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FROM LOCK-IN TO LIBERATION

The New Private Cloud Standard: Open, Automated, Cost-Efficient

Executive Summary

The cloud infrastructure landscape is undergoing a seismic shift. Following Broadcom's acquisition of VMware, many enterprises are re-evaluating their virtualization strategies amid significant changes in licensing models and pricing. According to Gartner, more than 65% of enterprise workloads are now running in the cloud, with this figure projected to exceed 85% by 2028 (Gartner, 2023). Simultaneously, cloud-native technologies - led by Kubernetes - are reshaping how IT organizations build and operate digital services.

Data from the **CNCF's State of Cloud Native Development** (Q1 2025) shows that 93% of developers now deploy to the cloud in some capacity, up from 85% in 2021. While public cloud usage has declined slightly (from 38% to 36%), **private cloud usage has steadily grown to 27%**, and hybrid cloud deployments have risen significantly, from 22% to 29%. This trend reflects an increasing interest in **cost control, data sovereignty, and regulatory compliance**—areas where private infrastructure continues to outperform.

Cloud-native infrastructure is also reaching maturity. Sixty-one percent of backend developers use containers, and 31% now use **Kubernetes**, suggesting these technologies are no longer emerging trends but established standards. Meanwhile, serverless functions have declined in usage, indicating enterprises are prioritizing stable, proven platforms over experimental models.

According to **VMware's Private Cloud Outlook 2025**, 92% of organizations trust private cloud for security and compliance, while 66% express high concern over public cloud compliance. Further, 90% of respondents value private cloud's cost predictability, and 49% estimate that over 25% of their public cloud spend is wasted, highlighting the growing dissatisfaction with public cloud cost efficiency.

In this context, **Cloudification's c12n Private Cloud Solution** offers a future-ready, vendor-neutral solution built on **Kubernetes**, **OpenStack**, and **Ceph**. **c12n.cloud** empowers organizations to operate a resilient, scalable private cloud at a fraction of the cost of proprietary platforms. Unlike VMware and other closed ecosystems, c12n enables full control over your infrastructure stack, optimized cost management, and seamless integration with modern DevOps workflows.

This white paper explores how **c12n** aligns with these evolving market trends, significantly **reduces total cost of ownership (TCO)**, and equips enterprises with the **flexibility, transparency**, and long-term **sustainability** needed to thrive in the cloud-native era.

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The Shift from VMware: Drivers and Implications

Broadcom's disruptive acquisition of VMware in late 2023 introduced a series of **structural** and **commercial** changes that triggered widespread uncertainty. Among the most notable are the transition from perpetual to subscription-only licensing, the consolidation of product offerings into bundled solutions, and a restructured partner ecosystem with a highly selective partner program.

Many companies reliant on VMware suddenly faced **300-500% higher license fees**, more restrictive contract terms, and significantly diminished flexibility. For many organizations, these changes have prompted a **reassessment of** their long-term infrastructure **strategies**. Shifts in pricing models, product access, and integration complexity have introduced new challenges and as a result, mid-sized enterprises and cost-conscious IT departments accelerated their plans to migrate away from VMware, seeking more transparent, modular, and open alternative platforms.

Historically, VMware customers could select and license specific products à la carte, such as vSphere, NSX, vSAN, or Aria Operations for example, allowing them to scale cost-effectively and integrate selectively based on actual business needs. Under Broadcom's new strategy, that **flexibility is gone**, and VMware offerings have been consolidated into two primary bundles:

- **VMware Cloud Foundation (VCF):** A comprehensive, software-defined data center (SDDC) stack that includes vSphere, vSAN, NSX, and Aria suite components. It's targeted at full-stack private and hybrid cloud environments.
- **VMware vSphere Foundation (VVF):** A lighter package compared to VCF, but still includes vSphere and a subset of other tools like Aria Operations. Even for small or specific use cases, organizations must now license the full VVF bundle and pay more.

While the aim is to streamline procurement and standardize deployments, this bundled approach introduces **higher licensing costs** and **reduced flexibility** - particularly for organizations that only require a subset of the included technologies.

Impact on Cloud and Managed Service Providers

Broadcom has also restructured VMware's partner programs, narrowing participation to a smaller number of high-volume CSPs and MSPs. The updated model prioritizes providers that meet specific thresholds:

- **Pinnacle Partners:** 7,000+ committed cores
- **Premier Partners:** 3,500+ committed cores

Smaller providers who were not invited to these tiers now access VMware licensing via a **White Label Program**, wherein they partner with an authorized provider for access to software, support, and services. While this structure may lead to operational efficiencies, it also introduces an additional layer between smaller providers and VMware, impacting autonomy and direct vendor engagement.

Beyond commercial aspects, it is important to evaluate VMware's alignment with modern, cloud-native requirements. The platform's proprietary nature and architecture present limitations when integrating DevOps workflows, containerized applications, and GitOps practices.

As organizations increasingly adopt Kubernetes, Infrastructure-as-Code (IaC), and CI/CD pipelines, infrastructure platforms that **natively support** these approaches may offer **long-term efficiency** and agility.

In today's evolving environment, organizations are encouraged to re-evaluate their infrastructure roadmap with a focus on:

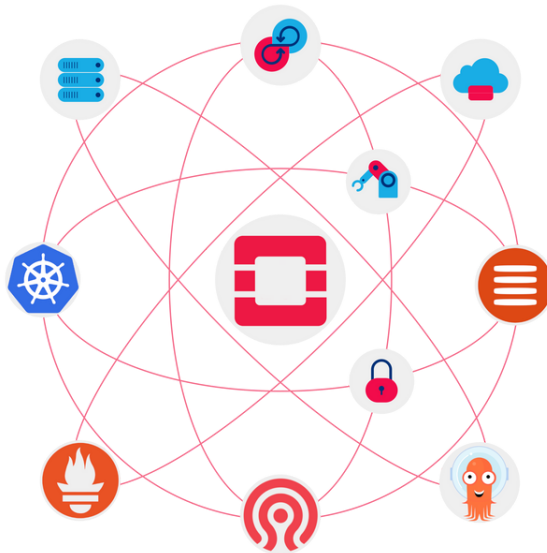
- **Total Cost of Ownership (TCO)** under the new VMware licensing model
- Compatibility with container-based and **DevOps-driven** workflows
- **Flexibility** in vendor relationships and support channels
- Long-term alignment with **hybrid** and **multi-cloud** strategies

Introducing c12n Private Cloud Solution

While world-leading organizations are rapidly transitioning to cloud-native technologies to meet growing demands for agility, scalability, and efficiency, Kubernetes, containers, and open standards now dominate the landscape. **c12n** provides a robust platform built on these principles, offering enterprises a powerful solution for modernizing their infrastructure without vendor lock-in or unpredictable costs.

c12n is Cloudification's turnkey private cloud stack, integrating **OpenStack for virtual infrastructure**, **Ceph for scalable storage**, and **Kubernetes for container orchestration**, wrapped in a production-grade, automated deployment and management layer. This composition enables enterprises to build and operate resilient, cloud-native infrastructure on-premises - while maintaining true sovereignty and cost transparency.

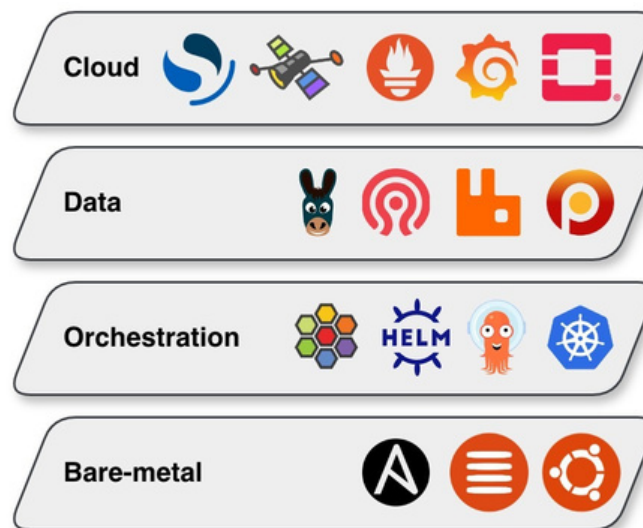
As enterprises confront increasing pressure to exit platforms like VMware, the demand for interoperable, open-source, and cost-effective solutions has never been higher. **c12n** is designed specifically to meet that demand - providing a future-proof foundation for modern Cloud Native workloads while lowering TCO through a fully license-free offering.



C12N AS A STRATEGIC ALTERNATIVE

Architecture Overview

c12n combines the power of mature open-source projects with the production-readiness of a unified, fully automated platform:



- **OpenStack:** Virtual machines, powerful SDN, and storage with full tenant isolation and control.
- **Kubernetes:** Container orchestration, microservice workloads, GitOps workflows, Helm support.
- **Ceph:** Unified block, file, and object storage, highly available and scalable to tens of PBs.
- **GitOps:** State of the art automation for maximum reliability with focus on security.
- **Security & Observability:** Integrated monitoring, alerting, logging, and role-based access control.

c12n delivers a modern open-source alternative to VMware, providing both **virtualization** and **containerization** within a single stack, without licensing overhead and vendor lock-in.

Key Differentiators

- **Cost Efficiency:** Lower TCO and OPEX compared to proprietary stacks.
- **Vendor Independence:** No dependency on a single company or other commercial cloud lock-ins.
- **Cloud-Native Readiness:** Seamless integration with Kubernetes-native tools and CI/CD pipelines.
- **Private Cloud Control:** True data sovereignty, fine-grained resource control, audit, security logging and better compliance posture.

Highlights & Facts

Managed or Air-Gapped	Kubernetes & Cloud-Native
Converged or Hyper Converged (HCI)	Full GitOps automation
Highly scaleable (6 to 100s of nodes)	Alerting & in-depth Monitoring
Integrated Inventory Management	GPU Support

The Open Source Foundation of c12n

At Cloudification, we have always been deeply committed to the open-source ecosystems. Our team has made hundreds of contributions to well-known projects including **OpenStack, Kubernetes, Terraform, and more**. We strongly believe that even the most demanding workloads - such as **high-performance computing (HPC), AI/ML, and Telco applications**- can be reliably supported using **free and open-source software**.

A Closer Look at the Open-Source Stack Behind c12n.cloud

At the heart of **c12n.cloud** is a powerful ecosystem of 100% open-source technologies, seamlessly integrated and thoroughly tested to create a production-grade private cloud platform. These components aren't just industry-leading - they're the backbone of the modern open-source cloud-native movement.

MAAS (Metal as a Service): Bare-Metal Automation Made Simple

MAAS automates the entire lifecycle of physical servers, from power-on to provisioning. With capabilities like automatic hardware discovery, firmware updates, network configuration, and base OS installation, MAAS brings life into your data center hardware the moment it is turned on. Whether you're running a small cluster of 5 to 10 servers or scaling out a large infrastructure, MAAS brings cloud agility to physical hardware and enables further integration with DCIM tools such as NetBox.

Kubernetes (K8s): Orchestrating Containers at Scale

As the de facto standard for container orchestration, Kubernetes powers modern application delivery. Within c12n, Kubernetes automates the deployment, scaling, and management of containerized workloads. It integrates tightly with GitOps workflows, enabling seamless CI/CD pipelines and infrastructure as code. Trusted by 97% of organizations using containers, Kubernetes is the backbone of c12n's cloud-native capabilities.

Ceph: Unified, Resilient Storage

Ceph offers a unified storage solution that supports block, object, and file shares - built on a self-healing, distributed and scalable architecture. It supports heterogeneous hardware (HDDs, SSDs, NVMe) within a single cluster and allows fine-tuning of configurations on a use-case basis to match specific performance and reliability needs. Ceph's flexibility and reliability make it the storage solution of choice in over half of all OpenStack deployments, and it's a cornerstone of c12n's data persistence strategy. For organizations looking to reuse their existing vendor storage infrastructure, c12n also supports seamless integration with all major solutions that have OpenStack-compatible drivers.

OpenStack: The Core of the Cloud

OpenStack provides a modular, vendor-neutral foundation for building Infrastructure-as-a-Service (IaaS) clouds. With support for compute, networking, storage, identity, and more, OpenStack offers the flexibility to run workloads with strict tenant isolation on any hardware. c12n leverages OpenStack as the foundation for orchestrating VMs, networks, and block storage, giving users full control over their private cloud environment.

Gardener: Multicloud Kubernetes as a Service (KaaS)

Gardener takes Kubernetes automation to the next level by managing entire clusters as reproducible entities. Built by SAP and used in large-scale enterprise environments, Gardener offers full lifecycle management across heterogeneous infrastructures. Within c12n, it ensures Kubernetes clusters are always up-to-date, secure, and consistent without the need for manual intervention.

ArgoCD: Declarative GitOps for Infrastructure and Applications

ArgoCD enables GitOps-driven operations in c12n, meaning every change to infrastructure or application configuration is version-controlled, auditable, and securely signed. With continuous synchronization between Git and live environments, ArgoCD ensures drift-free, consistent deployments. In c12n, Argo plays a pivotal role with all applications and components installed and managed in K8s as Argo Apps.

Prometheus and OpenSearch: Observability Built-In

Monitoring and observability in c12n are powered by Prometheus and OpenSearch. Prometheus scrapes metrics from all components across the platform, while Grafana dashboards provide rich visual insights. OpenSearch handles centralized logging and advanced search capabilities, enabling operators to trace, debug, and audit in real time. With 200+ predefined alerts and dashboards, they ensure your cloud remains reliable, measurable, and maintainable.

Together, these components form the core of **c12n.cloud**. With c12n, our customers are not just avoiding lock-in - they're actively investing in a **future-proof, transparent, and community-driven** technology stack that they can control and extend on their terms.

c12n in numbers:

80%

*About 80% of VMware portfolio can be replaced**

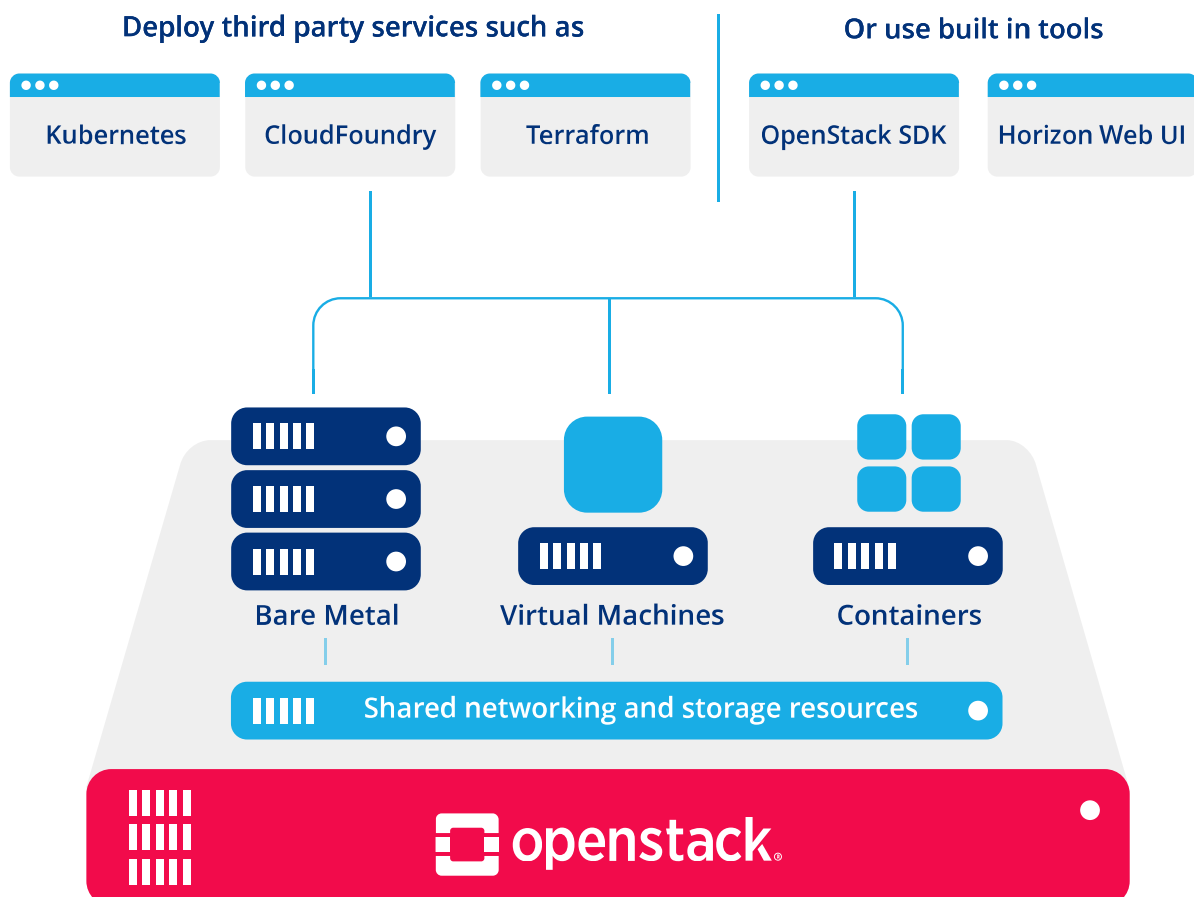
0€

No license fees, optional support packages

35K€

Cloud deployment from 35.000 EUR

OpenStack at a Glance



**Requires integration of additional software. See Feature-by-Feature comparison for more details.*

Feature-by-Feature Comparison: VMware vs. c12n.cloud

One of the most common questions enterprises ask during cloud transitions is whether open source alternatives can truly compete with established proprietary solutions like VMware. The answer is a resounding **yes**, with **more than 80%** of the VMware stack having a solid alternative.

The table below compares VMware's core products - including **vSphere**, **NSX**, and **NSX Advanced Load Balancer** - with the fully open source components used in **c12n.cloud**. This feature-by-feature breakdown highlights how **c12n** covers critical functionality across **virtualization**, **networking**, and **load balancing**, without the vendor lock-in or licensing complexity.

What makes c12n especially attractive for modern infrastructure:

- ✅ **Zero license fees and no lock-in**
- ✅ **Freedom to get support from different providers**
- ✅ **Transparent processes and many established projects**
- ✅ **Can replace more than 80% of VMware features**

Many of c12n's capabilities are delivered through **modular, cloud-native components** from the OpenStack and Kubernetes ecosystems. This enables more flexible, scalable, and cost-effective infrastructure - aligned with modern DevOps practices.

1	VMware	c12n.cloud
	VMware vSphere (Hypervisor ESXi)	OpenStack (Hypervisor KVM)
	Key features: (subject to subscription type and extra costs) • Web console • VM Live migration (vMotion) • Volume migration (Storage vMotion) • Clustering/HA for Control plane • Backup Integrations • Auto-rescheduling for VMs (VMHA) • Hot plug and extend (Net devices/volumes) • Site-to-site VM migration	Comparable features: (subject to integration of additional components) • Web console – yes • Live migration – yes • Volume migration – yes • Control plane HA – yes • Backup-Integrations – yes • VMHA – yes(1) • Hot plug and extend (Networks/Volumes) – yes • Site-to-site VM migration – yes(2) 1 OpenStack provides VMHA functionality with Masakari 2 When OpenStack control plane stretched across DCs
2	VMware NSX (VCF + VMware Firewall)	OpenStack Neutron
	Key features: • Switching (Layer 2 networks over Layer 3) ◦ Within data center ◦ Across data centers • Routing ◦ Distributed routing ◦ Active-active failover with physical routers ◦ Static routing ◦ Dynamic routing ◦ IPv6 support • Virtual routing and forwarding (VRF) ◦ Tenant isolation ◦ Separate routing tables ◦ NAT ◦ EDGE Firewall • Quality of service control (QoS) • Security Groups • NSX gateway (L2 Gateway) • DPU-based acceleration • Federation and Multi-cloud networking (consistent networking and security across DCs, private/public cloud boundaries)	Comparable features: • Switching ◦ Within data center – yes ◦ Across data centers – yes(1) • Routing ◦ Distributed routing – yes ◦ Active-active failover with physical routers – yes ◦ Static routing – yes ◦ Dynamic routing – yes ◦ IPv6 support – yes • Virtual routing and forwarding (VRF) ◦ Tenant isolation – yes ◦ Separate routing tables – yes ◦ NAT – yes ◦ EDGE Firewall – no(2) • QoS – yes • Security Groups – yes • L2 Gateway – yes • DPU-based acceleration – yes • Federation and Multi-cloud networking – yes(3) 1 if OpenStack control plane stretched across DCs 2 OpenStack has FWaaS extension 3 Partially with BGP VPN interconnection extension
3	VMware NSX Advanced Load Balancer (by Avi Networks)	OpenStack Octavia
	Key features: • L4-L7 load balancing • Container ingress gateway • HA architecture • Global server load balancing (GSLB) • Web application firewall (WAF) • Real-time application analytics • Multi-cloud load balancing • Application performance monitoring	Comparable features: • L4-L7 load balancing – yes • Container ingress gateway – yes • HA architecture – yes (stand-by) • Global server load balancing (GSLB) – no • Web application firewall (WAF) – no • Real-time application analytics – no • Multi-cloud load balancing – no • Application performance monitoring – no AVI networks support integrations with previous versions of OpenStack

4 VMware vSAN (Express Storage Architecture)	OpenStack Cinder + Manila (based on Ceph)
Key features: - Distributed Architecture: - Hyperconverged, integrates with vSphere - Based on local storage in ESXi hosts - Eliminates the need for external storage arrays - Cluster size: min 2 hosts, max: 64 hosts - Uses fast disks for caching and efficient placement - Data redundancy: - Distributed RAID, caching, and read/write optimizations - Provides fault tolerance at the storage policy level - Scalability: - Scalable with additional ESXi hosts to the cluster - Linear scalability of storage capacity and performance resources - Network speed: 25Gb/100Gb - File protocols: SMB, NFSv3, NFSv4.1 - S3-Compatible Object Storage - Native snapshots Multi-site cluster: vSAN Stretched Cluster	Comparable features: - Distributed Architecture – yes - Distributed architecture with a cluster of storage nodes running OSDs - Supports object, block, and file storage interfaces - Cluster size: min 6 hosts, max: 1000+ hosts - Does not require disks for caching - Data redundancy – yes - Data redundancy through replication (3 copies) and erasure coding - Replicates data across multiple OSDs or uses erasure coding for fault tolerance - Scalability – yes - Highly scalable, can scale out to tens of PBs of data - Allows adding or removing storage nodes dynamically without disruption - Network speed: 10Gb/25Gb/100Gb – yes - File protocols: CephFS, NFS via Manila – yes - S3-Compatible Object Storage – yes - Native snapshots – yes - Multi-site: Ceph RBD Mirroring – yes(1) 1 RBD mirroring affects performance due to journaling
5 VMware vCenter (VCF, VVF and vSphere STD)	OpenStack + Prometheus, MaaS, ArgoCD
Key features: - Centralized Control and Visibility - Web client and APIs - Inventory search - Alerts and notifications - Dynamic resource allocation - Multi-tenant management	Comparable features: - Centralized control-plane – yes(1) - Web client and APIs – yes - Inventory search – yes - Alerts and notifications – yes(2) - Dynamic resource allocation – yes(3) - Multi-tenant management – yes 1 When OpenStack control plane stretched across DCs 2 Based on Prometheus + Alertmanager with integrations 3 Provided by OpenStack Watcher
6 VMware Cloud Director (Cloud Management Platform)	OpenStack + Kubernetes
Key features: - Multi-site control - Cloud-native approach (Containers and VMs in the same environment) - Automation - Policy-driven Approach for Cloud management - Global Hybrid Cloud Management - Cloud Migration	Comparable features: - Multi-site control – yes(1) - Cloud-native approach – yes(2) - Automation – yes(3) - Policy-driven Approach – yes - Global Hybrid Cloud Management – no - Cloud Migration – yes(4) 1 Using Horizon region switch or a stretched control plane (Alternatively using ManagelQ) 2 Requires Managed Kubernetes service installation (Gardener) 3 Via Terraform, Ansible, Heat or Openstack SDK 4 Using third-party migration software

7	VMware Aria Operations for Logs (vRealize Log Insight)	Elasticsearch + Logstash + Kibana
	Key features: • Collect logs in files • Send logs to centralized system • Provide interface to search and analyze logs	Comparable features: • Collect logs in files – yes • Send logs to centralized system – yes • Interface for search and analysis – yes
8	VMware Aria Automation	OpenStack + ArgoCD
	Key features: • Multi-cloud environments management • DevOps for infrastructure • Infrastructure as code and Kubernetes automation • Network automation • SecOps for infrastructure • SaltStack	Comparable features: • Multi-cloud environments management – yes(1) • DevOps for infrastructure – yes • Infrastructure as code and Kubernetes automation – yes • Network automation – yes • SecOps for infrastructure – yes • Ansible + GitOps approach – yes 1 Via GitOps approach based on ArgoCD
9	VMware Aria Operations for Networks	OpenStack Neutron + Hubble + SkyDive
	Key features: • Networking ◦ End-to-end troubleshooting traffic and path ◦ Network assurance and verification ◦ Overlay and underlay network troubleshooting • Applications ◦ Application discovery and plan for migration ◦ Measure application latency and performance ◦ Finding network bottlenecks for application ◦ Analyze traffic • Security ◦ Troubleshoot security ◦ FW policies and network segmentation recommendations ◦ Dependencies map to reduce risk during migrations	Comparable features: • Networking ◦ End-to-end troubleshooting traffic and path – yes(1) ◦ Network assurance and verification – yes ◦ Overlay and underlay network troubleshooting – yes(1) • Applications ◦ Application discovery and plan for migration – no ◦ Measure application latency and performance – no ◦ Finding network bottlenecks for application – no ◦ Analyze traffic – yes • Security ◦ Troubleshoot security – no ◦ FW policies and network segmentation recommendations – yes ◦ Dependencies map to reduce risk during migrations – no 1 Underlay network with Cilium Hubble, overlay (cloud) networks with SkyDive
10	VMware Tanzu (Container Orchestration)	OpenStack + Gardener
	Key features: • Kubernetes cluster management • Multi-cloud • Application catalog • Service Mesh • Observability	Comparable features: • Kubernetes cluster management – yes(1) • Multi-cloud – no • Application catalog – yes(2) • Service Mesh – yes • Observability – yes 1 Using either Magnum or Gardener 2 Any Helm based application, optionally via KubeApps

11	VMware HCX (Application Mobility Platform)	OpenStack + Coriolis
	Key features: • Workload optimization • Inter cloud live migration • Bulk migration • Cloud-to-cloud migration • Disaster protection • Traffic engineering	Comparable features: • Workload optimization – yes(1) • Inter cloud live migration – yes • Bulk migration – yes • Cloud-to-cloud migration – yes(2) • Disaster protection – yes(3) • Traffic engineering – no 1 Provided by OpenStack Watcher 2 Using either Coriolis or Cyclone 3 Using Coriolis, Storware or other tools
12	VMware Horizon (Virtual Desktop Infrastructure)	OpenStack + OpenStack
	Key features: • Remote desktops • Hybrid cloud management	Comparable features: • Remote desktops – yes • Hybrid cloud management – no
13	VMware SQL (Database as Service)	OpenStack Trove
	Key features: • PostgreSQL support • MySQL support	Comparable features: • PostgreSQL support – yes • MySQL support – yes • MongoDB support – yes • Redis support – yes • Cassandra support – yes

24/7 Premium Support with Upstream Fixes

c12n.cloud includes an optional **24/7 Premium Support** package designed for enterprise-grade reliability. This includes:

- ✓ **24/7 incident response** by senior cloud engineers.
- ✓ **Upstream community fixes:** We fix bugs directly in the open source projects we support, proven by our strong contribution history.
- ✓ **Proactive monitoring:** Our team detects and resolves issues before clients notice them. On-call engineer is paged for any **Critical** alert.
- ✓ **1 hour SLA** for support availability.

This model ensures that clients get the benefits of open source without sacrificing reliability or taking years to build up internal expertise.

Cost Analysis: c12n vs. Proprietary Solutions

The table below compares the **Total Cost of Ownership (TCO)** across four infrastructure solutions - **VMware vSphere**, **Canonical OpenStack**, **Red Hat OpenStack Platform (RHOSP)**, and **c12n by Cloudification** - for a 15-node setup.

While all platforms offer cloud infrastructure capabilities, **c12n delivers the lowest total cost, no vendor lock-in, and personalized support.**

Assumptions:

- 15 compute servers plus 3 dedicated control plane servers (*optional, strongly recommended for production)
- Annual support and licensing for virtualization and container orchestration included.
- Enterprise-level support.

TCO Elements	Group	Component	VMware vSphere	Canonical OpenStack	Red Hat RHOSP	c12n by Cloudification
CAPEX	Hardware	Compute servers	\$380,000	\$380,000	\$380,000	\$380,000
		Control plane servers	\$0	\$62,000	\$62,000	\$62,000
		Network devices	\$48,000	\$48,000	\$48,000	\$48,000
	Software	Licences	\$300,000	\$0	\$285,000	\$0
		Installation	\$45,000	\$200,000	\$40,000	\$40,000
		VM Migration	N/A	\$23,000	\$30,000	\$16,000
		Training	N/A	\$11,000	\$12,000	\$7,000
OPEX	Software	1 year support subscription	\$170,000	\$61,000	\$85,000	\$54,000
		TOTAL*	\$943,000	\$785,000	\$942,000	\$607,000

**Disclaimer: Although pricing for some of these solutions is not publicly available, the above table reflects estimated prices based on internal benchmarks, vendor reports, and publicly available pricing calculators. Actual costs may vary depending on usage, support agreements, and custom configurations.*

What we can observe in the previous table:

- **c12n delivers 6x lower CAPEX** (software) compared to Red Hat OpenStack
- **c12n delivers almost 4x lower CAPEX** (software) compared to Canonical OpenStack
- **c12n delivers 3x lower OPEX** than VMware for similar infrastructure
- Unlike RHOSP, c12n includes native Kubernetes support without any licensing
- Canonical's pricing is competitive but includes fewer services; c12n adds full observability, Ceph, and Gardener integration out of the box with 24/7 premium support

Key Takeaways

- **VMware pricing and licensing changes** are accelerating **enterprise migration** initiatives.
- **Private cloud is gaining traction** due to rising concerns over cost efficiency and data sovereignty.
- **c12n offers a full-stack alternative** with virtualization and Kubernetes baked in.
- **Open source is the foundation of c12n**, enabling transparency, flexibility, and long-term sustainability along with full production readiness.
- **c12n reduces TCO by up to 6 times** compared to VMware, while delivering modern cloud-native capabilities with more features than VMware Cloud Foundation (VCF) has to offer.
- **Cloudification's open-source DNA** empowers customers to benefit from continuous community innovation—without vendor lock-in. Our customers are free to seek support from providers other than Cloudification and are never tied to restrictive long-term contracts.

"OpenStack global footprint exceeds 45.000.000 compute cores" - OpenInfra Foundation

WHY CLOUDIFICATION?

We believe that the future of cloud infrastructure is **open**, **flexible**, and **cost-transparent**. The shift away from platforms like VMware is not just about avoiding rising costs - it reflects a broader demand for **autonomy**, **scalability**, and alignment with **modern development practices**.

Cloudification's c12n provides a compelling, enterprise-ready alternative that delivers on these expectations. Built upon a solid open-source foundation - OpenStack, Kubernetes, and Ceph - c12n stack gives organizations the ability to run a fully featured private cloud maintaining full control over the infrastructure. This means greater **cost efficiency**, **vendor independence**, and **seamless integration** with cloud-native tooling and modern DevOps workflows.



As active contributors to three major open-source foundations, we bring deep expertise in designing and operating OpenStack and Kubernetes environments for a wide range of use cases - including helping VMware customers migrate to vendor-neutral, license-free solutions.

c12n is already powering modern, scalable infrastructure in production at organizations across Europe, Asia and USA. Whether you're planning a **migration from VMware**, building a **new sovereign cloud**, or simply seeking a **future-proof foundation** for your workloads, c12n offers the flexibility and transparency you need to move forward with confidence.

Request a Demo

Interested to see **c12.cloud** in action? Drop us a message to sales@cloudification.io