

Tencent Kubernetes Engine

Quick Start

Product Introduction



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- Nginx Services

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Quick Start

Deploy Tencent Kubernetes Engine

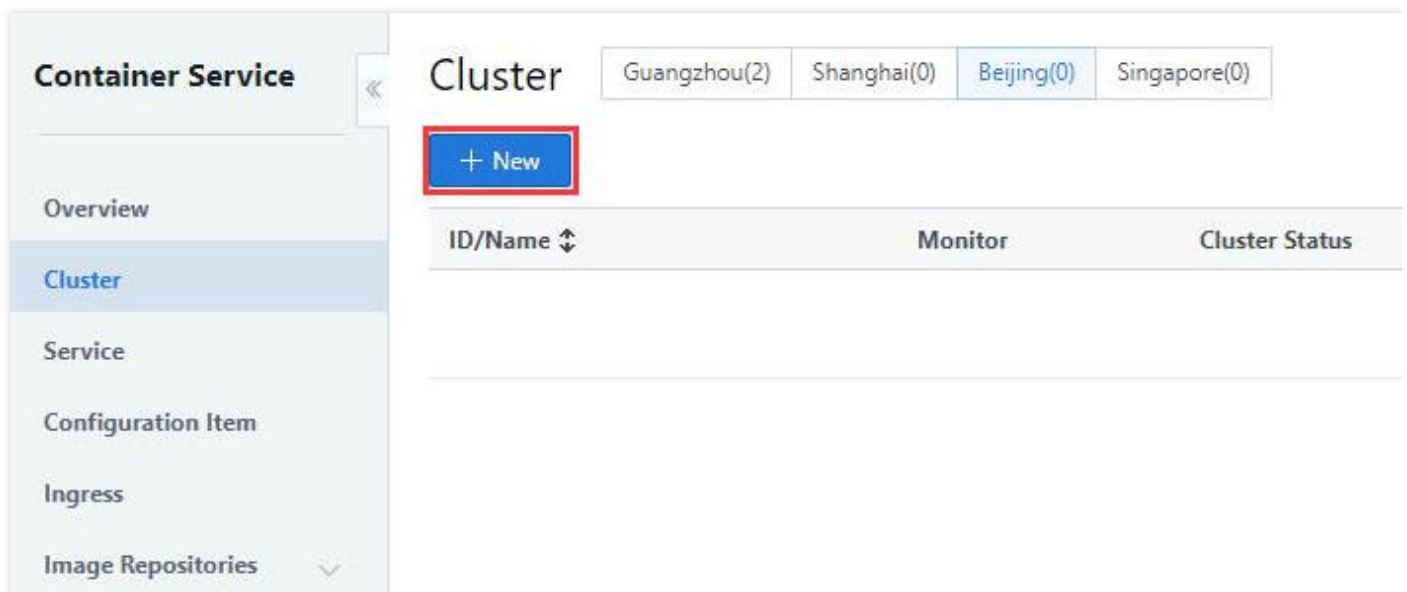
Last updated : 2018-09-20 14:18:56

Tencent Kubernetes Engines (TKE) is a container management service with high scalability and high performance. You can easily run applications on a hosted CVM pod cluster. In this tutorial, you will learn how to use TKE to quickly create and manage container cluster, and deploy your service in the cluster in a fast and flexible way.

Step 1: Create a cluster

First, you need to create a cluster. A cluster is a collection of cloud resources required by containers to run, including several CVMs, load balancers and other Tencent Cloud resources.

1. Log in to the [Tencent TKE Console](#).
2. Click "Cluster" in the left navigation bar, and click "+ New" in the cluster list page.



3. Configure the basic cluster information.
 - **Cluster name:** The name of the cluster to be created. It cannot exceed 60 characters.
 - **Billing method:** Two billing methods are supported: Prepaid and Postpaid. For more information, please see [Billing Method](#).
 - **Region:** Select a closest region based on your location. This helps minimize access latency and improve download speed.

- **Availability zone:** Clusters in the same region are interconnected with each other through private network, but the ones in different regions cannot communicate with each other through private network. Users who communicate with each other through private network need to choose the same region.
- **Node network:** The system assigns the IP addresses within the node network address range to the CVMs in the cluster. For more information, please see [Network Configuration of Container and Node](#).
- **Container network:** The system assigns the IP addresses within the container network address range to the containers in the cluster. For more information, please see [Network Configuration of Container and Node](#).
- **Cluster Description:** Information about cluster creation. This information is displayed in **Cluster Information** page.

Container Service

Overview

Cluster

Service

Configuration Item

Ingress

Image Repositories

< Back

Create Cluster

1 Cluster Information

To use CCS, you need to create a cluster. A cluster consists of several nodes (CVMs) on which services are

Cluster Name

Up to 60 characters

Project of new resource

Select Projects

New resources such as CVMs and load balancers in cluster are automatically all

Kubernetes version

1.4.6

1.7.8

Billing Mode ⓘ

Postpaid

Region

Guangzhou

Shanghai

Beijing

Singapore

Cloud products in different regions CANNOT communicate via private network

Availability Zone ⓘ

Beijing Zone 1

Beijing Zone 2

Node Network ⓘ

Select VPC

If no suitable network is found, you can [Create a VPC](#) or [Create a Subnet](#)

Container Network ⓘ

172

.

1

.

0

.

0

/

16

[Instruction](#)


Cluster Description

Next

4. Select a model (all models with cloud disks as system disks are supported).
- Series: **Series 1** and **Series 2** are provided. For more information, please see [Pod Types](#).

- **Model:** For more information about the model options, please see [Select CVM Configuration Option](#).

[< Back](#) | Create Cluster

 Cluster Information

Billing Mode	Postpaid
Region	North China (Beijing)
Availability Zone	Beijing Zone 1
Network	yunyxiao_test, yunyxiao_test
Series ⓘ	Series 1 Detailed Comparison
Model	<div>StandardS1</div> <div>MemoryM1</div>

Model
<input checked="" type="radio"/> StandardS1

5. Enter CVM configurations and click "Done".

- **System disk:** Always 50 GB.
- **Data disk:** Increment is 10 GB. Maximum value is 4,000 GB.
- **Public bandwidth:** Two billing methods are available. For more information, please see [Purchase Network Bandwidth](#).
- **Bandwidth:** If you check **Assign public IP for free**, the system assigns a public IP at no cost. If there is no need, set bandwidth value to 0.
- **Login method:** Three login methods are provided.
 - Set password:** Set a password according to instructions.
 - Associate with key immediately:** Key pair is a pair of parameters generated by an algorithm. It is a more secure method to log to CVM than a password. For more information, please see [SSH Key](#).
 - Automatically generated password:** The automatically generated password is sent to you through the internal message.
- **Security group:** Security group functions as a firewall and is used to control network access settings of CVMs. For more information, please see [Configuration of TKE Security Group](#).

- **Number of CVMs:** Select the number of CVMs.

[< Back](#) | Create Cluster

Cluster Information

Operating System ⓘ

Ubuntu 16.04 64-bit ▼

System Disk

Cloud disk

The capacity of cloud disk can only be 50 GB

Data Disk

Cloud disk

0GB

4000GB

-

0

+

Public Bandwidth

Bill by traffic

Bandwidth Cap

0Mbps

100Mbps

-

1

+

☒ Assign Public IP for FREE [Instruction](#) ⓘ

CVM Name

Auto-generated

Custom name

The CVM is auto named as "ccs_clusterID_node"

Login Method

Password

SSH Key

Automatically generate password

Note: Please keep your password in mind. If you forgot your password, please

User Name

ubuntu

Password

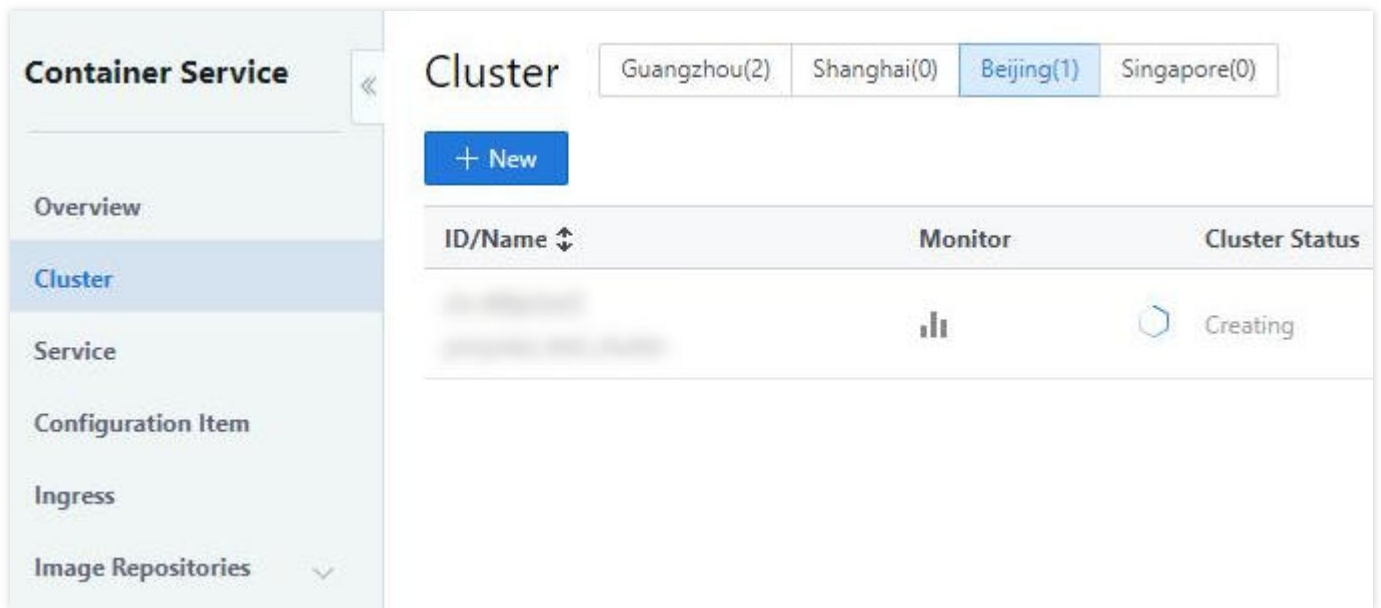
Enter the CVM password

8-16 chars, containing at least two of the following types: letters [a-z, A-Z],

Previous

Complete

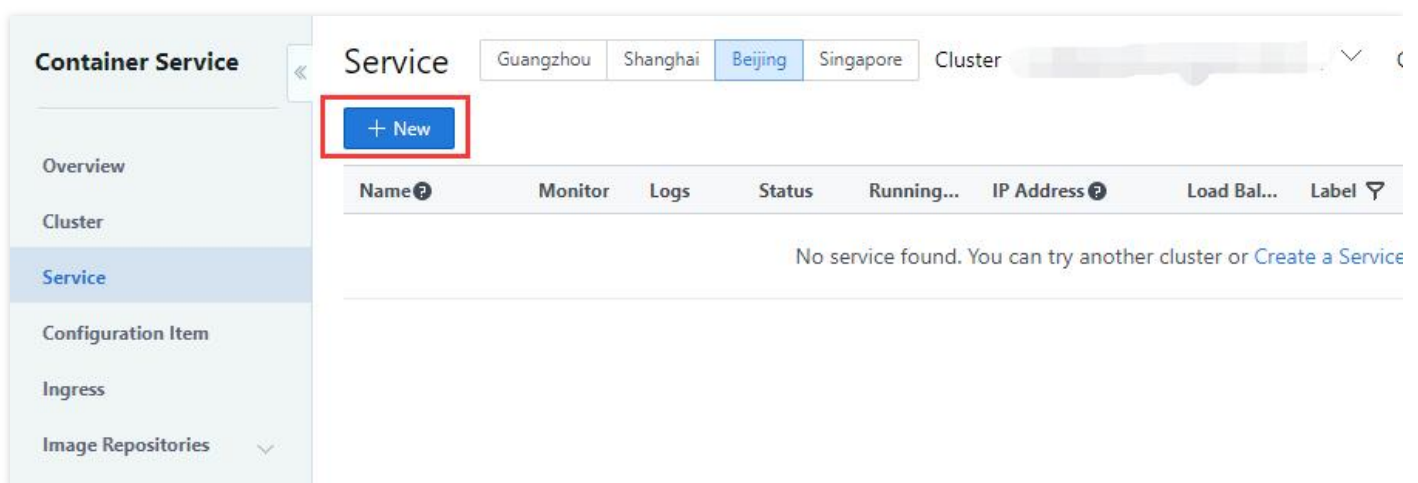
6. The created cluster is displayed in the cluster list.



Step 2: Create a service

After a cluster is created, you need to create a service. A service is a microservice comprised of multiple containers with the same configuration and rules used to access these containers.

1. Click "Service" in the left navigation bar, and click "+ New" in the service list page.



2. Configure basic service information.

- **Service name:** The name of the cluster to be created. Name is composed of lowercase letters, numbers and "-". It starts with a lowercase letter and ends with a lowercase letter or a number.
- **Region:** Select a closest region based on your location.

- **Running cluster:** Select a cluster that runs a service. To run a cluster, you need to select a running cluster with available CVMs in it.
- **Service description:** Information about service creation. This information is displayed in **Service Information** page.

Container Service << < Back | Create a Service

Overview
Cluster
Service
Configuration Item
Ingress
Image Repositories

Service Name
A maximum of 63 characters comprised of only lowercase letters, numbers and deli lower-case letter or number

Region

Running Cluster
If no suitable cluster is found, you can [New cluster](#) or [New Namespace](#)

Service Description

3. Configure data volume.

Click "Add Data Volume" when you specify a specific path to which a container is mounted.

Note:

If no source path is specified, a temporary path is assigned by default.

- **Type:** Four types of data volumes are supported: local disk, cloud disk, NFS disk, and configuration file. For more information, please see [How to Use TKE Data Volume](#).
- **Name:** The name of data volume.

- **Path:** Specify the path to which a container is mounted.

Data Volume (optional) ⓘ

Cloud disk ▼

Local disk

Cloud disk

NFS disk

Use configuration item

Name, such as: vol

No cloud disk available ▼

It supports temp path, CVM path, cloud disk data volume, NFS and configuration to the specified path of container. [Instruction](#)

4. Configure a running container.

- **Name:** The name of the cluster to be created.
- **Image:** Click "Select an Image" to create a service under My Images, My Favorites, TencentHub Image, DockerHub Image and other images.
- **Version:** A default version for TKE. If you need to use a different image version, click version display window to select one.

Running Container

Name

Image

Image Tag

Select an image

Advanced Settings

Note: After the service is created, you can modify the configuration information of the container by updating the service

Add Container

5. Other configurations.

- **Number of pods:** A pod is composed of one or more relevant containers. You can specify the number of pods by clicking + or -.
- **Service access method:** The method for accessing a service determines the network attribute of this service. Different access methods offer different network capabilities. For more information about the

four access methods, please see [Configuration of Service Access Methods](#).

Number of Pods: 1 Note: The CBS data volume has been set and the number of pods is limited to 1

Service Access ⓘ ☒ Via Internet ☐ Intra-cluster ☐ Via VPC ☐ Disabled [How to select](#) ⓘ

Provides an entrance for internet accesses. It supports TCP/UDP protocols, and is applicable to web frontend services

To forward requests via HTTP/HTTPS protocol or by URLs with public network, use Ingress for route forwarding in Ingress page, [View](#)

Port Mapping

Protocol ⓘ	Container Port	Service Port ⓘ
TCP ▼	Port listened on by application in con	Better to be the same as container po

[Add Port Mapping](#)

6. Click "Create Service" to complete the creation of service. A created service is displayed in service list.

Step 3: View resources

In previous steps, you have created a cluster and a service. In this step, you can view all the resources you created.

Viewing Cluster

1. Click "Cluster" in the left navigation bar, and click "ID/Name" of a cluster in the cluster list page, such as cls-dt8p2oe3.

Container Service << Cluster Guangzhou(2) Shanghai(0) Beijing(1) Singapore(0) [Cluster Operation Documentation](#) ⓘ

[+ New](#)

Enter the cluster name

ID/Name ↕	Monitor	Cluster Status	Node Status	Number of...	CPU Usage ⓘ	MEM Usage ⓘ	Operation
cls-dt8p2oe3		Running	Normal	2	0.72/2	0.21/2	Add Nodes Add Existing Node Manage Namespaces Delete

Overview
Cluster
Service
Configuration Item
Ingress
Image Repositories ▼

2. **Node list:** A node is a CVM registered in the cluster. You can create a cluster, add an existing cluster, or remove a cluster.

Namespace list: Namespace is an abstract collection of a group of resources and objects. Click "Namespace List" to create and delete a Namespace.

Cluster information: It displays the basic cluster information.

Container Service

Overview

Cluster

Service

Configuration Item

Ingress

Image Repositories

Back | cls-

Node List | Namespace list | Cluster Information

+ Create a Node | Add Existing Node | Remove

Enter the IP or node name

ID/Node Name	Status	IP Address	CPU Usage	MEM Usage	Billing Mode	Operation
ins-ccs_cls-dt8p2oe3_node	Healthy		0.52 / 1	0.21 / 1	Postpaid Created by 2017-11	Remove
ins-ccs_cls-dt8p2oe3_node	Healthy		0.2 / 1	0 / 1	Postpaid Created by 2017-11	Remove

Viewing Service

1. Click "Service" in the left navigation bar, and click "Name" of a service in the service list page, such as cfs1.

Container Service

Overview

Cluster

Service

Configuration Item

Ingress

Image Repositories

Service

Guangzhou | Shanghai | Beijing | Singapore

Cluster

Cluster Namespace

+ New

Enter the service name

Name	Monitor	Logs	Status	Running...	IP Address	Load Bal...	Label	Creation T...	Operation
cfs1			Starting ...	0/1		Creating	qcloud-app...	2017-11-16 10:...	Modify Number of Pods Modify Service More
			Starting ...	0/1		lb-b6ivz699	qcloud-app...	2017-11-16 10:...	Modify Number of Pods Modify Service More

2. **Pod list:** A pod is composed of one or more relevant containers. You can specify the number of pods or terminate a pod.

Service information: It displays the basic service information, configuration information, and port mapping information.

Pod information: It displays the basic pod information.

Event: You are redirected to this page when creating a service. It displays the details during the creation

of service.

The screenshot shows the Tencent Cloud Container Service console. On the left is a navigation menu with 'Container Service' at the top, followed by 'Overview', 'Cluster', 'Service' (highlighted), 'Configuration Item', 'Ingress', and 'Image Repositories'. The main area has a 'Back' button and a breadcrumb trail: 'Pod List' (highlighted with a red box), 'Service Information', 'Pod Information', 'Event', and 'Logs'. Below the breadcrumb are two buttons: 'Modify Number of Pods' and 'Terminate'. A table lists pods with columns: 'Pod Name', 'Monitor', 'Logs', 'Status', 'Node IP o...', and 'Pod IP'. The first row shows a pod named 'cfs1' with a status of 'Starting...'.

Step 4: Delete a resource

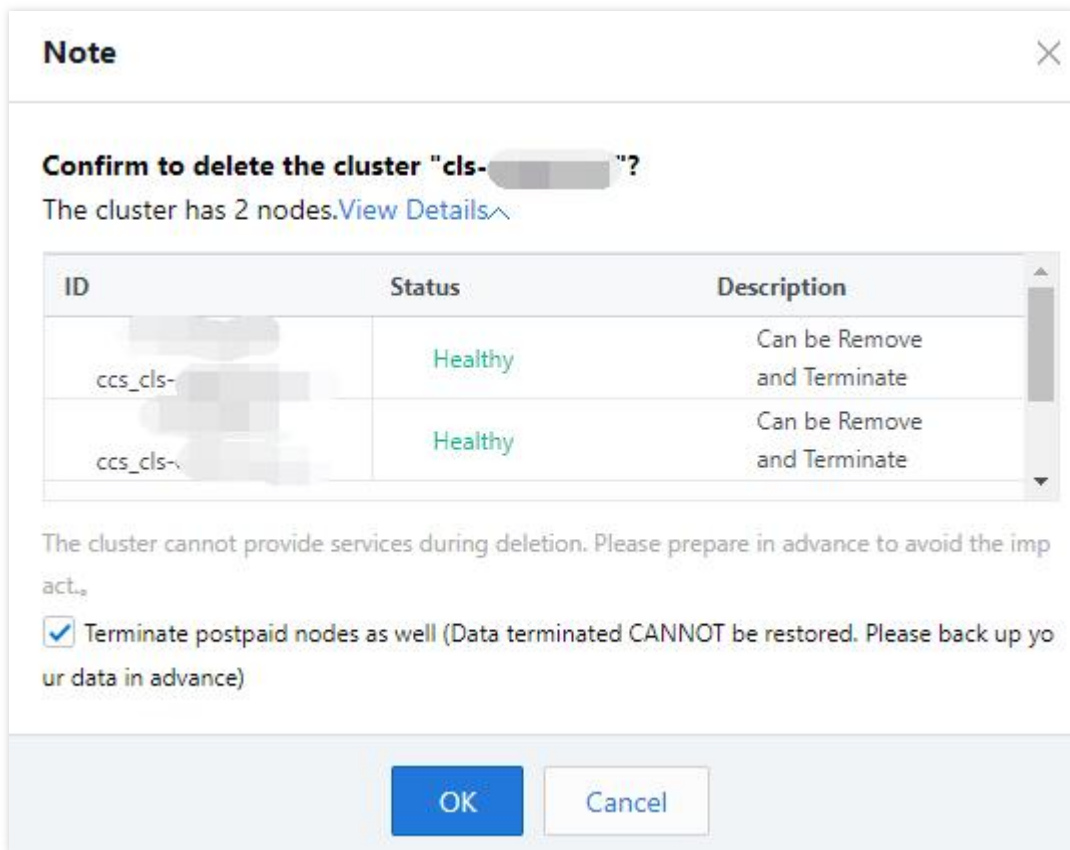
In this tutorial, you have enabled two types of resources: cluster and service. In this step, you can delete all the resources to avoid unnecessary costs.

Deleting a Cluster

1. Click "Cluster" in the left navigation bar, and click "Delete" on the right side of the cluster list page.

The screenshot shows the Tencent Cloud Container Service console with the 'Cluster' page selected. The left navigation menu is the same as in the previous screenshot. The main area has a 'Cluster' header with tabs for 'Guangzhou(2)', 'Shanghai(0)', 'Beijing(1)' (selected), and 'Singapore(0)'. There is a '+ New' button and a search bar labeled 'Enter the cluster name'. Below is a table with columns: 'ID/Name', 'Monitor', 'Cluster Status', 'Node Status', 'Number of...', 'CPU Usage', 'MEM Usage', and 'Operation'. The first row shows a cluster named 'cls-' with a status of 'Running' and a node status of 'Normal'. The 'Operation' column for this cluster has links for 'Add Nodes', 'Add Existing Node', 'Manage Namespaces', and 'Delete' (highlighted with a red box).

2. Click "OK".

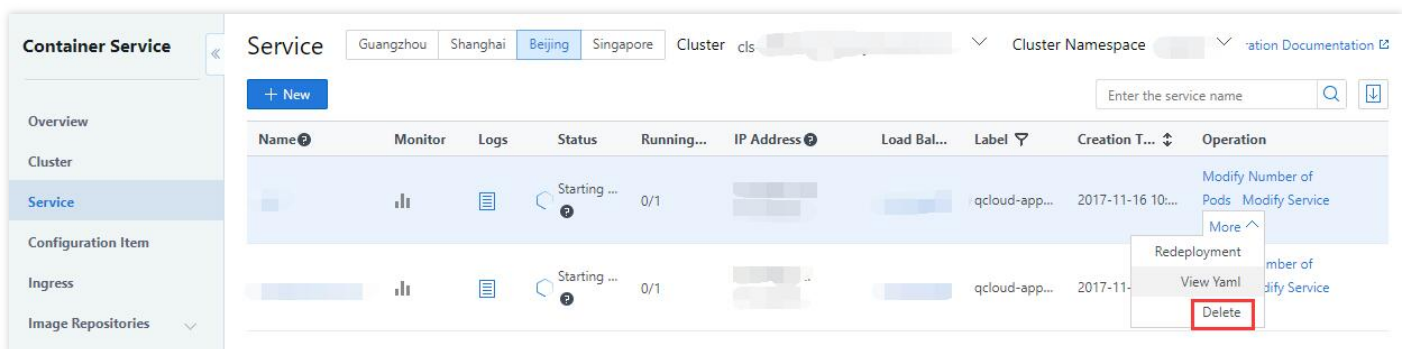


Note:

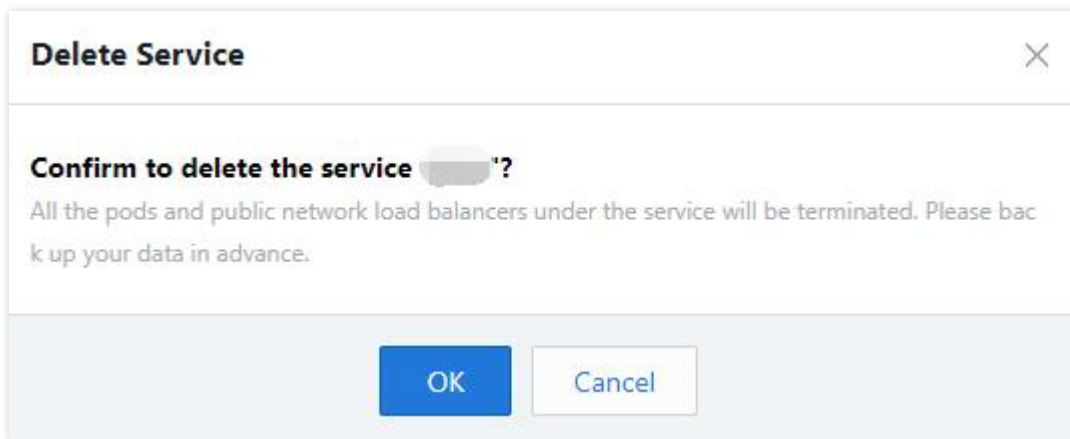
The cluster cannot provide services during deletion. Please prepare in advance to avoid the impact.

Deleting a Service

1. Click "Service" in the left navigation bar, and click "Delete" in "More" on the right side of the service list page.



2. Click "OK".



More

In this tutorial, you have learnt how to configure, deploy and delete services in Tencent TKE. With Tencent TKE, you don't need to install, operate, maintain or expand your cluster management infrastructure. You can enable and disable Docker applications, query full status of the cluster, and use various cloud services by simply calling APIs.

Go to the next tutorial, learn about the basic concepts and operations of [Load Balance](#) and [Image Registry](#). You can also create a service quickly using a pod in [Quick Start](#).

Examples

Nginx Services

Last updated : 2018-10-09 11:18:36

This document shows how to quickly create an "nginx" service in a container cluster.

Prerequisites

To create an "nginx" service, you must create a cluster first. For more information on how to create a cluster, please see [Create Cluster](#).

Procedure

1. Log in to [TKE Console](#).
2. Click **Service** in the left navigation bar, and click **+ New** in the service list page.



3. Enter basic service information.
 - **Service name:** The name of the service to be created, which is comprised of lowercase letters, numbers and "-". It starts with a lowercase letter and ends with a lowercase letter or a number. In this example, the name is "nginx".
 - **Region:** Select the closest region based on your location.

- **Cluster:** Select an appropriate cluster and Namespace.
- **Service description:** Service information. This information is displayed on the **Service Information** page.

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容器服务

概览 集群 服务 配置项 负载均衡 镜像仓库

< 返回 | 新建服务

服务名称
服务名称由小写字母、数字和 - 组成，且由小写字母开头，小写字母或数字结尾

所在地域 广州 上海 北京 新加坡

运行集群 testA default
如现有的集群不合适，您可以去控制台[新建集群](#)或[新建Namespace](#)

服务描述

4. Select an image. Enter the name of the running container, which is "nginx" here. Click **Select Image**.

运行容器

名称

镜像
选择镜像

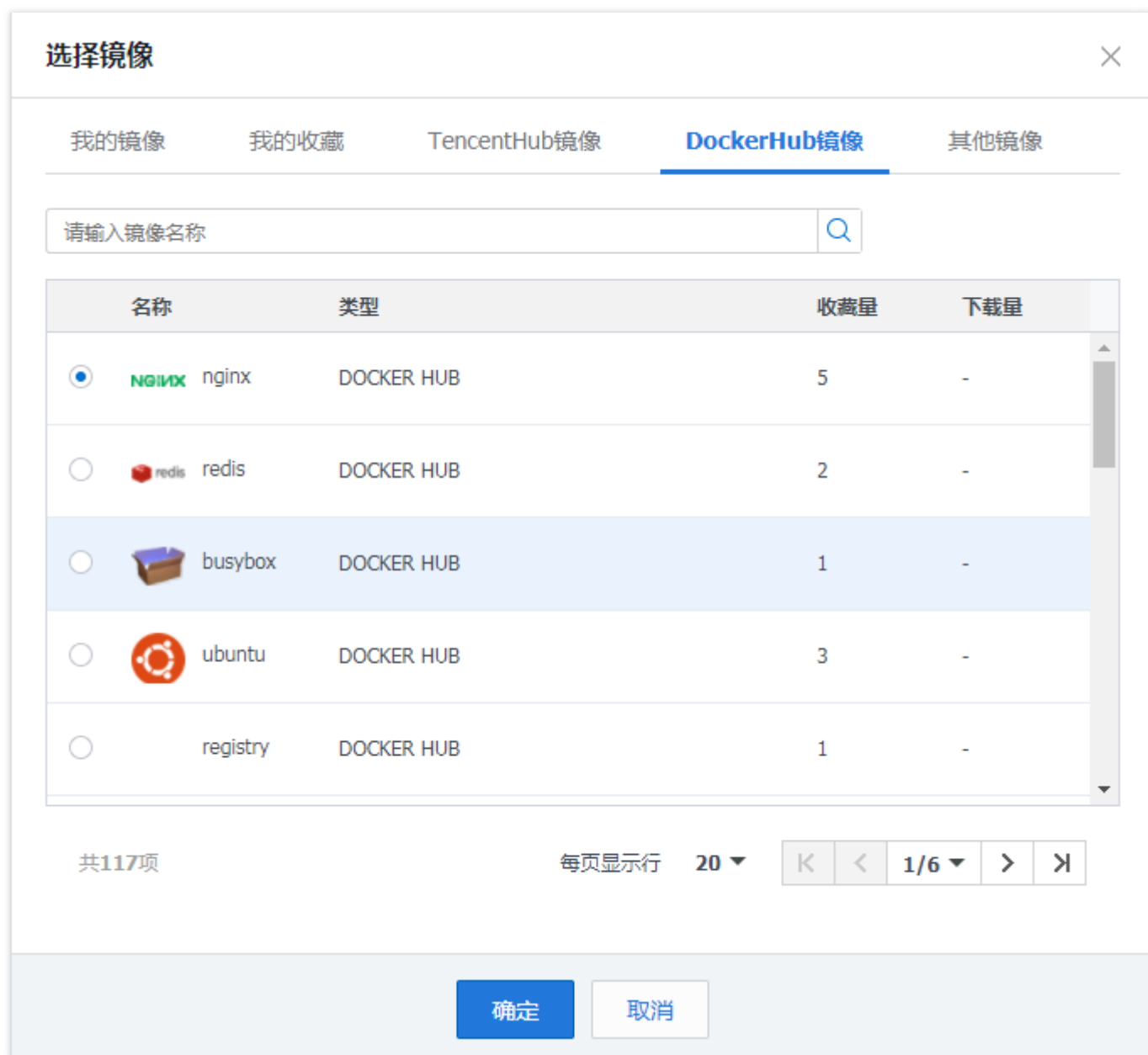
版本 (Tag)

[显示高级设置](#)

注意：服务创建完成后，容器的配置信息可以通过更新服务的方式进行修改

添加容器

Click **DockerHub Image**, and select "nginx". Click **OK**.



Version (Tag): latest. By default, the latest version is used for TKE.

运行容器

名称

nginx

镜像

nginx

选择镜像

版本 (Tag)

latest

显示高级设置

注意：服务创建完成后，容器的配置信息可以通过更新服务的方式进行修改

添加容器

5. Configure port mapping. Set both container port and service port to 80.

端口映射

协议 ⓘ

容器端口

服务端口 ⓘ

TCP

80

80

×

添加端口映射

6. Click **Create Service** to complete the creation of "nginx" service.

Note: Keep default settings for other options.

Accessing "nginx" Service

1. Click **Service Information** on the service page to check the load balancer ID and load balancer IP.

The screenshot shows the Tencent Cloud console interface for the Container Service. The left sidebar contains navigation options: 容器服务 (Container Service), 概览 (Overview), 集群 (Cluster), 服务 (Service), 配置项 (Configuration Item), 负载均衡 (Load Balancing), and 镜像仓库 (Image Repository). The main content area displays the details for the 'nginx' service. The '服务信息' (Service Information) tab is active, showing the following information:

实例列表	服务信息	实例信息	事件	日志
基本信息				
服务名称	nginx			
状态	运行中			
运行集群	cls-7kaky7w			
负载均衡ID	lb-3bvjkgz			
实例数量	1			
创建时间	2017-08-02 16:31:28			
描述	nginx测试			
服务配置				
实例数量	1			
负载均衡IP	111.230.126.187	(外网访问：绑定域名或VIP + 负载均衡监听端口)		
服务IP	10.7.255.202	(集群内访问：服务名或服务IP + 服务监听端口)		
访问方式	公网访问 (lb-3bvjkgz, 111.230.126.187)			

2. Access "nginx" service by the following ways.

- Use load balancer IP.
- Use **domain name**.

Copy the domain name by clicking **Load Balance** -> **TCP/UDP** in the left navigation bar of the container console to access the service.



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容器服务 负载均衡 广州 上海 北京 新加坡 所属集群 centos 所属集群空间 default

HTTP/HTTPS TCP/UDP

创建服务时选择公网或内网访问方式将自动创建TCP/UDP协议的负载均衡

名称	状态	域名	VIP	后端服务
lb-3bvjkgz ccs_cls-7kakty7w_nginx	运行中	ccs-cls-7kakty7w-ng.gz.125176...	111.230.126.187	nginx

- Other services or containers in the cluster can be accessed directly by the service name.

3. Go to "nginx" server's default welcome page.

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

More "nginx" Settings

For more information, please see [Create a Simple Web Service with Tencent Cloud TKE](#).

Hello World Programs

Last updated : 2018-10-09 11:30:03

Description

This document shows how to quickly create an Node.js "hello world" service in a container cluster. For more information about how to build a Docker image, please see [Build a Docker Image](#).

You can view [Instructions](#) in "My Image" to learn about how to upload images to Tencent Cloud image warehouse.

Step 1: Write Code to Create an Image

Write Application

1. Create a folder named "hellonode" and add file "server.js" to it.

```
[root@VM_88_88_centos ~]# mkdir hellonode
[root@VM_88_88_centos ~]# cd hellonode/
[root@VM_88_88_centos hellonode]# vim server.js
[root@VM_88_88_centos hellonode]# ls
server.js
```

File "server.js" is shown below:

```
var http = require('http');
var handleRequest = function(request, response) {
  console.log('Received request for URL: ' + request.url);
  response.writeHead(200);
  response.end('Hello World!');
};
var www = http.createServer(handleRequest);
www.listen(8080);
```

2. Test the application "hello world".

```
[root@VM_88_88_centos ~]# node server.js
```

Open a new console and test the application with "curl", or access the application from the browser using "". Port is 8080.

```
[root@VM_88_88_centos ~]# curl 127.0.0.1:8080
Hello World!
```

Here, you have completed the "helloworld" application.

Create Docker Image

For more information about how to create a Docker image, please see [Build Docker Image](#).

Create file "Dockerfile" under the "hellonode" folder:

```
FROM node:4.4
EXPOSE 8080
COPY server.js .
CMD node server.js
```

Build image using the "Docker build" command

```
[root@VM_88_88_centos hellonode]# vim Dockerfile
[root@VM_88_88_centos hellonode]# ls
Dockerfile server.js
[root@VM_88_88_centos hellonode]# docker build -t hello-node:v1 .
Sending build context to Docker daemon 3.072 kB
Step 1 : FROM node:4.4
Trying to pull repository docker.io/library/node ...
4.4: Pulling from docker.io/library/node
.....
.....
Removing intermediate container 1e8d01dc319f
Successfully built 027232e62e3f
[root@VM_88_88_centos hellonode]# docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-node v1 027232e62e3f 54 minutes ago 647.4 MB
```

Upload Image to Tencent Cloud Image Warehouse

For more information about image operations, please see [Image Warehouse Basic Instruction](#).


```
[root@VM_3_224_centos hellonode]# sudo docker tag 027232e62e3f ccr.ccs.tencentyun.com/test/hello-world:v1
[root@VM_3_224_centos hellonode]# sudo docker push ccr.ccs.tencentyun.com/test/hello-world:v1
The push refers to a repository [ccr.ccs.tencentyun.com/test/hello-world]
1b8da8805305: Pushed
20a6f9d228c0: Pushed
80c332ac5101: Pushed
04dc8c446a38: Pushed
1050aff7cfff: Pushed
66d8e5ee400c: Pushed
2f71b45e4e25: Pushed
v1: digest: sha256:38b194feeee09abf8ee45e7abca82b9fe494b18b953c771ce8ebefa387107be9
size: 1772
```

Step 2: Create Cluster

First, you need a cluster where containers can run. If you have no cluster, you need to create one. For more information, please see [Create Cluster](#).

Step 3: Create a Service with the Image

Click the "Create Service" button, choose the cluster to run the service, enter port configuration and click "Create":

[< Back](#) | **Create a Service**

Running Container

Name

A maximum of 63 characters comprised of only lowercase letters, numbers and delimiters (" - "), and cannot

Image [Select an image](#)Image Tag [Advanced Settings](#)

Note: After the service is created, you can modify the configuration information of the container by updating the service

[Add Container](#)

Number of Pods

Service Access [i](#)
☒ Via Internet
 ☐ Intra-cluster
 ☐ Via VPC
 ☐ Do not enable (do not support Ingress) [How to select](#)

Provides an entrance for internet accesses. It supports TCP/UDP protocols, and is applicable to web frontend services

To forward requests via HTTP/HTTPS protocol or by URLs with public network, use Ingress for route forwarding in Ingress page, [Learn More](#)

Port Mapping

Protocol i	Container Port	Service Port i
TCP <input type="button" value="v"/>	<input type="text" value="80"/>	<input type="text" value="80"/> <input type="button" value="x"/>

[Add Port Mapping](#)

You will be redirected to the event list where you can view the details of the creation process.

Instance List

Service Information

Pod Information

Event

Logs







Only the service events within the last 1 hour are saved. Please check them in time.

Enter the object name or keyword

Auto Refresh

☒


First Occurrence ↕	Last Occurrence Time ↕	Number of Occurrences ↕	Level ▾	Object Type ▾	Object Name	Content	Detailed Description
2017-12-01 11:20:53	2017-12-01 11:20:53	1 times	Normal	Pod	wordpress-3804118931-lq5lf	Created	Created container
2017-12-01 11:20:53	2017-12-01 11:20:53	1 times	Normal	Pod	wordpress-3804118931-lq5lf	Started	Started container

Service					Cluster cls-696wkkse (yunyxiao_cl_t1) Cluster				
Guangzhou Shanghai Beijing Hong Kong									
+ New									
Name ?	Monitoring	Logs	Status	Running/Expected					
helloworld			Running	1/1					
t			Running	1/1					
wordpress			Running	1/1					




When creation is completed, click the service to view its details. You can access the service through its public IP or load balancer domain.

[< Back](#) | **helloworld**[Instance List](#)[Service Information](#)[Pod Information](#)[Event](#)[Logs](#)

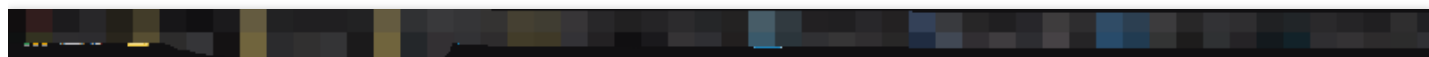
Basic info

Service Name 	helloworld
Status	Running
Running Cluster	cls-696wkkse
Load Balancer ID	lb-qmzxhga1
Number of Pods	1
Label	qcloud-app:helloworld Modify
Creation Time	2017-12-01 11:50:40
description	N/A

Service Configuration

Number of Pods	1
Load Balancer IP	111.230.83.78  (Public network access: bound domain name/VIP and LB listener port)
Service IP	172.16.255.166  (Access within cluster: service name/IP + service listener port)
Access Type 	Public Network Access (lb-qmzxhga1 , 111.230.83.78)
Yaml file	View Yaml configuration

Enter the IP address in the browser, you will see "Hello World!"



Hello World!

WordPress with Single Pod

Last updated : 2018-10-09 11:42:08

WordPress is a blogging platform developed with PHP. You can use it as a content management system, or use it to create websites on services that support PHP and MySQL databases.

This document describes how to use the `tutum/wordpress` image to create a publicly accessible WordPress website.

Note:

The created WordPress with single pod is for testing purpose only. The image includes all operating environments for WordPress, allowing you to pull and create the service directly. However, using WordPress with single pod cannot ensure persistent data storage, so it is recommended that you use the self-built MySQL or Tencent Cloud CDB to store your data. For more information, please see [WordPress with CDB](#).

Prerequisites

You need to create a cluster first. For more information on how to create a cluster, please see [Basic Operations of Cluster](#).

Procedure

1. Log in to the [Tencent Cloud TKE console](#).

2. Click **Service** in the left navigation bar, and click **+ New** in the service list page.



3. Configure basic service information.

- **Service Name:** The name of the service to be created, which is comprised of lowercase letters, numbers and "-". It starts with a lowercase letter and ends with a lowercase letter or a number.
- **Region:** Select the closest region based on your location.
- **Cluster:** Select a cluster to run your service. You need to select a running cluster with available CVMs in it.
- **Service description:** Information of the created service. This information is displayed on the **Service Information** page.

The screenshot shows the Tencent Cloud Container Service console. The left sidebar contains the following menu items: 容器服务 (Container Service), 概览 (Overview), 集群 (Cluster), 服务 (Service), 配置项 (Configuration Item), 负载均衡 (Load Balancing), and 镜像仓库 (Image Repository). The main area is titled '新建服务' (New Service) with a '返回' (Return) link. It contains the following form fields:

- 服务名称** (Service Name): A text input field with a placeholder '请输入服务名称, 不超过63个字符' (Please enter service name, no more than 63 characters). Below it, a note states: '服务名称由小写字母、数字和 - 组成, 且由小写字母开头, 小写字母或数字结尾' (Service name consists of lowercase letters, numbers, and hyphens, starting with a lowercase letter, and ending with a lowercase letter or number).
- 所在地域** (Region): A selection area with buttons for 广州 (Guangzhou), 上海 (Shanghai), 北京 (Beijing), and 新加坡 (Singapore). 广州 is selected.
- 运行集群** (Running Cluster): A dropdown menu showing a blurred cluster name and a 'default' option.
- 服务描述** (Service Description): A text area with a placeholder '请输入描述信息, 不超过1000个字符' (Please enter description information, no more than 1000 characters). Below it, a note states: '如现有的集群不合适, 您可以去控制台新建集群 或 新建Namespace' (If the existing cluster is not suitable, you can go to the console to create a new cluster or new Namespace).

4. Image configuration.

- **Name:** Enter the name of the running container (here is WordPress).
- **Image:** Enter `tutum/wordpress`.
- **Version (Tag):** Enter "latest".

The screenshot shows the '运行容器' (Run Container) dialog box. It contains the following form fields:

- 名称** (Name): A text input field with the value 'wordpress'.
- 镜像** (Image): A text input field with the value 'tutum/wordpress' and a '选择镜像' (Select Image) link.
- 版本 (Tag)** (Version (Tag)): A text input field with the value 'latest'.

Below the form fields is a link '显示高级设置' (Show Advanced Settings). At the bottom, a note states: '注意: 服务创建完成后, 容器的配置信息可以通过更新服务的方式进行修改' (Note: After the service is created, the container configuration information can be modified by updating the service).

5. Configure port mapping. Set both container port and service port to 80.

端口映射

协议 <i>i</i>	容器端口	服务端口 <i>i</i>
TCP	80	80

添加端口映射

6. Click **Create Service** to complete the creation of the WordPress service.

Note: Keep default settings for other options.

Accessing WordPress Service

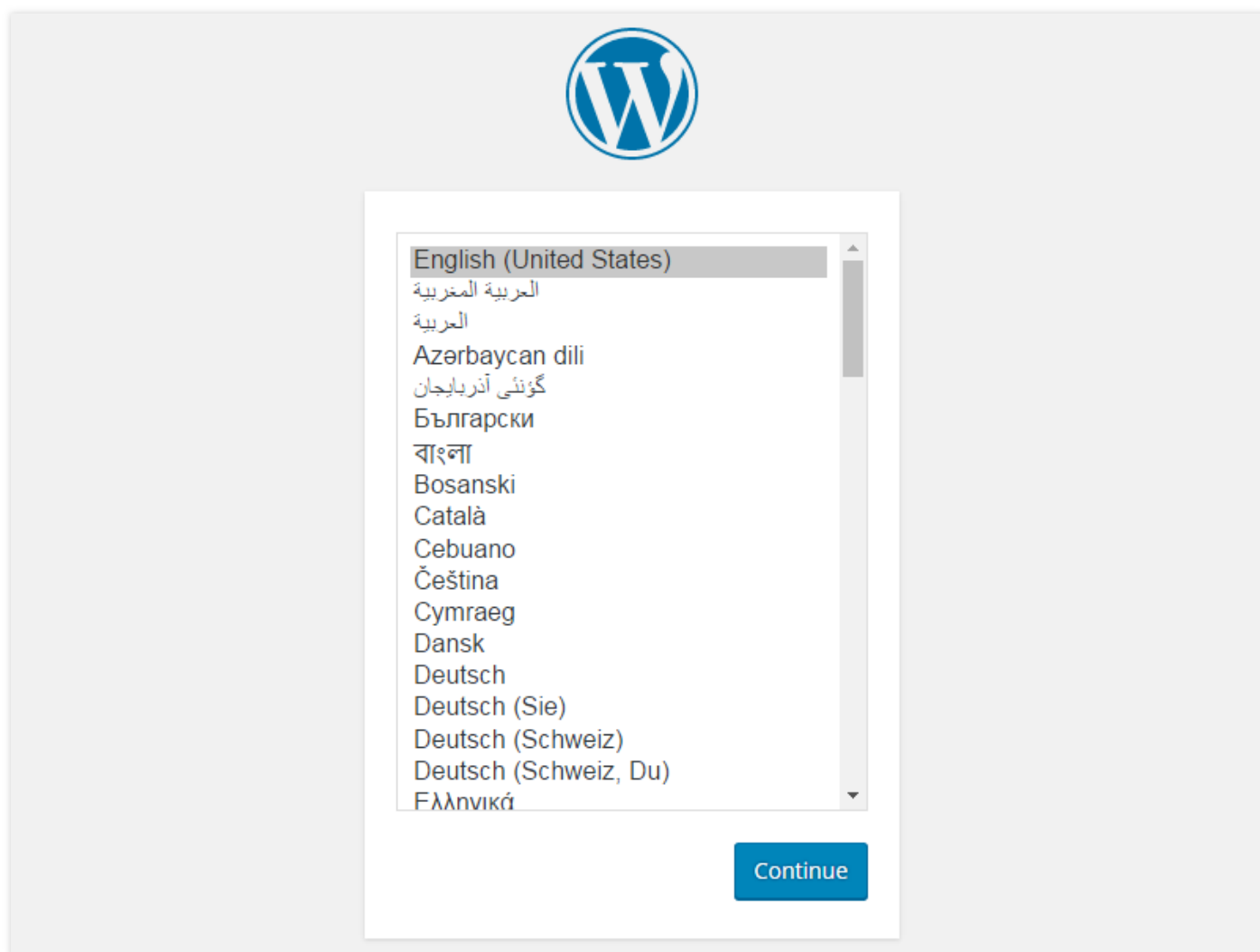
1. Click **Service Information** on the service page to check the load balancer IP.

The screenshot shows the Tencent Cloud console interface for the Container Service. The left sidebar contains navigation options: 容器服务 (Container Service), 概览 (Overview), 集群 (Cluster), 服务 (Service), 配置项 (Configuration Item), 负载均衡 (Load Balancing), and 镜像仓库 (Image Repository). The main content area is titled 'wordpress' and has a breadcrumb '返回 | wordpress'. Below this, there are tabs for 实例列表 (Instance List), 服务信息 (Service Information), 实例信息 (Instance Information), 事件 (Events), and 日志 (Logs). The '服务信息' tab is selected, displaying the '基本信息' (Basic Information) section. This section lists details for the 'wordpress' service, including its status ('运行中'), running cluster, load balancer ID, instance count (1), creation time (2017-08-16 15:27:19), and description (无). Below this is the '服务配置' (Service Configuration) section, which shows the instance count (1), the load balancer IP (119.29.10.10), the service IP (172.16.10.10), and the access method (公网访问). The load balancer IP is highlighted with a red box.

基本信息	
服务名称	wordpress
状态	运行中
运行集群	cls-xxxxxx
负载均衡ID	lb-xxxxxx
实例数量	1
创建时间	2017-08-16 15:27:19
描述	无

服务配置	
实例数量	1
负载均衡IP	119.29.10.10 (外网访问: 绑定域名或VIP + 负载均衡监听端口)
服务IP	172.16.10.10 (集群内访问: 服务名或服务IP + 服务监听端口)
访问方式	公网访问 (lb-xxxxxx, 119.29.10.10)

2. Enter the IP in the browser to access the service.



WordPress Featuring CDB

Last updated : 2018-10-09 15:30:05

In [WordPress with Single Pod](#), we described how to quickly create a WordPress service. The data of WordPress with single pod is written to the MySQL database running in the same container, which can ensure quick start but may incur an issue, that is, if the container is stopped for some reason, the database and storage-related files will be lost.

This document explains how to configure the MySQL database to make sure that it continue running when the pod/container restarts. Persistent data storage can be achieved by using [CDB](#).

Prerequisites

You need to create a cluster first. For more information on how to create a cluster, please see [Basic Operations of Cluster](#).

Procedure

Step 1: Create a CDB

1. Log in to the [VPC Console](#).
2. Click the ID/name (e.g. vpc-xxxxx) on the VPC list page.



3. On the VPC Details page, select **MySQL** in the database directory, and click **Add** on the right.

[< 返回](#) | [详情](#) [私有网络与子网帮助](#)

网络资源	弹性网卡	10	添加
	对等连接	0	添加
	基础网络互通	0	添加
	NAT网关	0	添加
	VPN网关	0	添加
	VPN运维网关	0	添加
	专线网关	0	添加
数据库	MySQL	0	添加
	SQL Server	0	添加
	TDSQL	0	添加
	PostgreSQL	0	添加
	云存储Redis	0	添加

4. Select the configuration to purchase, and complete the payment. For more information, please see [Database MySQL](#).

5. The purchased MySQL will appear in the MySQL instance list.



6. Initialize the MySQL instance. Click **Initialize** under the **Operation** column on the right side.



7. Configure initialization parameters, and then click **OK** to start initialization.

- **Supported character set:** Select the character set supported by the MySQL database.
- **Case-sensitivity of the table name:** Whether the table name is case sensitive. Default is "Yes".
- **Custom port:** Database access port. Default is 3306.
- **Root account password:** The default user name for the new MySQL database is "root". This is used to set the password of the root account.

- **Confirm password:** Enter the password again.

初始化

支持字符集

☐ LATIN1
 ☒ UTF8
 ☐ GBK
 ☐ UTF8MB4

若字符集设置不当会导致数据库导入发生错误

表名大小写敏感

☒

自定义端口*

3306

端口取值范围：1024-65535

设置root帐号密码*

请输入root帐号密码

1.至少包含字母、数字和字符 (_ + & = ! @ # \$ % ^ * ()) 中的两种
 2.长度为8-16个字符

确认密码*

请再次输入root帐号密码

确定

取消

8. The status of the target MySQL instance becomes **Running**, which indicates it has been initialized successfully.

MySQL-实例列表

全部项目

云数据库帮助

广州(2)

上海

上海金融

北京(1)

香港

新加坡

多伦多

硅谷

法兰克福

+ 新建

对比监控

续费

更多操作

请输入IP(换行分隔)或实例名

Q

<input type="checkbox"/>	ID/实例名	监控	状态	当前任务	实例类型	所属项目	所属地域	操作
<input type="checkbox"/>	> cdb- [实例ID]		运行中	--	主实例	默认项目	华南地区 (广州)	登录 管理 更多
<input type="checkbox"/>	> cdb- [实例ID]		运行中	--	主实例	默认项目	华南地区 (广州)	登录 管理 更多

Step 2: Create WordPress service

1. Log in to the [Tencent Cloud TKE console](#).

2. Click **Service** in the left navigation bar, and click **New** in the service list page.



3. Configure basic service information.

- **Service Name:** The name of the service to be created, which is comprised of lowercase letters, numbers and "-". It starts with a lowercase letter and ends with a lowercase letter or a number.
- **Region:** Select the closest region based on your location.
- **Cluster:** Select a cluster to run your service. You need to select a running cluster with available CVMs in it.
- **Service description:** Information of the created service. This information is displayed on the **Service Information** page.

The screenshot shows the 'Container Service' (容器服务) section in the Tencent Cloud console. The left sidebar contains links for 'Overview' (概览), 'Clusters' (集群), 'Service' (服务), 'Configuration Items' (配置项), 'Load Balancing' (负载均衡), and 'Image Repository' (镜像仓库). The main area is titled 'New Service' (新建服务) and includes the following fields:

- Service Name** (服务名称): A text input field with a placeholder '请输入服务名称, 不超过63个字符'. Below it, a note states: '服务名称由小写字母、数字和 - 组成, 且由小写字母开头, 小写字母或数字结尾'.
- Location** (所在地域): A selection of buttons for 'Guangzhou' (广州), 'Shanghai' (上海), 'Beijing' (北京), and 'Singapore' (新加坡). 'Guangzhou' is selected.
- Running Cluster** (运行集群): Two dropdown menus. The first is empty, and the second is set to 'default'. A note below says: '如现有的集群不合适, 您可以去控制台新建集群 或 新建Namespace'.
- Service Description** (服务描述): A large text area with a placeholder '请输入描述信息, 不超过1000个字符'.

4. Click **Display Advanced Settings** under the running container. In the drop-down list, click **New Variable** under Environment Variables. Enter:

WORDPRESS_DB_HOST = Address of CDB for MySQL

WORDPRESS_DB_PASSWORD = Password entered during initialization

The screenshot shows the 'Environment Variables' (环境变量) configuration page. It displays two variables:

- WORDPRESS_DB_HOST**: Set to a placeholder value.
- WORDPRESS_DB_PASSWORD**: Set to a placeholder value.

Below the variables, there is a link '新增变量' (Add Variable) and a note: '变量名只能包含大小写字母、数字及下划线, 并且不能以数字开头'.

5. Configure port mapping. Set both container port and service port to 80.

The screenshot shows the 'Port Mapping' (端口映射) configuration page. It has a table with the following columns: 'Protocol' (协议), 'Container Port' (容器端口), and 'Service Port' (服务端口).

协议	容器端口	服务端口
TCP	8080	80

Below the table, there is a link '添加端口映射' (Add Port Mapping).

6. Click **Create Service** to complete the creation of the WordPress service.

Accessing WordPress Service

1. Click **Service Information** on the service page to check the load balancer IP.

The screenshot shows the Tencent Cloud console interface for the Container Service. The left sidebar contains navigation options: 容器服务 (Container Service), 概览 (Overview), 集群 (Cluster), 服务 (Service), 配置项 (Configuration Item), 负载均衡 (Load Balancing), and 镜像仓库 (Image Repository). The main content area is titled 'wordpress' and has tabs for 实例列表 (Instance List), 服务信息 (Service Information), 实例信息 (Instance Information), 事件 (Events), and 日志 (Logs). The '服务信息' tab is selected, displaying the following details:

基本信息	
服务名称	wordpress
状态	运行中
运行集群	cls-...
负载均衡ID	lb-...
实例数量	1
创建时间	2017-08-16 15:27:19
描述	无

服务配置	
实例数量	1
负载均衡IP	119.29.1.1 (外网访问: 绑定域名或VIP + 负载均衡监听端口)
服务IP	172.16.1.1 (集群内访问: 服务名或服务IP + 服务监听端口)
访问方式	公网访问 (lb-..., 119.29.1.1)

2. Enter the IP in the browser to access the service.

