

CODING Continuous Deployment Operation Guide

Product Documentation





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Operation Guide Permission Control

Last updated : 2024-01-03 11:39:59

This document describes the permission control in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Admin Settings

1. Log in to the CODING Console and click the team domain name to go to CODING.

2. Hover over your profile photo in the upper-right corner to open the Team Management page through the dropdown list. Then, click "Permission Configuration" to open the Admin page.

Permission Control

By default, the roles and permissions in CODING-CD are as follows:

Team owner: Has permission to manage deployment.

Team admin: Has permission to manage deployment.

Ordinary team member: Has no permission to manage deployment.

We recommend that you create an independent **Ops** role in your team, grant it permission to **manage deployment**, and specify a team member to take on the role to implement the principle of least privilege. Set an **Ops** role as shown below. You can click **Add User Group** to set more roles.

🙆 Team Setting Center	Global Settings Setting	gs Q, Search Settings	<i>2</i>
Organization and	User Group +	Service Subscription View Page Service Subscri Manage Invoice	
Member	Sustem Group	Member View Page Invite Member Set Admin Modify Member Delete	
Member Management	Group Owner	Permission Config View Page Manage Permis	
Permission Batch Operation	Group Manager	Project Management Quary All Projects Create Project Modify Project Archive & Unarc Import Project Delete Project	
baten operation	Group Member	Program Managern Search All Progr Create Update Archive & Unarc Delete	
	Custom Group	Project Collaborati View Page Anage Config	
	Ops	Team Goal PRO View Page Manage	
	Front-end development Back-end development	Efficacy Measurem View Page Manage	
		Knowledge manag 🗌 View Page	
		Markdown Template View Page Markdown Tem	
		Audit PRO View Page Sensitive Mark Export Logs	
		Security Managem View Page Security Settings	
		Session management 🗌 View Page 🔹 Close Session	
		Logs View Page Export Logs	
		Deployment Settings 🔽 Deployment Ma	\checkmark
		Service Integration View Page Bind Service Unbind Service	
		Personal Settings Access Token App Management App Authorization	
		Open Resources View Page Private	

We recommend that you divide all the operations during continuous deployment into two categories and assign them to two roles respectively:

Ops: Configures the continuous deployment process (including the application, release process, and approval process)

Developer: Releases an application by submitting a release order (Specifically, submits a release order, waits for approval, and views the release process)

CODING-CD Console

Last updated : 2024-01-03 11:40:41

This document describes the console for CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

1. Log in to the CODING Console and click **Use Now** to go to CODING.

2. On the Workspace homepage, click



on the left to go to the CODING-CD Console.

Function Overview

The CODING-CD Console is built on Spinnaker. It is an integrated control center for managing applications and cloud accounts. In the console, users in an Ops role can manage the list of applications to be deployed, configure deployment pipelines, view and manage application clusters, and perform peer-to-peer operations on clusters (such as scaling, termination, and rollback).

You can open the CODING-CD Console directly from the homepage of your team.

Uvorkbench	Workbench Issues Merge Requests Build Jobs Wait Confirmations	All Projects *
Projects	All 0 Assignments 0 Requirements 0 Defects 0 Epics 0 Work-Items 0 Risks 0 Iterations 0 Reach all Q	
Knowledge beta		
Dashboard		
✓ Project Activities		
OKR Workload		
L Efficiency beta		
Dpen Resources	8:0	
All artifacts		
CD Console	There are currently no items assigned to you	

Deployment Pipeline

A deployment pipeline consists of a series of **stages** that can streamline continuous deployment. It can be triggered manually or automatically by a CODING Docker repository, webhook, scheduled trigger, etc. In addition, artifacts, parameters, notifications, and serial and parallel logic can be referenced. A **stage** is an automatic build module in the continuous deployment process. You can define the execution sequence of each stage in the pipeline to achieve flexible automated deployment. CODING-CD provides many stage templates to choose from, such as manual confirmation, prerequisite check, and deploy.



Deployment Strategy

CODING-CD supports refined deployment strategies, such as red/black (blue/green) deployment, rolling red/black deployment, and grayscale deployment. You can use different deployment strategies for each environment; for example, you can use the red/black strategy in the test environment and the rolling red/black strategy in the production environment. The necessary steps have been encapsulated in the deployment strategy, so that enterprise-grade releases can be implemented without a need for complicated operations.



Infrastructure Management

CODING-CD is based on Spinnaker's Clouddriver component, which is compatible with different cloud platforms to implement efficient cloud resource management. The infrastructure consists of the following parts:

Service group: It is the basic unit of resource management and is used to identify deployable artifacts (such as VM images and Docker images) and configuration items such as the number of instances, auto scaling strategies, and metadata. It may also be associated with load balancers and security groups. After the deployment is complete, it is equivalent to a set of running software instances (e.g., Tencent Cloud auto scaling groups and Kubernetes pods). Load balancer: It is used to redirect external network traffic to the running instances in the service group and supports specifying a series of rules to perform health checks on such instances.

Security group: It defines the network access permissions. A security group rule consists of the IP, port, and communications protocol.

Cluster: It is a logical group of service groups you define.

Application: It is the basic deployment unit in CODING-CD. Each includes several application clusters as well as load balancers and security groups. It usually represents the services you want to deploy, their configurations, and the basic settings required for their execution. The recommended approach is for one application to correspond to one service in the microservice architecture.



← Console	← app → Deployment	Process Kubernetes Cluster Execution record			
	Status All - Number of tasks 2 -	Search deployment proc Q			Creation process
Application					
Cloud Account	Name	Cloud Account	trigger	Change information	Action
Host management	> image		⊘ deactivated	Steven Updated in 2021-12-21 15:54:51	start up Edit …

Trigger

While retaining certain native trigger types of Spinnaker, the CODING-CD Console extends trigger types to match CODING upstream artifact repositories.

 Automatic trigge 	rs		
✓ CODING dock	er trigger		۵.
Trigger Enable S	witch		
Trigger Type			
CODING docke	r trigger		~
CODING docke	r trigger		
CCR Trigger			
TCR trigger			- 1
TCR Helm trigg	er		
Git trigger			
webhook trigge	r		
Cron			
CODING Gener	ic trigger		
Versions 🕐			
Please enter th	e version		
 Launch Parameter 	ers		

Artifact Type Transformation

While retaining certain native artifact types of Spinnaker, the CODING-CD Console adds support for CODING code repositories in the artifact types of **Git Repository Files**, and CODING Docker image artifacts in the artifact types of

Docker Images. Such artifact types as War packages and Helm packages are supported.

Glossary

Instance: A container or VM instance that is in operation.

Stack: A user-set custom logic group within a cluster, such as prod , staging , and test .

Detail: A user-set custom level-3 field that is used to identify a cluster. For example, the service groups with the same \\\${Application}-\\\${Stack}-\${Detail} fields belong to the same cluster.

Cloud Account

Last updated : 2024-01-03 11:41:21

This document describes the cloud accounts in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

1. Log in to the CODING Console and click the team domain name to go to CODING.

2. Go to the CODING Workspace homepage, click **Feature Settings** > **Continuous Deployment** on the left to open the Cloud Account Management page.

Function Overview

A cloud account is a credential for accessing cloud resources. Only after a cloud account is configured can CODING-CD implement the management of infrastructure and the deployment of cloud resources. Currently, the following cloud account types are supported:

Tencent Cloud TKE: It is displayed only when you register and log in via the Tencent Cloud Developer Platform. Kubernetes: Two commonly used credentials are supported, i.e. Kubeconfig and the Service Account.

Tencent Cloud Account: Tencent Cloud API key.

In the CODING Workspace homepage, click **Feature Settings** > **Continuous Deployment** > **Cloud Account** to manage your cloud account.

Tencent Cloud TKE

1. Select "Tencent Cloud TKE" for the cloud account type, and then bind the cloud account to the corresponding cluster according to the directions. If there is no cluster under the cloud account, go to Tencent Cloud TKE to create a cluster.

 Console 	Cloud Account Management		Binding Cloud Accounts
Application	CODING CD is based on cloud-native capabilities to manage your cloud account on this page.View cloud account descript	the deployment process, and can be easily and quickly deployed in Kubernetestion $\underline{\mathcal{C}}$	s, Tenc Cloud account category
Cloud Account	Search by name		
Host management	Account Name	Account Status	TKE Kubernetes TencentCloud
	flaskopp Learned CODING Docker	Failed D CR-verify	Cloud account name * Support upper and lower case, middle and underscore Please select a locale * Please select a locale
			Please select TKE cluster * Please select TKE cluster Auto-generate CODING Docker Repository Access Credentials O Please select armonage
			Allow continuous deployment to manage existing resources of the cluster

2. Select the cluster to be deployed. Once you click **OK**, the cluster under the cloud account will be automatically verified and bound to the account.

Kubernetes

A Kubernetes cloud account supports two commonly used credentials, i.e. Kubeconfig and the Service Account. Taking Kubeconfig as an example:

Log in to the Cloud Computing Web Console, copy Kubeconfig, and then add the CODING IP range to the extranet access control list (allowlist) of the cluster.

CODING Continuous Deployment :

212.64.105.0/24, 212.129.144.0/24

Cluster APIServer Infor	mation
Address	https://cls-bjvylwsb.ccs.tencent-cloud.com
Internet access The IP address h	Turned On as been released: 212.64.105.0/24; 212.129.144.0/24 🖍
Intranet access Kubeconfig	Unopened The following kubeconfig file is the kubeconfig content of the current sub- account
	apiVersion: v1 clusters: - cluster:
	<pre>certificate-authority-data: LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCk1JSUN5RENDQW. REFWTVJNd0VRWURWUVFERXdwcmRXSmwKY201bGRHVnpNQjRYRFI</pre>

Paste Kubeconfig into the CODING console, and then select the "Cluster Context" to add the cloud account.

ODING CD is based on cloud-native capabilities to manage our cloud account on this page.View cloud account descripti Search by name	the deployment process, and can be easily and quickly deployed in Kubern on $\ensuremath{\mathcal{C}}$	etes, Tenc Cloud account category
Account Name	Account Status	TKE Kubernetes TencentCloud
flaskapp Licensed CODING Docker	Failed 🕑 😋 Re-verify	Cloud account name *
		Support upper and lower case, middle and underscore
		© Tips ∽
		Please ensure that your Kubernetes cluster has open public access and add
		the public IP segment of your CODING ongoing deployment to the cluster access control list whitelist.
		CODING Continuously Deployed Public IP Seament:
		212.64.105.0/24
		212.129.144.0/24
		Select authentication method *
		Kubeconfig Service Account
		Kubeconfig *
		apiVersion: v1
		cluster:
		certificate-authority-data:
		LS0tLS1CRUdJTIBDRVJUSUZJQ0FURS0tLS0tCk1JSURBVENDQWVtZ0F3S

Tencent Cloud Account

1. Select "Tencent Cloud" for the cloud account type, enter a cloud account name, and then select a region. Multiple selection is supported. You will be able to manage the Tencent Cloud resources of the selected regions in CODING-CD.

DING CD is based on the cloud-native capability	rmanagement deployment process, which can be easily and	Cloud account type
ckly deployed in Kubernetes		TVC K L K L K L K L K L K L K L K L K L K
Account Name	Account Status	IKE Kubernetes Cloud
(test1	Verified	Cloud Account Name *
🔗 test	Verified	tencent-cloud
-10 , Total 2		Choose Area *
		-
		SecretID *

2. Log in to the Access Management Console to copy the key information.

APPID	SecretKey	
1301395873	SecretId: AKIDO SecretKey:*****) ra

3. Paste the SecretID and SecretKey you copied into the corresponding text fields, and then click **OK** to add the cloud account.

Applications and Projects

Last updated : 2022-03-30 10:23:07

This document describes the applications and projects in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

- 1. Log in to the CODING Console and click **Use Now** to go to CODING.
- 2. On the Workspace homepage, click 2 on the left to go to the CODING-CD Console.

Function Overview

All the applications and projects in CODING-CD are level-1 resources belonging to an enterprise or team. There is a one-to-many relationship between them; that is, one project can contain multiple applications, and one application can belong to multiple projects.

Ops Perspective

Dev Perspective



With this design, Ops personnel can focus on the management of the continuous deployment of the applications (deployment pipelines, infrastructure, etc.), while non-Ops personnel (generally developers) only need to handle the project dimension (submitting release orders, viewing release details, etc.), so that the former can focus on infrastructure Ops in the cloud, and the latter can carry out most of the business Ops within projects and create a complete closed loop from the requirement to the release.

Application

An application is the basic deployment unit in CODING-CD. Each includes several application clusters as well as security groups and load balancers. It abstracts the set of deployed software and usually represents the services you want to deploy, their configurations, and the basic settings required for their execution. The recommended approach is



for one application to correspond to one service in the microservice architecture.

Application		Create Application
Cloud Account: All * Associated Project: All * Sort by: Revi	× Create Application	
app 🚍	Application Name * ③ Fill in the name of the application, it cannot be changed a	
	Deployment Method * Kubernetes(TKE) Tencent Host Group	
	Description Please enter a description	
	Confirm Cancel	

One-to-one correspondence examples

In the microservice architecture, a microservice corresponds to a CODING-CD application. You can set the corresponding relationships based on your preferences. The following example shows the relationships among a team, projects, applications, clusters, and cloud accounts:

Team: XXX Technology Co., Ltd.	
Cloud account	 Self-built Kubernetes Service Account Tencent Cloud Beijing TKE Cluster Service Account Tencent Cloud Hong Kong API Key
Project 1: An E-Commerce Site for In-Vehicle Products	 Application 1: Backend of the In-Vehicle Product E- Commerce Site Application 2: Frontend of the In-Vehicle Product E- Commerce Site Application 3: Logistics Management Service
Project 2: An E-Commerce Site for Clothes	 Application 1: Backend of the Clothes E-Commerce Site Application 2: Frontend of the Clothes E-Commerce Site Application 3: Logistics Management Service
CODING-CD Console	 Application 1: Backend of the In-Vehicle Product E- Commerce Site Test cluster Production cluster



Cloud Account Binding

A cloud account is the token for accessing cloud resources. To create an application in the CODING-CD Console, click **Application** > **Create App** in the navigation bar. Before you create an application, make sure that you have completed Cloud Account Binding.

Cloud Account Management CODING CD is based on cloud–native capabilities to manage the your cloud account on this page.View cloud account description (Search by name Q Account Name	deployment process, and can be easily and quickly deployed in Kubern 3 Account Status	Binding Cloud Accounts Cloud account category TKE Kubernetes TencentCloud
(e) flaskapp Licensed CODING Docker	Failed C Pailed C	Cloud account name * Support upper and lower case, middle and underscore Please select a locale * Please select a locale * Please select TKE cluster * Please select TKE cluster * Auto-generate CODING Docker Repository Access Credentials 0 Please select namespace Allow continuous deployment to manage existing resources of the cluster

Application Creation

Click "Deployment Console" on the left side of the homepage, and then click **Create App** in the upper-right corner.

Application		Create Application
loud Account: All * Associated Project: All * Sort by: Revi	× Create Application	
app 🚍	Application Name * ③	
Cloud account: 0 • Associated Project: 1	Fill in the name of the application, it cannot be changed a	
	Kubernetes(TKE)	
	Tencent Host Group	
	Description	
	Please enter a description	
	Confirm Cancel	

Associate with Project

After creating an application in the CODING-CD Console, you can directly associate it with a project on the homepage of the console.



pplication	op Application configuration
oud Account: All * Associated Project: All * Sort by: Reverse update time * Search Q	Application attributes Notifications Delete
	арр
Application configuration o	Does not support changes after creation
🚨 Cloud account: 0 🔹 Associated Project: 1 📑 🚠 🔅 🚨 Cloud account: 0 🔹 Associated Project: 1	Application alias
	Support multiple aliases, separated by commas
	Description
	Please enter a description
	Deployment Method
	Tencent
	Host Group
	Instance health
	When performing tasks, only refer to the health check provided by the cloud service
	When the task is executed, the health check coverage option is displayed 3

Create Release Order

When Ops personnel completes the Deployment Pipeline Configuration of an application, developers can create a complete closed DevOps loop from project collaboration to application release within a project. For example, when a new version needs to be released, developers go to **Continuous Deployment** > **Kubernetes** to create a release order, which automatically triggers the execution of the deployment pipeline. Developers can view the release status



and historical details at any time.

 Overview Collabor Beposito 	, ation	Kubernetes Application Deployment You can submit a release order to deploy a Kubernetes application and view application information after a successful deploym			
Code Sc	anner beta >	🔡 🗄 Status: All 🔻	Sort by: All application	ation name Q	
× CI	>	000			
û, CD	✓ The a	application's last release order	• status		
Kuberne	tes				
CVM		O Posting Order	Oluster		
Host Ser	ve				
Artifact I	Management				
🏅 Test Ma	nagement >				
Docume	nt >				

Manage Applications

After you create an application in the CODING-CD Console, you can change the application fields and notifications in the **Configuration** of the application, or delete it.

Application		app Application configuration
Cloud Account: All - Associated Project: All - So	rt by: Reverse update time	Q Application attributes Notifications Delete
		Application Name ⑦
app 🚍	··· demo 🚍	арр
Cloud account: 0 🔹 Associated Project: 1	😫 🚠 🔯 🔹 Cloud account: 0 🔹 As	ociated Project: 1 Does not support changes after creation
		Application alias
		Support multiple aliases, separated by commas
		Description
		Please enter a description
		Deployment Method
		✓ Kubernetes(TKE)
		Tencent
		Host Group

Application notifications

Notifications can be sent through CODING, WeCom, DingTalk, and Feishu.

Show or hide function entry

You can disable the function entries that you do not need in the **Features** section. This will merely hide the function entries in the console, and will not delete their data. The function entries of deployment pipelines, clusters, load balancers, and security groups can be hidden:

Q	Application attributes Notifications Delete	
	✓ Feishu notice	۵
♦ Associated Project: 1	Notification method *	
	Feishu notice	•
	CODING station notice	
	Enterprise WeChat	
	DingTalk notice	
	Feishu notice	
	Please enter	
	Notification Scenario * At the beginning of any deployment process At the end of any deployment process When any deployment process is cancelled 	
	 Add notification settings Save Cancel 	

Add custom field link to instance

You can click **Cluster** > **Service Group** > **Instance Details** to view the custom link of the running instance. The link offers brief information on the instance, such as the log and health status.

 ▲ ↓ 	Overview Collaboration Repository	Kubernetes Application Deployment You can submit a release order to deploy a Kubernetes application and view application informati
٢	Code Scanner beta >	B Status: All Sort by: All application name Q
00	CI >	
Ŷ	CD ~	A No release history at this time
	Kubernetes	
	CVM	O Posting Order
	Host Serve	
-	Artifact Management	
Ł	Test Management >	
.8	Document >	

The IP address that corresponds to the custom link can be a public or private IP address. The default port is 80. But you can set another port number that starts with : in the "Path" text field, such as :7002/health .

- 1. Click Add Section in the Link section.
- 2. Enter a custom link title in Section Heading.
- 3. Enter the custom link name and URL in the Links field.

Note :

You can enter an expression in the URL field to reference more instance fields. For example, a Tencent Cloud instance can use {region} to reference the region where the instance resides.

- 5. Click Add Link to add more links to the same field.
- 6. Click Add Section to add a new custom field link.
- 7. Click **Cancel** to cancel the add operation. ** Canceling** an operation will not delete the saved custom field links.
- 8. Click Save.

Traffic protection

ठ Tencent Cloud

Note:

Traffic protection is designed to ensure that at least one instance is operating normally at any time.

Once the function is enabled, when a user or script tries to delete, disable or scale a service group, the CODING Console will verify if at least one instance in the cluster is running normally. If not, the request will be rejected.

1. In the Traffic Protection section, click Add Traffic Protection.

2. Enter the following fields:

Field	Required?	Description		
Cloud account	Yes	The cloud account for enabling traffic protection		
Region	Yes	Choose the region(s). `*` indicates all the regions.		
Group	No	The cluster group for enabling traffic protection. If this field is left empty, the cluster does not belong to any group.		
Details	Details No A level-3 field that differentiates clusters. The service groups with the same `\${Application}-\${Stack}-\${Detail}` belong to the same cluster.			

3. Click Save.

Application deletion

If there is a service group in an application, you need to delete the service group first.

In the CODING-CD Console, click the **gear icon** in the lower-right corner of the application. After you open the application configuration page, click **Delete**.

Application	app Application configuration
Cloud Account: All * Associated Project: All * Sort by: Reverse update time * Search Q	Application attributes Notifications Delete
app = Application configuration o = Cloud account: 0 @ Associated Project: 1 Cloud account: 0 @ Associated Project: 1	Deleting an application will only delete the metadata associated with the application, and w not delete any security groups, load balancers, or deployment process configurations you created.

Deployment Pipeline Deployment Pipeline Overview

Last updated : 2024-01-03 11:45:11

This document describes the deployment pipeline in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

1. Log in to the CODING Console and click Use Now to go to CODING page.

2. On the Workspace homepage, click



on the left to go to the CODING-CD Console.

Function Overview

The deployment pipeline is the core module of Continuous Deployment. It enables arbitrary combination of stages in any sequence, while maintaining excellent flexibility, consistency, and repeatability.

Flexibility: Supports serial or parallel control

Consistency: Supports multiple deployment strategies and rollback, ensuring the release results as expected Repeatability: Deployment pipelines can be executed repeatedly, and the stages can be copied to other pipelines. You can configure a fully automated pipeline or add manual judgment conditions at certain stages. In addition, the pipeline can be triggered automatically by various events, such as webhooks and other pipelines.

Create Deployment Pipeline



Go to CODING-CD Console, and then click the deployment pipeline icon in the lower-right corner of the application card.

Console	Application	Create Application
Application	Cloud Account: All * Associated Project: All * Sort by: Reverse update time * Search Q	
Cloud Account Host management	app = Deployment Process demo = Cloud account: 0 Image: Associated Project: 1 Image: Associated Project: 1	컴 조 《

1. Click the **Create Pipeline** button in the upper-right corner.

Console	Create a deployment process Copy Kubernetes		Creation process
 Cloud Account Host management 	Application app Blank process Empty template	Please select the deployment process	start up Edit ····
	Image Configuration Deploy Deploy Service		

2. You can copy any pipelines created in other applications, or create a new one. CODING also offers sample pipeline templates for Kubernetes and Tencent Cloud Auto Scaling.



ру	Kubernetes				
eploy th	ne Helm application to the	Kubernetes cluster			
	Configuration	Bake (Manife	部署 (Manifest)		Please select the deployment process
eploy th	ne Deployment and Service	e to the Kubernetes cluster			
	Configuration	Deployment	Deploy Service		
/anual c	onfirmation before deploy	ving to a Kubernetes cluster			
	Configuration	Manual confirmation	Bake (Manife	Deploy (Manifes	
				_	
eploy D	eployments and Services i	n parallel			
	Configuration	Deployment	Deploy Service		

Basic Configurations

Basic configurations of an application can be regarded as the starting point for a full build. This allows you to set trigger conditions, or configure the notifications for a pipeline.

image 🖉		Basic configuration
		Execution options Automatic triggers Launch Parameters Notifica
Basic configuration	+ Add stage	~ Execution options
cts		Parallel execution of this process is prohibited (only one deployment can be executed at the same time)
		Do not automatically cancel deployment tasks that are in the queued state
		~ Automatic triggers
oment		No trigger at this time
urable in ases		● Add trigger
		~ Launch Parameters
		No startup parameters at this time
		● Add startup parameters
		~ Notifications
		No notification at this time
		Add notification settings

Auto Trigger

The auto trigger supports CODING Docker Repository Trigger, TCR Personal Repository Trigger, and Git Repository Trigger.

mago \min			
	<u></u> ;	Execution options Automatic triggers Launch Parameters	Notificat
Basic configuration	+ Add stage	 Parallel execution of this process is prohibited (only one deployment executed at the same time) 	can be
		Do not automatically cancel deployment tasks that are in the queued	l state
• -		 Automatic triggers 	
oroduct at the		✓ CODING docker trigger	₫
oment gurable in		Trigger Enable Switch	
phases			
		Trigger Type	
		CODING docker trigger	~
		CODING docker trigger	
		CCR Trigger	
		TCR trigger	
		TCR Helm trigger	
		Git trigger	

Add deployment pipeline parameters



Go to the Deployment Pipeline Configuration page, and then click Add Startup Parameters.

image 🙋		Basic configuration	
♦ Basic configuration		Execution options Automatic triggers Launch Parameters	Notifica
Artifacts	+ Add stage	✓ Launch Parameters	圕
		Parameter Name Please enter	
No product at the moment Configurable in phases		Required parameters	
		Parameter type	
		String	•
		Default value	
		Please enter	
		Description Information	
		Please enter	

Add stage

On the Deployment Pipeline Configuration page, click + to add a new stage, and select the stage type from the list on the right.

		Dependent		Search stage name	4
¢∳ Basic configuration	+ Please select stage	Kuberne	Hostserver deployment	TSF deployment	Ge
Artifacts	Stage type	(Bake (Manifest) Use Helm Bake manifest file		select
No product at the		۲	Delete (Manifest) Delete Kubernetes (Manifest)		selec
moment Configurable in phases		۲	Deploy (Manifest) Deploy the Kubernetes manifest file in yami/j	son format	select
			Filter (Manifest)		selec

Execute Deployment Pipeline

After the pipeline configuration is complete, you can use the preset trigger to execute the pipeline automatically, or manually trigger the pipeline by submitting a release order in Continuous Deployment.

Collaboration	Kubernetes Application Deployment You can submit a release order to deploy a Kubernetes application and view application information after a success	Configuration guide Help Documentation
 Repository Code Scanner beta > 	B Status: All ^v Sort by: All ^v application name Q	
• CI >		
Kubernetes	pplication's last release order status	
CVM Host Serve	Posting Order 👸 Cluster	
Artifact Management		
Test Management		

Deployment Pipeline Configuration

You can delete, disable, or lock a deployment pipeline, view its earlier versions, and edit JSON configuration.

- image Z		Undo changes Save
		Delete
↓ Basic configuration +	Please select stage	Disabled
	Stage type:	Lock
Artifacts		Edit JSON configurat
		View historical version
No product at the moment Configurable in phases		

Delete pipeline

If you click "Delete", the pipeline will be deleted.

Disable deployment pipeline

If you click "Disable", the pipeline can neither be launched via any trigger nor triggered manually. You can disable a pipeline for the team or a certain project.

Masic configuration	Confirm to disable deployment process?	
	Disable globally Disabled within the project	
Artifacts	After the prohibition is prohibited, the deployment process cannot be triggered in any way.	
No product at the moment	Disabled Cancel	
Configurable in phases		

Lock deployment pipeline

If you click "Lock", the pipeline cannot be edited through the CODING-CD Console. You can specify whether the pipeline can be updated through API.

	Confirm Lockdown Deployment Process?
•─• ¢ Basic configuration	Once locked, no modifications can be made to the deployment process in the deployment console.
Artifacts	Support unlocking in the deployment console ⑦
	Description ⑦ Please enter
No product at the moment Configurable in	Lock Cancel
phases	

View revision history

When a new pipeline configuration is saved, the previous version will be added to revision history. On the Revision History page, you can make a comparison between different versions, and restore to any earlier version.

sion 2021–12–21 15:54:51 (Last saved) -	Compared
<pre>{ "default": "", "description": "", "hasOptions": false, "label": "", "name": "", "options": [{ } }</pre>	<pre>{ "account": "", "artifactType": "yaml/deployment", "cloudProvider": "kubernetes", "manifests": [{ } }</pre>
"value": ""	<pre>"apiVersion": "apps/v1", "kind": "Deployment", "metadata": { "labels": { "app": "nginx" }, "name": "nginx-deployment" }, "spec": { "replicas": 3, "selector": { "replicas": 3, "selector": { "replicas": 3, "selector": { "replicas": 3, "selector": { "replicas": 3, "selector": { "metadatales": { "metadata": { "metadata": { "metadata": { "metadata": { "app": "nginx"</pre>

Edit JSON configuration

Any changes made in the CODING-CD Console are saved in JSON files. You can add new fields to a pipeline, or edit the JSON content to customize configuration items not displayed in UI.

Note:

This allows you to edit a deployment pipeline in the text box, but it may affect the availability of the pipeline. We support restoring to any specific version in the revision history.



Stage Types

Last updated : 2024-01-03 11:50:30

This document describes the stage types of deployment pipelines in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

1. Log in to the CODING Console and click **Use Now** to go to CODING.

2. On the Workspace homepage, click

on the left to go to the CODING-CD Console.

General Types

When you edit a deployment pipeline, you can select a stage type for each step.



Prerequisite check

Check such prerequisites as the cluster size or status of a specific stage before executing the next step.

Custom variables

Add custom variables (i.e. key/value pairs), which can be referenced by downstream stages.


Manual confirmation

Wait for manual confirmation before executing the next step. To facilitate manual confirmation, you can add instructions, or offer input options to users for selection. These input options determine the execution behaviors in the downstream stage. For example, the prerequisite check can be used to ensure that a stage will be executed only when specific conditions are met.

Deployment pipeline

🕗 Tencent Cloud

Execute other deployment pipelines as sub-pipelines. You can execute the deployment pipeline of this application, as well as the pipelines of other applications that you have access to. You can select whether to wait for the execution results of the sub-pipelines before the stage execution ends. If you select to wait, the final execution status of the sub-pipelines is deemed as the status of this stage. Otherwise, when the execution of the sub-pipelines starts, the status of this stage will be flagged as "successful".

Description of configuration options:

Field	Required?	Description		
Application	Yes	Lists all the applications that you have access to		
Deployment Pipeline	Yes	Lists all the deployment pipelines under the application		
Wait for execution result	No	If you select to wait, the final execution status of the sub-pipelines is deemed as the status of this stage. Otherwise, when the execution of the sub-pipelines starts, the status of this stage will be flagged as "successful".		

	▶ Deployment Process ∠ Dependent stage: Please select stage
ent Process	Deployment Process Configuration
Deployment Proc	 Deployment Process Configuration
	Application
	Please select application
	Deployment Process
	Please select deployment process
	✓ Whether to wait for the execution
	 Execution options
	If the phase fails
	If the phase fails Terminate the entire process ①
	If the phase fails Terminate the entire process ① Terminate this branch in the procesting
	If the phase fails Terminate the entire process ① Terminate this branch in the proce Terminate this branch in the proce ①
	If the phase fails If the phase fails Terminate the entire process Terminate this branch in the proce Ignore failure Ignore failure Ignore failure
	If the phase fails Terminate the entire process () Terminate this branch in the proce Terminate this branch in the proce I lgnore failure () Only allow this stage to be executed
	If the phase fails If the phase fails Terminate the entire process () Terminate this branch in the proce Terminate this branch in the proce I I I I I I I I I I I I I I I I I I I
	If the phase fails Terminate the entire process ① Terminate this branch in the proce Terminate this branch in the proce Ignore failure ① Only allow this stage to be execute After the specified time, this stage Set phase to fail if expression doe

🔗 Tencent Cloud

Wait

Wait for a certain period of time before resuming execution. During the pipeline execution, you can manually reduce the waiting time or directly skip waiting. The waiting time can be an expression.

	s wait 🖉
	Dependent stage: Please select stage
Deployment Process	wait Configuration Execution opt
age type: Deployment Proc	 wait Configuration
	Waiting time (seconds)
	Numerical value 30
wait	Expression
age type: wait	Display a warning message when the
	 Execution options
	If the phase fails
	• Terminate the entire process ①
	O Terminate this branch in the process
	Terminate this branch in the process
	Ignore failure ()
	Only allow this stage to be executed
	After the specified time, this stage fa
	Set phase to fail if expression does r
	Conditional Expressions ()





No notification at this time

+ Add notification settings

Webhook

Calling external system APIs can be a stage in a deployment pipeline.

To call a specified webhook, the target URL and HTTP method can be used together with a custom header and the payload in JSON format. By default, if calling a webhook returns 2xx or 3xx, the stage execution has succeeded; if it returns 4xx or 5xx, the execution has failed. The final status of the webhook's URL and payload will be displayed in the pipeline execution details.

Pipeline expressions can be used in the URL field and payload. When the stage execution is complete, the payload content will be included in the Webhook object of the stage context, so that the payload can be referenced in the subsequent pipeline expressions. For example, you can use the following expression to obtain the final status of the webhook execution:





\${#stage("My Webhook Stage")["context"]["webhook"]["statusCode"]}



	Webbeek	Webhook Configuration Execution
	Stage type: Webhook	 Webhook Configuration
		Webhook URL *
)	Deployment Process	Method *
	Stage type: Deployment Proc	Please select
		HTTP status code for marking failure ①
	wait	Custom request header ①
	Stage type: wait	Key Value
		No data a
		+ Add custom parameters
		Wait for execution to complete ①
		~ Execution options
		If the phase fails
		• Terminate the entire process ()
		O Terminate this branch in the process
		 Terminate this branch in the process,
		Ignore failure 1

Disable Cluster

If you disable a cluster, the cluster keeps running but cannot process traffic. If needed, you can specify a certain number of service groups to keep them running, and disable the remaining ones.

Description of configuration options:

Select Kubernetes for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects
Namespaces	Yes	Namespaces where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Disable Options	Yes	Specifies the rules for disabling options

Select Kubernetes for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects
Namespaces	Yes	Namespaces where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Disable Options	Yes	Specifies the rules for disabling options
Health Check	Yes	Only refers to the health check that Tencent Cloud provides when you perform this task

Cluster Scale-Down

You can select whether to scale down active service groups (i.e. those operating normally). In addition, you can specify a certain number of service groups to maintain their size, and scale down the remaining ones. Select Kubernetes for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.



Cloud Account	Yes	Cloud account that manages resource objects
Namespaces	Yes	Namespaces where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Scale-Down Options	Yes	Specifies scale-down options

Select Tencent Cloud for Cloud Service (Provider)

Field	Required?	Description			
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.			
Cloud Account	Yes	Cloud account that manages resource objects			
Regions	Yes	Regions where the service groups belong			
Clusters	Yes	Clusters where the service groups belong			
Health Check	Yes	Only refers to the health check that Tencent Cloud provides when you perform this task			

Enable Service Group

If you enable a service group that has been disabled, it will process request traffic again. The configuration of the load balancer determines the routing rules between old and new service groups. When a service group is enabled, the scaling strategy is also enabled.

Description of configuration options:

Select Kubernetes for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects
Namespaces	Yes	Namespaces where the service groups belong
Clusters	Yes	Clusters where the service groups belong



Farget	Service	Groups	
i ai got	0011100	anoupo	

Specifies matching rules for service groups

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects
Regions	Yes	Regions where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Target Service Groups	Yes	Specifies matching rules for service groups
Health Check	Yes	Only refers to the health check that Tencent Cloud provides when you perform this task

Select Tencent Cloud for Cloud Service (Provider)

Disable Service Group

If you disable a service group, the service group keeps running but cannot process traffic. In addition, any scaling operations on the disabled service groups will be disabled. By disabling service groups, you can easily switch traffic between old and new service groups. Before a stage is initiated, you must specify the newest, oldest, or newer service groups to be disabled.

Note:

For configuration options, refer to Enable Service Group.

Destroy Service Group

You can destroy the service groups and relevant resources of a specified cluster. Before a stage is initiated, you must specify the newest, oldest, or newer service groups to be destroyed.

Description of configuration options:

Select Kubernetes for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects



Namespaces	Yes	Namespaces where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Target Service Groups	Yes	Specifies matching rules for service groups

Select Tencent Cloud for Cloud Service (Provider)

Field	Required?	Description
Cloud Service	Yes	Cloud service type. Kubernetes and Tencent Cloud are supported.
Cloud Account	Yes	Cloud account that manages resource objects
Regions	Yes	Regions where the service groups belong
Clusters	Yes	Clusters where the service groups belong
Target Service Groups	Yes	Specifies matching rules for service groups

Adjust Service Group Size

Adjusts the size of a service group in proportion to its current size or by a specified amount. The supported adjustment strategies are as follows:

Scale-up: Increases the size of the target service group

Scale-down: Decreases the size of the target service group

Scale up to the relatively largest size: Scales up the target service group to match the size of the largest service group in the current cluster

Adjust to a specific size: Adjusts the size of the target service group to a specific value

Tencent Cloud Type

Bake

Bakes cloud server images from the specified software package. Baking refers to the process of creating cloud server images. The CODING-CD Console abstracts the Baker stage by using HashiCorp's Packer, and offers a default Packer template and basic cloud server images to help you get started.

Note that the bake process will be skipped if Spinnaker does not detect any new bake operation. The console generates a unique key for each bake operation according to the parameters of the Bake stage (the base OS,

versioned software package, and so on). Any changes to the software package or the parameters will trigger a new bake operation. If you need to change the default behaviors and rebake images every time the deployment pipeline is executed, select Rebake in the stage configuration. For more information, see Packer by HashiCorp.

Deploy

Deploys the images baked in advance according to the specified deployment strategies. CODING-CD offers partly built-in deployment strategies such as red/black (blue/green) deployment and Highlander deployment. You can also adopt non-invasive deployment methods for the existing service groups, or create custom deployment strategies.

Roll Back Cluster

Rolls back the instances of one or more regions in a cluster.

Description of configuration options:

Field	Required?	Description
Cloud Account	Yes	Tencent Cloud Account
Regions	Yes	Regions where the clusters belong
Clusters	Yes	Specifies the clusters to be rolled back
Health Check	Yes	Only refers to the health check that Tencent Cloud provides when you perform this task

Clone Service Group

Clones all the fields of the existing service group to a new service group (by using images, containers, and so on). When you create a new service group, you can overwrite any field of the cloned service group.

Shrink Cluster

Retains a certain number of the newest or largest service groups, and deletes the remaining ones. You can select whether to delete active service groups (i.e. those operating normally) that do not meet the specified conditions.

Modify Scaling Process

Pauses or resumes scaling operations.

Kubernetes Type

Bake (Manifest)

Bakes the resource list by using such template renderers as Helm.

Deploy (Manifest)

Includes two major steps: Specifies the manifest to be deployed Specifies the artifacts to be overwritten in the manifest (such as Docker image) **Configure manifest** You can specify a manifest in the following two ways: Static: Specify it directly in the deployment pipeline Dynamic: Use the bound artifact during execution Either way, select the Deploy (Manifest) stage in advance.

Configure static manifest

If you know the manifest that corresponds to the resources to be deployed beforehand (even though you do not know the artifact version), you can directly provide the plaintext content of the manifest in the configuration of the Deploy (Manifest) stage.

Note:

When you select the Text type, you can directly edit the YAML file content in the text field. If a JSON-defined deployment pipeline is used, the corresponding content will be as follows:





Configure dynamic manifest

If artifacts are not stored in the pipeline repository, or multiple artifacts need to be deployed at a stage, you can configure the manifest by binding artifacts. CODING-CD artifacts allow you to reference any remote deployable resources. The artifacts referenced at the Deploy (Manifest) stage must be the text files that contain the manifest definition, which may exist in GitHub repositories or GCS. For more information, see Deployment Pipeline Settings.

If you have declared expected artifacts at the upstream stages, you can reference them at the Deploy (Manifest) stage:

Note:

After you select Artifact for the Manifest Source field, you can deploy the artifacts offered by upstream stages. Make sure that your cloud account has permission to download artifacts.

Upstream stages may match multiple artifacts. For example, if you configure the regular expression .*\\yml to use all yml files as artifacts, then all matching yml files will be deployed when the Deploy (Manifest) stage is executed.

Overwrite artifacts

Normally, when you deploy and update Kubernetes resources, most of the changes involve a flag in the Docker image or ConfigMap. Therefore, CODING-CD provides excellent adaptability to these resource type changes. Docker image

Kubernetes ConfigMap

Kubernetes Secret

If these resource objects exist at an upstream stage of a deployment pipeline, CODING-CD will try to automatically inject them into the manifest file being deployed.

For example: The pipeline execution is triggered by the Docker image registry trigger that carries the image gcr.io/my-project/my-image , whose digest value is sha256:c81e41ef5e.... In the pipeline, you configure a deployment stage with the following manifest content:





```
# ... rest of manifest
containers:
    - name: my-container
    image: gcr.io/my-project/my-image
# rest of manifest ...
```

Because the pipeline is triggered by changes in the content of the Docker image, the pipeline orchestration engine will distribute the Docker image artifact along with the manifest at the deployment stage to the Clouddriver component for processing. The content of the manifest that is eventually deployed will be as follows:





```
# ... rest of manifest
containers:
    - name: my-container
    image: gcr.io/my-project/my-image@:sha256:c81e41ef5e...
# rest of manifest ...
```

To ensure that proper artifacts are obtained at the deployment stage, you can forcibly bind all the required artifacts to the stage. If the binding fails, the stage will fail to boot. The following configuration indicates that the Docker image gcr.io/my-project/my-image must be bound to the manifest. Otherwise, the stage execution will fail:

Enable (Manifest)

Enables Kubernetes objects.

Description of configuration options:

Select Statically Specify Target for Selector

Field	Required?	Description
Cloud Account	Yes	Cloud account that manages resource objects
Namespace	Yes	Namespace where the resource objects belong
Selector	Yes	Statically specifies the target resources to be deleted by name
Kind	Yes	Resource object type
Name	Yes	Resource object name (such as ReplicaSet resources nginx-deployment- 5dfd77bbf9)

Select Dynamically Select Target for Selector

Field	Required?	Description
Cloud Account	Yes	Cloud account that manages resource objects
Namespace	Yes	Namespace where the resource objects belong
Selector	Yes	Statically specifies the target resources to be deleted by name
Kind	Yes	Resource object type
Clusters	Yes	Resource object name (such as ReplicaSet resources nginx-deployment- 5dfd77bbf9)
Target	Yes	Selects matching rules for resource objects

Delete (Manifest)

Deletes the Kubernetes objects that are created through the resource list.

Description of configuration options:

Select Statically Specify Target for Selector

🔗 Tencent Cloud

Field	Required?	Description
Cloud Account	Yes	Cloud account that manages resource objects
Namespace	Yes	Namespace where the resource objects belong
Selector	Yes	Statically specifies the target resources to be deleted by name
Kind	Yes	Resource object type
Name	Yes	Resource object name (such as ReplicaSet resources nginx-deployment- 5dfd77bbf9)

Select Dynamically Select Target for Selector

Field	Required?	Description
Cloud Account	Yes	Cloud account that manages resource objects
Namespace	Yes	Namespace where the resource objects belong
Selector	Yes	Dynamically selects resource objects by cluster and target field
Kind	Yes	Resource object type
Cluster	Yes	Cluster where the resource objects belong
Target	Yes	Selects matching rules for resource objects

Select Match Target by Tag for Selector

Field	Required?	Description
Cloud Account	Yes	Cloud account that manages resource objects
Namespace	Yes	Namespace where the resource objects belong
Selector	Yes	Matches resource objects according to the specified tag rules
Kind	Yes	Resource object type
Labels	Yes	Matches all the resource objects of the specified types if no rules are set

Description of setting options:

Field	Required?	Description

Delete Cascade	No	If this field is checked, all the resource objects managed by this resource object (for example, all the pods managed by a ReplicaSet) will be deleted. If this field is not checked, orphan resources may be generated.
Grace Period	No	(Optional) Specifies a termination time for the resource object, which will overwrite the time set in the manifest.

Trigger Configuration

Last updated : 2024-01-03 11:57:06

This document describes the trigger configuration of a deployment pipeline in CODING Continuous Deployment (CODING-CD).

Prerequisites

You must activate the CODING DevOps service for your Tencent Cloud account before you can use CODING Project Management (CODING-PM).

Open Project

1. Log in to the CODING Console and click Use Now to go to CODING page.

2. On the Workspace homepage, click



on the left to go to the CODING-CD Console.

Function Overview

CODING-CD Console supports various auto trigger conditions to match the pipelines in CODING, including Docker Repository Trigger, TCR Personal Repository Trigger, TCR Enterprise Repository Trigger, and Git Repository Trigger.



Docker Repository Trigger

Docker Repository Trigger can be configured to listen on the updates of artifact repositories. Any image updates will trigger the CD pipeline automatically.

	Execution options Automatic triggers Launch Parameters	Notificatio
Yebhook age type: Webhook	 Automatic triggers 	
	✓ CODING docker trigger	Ð
	Trigger Enable Switch	
oyment Process		
e type: Deployment Proc	Trigger Type	
	CODING docker trigger	\sim
it .	Binding existing products Customize Project Please select item	~
e: wait	New-scrum	
	Internal-docs	
	uri	
	Proxypanel	
	Flask Demo	

Git Repository Trigger

Three types of Git repositories are supported: CODING-CR, GitHub, and GitLab.

Field	Description			
Repository Type	Three types of Git repositories are supported: CODING-CR, GitHub, and GitLab.			
Project	Lists all the projects that the logged-in account joins			
Repository	Lists all the code repositories in the project			
Branch or Tag Rule	Regular expressions are supported. Null or .* indicates no restrictions on branches or tags.			



CODING Code Repositories

Configure the "cd-demo" code repository in the "cd-demo" project as a trigger. The branch or tag rule "release.*" means that the deployment pipeline is triggered only for branches or tags prefixed with "release" in their name.

(=	Execution options	Automatic triggers	Launch Parameters	Notificatio
Webhook Stage type: Webhook	✓ Git trigger			đ
	Trigger Enable Swi	tch		
Penloyment Process	• Trigger Type			
Stage type: Deployment Pro	Git trigger			~
	Binding existing Type	g products 🛛 🌔 customiz	e	
	CODING Code Ba	ase		-
wait	CODING Code Ba	ase		
Stage type: wait	GitHub			
	GitLab			
	Repository			
	Please select rep	ository		~
	File Path			
	Please enter			
	Branch or Tag Rule	es 🕐		
	^refs/(heads/(ma	ster release release buil	d–.))	
	Add trigger			

GitHub

To support a GitHub code repository, follow the steps below to associate the repository in the project settings: 1. Go to the project overview page, Click **Repository**.



Overview	Code Repository External Repositories + Associated code warehouse
Collaboration	Warehouse source All + Authentication mode All + The project module has been started All + Associates All + Search the warehouse Search the warehouse of the search the warehouse of the search the se
Repository	Code Repository Warehouse source Authentication mode The project module has been Associates Correlation time Operation
Code Scanner beta >	started No code base has been associated
•• CI >	
₿ CD >	0-0 code repository, total 0
Artifact Management	
👗 Test Management >	
Document >	

2. Click the Associated Code Warehouse button in the upper right corner.

Overview	Code Repository External Repositories + Associated code warehouse					
Collaboration	Warehouse source All - Authentication mode All - The project module has been started All - Associates All - Search the warehouse of the search the warehouse of the search the s					
Repository	Code Repository Warehouse source Authentication mode The project module has been Associates Correlation time	Operation				
Code Scanner beta >	staneo No code base has been associated					
•• CI >						
A CD >						
Artifact Management						
👗 Test Management >						
Document >						

3. Use OAuth to jump to the GitHub associated account and select the code repository under the name.

· · · ·	\mathbf{O}			G		
CODING	GitHub	GitLab	Private GitLab	Gitee	TGit	Generic Git repository
Authentication	mode	The au	thorized person			
OAuth	•	Steven	, Refresh GitHub C	OAuth authentic	cation	
Code Reposito	ry *					

4. After the connection completed, Return to **Basic configuration** > **Execution Options**, Choose **GitHub** Repository Type_o

	Basic configuration
	Execution options Automatic triggers Launch Parameters Notifications Description
ease select stage age type:	same time) Do not automatically cancel deployment tasks that are in the queued state
	 Automatic triggers
	✓ Git trigger □
	Trigger Enable Switch
	Trigger Type
	Git trigger
	Binding existing products customize Type
	GitHub
	CODING Code Base
	GitHub
	GitLab
	Repository
	Please select repository
	File Path
	Please enter
	Branch or Tag Rules ①
	^refs/(heads/(master/release/releasebuild))

GitLab

After you associate your GitLab account (see GitHub for specific steps), click **Basic Configurations** > **Execution Options** to select the **GitLab** repository type.

Execution options	Automatic triggers	Launch Parameters	Notifications	Descriptio
same time)				
Do not automatica	lly cancel deployment ta	sks that are in the queued	state	
Automatic triggers				
∽ Git trigger				Ū
Trigger Enable Swite	ch			
Trigger Type				
Git trigger				\sim
l ype GitLab				•
CODING Code Bas	se			
GitHub				
GitLab				
Repository				
Please select repo	sitory			\sim
File Path				
Please enter				
Branch or Tag Rules	s @			
0				

Webhook trigger

If you select the webhook trigger, a globally unique trigger URL will be generated. Payload Constraints defines the parameters that the payload request must provide. Regular expressions are supported. Null or .* indicates no restrictions on the key value.

🔗 Tencent Cloud

Payload Constraints: If you need to use a specific payload to trigger a webhook, you can add a key/value pair in the Payload Constraints section. When a pipeline receives a webhook request, the payload content will be validated. The value supports regular expressions.



Sample scenario: A pipeline's webhook URL is accessible from the public network, but the pipeline can be triggered only if correct authentication credentials are provided.

The pipeline will be triggered for the following payload request:





```
curl --location --request POST 'http://codingcorp.coding.com/api/cd/webhooks/webhoo
--header 'Content-Type: application/json' \\
--data-raw '{"secret": "faiM4&KqJTTuEy8J"}'
```

Scheduled Trigger

For example, to trigger a pipeline at 8:00 pm every day:



Execution options Aut	omatic triggers	Launch Parameters	Notifications	Descriptio
 Automatic triggers 				
∽ Cron				⊡
Trigger Enable Switch				
Trigger Type				
Cron				\sim
Trigger frequency				
day(s)				\sim
interval	day(s)			
Every working day				
Trigger time 20 🗸	00 ~			
+ Add trigger				
 Launch Parameters 				
No startup parameters at th	is time			
+ Add startup parameters				
 Notifications 				
No notification at this time				
Add notification settings	3			

Deployment Method Trigger When Docker Artifacts Are Auto Released

Last updated : 2024-01-03 11:57:45

CODING Continuous Deployment (CODING-CD) allows you to easily integrate upstream and downstream products as workflows. This article describes how to configure a basic automated pipeline for **pushing artifacts through CI task**, **updating artifact repository images**, and **triggering pipeline**.

Step 1: Associate the application with the project

The **application** in the CODING-CD Console must be associated with the project. Go to the CODING-CD Console, click the **Associate Project** button in the application, and then select the project with the CI configuration.

← Console	Application	Creat
Application	Cloud Account: All = Associated Project: All = Sort by: Reverse update time = Search Q.	
 Cloud Account Host management 	test = Cloud account: 0 Associated Project: 1 2 3 4 0 test Project -	

Step 2: Configure CI process

This step pushes artifacts to the artifact repository through CI. You can create a CI process from the CI plan template, or add this stage by writing a Jenkinsfile.



Soloot	Build Job Tom	nlata							customize the build process
Select Build Job Template								customize the build process.	
d jobs are	basic units in contin	nuous integration. You can quickly	create a build plan here.	For more configurations, go	to the build job o	details.View Hel	p Documentation 🗹		
Ι Τε	eam Template	Programming Language	Image Registry	Artifact Repository	Deploy	Basics	API Documentation		Search by template keyword. Q
	Push CODING	Docker Image							
-	Push a built Dock	ker image to the Docker artifact re	pository of the current p	oject.					
suitable t	template is found, vo	ou can choose to customize the bu	ild process.						
	,								
_	customize the	build process.							
Ξ.	You can customia	ze the continuous integration pipel	ine process according to	Jenkinsfile specifications.					

Add this stage to the CI process:

express-docker 🖄 Basic Info Process Configuration Trigger Rule Variable and Cache	Notification Go To Latest Build Operation V D Build Now
Jenkinshle with Static Configuration ⑦ Craphic Editor Text Editor	\$ Environment Variable Discard Modification Save
	😵 Run Pipeline Script 📀
4-1 Dependencies Bug Scan + Add Stage + Add Stage	Plugin Configuration Advanced Configuration
⊘ Run Npm Audit	Pipeline Script *
André Parcellei Strane André Parcellei Strane	
¢	
+ Add Parallel Stage	
	•

Jenkinsfile





```
stage('Deploys to the remote Kubernetes cluster') {
    steps {
        cdDeploy([
            deployType: 'PATCH_IMAGE',
            application: "${CCI_CURRENT_TEAM}",
            pipelineName: "${PROJECT_NAME}-${CCI_JOB_NAME}-${CD_CREDENTIAL_INDEX}",
            image: "${CODING_DOCKER_REG_HOST}/${CODING_DOCKER_IMAGE_NAME}:${DOCKER_IM
            cloudAccountName: "${CD_ACCOUNT_NAME}",
            namespace: "${CD_NAMESPACE_NAME}",
            manifestType: "${CD_MANIFEST_TYPE}",
            manifestName: "${CD_MANIFEST_NAME}",
```

```
containerName: "${CD_CONTAINER_NAME}",
    credentialId: "${CD_CREDENTIAL_ID}",
    personalAccessToken: "${CD_PERSONAL_ACCESS_TOKEN}",
  ])
  }
}
```

Step 3: Trigger According to Artifact Image Version

Go to the Application pipeline page in Continuous Deployment, and then click "Enable Trigger" in **Basic Configurations**. If you select "CODING Docker Repository Trigger", the artifact version number in the associated project will be listened on. When artifacts are pushed to the artifact repository through CI, the pipeline will be triggered automatically. If you select "Custom", the artifact repository updates of other projects can be listened on. In addition to CODING Docker Repository Trigger, you can also select Git Repository Trigger or Scheduled Trigger.



Add Deployment Stage to Build Plan

Last updated : 2024-01-03 11:58:24

Before you trigger deployment in Continuous Deployment, go to the **CODING-CD Console** to associate your application with the project.

Cloud Account: All & Associated Project: All & Sort by: Reverse update time & Search Q Cloud Account: All & Associated Project: All & Sort by: Reverse update time & Cloud Account: Q Cloud Account: Q Fest Associated Project: 1 Fest Fest Fest Fest Fest Fest Fest Fest	← Console	Application					
C Application I Host management Eest		Cloud Account: All - Associated Project: All - Sort by: Reverse update time -			Search Q		
 Cloud Account test1 = Cloud account: 0 Associated Project: 1 test Associated Project 	Application						
Cloud account: 0 Associated Project: 1 Associated Project	Cloud Account Host management	test1 =					
essi ∉ Associated Project		Cloud account: 0 • As	sociated Project: 1	8 A V			
er Associated Froject		test					
		8 ^v As	ssociated Project				

You can add a deployment stage to a build plan in either of the following ways:

Directly use a build plan template

Add a deployment stage to an existing build plan

Use Build Plan Template

Note:

Associate the cloud account for the relevant cluster in the CODING-CD Console. For more information, see Cloud

Accounts.

Click **Continuous Deployment** in the product section on the left, and then click "Create Build Plan" in the upper-right corner. Under the **Deployment** category, select the **Push to Kubernetes** template.

Select Build Job Template Build jobs are basic units in continuous integration. You can quickly create a build plan here. For more configurations, go to the build job details. View Help Documentation 2	customize the build process.
All Team Template Programming Language Image Registry Artifact Repository Deploy Basics API Documentation	Search by template keyword. Q
CODING Docker Image Push and Deploy to Kubernetes a built Docker Image to the Docker product library under the current project and deploy It to Ku	
If no suitable template is found, you can choose to customize the build process.	
customize the build process. You can customize the continuous Integration pipeline process according to Jenkinsfile specifications.	
	•



Select the corresponding artifact repository, remote cluster address, and other information as instructed. When you are done, select "Trigger build after creation".

uild Job Name *		
docker-image-deploy		
uild Process		
1 Code Repository	Jenkinsfile Preview	
Code Source CODINS CODINS GitHub.com GitLab.com GitLab.com GitLab.com GitLab.com GitLab.com GitLab.com	<pre>pipeline { agent any environment { CODIMG_DOCKER_REG_MOST = "\$(CCI_CURRENT_TEAM)-docker.pkg.\$(CCI_CURRENT_DOWAIN)" CODIMG_DOCKER_IMAGE_NAME = "\$(PROJECT_NAME.toLowerCase())/\$(DOCKER_REP0_NAME)/\$(DOCKER_IMAGE_NAME)" } stages { stages { stage { checkoutt (checkoutt [sclass: 'GitSCM', branches: '[Giname: GIT_BUILD_REF]], } </pre>	

After the setup is complete, you can run the continuous build plan to automate the release process.

Add Deployment Stage

Click **Build Plan** > **Process Configuration** to add a deployment stage by using an editor or entering a command.

Graphical editor

Add a **deployment** stage in the existing build plan settings, and then fill in the image URL, cluster, namespace, etc.


🔶 Test 🖄 Basic Info Process Con	figuration Trigger Rule Variable and Cache Notification	Go To Latest Build Operation V Devid Now
Jenkinsfile with Static Configuration ⑦ Graphic Editor	Text Editor	\$\$ Environment Variable Discard Modification Save
		> Image Update
-+-+ 4-1 Dependencies Bug Scan +	1 Build Image and Push to + Add Stage → O End (+)	Plugin Configuration Advanced Configuration
🕞 Run Npm Audit	to run Shell script	Deploy the Docker image built upstream to the Kubernetes cluster.
+ Add Parallel Stage	Image Update \triangle	Image ⑦ *
	Quick Filter Q	
4	¢ command	Cluster *
4	b Code Management →	Choose Cluster -
E	B File Operations →	Namespace *
8	a Artifact Repository →	Choose Namespace 💌
E	Collect Reports	Resource Type *
6	Flow Control	Choose Resource Type
G	∂ Security →	
8	a AR Al Official Plagin Team Plagin	Hesource Name *
5	Image Update	Choose Resource Name
2	R Others	Pod Container ③ *
0		Choose Pod 👻

Jenkinsfile





```
stage('Push to CODING Docker artifact repository') {
    steps {
        script {
            docker.withRegistry(
               "${env.CCI_CURRENT_WEB_PROTOCOL}://${env.CODING_DOCKER_REG_HOST}",
               "${env.CODING_ARTIFACTS_CREDENTIALS_ID}"
            ) }
            docker.image("${CODING_DOCKER_IMAGE_NAME}:${env.DOCKER_IMAGE_VERSION}")
        }
}
```



}

Manually Submit Release Order

Last updated : 2022-03-09 15:29:00

Create Release Order

We recommend that you grant the **Developer** user group the permission to access and manage Continuous Deployment (CD). For more information, see Permission Control.

Project & Member	Member Permission 65 GP199513 The user group is 项目管理员. All obtained permissions are lister	d as follows:	
basic settings	Component Access Permission Feature Permission		Select All
Feature Toggle	Collaboration So to Project C Se Edit Iteration ③	✓ Delete Iteration ✓ Edit Issue ⑦ ✓ Delete Issue	\checkmark
Notification Settings	Test ☑ Access Test ☑ Edit Test Plan ③ ☑ Edit Report ③	✓ Archive Test Plan ✓ Delete Test Plan ✓ Edit Case ⑦ ✓ Delete Case ✓ Delete Report ✓ Test ✓ Modify Auto ⑦ ✓ Delete Automati	
Member	Code Scanning 🖉 Access Code S 🧭 Code Scan Setti		
User Group Personal Preference	Integration V Access Continu O Continuous I O Edit Job	Image: Manual Trigger/ Image: Reset Cache Image: Delete Record Image: Create Job Image: Replication Job Image: Delete Continuo Image: Manual confirm	
Emails Notification	Application Manag Visit application V App publishing	Application editi	
Others	Deployment 🗹 Access Continu 💿 Continuous 💿	Delete Deploym	
Template	Artifact Repository 🖉 Access Artifact 📝 Artifact Repo 💿	☑ Delete produ ③ ☑ Product scan ③	
	Wiki 🗹 Access Wiki Page 🖉 Edit Wiki Page 🕥	Delete Wiki Page Share Wiki Page	
	Files 🗸 Access Files 🖉 Edit File 🕲	Delete File Share File	
	API Documentation S Access API Doc		
	Knowledge manag Visit knowledge		

Developers with the permission can submit a release order, but cannot modify deployment configurations in the CODING-CD Console. Ops user group can add a manual confirmation process to the deployment pipeline of an application to ensure that the application is reconfirmed when it is released via a release order. In this way, highquality application can be achieved through permission control.



← test ∠	0	Selection phase Se	arch stage name
Bake (Manifest) Stage type: Bake (Manifest) H I I I I I I I I I I I I I I I I I I I		Dependent stage: Deploy (Manifest) ~ Kubernetes Hostserver deployment TSF deployment Disable cluster Disable an existing cluster	General type Stay tuned!
		Entity Tags Applies entity tags to a resource.	Stay tuned!
		Find Image from Tags Finds an image to deploy from existing tags	Stay tuned!
		Walt for manual confirmation before continuing	selec t
		Pre-condition check Check the preset conditions before executing the next stage	selec t

Click Create Release Order to run existing applications and pipelines.

← test1 - Posting Order Cluster Deployment Process	New Release Order
Status: All * Created by: All * Deployment Process: All * Release time: Last ten days * Search: Enter keywords to searc	Name
	Default if not filled: date-application-deployment-process
	Select Application *
	👪 test1 🔹 flaskapp
	Deployment Process *
	test
• = -	& View selected deployment flowchart
No release order at the moment, You can clic Add Bolease (Description
	Write Preview H B I % 66 ∅ III III ∅ IIII IIII ∅ ∅ IIII IIIIII IIIIIIII ∅ ∅ IIIIIIIIIIIII ∅ ∅ IIIIIIIIIIIIIIII ∅ ∅ IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
	Please enter a description here (Markdown is supported)
	OK Cancel

Quick Release

To directly use CODING-CD without complex permission configurations, you can use the **Quick Release** feature. It allows you to release images to a cluster without configuring a pipeline in the console. This feature applies to more flexible and complex pipelines. For example, when such emergencies like temporary image changes occur, you don't have to release artifacts to the cluster immediately.



	Quick Release Configuration
	Quick Release is suitable for simple release scenarios, for more flexible and complex deployment processes, please go to Console (?
	Cluster (2) Artifact (3) Application Deployment
	Cluster Source Use existing cluster Add new cluster
	Cluster Name Please select cluster \checkmark
	Next Cancel
low do I add a new cluster?	
lse Kubeconfig credentialsAdding a new cluster. Ple CODING Continuously Deployed Public IP Segment:	ase ensure that the cluster has open public access and add the public IP segment of the CODING ongoing deployment to the cluster access control list (whitelist).
12.64.105.0/24	
12 120 144 0/24	

To do this, your user group must have the permission to manage CD and the permission scope of the released artifacts must be set to public, so that the artifacts can be accessed by the cluster.

Configuration	test			
Basic Information	Basic Info	rmation		
Proxy Configuration Version Policy	Artifact	🐟 test		
Clear Strategy	Repository			
	Repository Address	https://gp13567-docker.pkg.coding.net/test/tes	st	
	Repository Description	Enter a repository description of up to 100 cha	aracters.	
	Permission	External Permissions of Artifact Repository @	View the full permission description of the artif	act repository.
	Range	S In Project	🛓 In Team	Open Permission Range Pull ✓ Project Member ✓ Group Member ✓ Other User
		Non-members of this project cannot push or pu	II the products of this warehouse. The push and	Push ✓ Project Member × Group Member × Other User pull permissions of members of this project can be configured in the project settings.
	Save			
	Delete Rep After deletion, th	Dository he repository address and all its artifacts will be deleted ar	nd cannot be recovered.	
	Delete			

After release, you can view the release details in Continuous Deployment.



ase Information	Stage		Obalius Duranan	Start Sime 0000 00 00 11:00:06
Manual Trigger	Success of	• Success •	Time 6 second(s)	Start time 2022-03-08 11:02:06
 GP199513 2022–03–08 11:02:05 	Deployment Time: 6 second(s)	Deploy Service Time: 6 second(s)	Phase Details	
3 12 second(s)			Status Script Name	Start Time Time
vrtifacts			Success Deployment	2022-03-08 11:02:06 6 second(s) v
No product at the moment				