SERVICE TEMPLATE

ZeroStack Kubernetes-as-a-Service

Speed up your transition to cloud-native applications without being restricted to the container platform – Docker, Kubernetes or OpenShift

Companies want to implement modern enterprise applications that can be used anytime, anywhere by always-connected users who demand instant access and continuously improved services. Developing and deploying such applications requires development teams to move fast and deploy software efficiently, while IT teams have to keep pace and also learn to operate at large scale.

CONTAINERS COME TO THE RESCUE

While the concept has been around for a couple of decades, containers staged a comeback in the last five years because they are ideally suited for the new world of massively scalable cloud-native applications. Because they share the operating system kernel, containers are extremely lightweight, start much faster and use a fraction of the memory compared to virtual machines which need an entire operating system to boot up. More importantly, they enable applications to be abstracted from the environment in which they actually run. Containerization provides a clean separation of concerns, as developers focus on their application logic and dependencies while IT operations teams can focus on deployment and management without bothering with application details.

ENTER KUBERNETES

Deploying and managing these containers is still a significant challenge. In the past couple of years, Kubernetes burst onto the scene and became the de facto leader as the open-source container orchestrator for deploying and managing containers at scale. The hype has reached such a peak now that there are as many as 30 Kubernetes distribution vendors and over 20 Container-as-a-Service companies out there. All the major public clouds (AWS, Azure, and Google Cloud) provide Container-as-a-Service based on Kubernetes. **MSPs have a unique regional opportunity to enter the market with ZeroStack's cloud platform software.**

ZeroStack's Kubernetes-as-a-Service gives IT and development teams an easy way to consume on-demand compute, storage and networking as well as provide easy access to container services that help increase their development throughput and shorten product delivery. Additionally, it empowers operations teams to manage, maintain and operate the entire infrastructure environment with very few people using smart software that drives automation and intelligence into the entire stack.

About ZeroStack

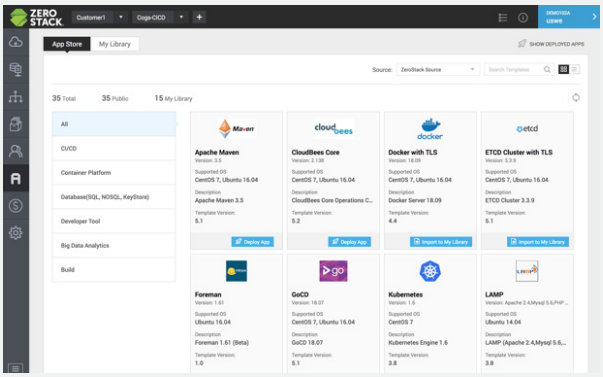
ZeroStack Intelligent Cloud Platform is a fully-integrated cloud solution that delivers the simplicity and agility of a public cloud, along with the performance and control of a private cloud, at a fraction of the cost.

ZEROSTACK KUBERNETES-AS-A-SERVICE:
Self-Service Container Platforms with IT Control

Built-in App Store with a variety of Container platforms

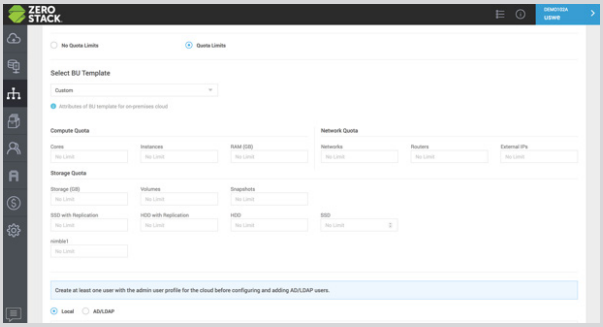
The built-in AppStore offers the leading container platforms and dozens of application templates that enable customers to deploy tools and applications with ease. Some of the example templates include the following:

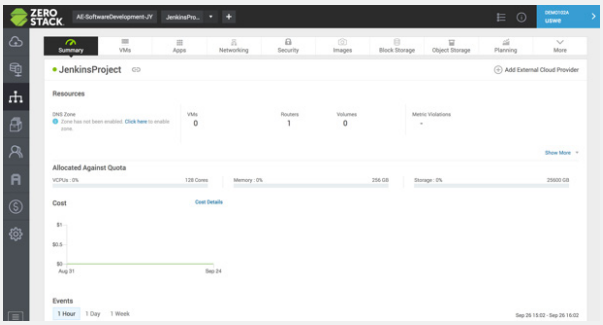
- Container tools such as Kubernetes, OpenShift, and Docker
- CI/CD tools such as Jenkins, CloudBees, GitLab, Puppet, Apache Maven and GoCD
- SQL and NoSQL databases such as Cassandra, Redis, and MongoDB
- Dev Tools and Language stacks such as LAMP Stack, MEAN Stack, DevBox and Terraform



Built-in governance and fine-grained access control of underlying infrastructure resources

Cloud administrators can control which business units have access to which apps while specifying usage quotas for storage, networking, CPU and GPU resources.



Self-service ready	ZeroStack Kubernetes-as-a-Service is easy to use once access is provided by the cloud admins. Users and developers deploy their own apps from the AppStore, network distributed apps using the built-in software-defined networking, monitor usage, and plan capacity, and troubleshoot and correlate issues using the built-in tools. 
Built-in production operational capabilities	For field maintenance, administrators can add and remove physical hosts following host evacuation workflow best practices. The ZeroStack cluster can be scaled up on demand by adding new physical nodes to the cluster.

ZEROSTACK KUBERNETES-AS-A-SERVICE: Use Cases

MSPs who want to provide a Kubernetes-as-a-Service to their end customers

Automated deployment of Docker, Kubernetes, and OpenShift, self-service options for IT Operations controlling customer access to infrastructure resources as well as cost management make ZeroStack Kubernetes-as-a-Service an attractive new revenue source for MSPs.

Enabling CI/CD, ML, IoT, and many more emerging technologies

Multiple GPU capabilities, dedicated/full GPU access, streaming analytics tools, small footprint, and self-service Container choice make this attractive for enterprises and universities who want to develop IoT and ML applications in addition to CI/CD pipelines.

Agile Operations

ZeroStack's self-healing features, software-defined networking, and storage as well as seamless upgrades and scalability can now be used with GPU applications.