST)

- **Set goals and inventory:** Catalog VMs, OS versions, databases, integrations, and dependencies. Record license and maintenance spend. Baseline server count, power, and rack use.
- **Design VergeOS:** Size the initial cluster. Define Virtual Data Centers by tenant or department. Map storage classes to performance and protection needs. Establish network segments and access roles.
- **Choose the migration path:** Select ioMigrate for limited footprints of current generation VMware scopes with short cutovers. Select Cirrus Data for any other migration to VergeOS, including older VMware estates, hypervisors outside of VMware, mixed-platform moves, migrations that involve RDMs, time-sensitive, larger migrations, or large parallel waves.
- **Prepare Cirrus:** Deploy the agent on source hosts. Configure the VergeOS integration and access nodes. Draft the MigrateOps YAML with operation name, recipe, compute, and networks. Set business-hour limits and off-hour acceleration.
- **Synchronize and test:** Copy in the background. Boot target VMs in an isolated VergeOS network. Validate start-up, bindings, and storage latency.
- **Plan cutover:** Schedule the approval window in MigrateOps. Run a final sync. Power off the source. Power on in VergeOS. Validate health checks and access.
- **Scale out:** Increase batch size after the pilot. Retire or repurpose old hosts. Update DR to use VergeOS replication across sites. Track license returns and power savings.

TECHNICAL NOTES

Network design drives migration risk, so preserve IPs when practical, or plan a clean re-IP with DNS controls and short TTLs. VergeOS network virtualization separates tenants and isolates noisy neighbors, ensuring predictable testing. Cirrus moves data across any block storage and avoids source snapshots, allowing busy systems to continue serving users as synchronization proceeds. MigrateOps records actions, approvals, and results for each run, which simplifies audit reviews and rollback plans.

MEASURABLE OUTCOMES

Consolidation on VergeOS reduces the server count and lowers power draw, and those gains are reflected in the first reporting cycle. Retiring stacked licenses trims operating cost in year one and creates ongoing savings that can fund backlog work. IT can shrink change windows since the final step is a controlled restart, and they can align cutovers with regular maintenance and support staffing. Production remains responsive as iQoS manages synchronization, and each move includes a complete record from approval through validation, allowing teams to resolve questions quickly and keep the program on schedule.

A PRACTICAL QUESTION, ANSWERED

Can a team move hundreds of terabytes without an outage? Yes. Data synchronizes as production serves users, target VMs are validated on VergeOS, and the final step is a controlled power-off and power-on. Cirrus Data provides the synchronization and approvals. VergeOS provides the stable end state.

NEXT STEPS

Select a pilot that blends high business value with technical variety, and use it to prove speed, safety, and repeatability. Stand up the first VergeOS cluster, define the initial Virtual Data Centers, and complete one end-to-end move with Cirrus Data from synchronization through cutover. Capture time, cost, and service impact in a brief report for leadership, then expand to larger waves that retire the highest-cost segments first and build skills across the team.

CONCLUSION

VergeOS removes stacked complexity, and Cirrus Data removes migration risk. The joint plan delivers a clean exit from legacy virtualization and a stable infrastructure platform for the next decade. Start with a focused pilot, document results, and expand with confidence across the estate.