



BUYER'S GUIDE

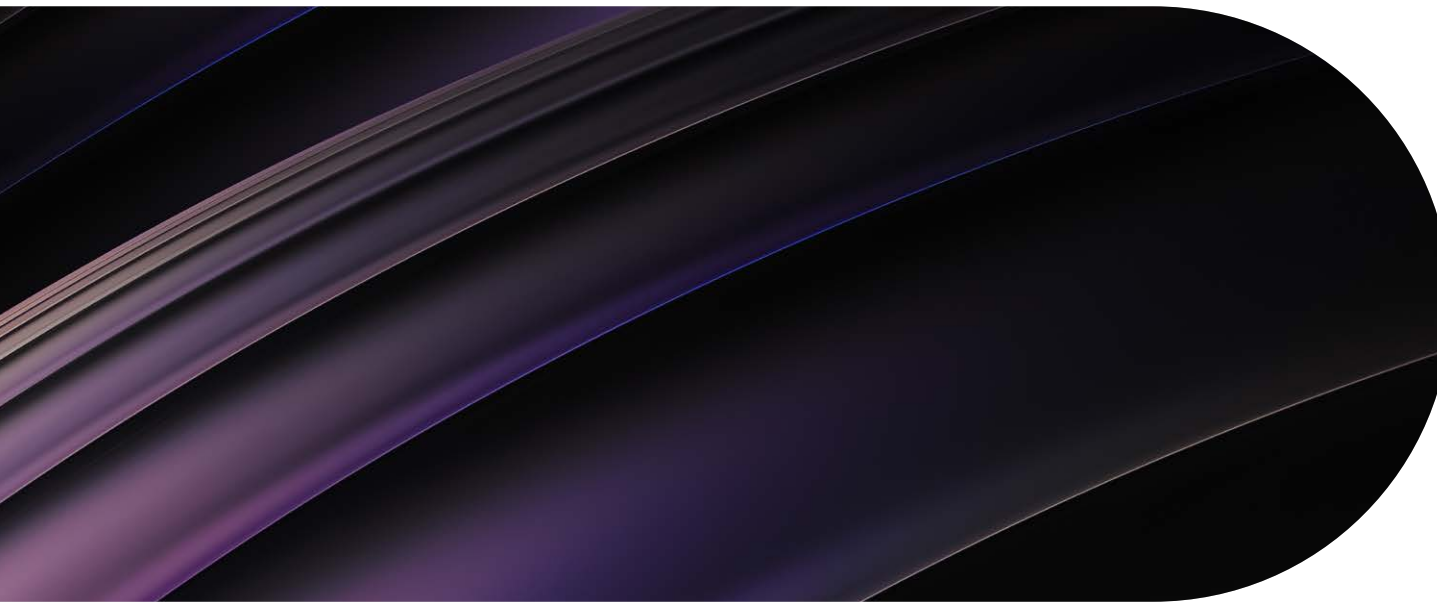
HPE Morpheus VM Essentials

**A mature hypervisor option,
and so much more.**



An in-depth guide to HPE's enterprise virtualisation platform: what it does, who it is for, and how it fits into a modern infrastructure strategy.

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1 The Evolving Virtualisation Landscape

Enterprise virtualisation has been one of the most stable layers of IT infrastructure for more than **two decades**.

VMware, part of Broadcom since late 2023, remains one of the most widely deployed and battle-tested platforms in the market, with deep tooling, a mature ecosystem, and a global support community. The VMware platform continues to evolve and, for many organisations, remains an excellent choice for their virtualised workloads.

At the same time, the market is broadening. Recent changes to VMware's commercial model, including the move to bundled subscriptions and the shift from perpetual to annual licences, have prompted many IT teams to evaluate what is available alongside or in place of their current stack. This is a normal part of a healthy market: when commercial conditions shift, procurement teams review options and consider whether alternative platforms merit a closer look.

This guide focuses on one of those alternatives: HPE Morpheus VM Essentials. It is not a guide that positions any platform as a replacement for another in absolute terms. What it does is explain what

VM Essentials is, what it can do, where it fits well, and where it fits less well, so that IT leaders and infrastructure architects can make an informed decision about whether it belongs in their evaluation.

Evaluating HPE Morpheus VM Essentials

The core question this guide answers is not "should I leave VMware?" It is: "Is HPE Morpheus VM Essentials worth evaluating for our infrastructure, and what would it actually mean in practice?" Those are different questions, and the answer to the second is worth understanding regardless of how you answer the first.

"The VMware platform continues to evolve and, for many organisations, remains an excellent choice for their virtualised workloads"



2 What Is HPE Morpheus VM Essentials?

HPE Morpheus VM Essentials is a **virtualisation software platform** that includes HPE's own KVM-based hypervisor (HVM) alongside a management layer that connects to and manages **VMware vSphere environments**.

The key characteristic of the platform is that it is designed for coexistence: you can run HVM and VMware side by side from a single management console, and move workloads between them at your own pace.

The product's management layer has a well-established history. Morpheus Data was an independent cloud management platform provider with a proven enterprise customer base. HPE acquired the company in 2024 and used the Morpheus platform as the foundation for VM Essentials, integrating it with the HVM hypervisor HPE had been developing. The management capability inside VM Essentials is therefore not a new product built from scratch; it inherits years of real-world deployment across complex multi-hypervisor and multi-cloud environments.

AstraZeneca is among the organisations that deployed the Morpheus management layer to significant effect, reducing server provisioning times from 80 hours to under 20 minutes and realising savings in excess of £6M. The management depth that enabled that outcome is the same depth that sits inside VM Essentials.

VM Essentials and Morpheus Enterprise

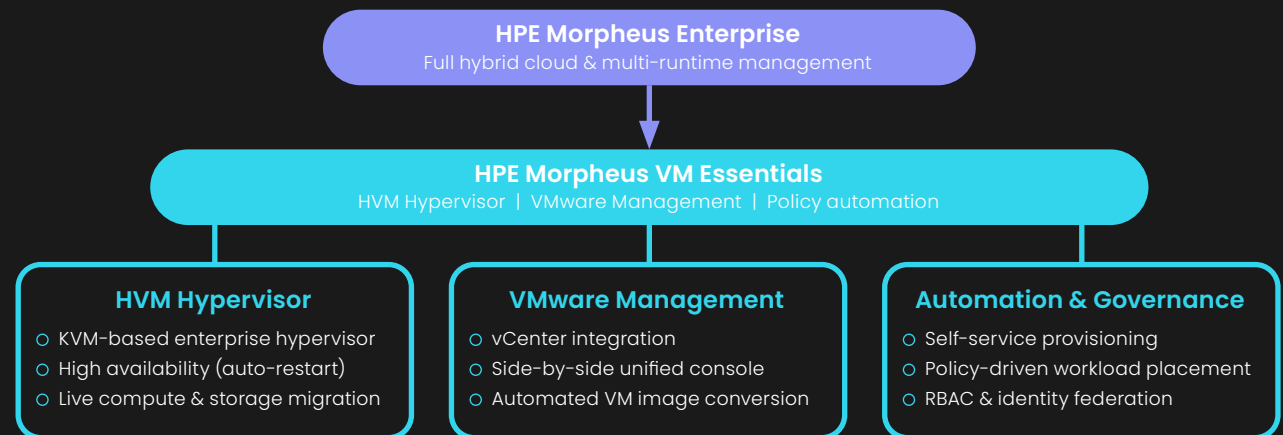
HPE offers Morpheus software in two tiers. VM Essentials is focused on virtualisation, HVM plus VMware management, provisioning automation, governance, and data protection integration.

Morpheus Enterprise extends this to full hybrid cloud management: multi-cloud orchestration across AWS, Azure, GCP, container support including OpenShift and Kubernetes, Nutanix, bare-metal, and over 90 third-party integrations.

The upgrade path between them is a single licence key. No reinstall, no migration. For organisations who are not ready to commit to full hybrid cloud management but want to preserve that option, the path is explicitly available.

HPE Morpheus Software – Product Family and Upgrade Path

FIGURE 1: HPE Morpheus Software product family. VM Essentials upgrades to Enterprise via a licence key — no reinstall required.



3 The HVM Hypervisor: KVM, Enterprise-Grade

At the core of VM Essentials is the **HVM hypervisor**, a KVM-based virtualisation platform that HPE has extended and hardened for **enterprise on-premises use**.

KVM (Kernel-based Virtual Machine) is a mature, extensively tested technology that underpins much of the world's virtualisation infrastructure, including all major public cloud providers. What HPE has done is build enterprise management and operational capabilities on top of that foundation.

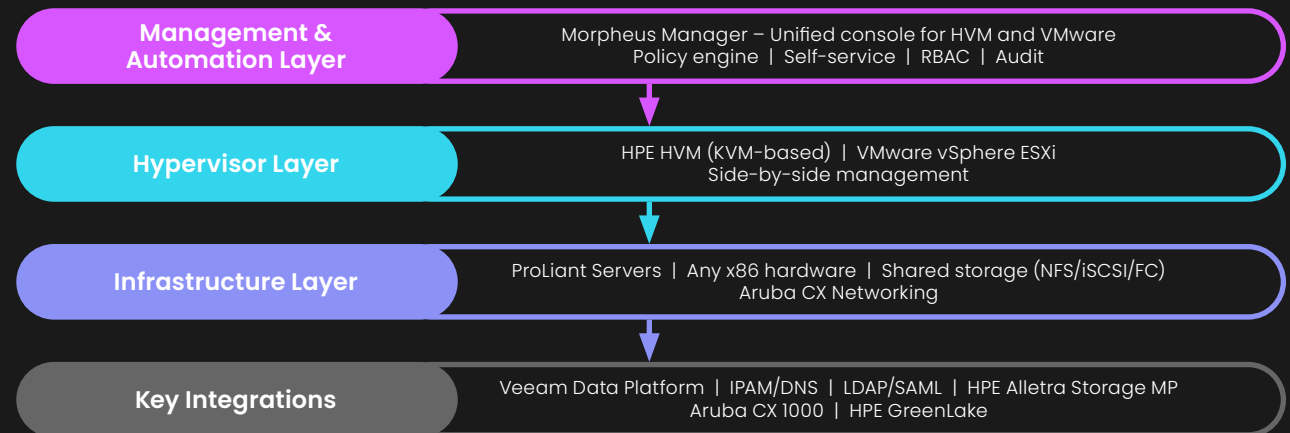
Enterprise Capabilities

VM Essentials delivers the functionality that enterprise IT teams require day to day:

- **High Availability:** Automatic VM restart on host failure. When a host goes down, VMs restart on surviving cluster members without manual intervention.
- **Live Migration:** Move running VMs between HVM hosts without downtime. Both live compute migration and live storage migration are supported.
- **Intelligent Workload Placement:** Policy-driven placement distributes VMs across hosts based on available compute and memory, with affinity and anti-affinity rules to manage workload distribution deliberately.
- **External Storage:** HVM supports NFS, iSCSI, and Fibre Channel, integrating with your existing shared storage. HPE Alletra MP integration via the Storage Integration Pack provides deeper storage lifecycle management for customers on that platform.

HPE Morpheus VM Essentials – Platform Architecture

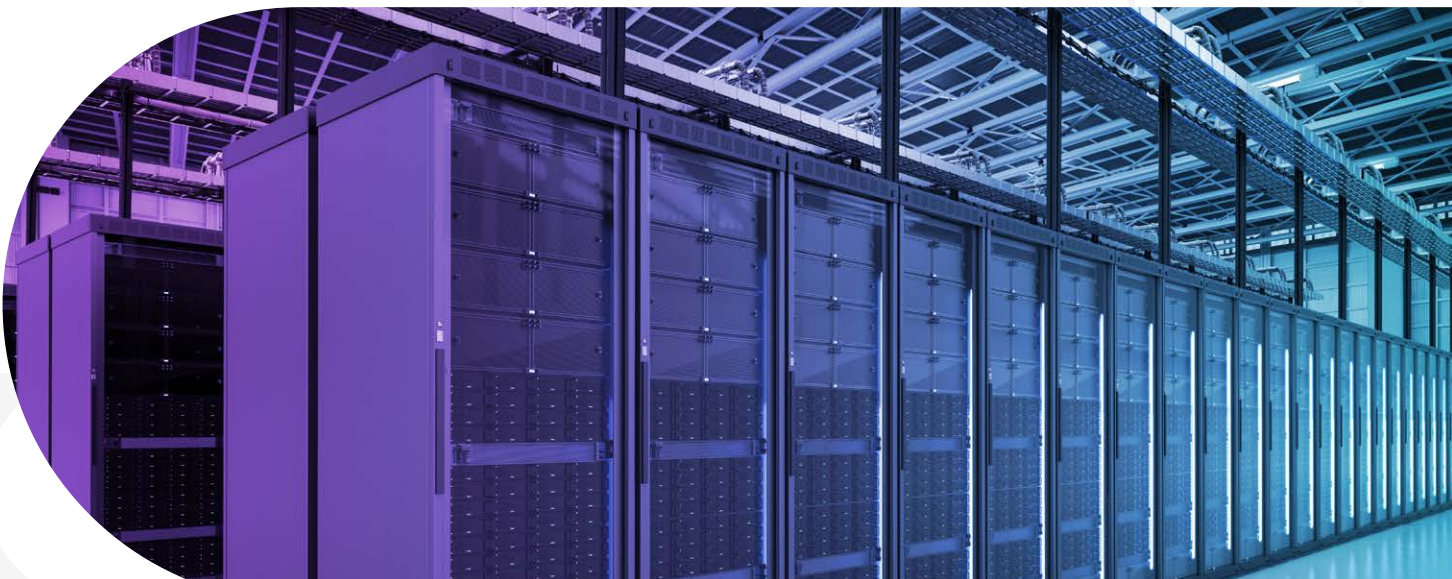
FIGURE 2: HPE Morpheus VM Essentials platform architecture. The management layer sits above both HVM and VMware vSphere clusters.



- **Snapshot Management:** VM-level snapshots with revert capability. From version 8.0.5, child snapshots are retained on revert rather than deleted.
- **GPU and Device Passthrough:** GPU passthrough with pooling, PCI, NVMe, and USB device passthrough from v8.0.5. GPU pools allow workloads to claim and release GPU resources dynamically — relevant for organisations running AI inference or rendering workloads alongside standard VMs.
- **Secure Hardening and Secret Management:** The platform ships with security hardening built in, including an integrated cypher store for secret management. This is not a post-deployment add-on.
- **Aruba CX Network Microsegmentation:** Integration with HPE Aruba CX 1000 switches delivers VM-level network microsegmentation at the switch layer rather than the hypervisor. This reduces hypervisor overhead and cleanly separates the cost of that security capability from the virtualisation licence.

Virtualisation technology proven at scale

The HVM hypervisor is a relatively recent product from HPE, but the KVM foundation it runs on is not. The same kernel subsystem underpins AWS EC2, Google Compute Engine, and large portions of Azure. If your concern is whether the underlying virtualisation technology is proven at scale, the kernel answer is yes. Evaluate the HPE management layer carefully, that is where the relevant maturity assessment lies.



4 Management, Automation and Orchestration

The management layer inside VM Essentials is where the **Morpheus heritage** is most visible.

Rather than building a basic console for HVM, HPE integrated the full Morpheus platform, which had already been deployed at scale for complex multi-cloud and multi-hypervisor environments. The result is a management experience that goes well beyond what most platforms in this category offer at a comparable price point.

Unified Management: HVM and VMware Together

VM Essentials connects to your existing VMware vCenter and presents a unified view of all VM inventory, HVM and VMware workloads side by side, in a single console. Provisioning a new VM does not require context-switching between tools. You select the target environment and VM Essentials handles the rest. For organisations running both platforms during a transition, this unified view is a meaningful operational simplification.

Automation and Self-Service

Provisioning is policy-driven. Administrators define service plans, CPU, memory, storage profile, GPU requirements, network policy, and end users' provision to those plans. The result is a self-service model where workloads are delivered quickly and consistently without requiring administrator involvement on each request. IPAM, DNS, and external automation framework integrations remove the manual handoff steps that typically slow provisioning down. HPE cites a 150x improvement in application deployment speed because of this automation layer.

Morpheus VM Essentials unified management console

FIGURE 3: Morpheus VM Essentials unified management console, HVM and VMware vSphere workloads managed side by side from one interface.



Virtual Machines						
Name	Hypervisor	Status	CPU	RAM	Host	
web-prod-01	HVM	Running	4 vCPU	16 GB	Host-Host-02	
db-primary	HVM	Running	8 vCPU	32 GB	Host-Host-01	
app-server-03	VMware	Running	4 vCPU	8 GB	Host-01	
backup-mysql	HVM	Running	2 vCPU	4 GB	Host-Host-03	
legacy-app-01	VMware	Running	4 vCPU	16 GB	Host-02	
test-env-dev	HVM	Stopped	2 vCPU	4 GB	Host-Host-01	
analytics-ml	HVM	Running	16 vCPU	64 GB	Host-Host-02	

Illustrative UI mockup based on HPE Morpheus VM Essentials interface.

Governance and Security

Role-based access control, identity provider integration (LDAP, SAML), policy-based governance for provisioning decisions, and comprehensive audit logging are all included with the platform. For organisations in regulated sectors, consistent governance applied across both HVM and VMware workloads from a single control point, with full audit trails, is a genuine operational advantage.

150x

Faster application deployment speed cited by HPE versus manual provisioning processes.

90+

Third-party integrations available through Morpheus Enterprise. A growing subset available in VM Essentials.

20 min

AstraZeneca's server provisioning time after Morpheus deployment, down from 80 hours. Saving over £6M.

5 The Licensing Model: Per-Socket Explained

One of the most **structurally significant** differences between HPE Morpheus VM Essentials and other virtualisation platforms is the **licensing model**. Understanding why it matters requires a brief description of how modern server CPUs are configured.

Enterprise servers today commonly carry 32, 48, 64 or more physical cores per CPU socket. A dual-socket server purchased now might have 96, 128, or 192 physical cores in total, depending on processor generation. Some virtualisation platforms licence on a per-core basis, meaning the cost of licensing the same physical server rises as CPU core counts increase, even if the number of VMs and workload characteristics remain unchanged.

HPE Morpheus VM Essentials licences on a per-socket basis. A socket is a physical CPU slot. A dual-socket server has two sockets regardless of how many cores each socket contains. This means the licensing cost for VM Essentials is consistent across generations of high-core-count processors, which can create a material TCO difference for organisations with modern server infrastructure.

What Is Included

The VM Essentials licence covers all of the following with no incremental feature charges:

- HVM hypervisor
- VMware vSphere integration and unified management
- High availability (automatic VM restart on host failure)
- Live migration – compute and storage
- Intelligent workload placement with affinity/anti-affinity
- Policy-driven VM provisioning and self-service
- IPAM and DNS integration

- RBAC, identity provider integration (LDAP/SAML), audit logging
- HPE enterprise support, 24x7
- Licence key upgrade path to Morpheus Enterprise

The First-Year Migration Programme

At HPE Discover 2026, HPE announced a programme to address what its CTO described as the “double-bubble cost problem”, the practical barrier of running two platforms and two licences simultaneously during a migration window. Under the programme, organisations migrating to VM Essentials receive the first year of licences at no cost. HPE Zerto migration software was available at £1 during the migration period under the same initiative.

Licence Pricing Reference

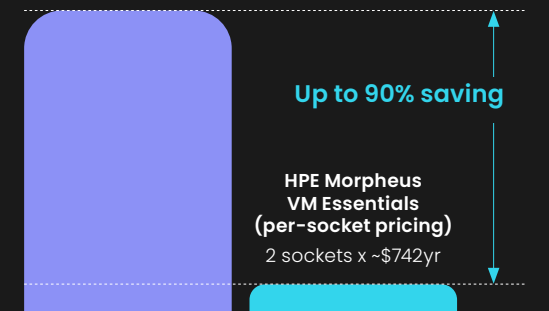
LICENCE TERM	PER SOCKET (US LIST PRICE)	ANNUAL EQUIVALENT
1 Year	\$741.99	\$741.99
3 Year	\$2,220.30	\$740.10
5 Year	\$3,700.51	\$740.10

Virtualisation Licensing: Per-Core vs Per-Socket

FIGURE 4: Illustrative comparison of per-core versus per-socket licensing on a high core-count server. Actual savings vary by environment.

Example: Dual-socket server, 48 cores per-socket (96 cores total)

VMware vSphere
(per-core pricing)
96 cores x per-core rate



Based on HPE internal analysis vs VMware vSphere Foundation per-core pricing. Actual savings vary by environment and do not include discounts.

6 Running VMware and HVM Together

One of the **design principles** of VM Essentials is that **coexistence** is a first-class mode of operation, not a transitional state.

You can run VMware vSphere and HVM clusters alongside each other indefinitely if that is what suits your environment. VM Essentials does not require a commitment to migrate off VMware, it simply gives you the option when and if you choose to take it.

How Coexistence Works

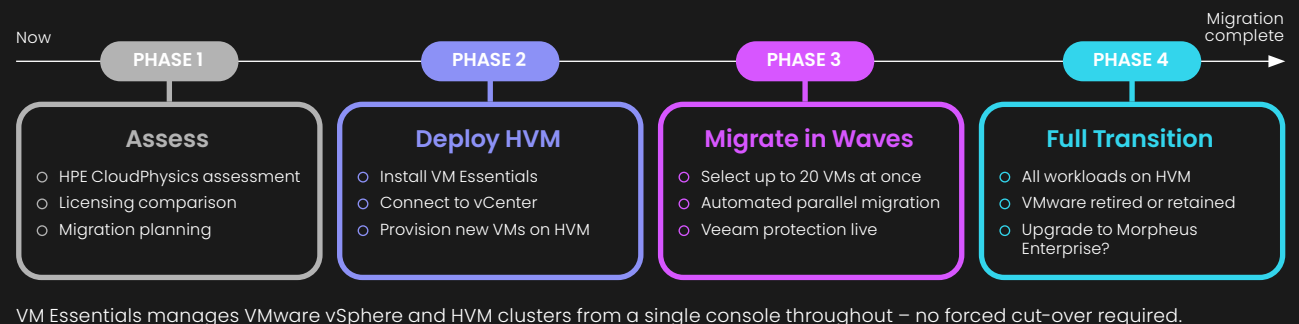
Once you connect VM Essentials to your existing vCenter, you have a unified view of VMware and HVM workloads in a single console. New VMs can be provisioned to either platform. Existing VMware VMs continue to run on vSphere with no change. The VMware management integration covers provisioning, lifecycle operations, and policy application, so governance is consistent across both hypervisors from day one.

Migration When You Are Ready

For organisations who do want to move workloads from VMware vSphere to HVM, VM Essentials provides tooling to do that. The VME Manager includes an embedded migration workflow that connects to vCenter, allows you to select up to 20 VMs simultaneously, and runs automated parallel migrations. For larger or more complex environments, HPE Services and an expanding partner network provide additional migration support. VM image format conversion (VMDK to HVM-compatible format) is handled within the migration workflow, no manual format conversion is required outside the platform.

Phased Migration: VMware and HVM Side-by-Side

FIGURE 5: Phased migration approach. VM Essentials manages VMware and HVM from one console throughout – no forced timeline.



Practical Guidance

- The lowest-risk starting point is provisioning net-new VMs on HVM rather than migrating existing production workloads immediately. This builds operational familiarity before any migration work begins – **New workloads on HVM first.**
- HPE CloudPhysics is a free tool that connects to vCenter and generates a licensing cost comparison based on your actual inventory. Run it before making any decisions – **Assess before planning.**
- If your VMware environment uses shared storage over Fibre Channel or iSCSI, confirm HVM cluster connectivity to the same fabric before migrating VMs. Storage connectivity planning is a prerequisite, not an afterthought – **Storage connectivity first.**
- VM Essentials is designed so that you can run both platforms for as long as makes sense for your organisation. If VMware continues to be the right home for certain workloads, it can stay there – **There is no migration deadline.**

7 Data Protection: Veeam Integration

For organisations using **Veeam Backup & Replication** as their data protection platform, which represents a large proportion of the enterprise market, the question of how VM Essentials integrates with the **existing backup estate** is a practical priority.

Veeam announced native support for HPE Morpheus VM Essentials in early 2026. The integration is delivered as a dedicated Veeam plug-in for HPE Morpheus that communicates directly with Morpheus Manager via API. Backup jobs for HVM workloads are configured within Veeam Backup & Replication, the same interface used for VMware, Hyper-V, and all other supported platforms, without additional components or separate registration.

What the Integration Covers

- Core backup and recovery workflows for HVM VMs
- Immutability for backup data using Veeam's hardened Linux repository or S3 Object Lock-enabled object storage
- Encryption of backup data in transit and at rest
- Veeam observability and reporting across HVM and VMware environments within the same job and reporting structure
- Application-aware backup via Veeam Agents for workloads running inside HVM VMs

What Is Still Developing

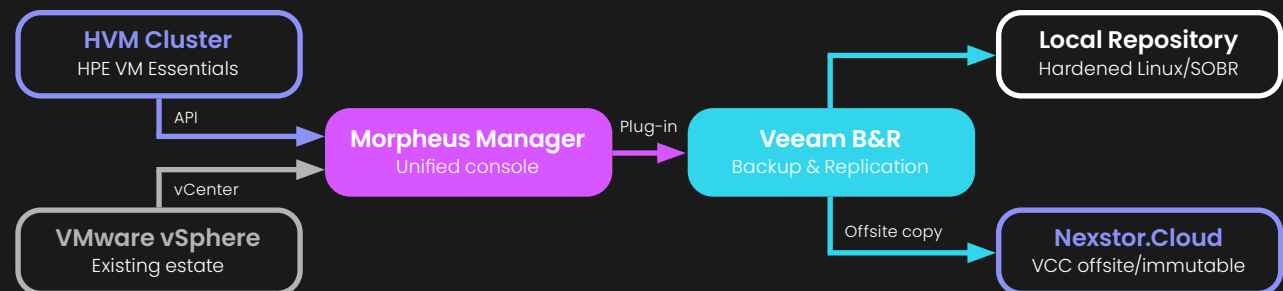
Storage snapshot integration, which allows Veeam to leverage array-level snapshots for near-zero-impact backup operations, is under active evaluation for HVM environments and is expected in subsequent platform releases. Organisations who currently rely on this capability for VMware workloads should factor it into migration timeline planning for any workloads where that backup approach is critical.

Platinum Veeam Partner

Nexstor is a Platinum Veeam partner with deep experience across backup architecture, hardened Linux repositories, Scale-Out Backup Repository, and immutable backup design. If you are evaluating how Veeam and VM Essentials work together in your specific environment, that is a conversation we know well. We can also support this through Veeam Cloud Connect with offsite backup replication to Nexstor.Cloud.

Veeam + HPE Morpheus VM Essentials – Data Protection Architecture

FIGURE 6: Veeam data protection architecture with HPE Morpheus VM Essentials. HVM and VMware workloads protected through a single Veeam deployment.



Veeam Agents provide application-aware backup inside HVM VMs. Storage snapshot integration for HVM is on the product roadmap.

8 Deployment Options and the HPE Ecosystem

VM Essentials is available in **three distinct deployment configurations**, giving organisations flexibility in how they bring the platform into their environment.

Standalone Software

VM Essentials can be deployed as standalone software on any x86 server hardware. It is not tied to HPE ProLiant or any specific server manufacturer. For organisations with an existing hardware estate who are not planning a server refresh, this is the most straightforward path, the licence runs on what you already have.

HPE Private Cloud Business Edition

For organisations refreshing hardware simultaneously, VM Essentials is available embedded within HPE Private Cloud Business Edition, a hyper-converged or distributed HCI stack combining ProLiant servers, Alletra MP storage, and VM Essentials software in a validated configuration. This provides automated setup, lifecycle management, and a guided deployment experience for organisations who want compute, storage, and virtualisation as a pre-integrated solution.

HPE GreenLake As-a-Service

VM Essentials is available through HPE GreenLake on a consumption-based basis, metered billing, no upfront capital outlay. For organisations with capital expenditure constraints or those who prefer operational expenditure models, this is worth evaluating alongside the traditional licence purchase.

Storage and Network Integration

HVM supports NFS, iSCSI, and Fibre Channel for external shared storage. The HPE Alletra MP Storage Integration Pack extends this with datastore provisioning, capacity reporting, and snapshot integration for Alletra customers.

Nexstor has strong HPE Alletra expertise and can assist with storage integration design as part of a VM Essentials deployment. For network security, integration with Aruba CX 1000 switches delivers VM-level microsegmentation at the switch layer rather than in the hypervisor.

HPE Morpheus VM Essentials – Three Deployment Paths

FIGURE 7: Three paths to deploying HPE Morpheus VM Essentials. All include the same licence and upgrade path.

1 Standalone Software

Deploy on any x86 server hardware. Hardware-agnostic.
Ideal for existing estates without a full refresh.

2 HPE Private Cloud Business Edition

ProLiant + Alletra MP + VM Essentials pre-validated.
HCI or dHCI. Guided setup and lifecycle management.

3 HPE GreenLake As-a-Service

Consumption-based billing.
No upfront capex required.
Managed by HPE on your preferred infrastructure.

All three paths include the same VM Essentials licence and upgrade path to Morpheus Enterprise.

VM Essentials sits alongside a number of **well-established virtualisation platforms**. The comparison below covers the platforms most commonly evaluated by UK enterprise organisations.

Key Distinctions Worth Understanding

- **Against VMware vSphere:** VMware vSphere remains one of the most capable and extensively integrated virtualisation platforms available. Its tooling depth – vMotion, Site Recovery Manager, NSX, vSphere with Tanzu – is mature and well-supported. VM Essentials is not a feature-for-feature replacement for a fully deployed vSphere estate. It is a strong option for organisations who are planning net-new deployment, refreshing parts of their estate, or looking for a lower-cost addition to run alongside existing VMware capacity. The unified management console means VMware and HVM coexist rather than compete.
- **Against Nutanix AHV:** Nutanix AHV is a solid enterprise hypervisor, but its licensing is inherently tied to the Nutanix cluster platform. It is not hardware-agnostic in the same way VM Essentials is. For organisations not planning to standardise on Nutanix infrastructure, VM Essentials offers greater deployment flexibility.
- **Against Proxmox VE:** Proxmox is open source and has gained significant traction particularly in the mid-market as a cost-effective option. It is a capable platform, but it lacks the enterprise management layer, the formal global support structure, and the HPE ecosystem integration that VM Essentials provides. For organisations where enterprise support and governance capabilities are requirements, Proxmox carries a different risk profile.

- **Against Microsoft Hyper-V:** Hyper-V is a strong choice for organisations who are heavily Microsoft-centric and whose Server licensing already includes Hyper-V entitlements. For predominantly Windows workload environments where SCVMM is an acceptable

management layer, that is a cost argument worth understanding. VM Essentials is generally stronger for mixed-workload environments and for organisations who need more capable provisioning automation and governance than the Microsoft stack provides natively.

Virtualisation Platform Feature Comparison					
FIGURE 8: Platform comparison across key evaluation criteria. Feature sets evolve – verify current capabilities with each vendor.					
	HPE VM ESSENTIALS	VMWARE VSPHERE	NUTANIX AHV	HYPER-V	PROXMAX VE
Licensing Model	Per Socket	Per Core	Bundled / Node	Incl. Win Server	Open Source / Sub
Hardware Agnostic	Yes	Yes	Nutanix-preferred	Yes	Yes
VMware Side-by-Side Management	Yes	N/A	Limited	Limited	No
High Availability	Yes	Yes	Yes	Yes	Yes
Live Migration	Yes	Yes (vMotion)	Yes	Yes	Yes
Veeam Integration	Yes (2026 plug-in)	Yes (mature)	Yes (mature)	Yes (mature)	Plug-in
Cloud Management Upgrade	Morpheus Enterprise	VCF	Nutanix CM	Azure Arc	Limited
Enterprise Support	HPE Global	Broadcom	Nutanix Global	Microsoft	Community / Paid
Feature comparison indicative only. Accurate as of June 2026. Verify current capabilities with each vendor.					

10 Is This the Right Fit? A Practical Guide

The following is an **honest assessment** of where VM Essentials is well-suited and where further consideration is warranted.

Strong Fit

- Organisations with high core-count CPUs where per-socket licensing creates a material cost difference
- IT teams who want to introduce a second hypervisor without disrupting existing VMware operations
- Environments using Veeam for data protection
- Organisations planning a server refresh where hardware and virtualisation can be evaluated together
- Teams who want a path to full hybrid cloud management without changing platforms later

Worth Considering Further

- Environments with deep investment in VMware-specific tooling such as Site Recovery Manager or NSX, assess each tool's migration complexity separately
- Organisations where Veeam storage snapshot integration is critical to backup SLAs (on the VM Essentials roadmap, not yet GA)
- Very small environments (under 10 VMs) where a full enterprise management layer exceeds operational needs
- Container-first or Kubernetes-native environments, Morpheus Enterprise or OpenShift Virtualisation is likely a better starting point

A Useful Starting Point

Before committing to any evaluation path, run HPE CloudPhysics against your current infrastructure. It is a free tool that connects to vCenter and generates a per-socket versus per-core cost comparison based on your actual hardware configuration and VM inventory. The output gives you a grounded starting point for the financial part of the decision and takes the guesswork out of the licensing maths.

From there, the conversation should cover migration complexity, operational readiness, support requirements, and integration with your existing tooling. The licensing saving is one input. A good evaluation covers all of them.

11 The Nexstor Perspective

We have been deploying virtualisation infrastructure for enterprise customers for **over twenty years**. We are also an HPE partner, a Platinum Veeam partner, and a NetApp storage partner.

That means we have relationships with the vendors on both sides of any comparison — and a commercial interest in recommending the right solution for the customer's situation, not the one that generates the largest transaction.

Our view on VM Essentials is that it is a credible, genuinely capable platform that deserves a place in most enterprise evaluation processes when virtualisation infrastructure is being reviewed. The management layer is its strongest asset, the Morpheus foundation brings provisioning automation, governance, and unified console management that goes well beyond what you would expect at this price point. The Veeam integration, while still maturing relative to VMware, is already functional for most backup use cases and is on a clear development trajectory.

We are also clear-eyed about what VM Essentials is not. It is not a full replacement for a mature, deeply configured VMware estate, particularly one with

Site Recovery Manager, NSX, or Tanzu in the mix. For those environments, the honest conversation is about which workloads, and which infrastructure are candidates for VM Essentials, and which should remain on VMware, either permanently or for a longer transition period. That is a nuanced conversation, and it is not one that should be resolved by a licensing comparison alone.

Our Approach

We don't start with a recommendation. We start with your environment, your renewal timeline, your tooling dependencies, and your operational constraints. The answer emerges from that conversation, not before it.

"The solution emerges from the client engagement, not before it"



12 Next Steps

If this guide has **raised questions** worth exploring further, here are the practical steps that make sense **regardless** of where you end up.

1 Run a CloudPhysics assessment

HPE CloudPhysics connects to your vCenter and generates a per-socket versus per-core cost comparison based on your actual hardware and VM inventory. It takes minutes to deploy and produces results within seven days. Contact us and we can facilitate access.

2 Map your Veeam protection model

If you are running Veeam, understand how your existing backup jobs, retention policies, and storage targets translate to HVM workloads. The integration is straightforward but mapping it before you begin is good practice.

3 Have an honest conversation with Nexstor

We will help you understand whether VM Essentials makes sense for your environment, including the parts where it may not. We will also work through VMware coexistence, migration complexity, storage integration, and Veeam coverage specific to your infrastructure.

4 Request an evaluation licence

HPE offers a 60-day, 6-socket evaluation licence at no cost. If you want to test the platform in your environment before making any decision, that is available through HPE's evaluation programme. We can support the evaluation engagement.

5 Understand the Morpheus Enterprise path

If your longer-term direction includes hybrid cloud management, container orchestration, or multi-cloud governance, understand what Morpheus Enterprise adds and what the upgrade involves. It is a licence key change, but knowing where the platform goes matters when you are choosing the foundation.



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