

**viettel**  
IDC



**datasheet**

**VIETTEL OPEN KUBERNETES SERVICE**



The leading corporation in Vietnam for Cloud Computing and Data Center Services  
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## OVERVIEW

Viettel Open Kubernetes Service (vOKS) is a service at the platform (PaaS) providing Software Developers with a complete OS-virtualized environment, supporting them on developing, testing and deploying applications on Kubernetes.

Inherited the advantages of Viettel IDC's highly robust and stable Public Cloud infrastructure, Viettel Open Kubernetes Service possesses the ability to create and provide Kubernetes clusters to Developers at a high speed, fully automated and self-configured manner. Our service also meets many of the Cloud industry standards and achieved many related certifications, both local (Cloud for Government) and global (ISO 9001:2015 - Quality Management System, ISO 27001:2013 - Information Technology System Management, ISO 27017:2015 - Information technology-Security techniques-Code of practice for information security controls for cloud services, etc.)

## HIGHLIGHTS

- The diverse selection of regions is convenient for customers to connect vOKS with other services in the ecosystem and optimize transmission latency.
- Initialize a Kubernetes cluster with multiple Master Nodes & Load Balancers to enhance service availability (99.99% SLA)
- Easily & quickly add unlimited number of Worker Nodes to your Kubernetes cluster.
- A NFS Node - Persistent Storage will be automatically added to your Cluster upon initialization & pre-configured for all other nodes to use.

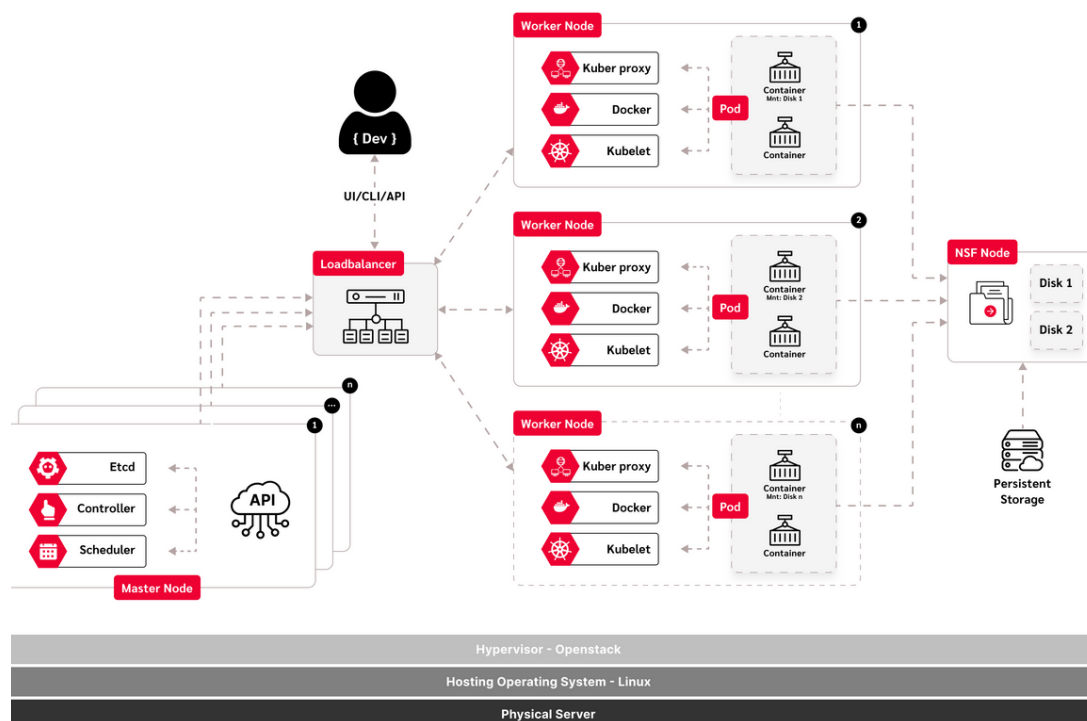


Figure 1: Key Components of a Kubernetes cluster



## MAIN FEATURES

### High Availability

Initialize and operate your Kubernetes cluster with 03 Master Nodes & a Load Balancer to maximize the availability of your service (99.99% availability).

### Scaling without limitation

Easily & quickly add unlimited number of Worker Nodes to your Kubernetes cluster.

### Automating & Self-healing Pods

Kubernetes features the ability to automate the process of creating and terminating Pod without causing downtime, automatically reboot the error Pods, those not responding to health check will be automatically terminated and replaced by new healthy ones.

### Service Management

Customers register and initialize services automatically through a self-service portal, manage service techniques on Cloud Management Platform (CMP) interface developed by a team of leading engineers and experts of Viettel IDC, interact with the service through the familiar kubectl tool.

### Performance monitoring

The Kubernetes Dashboard is integrated into the system to monitor resources of nodes and pods more efficiently. Real-time information is displayed on the charts

### Persistent Storage

A NFS Node - Persistent Storage will be automatically added to your Cluster upon initialization & pre-configured for all other nodes to use.

Besides the basic Persistent Storage feature with the advantage of saving effort & ready to use immediately, Viettel IDC also provides an advanced Persistent Storage solution using a combination of other services in the ecosystem such as Viettel Cloud File Storage, Viettel Cloud Object Storage to transfer and save data with better performance, higher safety through Viettel Hybrid Connect.



## USE CASE

### Implement microservice architecture

Kubernetes and Containers play an important role in deploying applications under the microservices architecture and in standardizing how software is developed into service sets that are data-separated and operate independently.

### Deploy applications that need to scale quickly

Build and manage backend services on vOKS to speed up deployment and improve application performance. Development team builds the application, tests and updates the new version independently without affecting other applications, thereby improving the availability and efficiency of customers' services.

### Implement CI/CD

Perform the integration with CI/CD systems such as Gitlab, Jenkin, Travis, etc. on vOKS to manage the software development process of DevOps team more effectively, and to install, configure or expand the application development and integration scale more easily.

### Deploy API & backend services

Build and manage backend services on vOKS to speed up deployment and improve application performance. Development team builds the application, tests and updates the new version independently without affecting other applications, thereby improving the availability and efficiency of customers' services.

### Migrate services between Cloud providers

Containerized applications can be easily migrated from one Cloud provider to another with the help of Kubernetes.

### Migrate services between on-premise and Cloud systems

Kubernetes and Container help companies containerize and migrate their IT systems from On-premise to Cloud and other way around in a quick and simple manner.

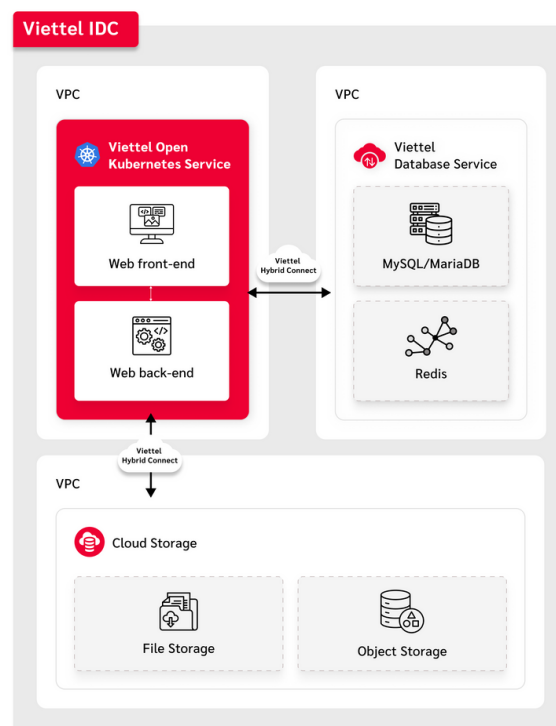


Figure 2: Connection model between Viettel Open Kubernetes Service and Viettel Database Service, Viettel Cloud Object/File Storage



### WHY YOU SHOULD CHOOSE VIETTEL IDC?

- **The leading company in the field of cloud computing technology**

Viettel - CHT Co., Ltd (trade name: Viettel IDC) established in 2008 - a pioneering cloud computing service provider with the most diverse ecosystem in Vietnam with the mission of providing a reliable platform for customers to innovate, breakthrough, and comprehensively digital transform. Viettel IDC's product range includes 50+ services spanning many needs from computing, storage, and connection to graphics processing, monitoring,...

- **Standard International Infrastructure**

The infrastructure is located at the data centers of Viettel IDC that meet TIA-942 Rated 3 Constructed Level standards, ISO 9001: 2015, 50001: 2018 international certificates, information security and safety certificates: ISO 27001: 2013, 27017: 2015 (specialized for Cloud services) and PCI DSS ensure to meet the most rigorous criteria of customers in terms of infrastructure, service quality and information safety and security.

The advantage of multi-site infrastructure stretching across three regions of the North, Central, and South of Viettel IDC makes it easy for customers to choose the right area to conveniently connect to other services in the ecosystem, minimizing the transmission latency.

- **Modern, up-to-date technology**

Viettel IDC is committed to applying the best and most modern technologies for customers. Regarding innovation as the guideline, we select & deploy top-quality technologies, and constantly update the latest trends and technology solutions for not only Viettel Open Kubernetes Service but for the entire ecosystem of products and services.

- **Team of experts and experienced engineers**

24/7 technical support team and a large number of engineers and experts with an average of more than 5 years of experience, and extensive knowledge spanning many different technology fields will help solve customer problems in the most comprehensive and effective way.

