

Apache CloudStack as a VMware Alternative



Apache CloudStack provides a seamless transition for current VMware users, offering a straightforward pathway for service providers to adopt a **highly scalable and reliable open-source solution**. By adopting Apache CloudStack, organizations can ensure vendor independency, ushering in a new era of flexibility and autonomy.



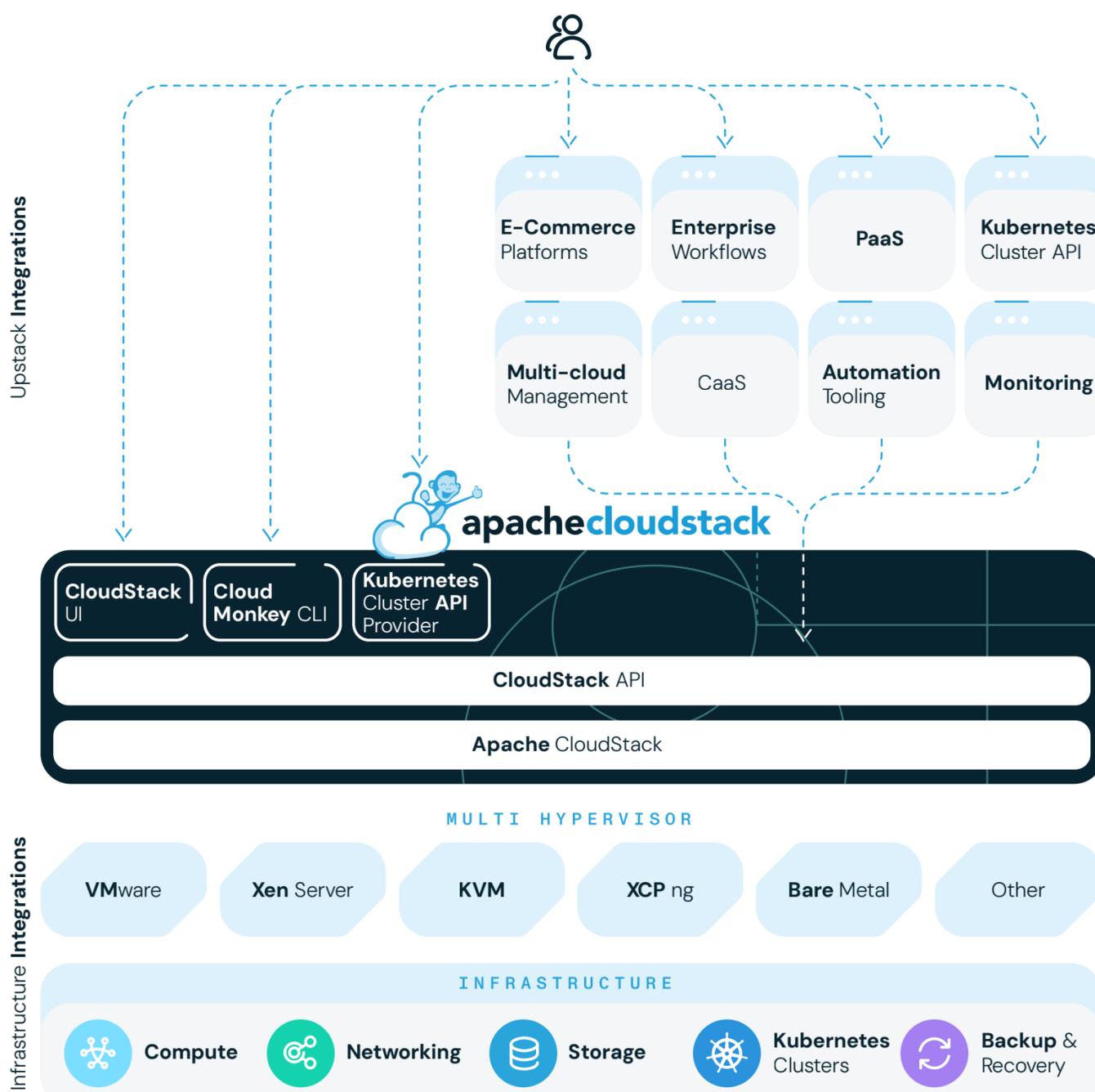
Avoid Vendor Lock-in & Ensure Long-term Reliability & Profitability with CloudStack as a VMware Alternative

CloudStack supports a variety of hypervisors including VMware, KVM, Citrix Hypervisor & XCP-ng. It enables CSPs and MSPs to tailor their cloud offerings to the diverse needs of customers without being constrained by vendor-specific limitations.



CloudStack Architecture

Apache CloudStack is an open source software designed to deploy and manage large networks of virtual machines, as a highly available, highly scalable Infrastructure as a Service (IaaS) cloud computing platform. CloudStack is used by a number of service providers to offer public cloud services, and by many companies to provide an on-premises (private) cloud offering, or as part of a hybrid cloud solution.





Hypervisor Support

CloudStack is hypervisor agnostic, supporting VMware, KVM, Citrix Hypervisor, and XCP-ng. This gives CloudStack a unique position in the market: it is not proprietary technology and is not tied to any specific infrastructure. **Every company can choose a hypervisor that best matches their needs** and with which they have experience.



Scalability

CloudStack can manage tens of thousands of physical servers installed in geographically distributed data centers. **The management server scales near-linearly eliminating the need for cluster-level management servers.** Maintenance or other outages of the management server can occur without affecting the virtual machines running in the cloud.

CloudStack Features Designed for Cloud Service Providers Looking for a VMware Alternative



Hypervisor Agnostic DRS

CloudStack's DRS is hypervisor agnostic, **enabling efficient allocation of resources across different hypervisor types**, ensuring the best performance and workload distribution at the Zone or Hypervisor Cluster level.



Disaster Recovery Workload Protection

CloudStack supports features enabling its users to provide multi-tenant disaster recovery solutions, **ensuring your customers' workload protection and business continuity** in the event of system failures or other disruptions.



Metering and Usage

Accurate metering and usage tracking are essential for service providers. CloudStack includes sophisticated metering tools to monitor resource usage, helping with billing and capacity planning.



Multi-Zone Management

CloudStack excels at multi-zone management, **improving data centre resource utilisation** and providing geographic redundancy for your users.



Advanced Networking Capabilities

Network-as-a-service options, and fine-grained network control. **VPC networks, agnostic integration with third-party VNF (Virtual Network Function)**, Firewall, Load Balancer, SDN, among other network functions.



Veeam Integration

Veeam integration, through CloudStacks Backup and Recovery Framework **adds robust data protection and backup capabilities essential** for maintaining data integrity and availability.



Powerful Open-Source VMware Alternative



CloudStack as a VMware Abstraction Layer

Apache CloudStack has the ability to easily **onboard existing VMware assets, including instances, networks and storage, with no downtime.** CloudStack provides users with an option to easily ingest existing VMware into it and eliminate the need to manage your VMs and hypervisors through vCenter. CloudStack can connect natively to the VMware API and register existing instances by exporting their respective meta-data configurations, and allowing end users to **manage their resources via the powerful CloudStack API or UI.**



From VMware to CloudStack and KVM

For companies, willing to eliminate end-to-end vendor dependency and decrease their costs, **Apache CloudStack has all the tools needed to easily convert your VMware environment to KVM with CloudStack on top.** Some of the features facilitating the migration are VMware to KVM migration and KVM import, coming with the latest CloudStack release.

Both technologies are proven to be reliable at large-scale environments and are open-source, which ensures your long-term reliability.



Open-Source Solution, ensuring your profitability

- **Eliminates the need for expensive licensing fees** associated with proprietary software, significantly reducing operating costs.
- It offers a transparent and community-oriented development model, ensuring that there are **no hidden costs or sudden price changes.**



Simplified cloud management & operations

- The user-friendly interface and robust API simplify cloud management tasks, making it **easy to deploy, manage, and scale cloud resources.**
- **Reduces the complexity of managing multi-tenant cloud environments,** increasing efficiency for service providers.



Advanced network & security features

- It offers sophisticated network capabilities, **including VPCs, load balancing, & NAAS options.**
- Integrates advanced security features, ensuring **secure cloud operations and data protection.**



Robust multi-tenancy & scalability

- Facilitates the creation and management of secure, **isolated multi-tenant environments essential to CSP.**
- **Scales effectively to accommodate growing customer demands,** from small deployments to large-scale distributed cloud environments.



VMware & CloudStack Side-by-Side Comparison - Feature Matrix

FEATURE	vSphere Essential Plus*	vSphere Standard*	vSphere Foundation*	Vmware Cloud Foundation	CloudStack + KVM
Multi-hypervisor Support	No	No	No	No	Yes
Multi-zone Management	No	No	No	Yes	Yes
DRS	No	No	Yes	Yes	Yes
Distributed Switch	No	No	Yes	Yes	Partial
Cross Cluster live-migration	No	No	Yes	Yes	Yes
Cross DC live-migration	No	No	Yes	Yes	Partial
Storage live-migration	No	No	Yes	Yes	Yes
High Availability	Yes	Yes	Yes	Yes	Yes
Kubernetes Support	No	No	Yes	Yes	Yes
Self-Service	No	No	No	Yes	Yes
Disaster Recovery	No	No	Add-on	Add-on	Partial
SDN Integration	No	No	No	Yes	Yes
SDS Integration	No	No	Yes	Yes	Yes
Multi-Cloud	No	No	No	Yes	No
Hybrid Cloud	No	No	Yes	Yes	Yes
Capacity Analytics	No	No	Yes	Yes	Yes
Life-cycle Management	No	No	No	Yes	Yes
Firewall	No	No	Add-on	Add-on	Yes
Load Balancer	No	No	Add-on	Add-on	Yes
Usage Metering	No	No	No	Yes	Yes
Object Storage	No	No	Yes	Yes	Yes
Edge Zone Capabilities	No	No	No	Yes	Yes
VNF Orchestration	No	No	No	No	Yes

* The combination of CloudStack and vSphere is also possible. In this case, the missed features will be included if the use of vSphere is considered.



Apache CloudStack is **Used by** **Leading Cloud Providers** & Global Enterprises



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