



Hewlett Packard
Enterprise

Brochure



Rethinking virtualization for the hybrid cloud era

Market snapshot

For decades, server virtualization has served as the backbone of IT infrastructure, driving data centers and enabling cloud environments. However, with rising licensing costs, increasing vendor lock-in, and the widespread adoption of hybrid cloud strategies, organizations are being forced to rethink their virtualization approach.

Today's enterprises need more than conventional virtualization platforms. They require flexible, cost-efficient solutions that simplify management across private, public, and edge environments, with a path to modernize to cloud-native applications. Forward-looking businesses are seeking pathways to optimize existing investments, modernize infrastructure, and reduce complexity in their hybrid cloud operations.

This brochure explores how organizations can respond to these market-wide shifts, realize greater value from their IT investments, and future-proof their workloads with a modern, hybrid-ready virtualization strategy.

Virtualization is evolving alongside both market trends and business needs. Enterprises once embraced traditional hypervisors for their efficiency and consolidation benefits. However, rising costs, vendor dependencies, and evolving workload requirements have prompted organizations to seek more open, cost-effective alternatives that align with their hybrid cloud strategies.

Common challenges driving change:

- **Rising costs and licensing complexities:** Recent changes in VMware® licensing have significantly increased costs and limited flexibility.
- **Cloud complexity and lack of interoperability:** Siloed environments and inconsistent cloud experiences slow innovation.
- **Modern workload diversity:** AI, machine learning, and cloud-native applications demand more than traditional virtual machines (VMs).
- **Operational strain on IT teams:** Organizations need solutions that reduce complexity while supporting multicloud and containerized workloads.

The next generation of virtualization solutions must integrate seamlessly into hybrid cloud environments, support multiruntime flexibility, and reduce cost burdens without sacrificing performance.

Forward-thinking companies are embracing solutions that provide an open, scalable approach to virtualization, enabling them to optimize existing investments, modernize their IT environments, and simplify operations with unified management across private and public clouds.



A smarter path to virtualization

A modernized approach to virtualization is essential for businesses seeking to transition smoothly while maximizing the value of their IT investments. Open, flexible, and cost-efficient virtualization strategies help organizations:

Optimize existing investments: Reduce licensing expenses, enhance workload efficiency, and simplify VM management

Modernize for the future: Support AI, containerized applications, and emerging workloads alongside traditional VMs

Simplify operations: Utilize unified automation and AI-driven insights to manage workloads across hybrid environments

Unlike proprietary platforms that create lock-in, open and interoperable solutions give businesses the freedom to migrate at their own pace, avoid vendor dependency, and maintain control over their hybrid cloud environments.

Optimizing IT investments

Enterprises face growing pressure to reduce virtualization costs while maintaining efficiency. As IT environments grow increasingly complex, businesses require solutions that deliver flexibility, control, and seamless integration.

To address these challenges, modern virtualization approaches can help enterprises:

- Cut licensing costs by optimizing infrastructure and licenses and reducing overprovisioning
- Rightsize workloads with AI-driven insights to eliminate underutilized resources
- Use data-driven assessments to analyze VM usage and consolidate workloads effectively
- Transition at their own pace with open platforms supporting multiple hypervisors like VMware and open KVM-based systems

Modernizing for the future

Traditional virtualization solutions are no longer enough to support the rapid evolution of IT workloads. Organizations must prepare for a future where cloud-native applications, AI workloads, and data-intensive operations demand scalable, high performance environments that can be provisioned on demand. Success will require multiruntime flexibility—the ability to seamlessly run workloads across VMs, containers, and bare metal—along with a private cloud model that delivers the agility of public cloud without unpredictable costs.

Modern virtualization approaches help businesses meet these demands with future-proof architectures designed to support both legacy and cloud-native applications. Pre-integrated solutions can simplify AI and high performance computing while flexible deployment options ensure quick time to value. Combined with unified management across hybrid environments, these solutions reduce complexity and improve performance, helping businesses stay ahead as workloads evolve.





Simplifying IT operations

As IT teams navigate increasingly complex hybrid environments, operational simplicity has become essential to maintaining efficiency and driving innovation. Organizations need to reduce the burden on overextended teams while ensuring performance, cost, and compliance requirements are met across their virtualized and cloud platforms.

Modern solutions address this by unifying orchestration across hypervisors, containers, and public clouds—enabling teams to automate provisioning, streamline workload placement, and eliminate manual processes. Self-service capabilities empower developers and operators to access the resources they need without delay while AI-powered analytics (AIOps) proactively identify and resolve issues before they disrupt operations.

These capabilities, combined with centralized management across on-premises, cloud, and edge environments, give IT the control and visibility needed to simplify operations and future-proof its infrastructure.

A strategic approach to virtualization

Organizations are rethinking their approach to virtualization to reduce total cost of ownership (TCO) while maintaining performance and flexibility. An open virtualization model can help eliminate vendor lock-in, enabling a smooth transition to hybrid cloud with integrated automation and workload management.

Solutions that support existing VMware VMs alongside alternative hypervisors, like HPE VM Essentials Software, offer a cost-effective, flexible path forward—helping ensure businesses can adapt to future cloud-native architectures with confidence.



Next steps: Experience the benefits of virtualization

Whether you're looking to **optimize current investments, modernize your IT stack, or simplify hybrid cloud operations**, HPE provides the **solutions, expertise, and flexibility** to help you succeed.

HPE virtualization solutions enable you to:

- **Optimize** your current investments by reducing VM license costs, rightsizing workloads, and leveraging automation to mitigate inefficiencies
- **Modernize** your infrastructure with a flexible, future-ready platform that supports VMs, containers, and AI workloads, providing seamless transitions to cloud-native environments
- **Simplify** operations with unified management, intelligent automation, and proactive monitoring across hybrid cloud environments

Get the control, flexibility, and cost efficiency needed to evolve your IT strategy while reducing complexity and vendor lock-in.



Ready to get started?

Work with us to get set up with a free trial of HPE VM Essentials Software for open virtualization.

Learn more at

[HPE.com/us/en/solutions/virtualization.html](https://hpe.com/us/en/solutions/virtualization.html)

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