Proxmox: an alternative to VMware

Why more and more small and large organisations are choosing Proxmox

YOU FOCUS, WE MANAGE.

EPACT

Introduction

The acquisition of VMware by Broadcom and the far-reaching changes to licensing models and pricing structures have placed **virtualisation back on the agenda** of board-level executives, CIOs and IT managers. Not because of technological shortcomings, but because costs, dependencies and strategic control have suddenly become tangible.

Virtualisation has consequently evolved from a purely technical decision into a business-critical one. It affects not only IT budgets, but also flexibility, vendor lock-in, data sovereignty and the long-term agility of the organisation.

Against this backdrop, interest in open-source alternatives such as Proxmox is growing, as they are promising a different balance between functionality, cost and control.

This eBook frames that shift. It is not an ideological advocacy for open source, nor a simplistic feature comparison. Instead, it provides CIOs and IT managers with a well-founded framework for approaching virtualisation strategically once more: **what is relevant today, which assumptions no longer hold, and how do you make decisions that will stand the test of time.**

vmware® → PROXMOX

The virtualisation market has changed. What does that mean for CIOs and IT managers?

Virtualisation has long been a stable pillar within the data centre. Choices were clear, the market predictable, and the technology considered mature. That period is now behind us.

The virtualisation market has fundamentally shifted following Broadcom's acquisition of VMware and the consequences this has had for licensing and pricing structures. This forces CIOs and IT managers to reconsider strategic choices that were taken for granted for a long time. The catalyst is not primarily technological, but economic and strategic.

VMware's decisions as a tipping point

VMware was for many years the de-facto standard for enterprise virtualisation. Not because it was the only option, but because it offered a mature, reliable and rich ecosystem. Many IT architectures, operational processes and skill sets have been built around it.

The recent changes to the VMware landscape, particularly around licensing models, feature bundling and pricing structures, have shattered that self-evident status. For many organisations, virtualisation is no longer a commodity but a cost line under a microscope.

The consequence

As CIOs and IT managers, you must ask yourselves a number of questions:

- What are we actually paying for our virtualisation layer?
- Which functionality do we actually use?
- How significant is our dependency on a single vendor?
- And above all: does this choice still support our broader IT strategy?

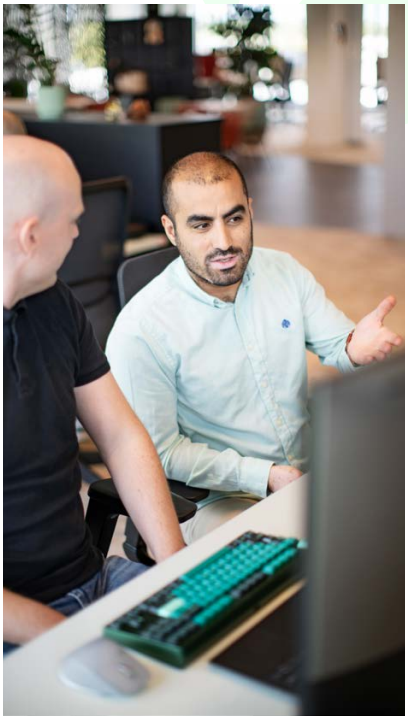
From technology choice to strategic decision

Where the choice of hypervisor was previously approached primarily from a technical perspective, it is unmistakably strategic today.

Virtualisation now touches on:

1. **Cost structure** (CAPEX vs OPEX, predictability)
2. **Risk management** (vendor lock-in, roadmap dependency)
3. **Operational flexibility** (integration with cloud, containers, automation)
4. **Future-proofing** your IT environment

The debate is therefore less about features and more about control, agility and long-term scalability.



Open-source alternatives are gaining ground

In this context, open-source platforms such as Proxmox are receiving ever-increasing attention. Not because they are 'new', but because their value proposition better aligns with the questions that decision-makers are asking.

Key reasons why organisations are exploring this direction

- **Transparent cost model** without per-core or feature-bound licences
- **Functional completeness:** clustering, high availability, software-defined storage and network management in a single platform
- **Architectural freedom:** broad support for storage and networking technologies
- **Integration with modern IT concepts** such as containers, automation and API-driven management

For many IT decision-makers, this is not an ideological choice for open source, but a rational re-evaluation of value versus cost and risk.

Concrete implications for CIOs and IT managers

1

Virtualisation is no longer a given

The days when virtualisation remained 'under the radar' are over. Its current impact on budgets and strategic dependencies makes it a boardroom-level topic.

2

Re-architecture becomes a real option

Organisations are looking not only at alternative platforms, but also at their total infrastructure architecture: simpler, more modular and better aligned with hybrid cloud models.

3

Operational continuity remains criticall

While cost and flexibility are important drivers, stability, performance and support remain decisive. Migration and transition scenarios must therefore be controlled and phased.

4

Internal skills versus external expertise

Not every IT organization wants or is able to continue developing in-depth platform knowledge within its own team. As a result, managed services and strategic partners are becoming increasingly important as an extension of the internal team.

CONCLUSION

Repositioning a core layer

The virtualisation layer was for many years a stable foundation to which little strategic attention was paid. Today, that has fundamentally changed.

The core question is not which platform is 'the best', but which platform, and by extension which collaboration model, best aligns with the long-term objectives of the organisation.

Virtualisation has once again become a strategic building block.

What can Proxmox do today?
Functionality, architecture and enterprise capabilities

Where Proxmox was previously seen primarily as a solution for niche environments, it has today grown into a fully-fledged Hyper-Converged Infrastructure (HCI) platform that meets the most stringent enterprise requirements.

For CIOs and IT managers, the core question is no longer whether Proxmox is sufficient, but how the platform offers strategic advantage in terms of cost management, data sovereignty and operational control.

Architecture: the strength of open standards

The foundation of Proxmox VE is a stable Debian Linux stack that brings two worlds together: KVM for full virtualisation and LXC for lightweight containerisation.

This combination on a single unified stack is unique and provides IT teams with the freedom to choose the right technology for the right workload, without additional management layers.

Shared-nothing cluster architecture
No single point of failure. Each node can manage and migrate workloads, meaning hardware maintenance never interrupts service delivery.

Intelligent cluster management
Via Corosync and quorum monitoring, the risk of 'split-brain' scenarios is minimised. The cluster always makes safe, automated decisions when network interruptions occur.

Full API access
Ideal for modern IT teams that invest heavily in automation, Infrastructure as Code (Terraform) and CI/CD pipelines.

The Result

An infrastructure that is scalable, transparent and manageable, even in complex enterprise environments.

Enterprise features with direct business impact

Proxmox is technically mature and offers features that significantly reduce dependency on expensive external vendors:

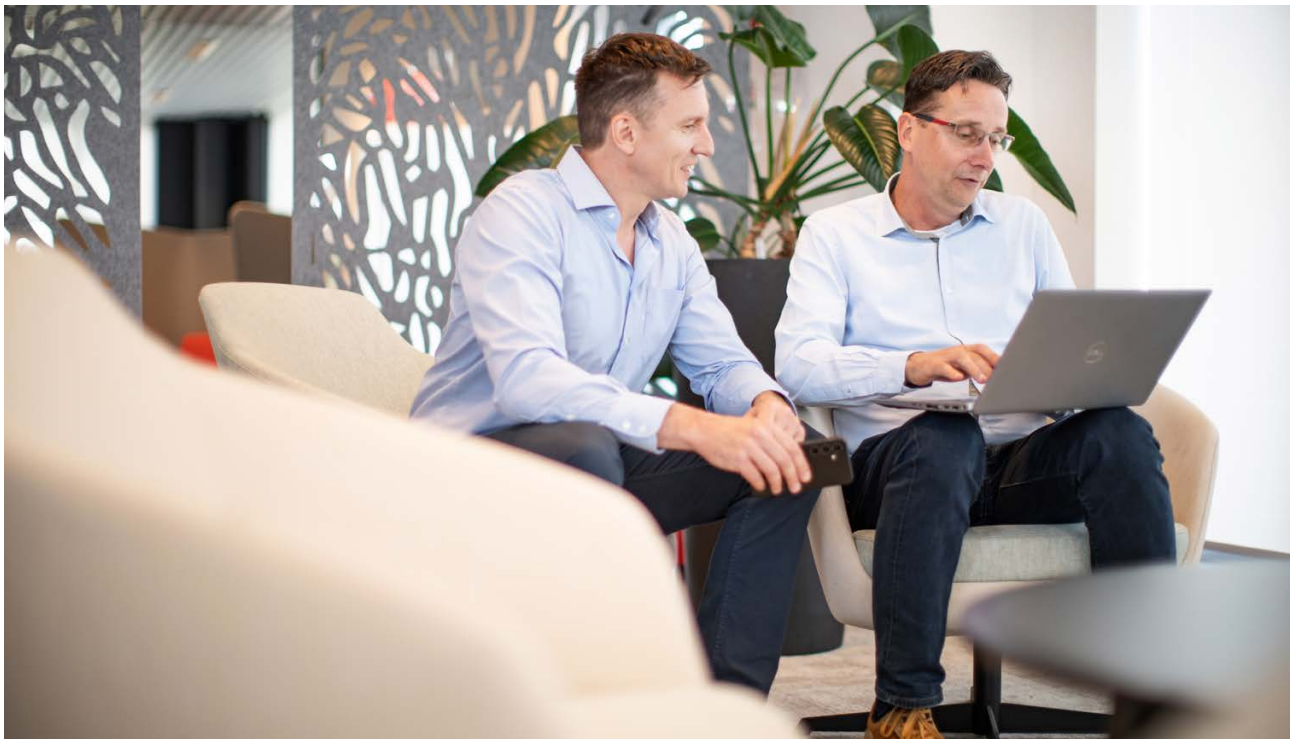
1. **Software-defined storage (Ceph & ZFS):** Transforms standard servers into a powerful, scalable storage network. This eliminates the need for costly, proprietary SAN solutions and simplifies the hardware stack (HCI).

2. **Proxmox offers secure, efficient immutable backups with deduplication and incremental snapshots,** thanks to deep integration with backup providers such as Veeam. Through client-side encryption and off-site capabilities, your data remains recoverable in the event of an incident.

3. **High availability & live migration:** Minimise downtime through automatic failover. Move active workloads between nodes without end users noticing.

4. **Seamless integration:** Native support for Role Based Access Control (RBAC) and LDAP/AD integration ensures that security and governance align with your existing organisational structure.

The barrier to migration has also been removed: the recent launch of the official Import Wizard is a game-changer. It enables IT teams to import existing virtual machines directly via the API, making a controlled migration possible without complex scripts or lengthy downtime.



Enterprise-ready, with the right approach

Proxmox VE offers genuine freedom of choice, but success in a production environment depends on three strategic pillars:

1

No vendor lock-in

Open standards ensure complete control over your workloads and data. You are no longer bound by the licensing whims or roadmaps of a single vendor.

2

Transparent scalability

The licensing model is based on a community or support model per CPU socket, without limits on the number of VMs or the amount of RAM. This makes IT budgets predictable once more.

3

Operational discipline

The transition to open source requires a partner with expertise. Success or failure hinges on sound design (architecture), standardised lifecycle management and proactive monitoring.

CONCLUSION

A strategic reconsideration

Proxmox VE is no longer a 'cheap alternative', but a mature architectural choice for organisations that wish to regain control over their core infrastructure.

It offers the stability of traditional virtualisation combined with the flexibility of modern cloud technologies.

For IT decision-makers, it is now a matter of making a rational assessment: do we continue investing in closed ecosystems with rising costs, or do we build an open, resilient and cost-efficient foundation?

Proxmox versus VMware

A complete comparison across all dimensions

VMware was for many years the dominant player in the virtualisation market. Due to adjustments to their licensing structure and the associated price increases, many companies are now actively exploring alternatives. Proxmox is one of them.

And whilst Proxmox has the same objective as VMware, they differ significantly in philosophy, licensing model, functionality and management experience.

Proxmox and VMware in brief

Proxmox VE: open-source flexibility at its core

Proxmox Virtual Environment (VE) is a fully open-source virtualisation platform that combines two technologies in a single console: KVM for virtual machines and LXC for containers. The system is built on Debian Linux and offers a web-based management interface, REST APIs, clustering and high availability (HA).

A key advantage is the broad support for storage and networking. The platform works with ZFS, LVM, iSCSI, NFS, Ceph and also supports SDN, Linux bridges and OpenvSwitch. HA functionality, firewalling and role-based access control are built in as standard, without additional licence costs.

Where Proxmox truly excels is the integrated approach: VMs, containers, storage, backup and network management within one open ecosystem, without the need for expensive suites or add-ons.

VMware vSphere/ESXi: enterprise-class virtualisation

VMware has long been the uncontested standard for enterprise virtualisation. The core consists of VMware ESXi, a bare-metal hypervisor, and vCenter, the central management platform that enables clustering, high availability, automation and monitoring.

This combination makes VMware particularly well-suited for environments where uptime, compliance and predictability are essential, such as large enterprises, government organisations and data centres. The downside is clear, however: all of this functionality requires advanced licences, which have become considerably more expensive since the recent switch to a per-CPU-core subscription.

Proxmox vs VMware: the comparison

Licence cost and Total Cost of Ownership (TCO)

Let's start with cost structure, because that's where we see the biggest differences.

PROXMOX	VMware
Open-source	Subscription model per CPU core
No licence costs for hypervisor or features	Additional licences for vCenter, vSAN, DRS, vMotion...
Optional: support subscription per CPU socket	Higher TCO, especially in multi-node clusters
Very low TCO, ideal for cost-conscious organisations	Enterprise support included, but costly

Architecture and technology

Both platforms have a different view on virtualisation. Proxmox deliberately chooses an open model, while VMware is based on proprietary software.

PROXMOX	VMware
Built on KVM (open-source hypervisor)	Proprietary ESXi hypervisor
Supports both VMs and containers (LXC)	VM virtualisation only (containers only via additional products)
Free choice of storage and network architecture	vCenter Server required for advanced features
Standard clustering and HA, basic DRS (load balancing at VM start)	Advanced orchestration such as DRS and FT
No separate management server required	Deeply integrated enterprise tooling

The core differences are situated mainly in flexibility and pricing: Proxmox offers more freedom and combines technologies, while VMware offers integrated enterprise features at a higher price.

Management and ease of use

Both platforms offer an intuitive web interface, but with a different approach.

PROXMOX	VMware
Single unified web console for everything: VMs, containers, storage, networking, replication, backups and clusters. Particularly attractive for teams wanting to work efficiently without separate tools or consoles.	Splits functionality between ESXi hosts and vCenter. Anyone managing a cluster must use vCenter. This adds power, such as advanced automation, but also increases infrastructure complexity and licence costs.

Storage and networking

Concerning storage, both platforms are mature, with different accents.

PROXMOX	VMware
Standard support for ZFS, Ceph, iSCSI, NFS, LVM, GlusterFS	vSAN is one of the market leaders in software-defined storage
Ideal for those wanting affordable, flexible SDS	Very stable and ideal for enterprise environments
Considerable networking freedom with Linux networking and SDN modules	Storage optimisation and monitoring among the best on the market
Enterprise support via partners	Very mature distributed switch for networking

High availability and clustering

Both platforms offer high availability, but with a different philosophy.

PROXMOX	VMware
HA and clustering included as standard, without extra licences. The HA manager handles automation and failover well and works in combination with Ceph for hyper-converged scenarios.	vSphere offers HA, DRS and FT - all powerful, mature features enabling a very stable and automated cluster environment, but at a considerable price.

CONCLUSION

The comparison between VMware and Proxmox makes one thing clear

The choice of virtualisation platform is not a black-and-white story. VMware offers a very mature, deeply integrated enterprise solution, but at an increasing cost and with strong dependency on a single ecosystem.

Proxmox starts from a different philosophy: open standards, transparent costs and architectural freedom, with functionality that is more than sufficient for most environments.

The core question is therefore not which platform is ‘technically superior’, but which model better aligns with the strategic priorities of your organisation: predictability versus flexibility, vendor ecosystem versus control, comfort versus autonomy. That trade-off is more relevant today than ever.

The biggest myths about Proxmox debunked

In conversations with CIOs and IT managers, we sometimes still hear doubts about Proxmox VE. These are often reinforced by competitors who focus on established brands.

In this chapter, we debunk the biggest myths and show how Proxmox today can indeed meet the requirements of modern enterprise environments.

Summary

Myth	Enterprise reality
Only for small environments	Proven in clusters of 100+ nodes with high availability.
No professional support	Support via IT partners and stable enterprise repositories.
Not suited to complex networks	Full Software-Defined Networking (SDN) & VXLAN.
Insufficient security	RBAC, AD integration and robust ransomware protection.
Migration is complex and risky	Planning & import wizards minimise complexity and downtime.

MYTH 1

Proxmox Is only suitable for small environments

The reality

Proxmox is mature and has already proven itself in production environments ranging from dozens to hundreds of nodes. Thanks to its shared-nothing cluster architecture, high availability and live migration, organisations can manage, scale and migrate workloads without interruption. Large enterprises use the platform for mission-critical applications, both on-premises and in hybrid cloud environments.

What you as CIO or IT Manager need to know

Scalability lies in the architecture; reliability lies in the execution. Through the use of standardised templates and lifecycle management, Proxmox offers stability that is on a par with proprietary software.

MYTH 2

Open source means no support and no guarantees

The reality

This is perhaps the most persistent myth. Proxmox provides guaranteed stable software updates via the Enterprise Repository. For businesses requiring 24/7 certainty, local and regional partners with extensive expertise are available to meet that need.

What you as CIO or IT Manager need to know

In an enterprise environment, technology is only half the solution. A local partner with Proxmox expertise underpins governance and provides the operational back-up that is crucial for your business continuity.

MYTH 3

Proxmox cannot handle complex enterprise networks

The reality

With the introduction of advanced Software-Defined Networking (SDN), Proxmox can handle complex multi-tenant structures, VXLAN and VLAN segmentation. Management is centrally coordinated, ensuring network configurations remain consistent across the entire cluster.

What you as CIO or IT Manager need to know

Enterprise readiness requires that network profiles, firewall rules and monitoring are applied in a standardised manner. With sound governance, Proxmox can handle network management that is equally complex and secure as traditional hypervisors.

MYTH 4

Proxmox is not secure enough for production environments

The reality

Proxmox supports RBAC, LDAP/AD integration, encryption for storage and backups, and audit logs. Security best practices are integrated and can be fully aligned with internal compliance requirements.

What you as CIO or IT Manager need to know

Security is 'by design' in Proxmox. An additional strength: seamless integration offering unique protection against ransomware through immutable backups and data integrity checks.

MYTH 5

Migrating to Proxmox Is complex and risky

The reality

The barrier is lower than ever. With the recently launched Import Wizard, VMware ESXi workloads can be migrated directly with minimal downtime. Migration is no longer a technical risk, but a managed project.

What you as CIO or IT Manager need to know

A successful migration stands or falls with planning. Proxmox provides the tools (live migration, compatible storage) to carry out the transition in a phased manner without impacting end users.

CONCLUSION

The scepticism is unfounded

The scepticism surrounding Proxmox is often based on outdated information, limited experience or strategic arguments from competitors.

Given the current market shifts, Proxmox offers not only a technical solution, but also a strategic liberation from unpredictable licence costs and vendor lock-in.

It is a fully-fledged, enterprise-ready platform, provided that architecture, governance and operational processes are correctly configured.

What steps are there in a migration from VMware to Proxmox?

Many untruths are told about migrations from VMware to Proxmox: complex, risky, slow, and so forth. The reality, however, is that - given proper planning and execution - migration proceeds in a controlled, predictable and cost-efficient manner.

In this chapter, we outline how a standard VMware-to-Proxmox migration is carried out and which steps are crucial for a successful implementation.

Step-by-step migration approach

A successful migration from VMware to Proxmox typically proceeds through the following phases:

1 Preparation and Inventory

Workload inventory
We map all virtual machines, storage configurations, network setup and dependencies.

Risk analysis
We identify critical systems, downtime requirements and fallback options.

Plan of action
We determine migration routes per VM (cold migration, live migration via conversion) and establish a rollback strategy.

2
Setting up the Proxmox environment

Cluster configuration
We install Proxmox on the new hardware and configure an HA cluster (if desired).

Storage and network configuration
We set up storage pools (ZFS, Ceph, LVM) and configure networks according to best practice.

Test environment
We simulate migrations of non-critical VMs to gain experience and identify potential issues early.

3
Workload migration

VM conversion
Tools such as qemu-img, virt-v2v or Proxmox's built-in import options enable VMware VMDKs to be converted to Proxmox KVM images. We prefer to use Veeam as a V2V tool, as it significantly minimises the maintenance window - we can perform an initial restore to Proxmox whilst the VMware VM is still active. During the maintenance window, only the delta needs to be restored, resulting in considerably shorter downtime.

Network and storage adjustment
We adapt VM configurations to the new network topology and storage structure.

Validation
We test each VM post-migration for functionality, performance and integration with other systems.

4
Optimisation and monitoring

Performance tuning
We utilise Proxmox features such as resource limits, ballooning and Ceph tuning for maximum efficiency.

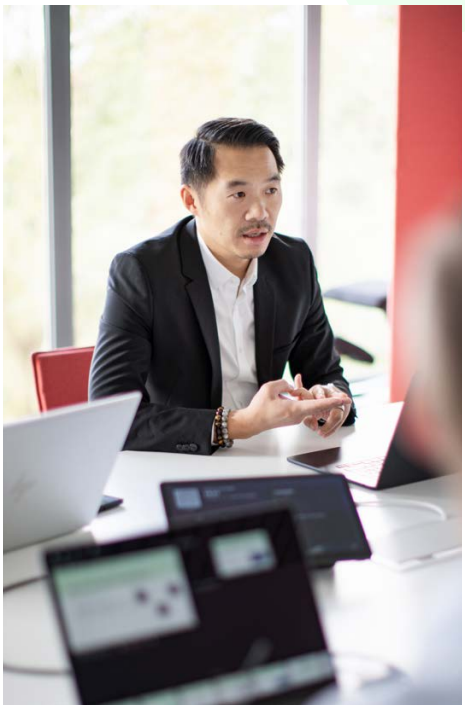
Backup strategy
We implement a reliable backup solution (our preference is Veeam).

Monitoring
We deploy tools for proactive monitoring.

Why a migration often goes more smoothly than expected

Many concerns about the complexity of a VMware-to-Proxmox migration are based on negative commentary from competitors, a lack of preparation or a lack of experience.

When the migration is carried out step by step, with a clear inventory, test environment and rollback options, the likelihood of issues or downtime is minimal.



CONCLUSION

A migration is not complex or risky when well prepared

A migration from VMware to Proxmox is not an insurmountable project. With a structured approach, good tooling and adequate preparation, you can execute this transition efficiently and avoid risks.

Through proper planning and execution, a VMware-to-Proxmox migration is not a leap into the unknown, but a strategic step towards a modern, cost-effective and scalable data centre.

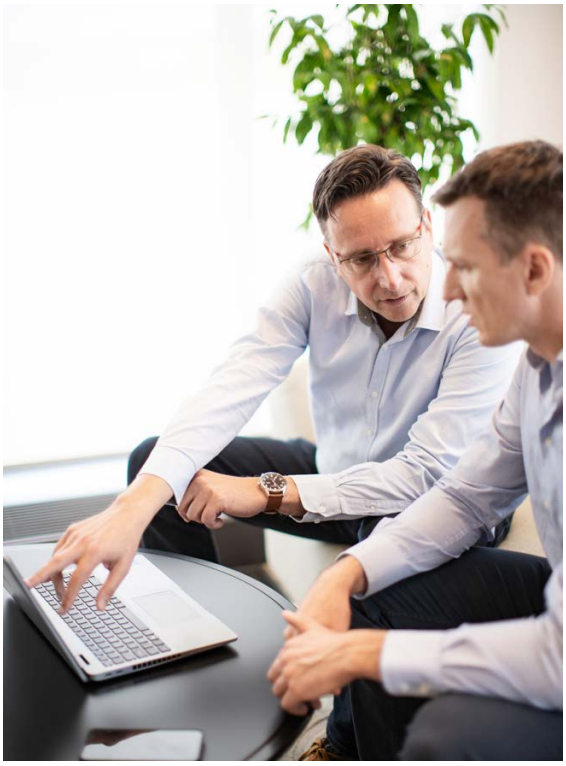
When should you choose Proxmox? And when shouldn't you?

The choice of virtualisation platform is strategic and has a direct impact on costs, flexibility and operational continuity.

But when is Proxmox the right choice? And when should you consider a different platform? In this final chapter, we aim to provide clear insights.

When Proxmox is a good choice

Proxmox distinguishes itself through the combination of virtualisation and container technology, combined with an open-source model that minimises licence costs. For organisations pursuing the following objectives, Proxmox is often very well suited:

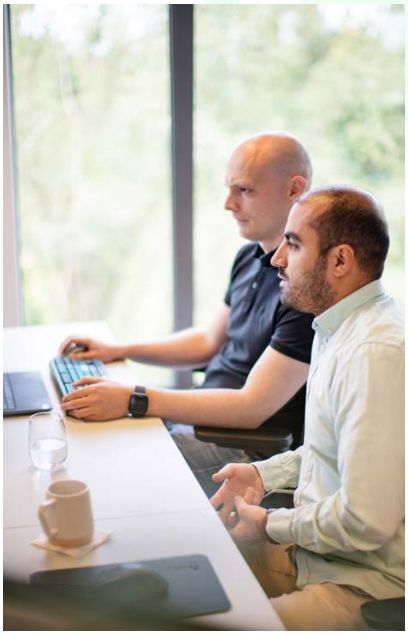


1 **Cost management and open-source flexibility**
The licence costs of commercial hypervisors such as VMware can - especially following the Broadcom acquisition - escalate rapidly, to such a degree that more and more organisations are actively exploring alternatives. Proxmox offers enterprise-grade functionality without high licence costs. For organisations seeking to structurally reduce costs, this is a compelling argument.

2 Integration of VMs and containers
Proxmox supports both KVM VMs and LXC containers, allowing workloads to be distributed flexibly. Teams wishing to combine microservices or lightweight containerised applications with traditional VMs will benefit from this versatility.

3 Clustering and high availability
For medium-to-large data centres, Proxmox offers built-in clustering, live migration and High Availability (HA). This makes it possible to guarantee redundancy and uptime without additional licence costs.

4 Transparency and control
Because Proxmox is open-source, your IT team or IT partner has full control over updates, configurations and integrations. You are no longer fully dependent on a vendor, which increases flexibility and autonomy.



What about enterprise features?

A frequently heard criticism is that Proxmox 'offers fewer enterprise features' than platforms such as VMware. That assertion is too simplistic. Proxmox has considerable enterprise functionality, but some features are implemented differently, require additional configuration, or are less deeply integrated in a ready-made ecosystem. A good local partner with knowledge and experience of the platform can of course compensate for this, making vendor support less important.

High availability & clustering

- **Proxmox:** HA and live migration are built in. VMs can automatically restart upon node failure.
- **VMware:** HA, DRS and vMotion are integrated and offer an extensive GUI experience.

Conclusion: Proxmox works excellently for most clusters, though large-scale setups may require additional tuning.

Storage & data management

- **Proxmox:** Supports ZFS, Ceph, LVM, NFS and iSCSI. Backups are possible via Proxmox Backup Server or other solutions (we prefer Veeam).
- **VMware:** vSAN, Storage Policies and advanced snapshots are deeply integrated.

Conclusion: Proxmox can offer the same functionality, but this sometimes requires additional expertise in Linux and storage solutions.

Security & compliance

- **Proxmox:** Offers RBAC, per-VM firewalling, encryption and audit logs.
- **VMware:** Offers extensive certifications, policy-driven security and integration with enterprise security tools.

Conclusion: For most organisations, Proxmox is more than sufficient, though heavily regulated environments may have additional considerations.

Ecosystem & integrations

- **Proxmox:** Open-source, extensible via API and CLI, active community, commercial support available via partner subscriptions.
- **VMware:** Large ecosystem with plug-and-play integrations for monitoring, backup, disaster recovery and more.

Conclusion: Integrations with Proxmox are possible, but often require more configuration and expertise.

When you should (not yet) choose Proxmox

Proxmox is not always the best choice.
You should perhaps consider an alternative when:

Your organisation is dependent on a large ecosystem of third-party add-ons and certifications.
Very advanced enterprise features (such as policy-based storage or advanced DR) are essential and ready-made integration is required.
Internal teams have limited Linux experience, you do not wish to operate in a managed model, and full vendor support is crucial.

The choice often revolves around a balance between licence costs, operational flexibility and internal expertise. For many medium-to-large, cost-conscious organisations, Proxmox offers powerful, reliable virtualisation, whilst very large enterprises may sometimes be better served by an ecosystem that delivers advanced features and extensive support out of the box.

CONCLUSION

A good local partner offers both expertise and support

Proxmox is a mature platform with many enterprise features, but implementation is often more flexible and demands more knowledge than some commercial alternatives.

With a realistic inventory of workloads, required features and internal knowledge - or knowledge of a good IT partner - the choice between Proxmox and other virtualisation platforms becomes a strategic decision rather than a gamble.

FINAL THOUGHTS

Virtualisation is more than ever a strategic lever

The time when virtualisation was an invisible, stable substrate is definitively behind us.

What was long considered a commodity has once again become a strategic building block with direct impact on costs, flexibility and risk management.

The changes in the VMware landscape have rapidly exposed this reality. They force organisations to ask fundamental questions: about dependencies, about licensing models and about the extent to which IT is still in service of the business, rather than the other way around.

Proxmox fits into this new paradigm. Not as a 'cheap alternative', but as a mature, open and controllable platform that makes organisations the masters of their own infrastructure choices once more. Provided with thoughtful architecture, robust governance and the right expertise, it offers a stable and future-proof foundation for modern IT environments.

The right choice is not universal. It depends on context, ambitions and maturity. But one thing is certain: virtualisation once again deserves strategic attention.

Organisations that undertake this exercise today are building **an infrastructure that not only works, but also moves with the future.**

Would you like to know whether Proxmox is a viable strategic alternative for your organisation?

The transition to Proxmox - or revisiting your virtualisation strategy in general - is not a purely technical project. It is a strategic exercise that touches on cost structure, risk, governance and the future-proofing of your IT environment.

Get in touch with us

For a no-obligation assessment or technical deep dive. That way, you are not taking a leap in the dark, but making a well-informed decision.

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