

Event Bridge

Getting Started

Product Documentation



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Getting Started

Activating EventBridge

Last updated : 2022-05-05 16:02:45

Tencent Cloud EventBridge uses [Tencent Cloud Access Management \(CAM\)](#) to manage permissions. CAM is a permission and access management service that helps you securely manage the access permissions to resources under your Tencent Cloud account. With CAM, you can create, manage and terminate users and user groups and use identity and policy management to control user access to Tencent Cloud resources. Before using EventBridge, you need to activate it on the product page. This document describes how to activate and use EventBridge.

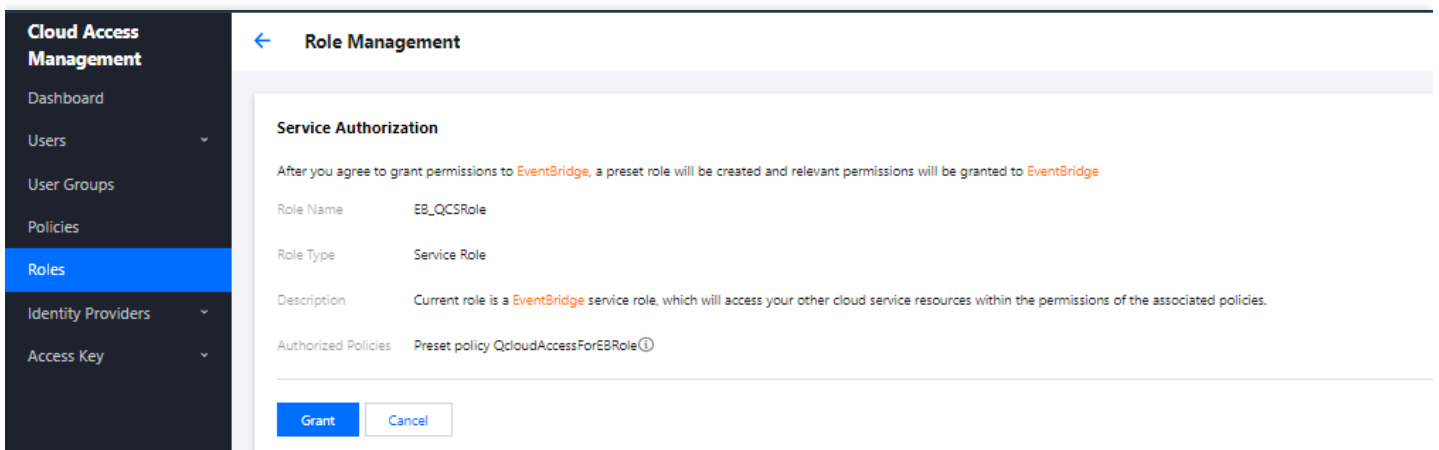
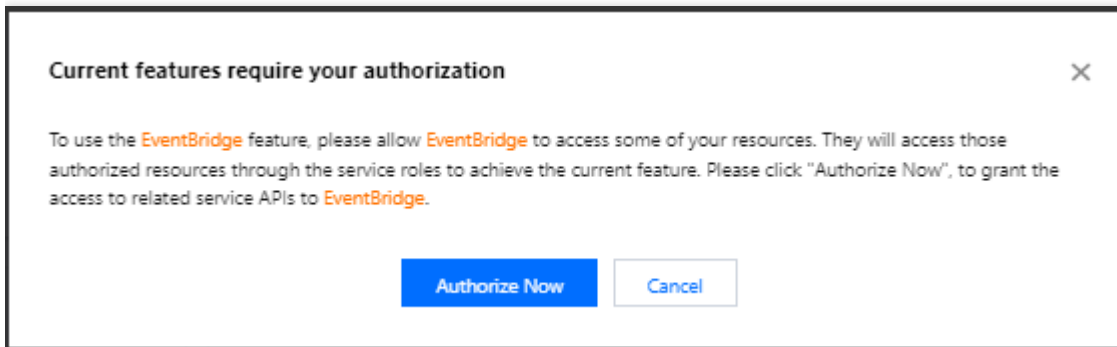
Directions

- 1Log in to the [EventBridge console](#) and activate the service and create a role as prompted (these operations must be performed with the **root account**).
- 2(Optional) Log in to the [CAM console](#) to assign permission to the sub-account.
- 3After creating a service role, you can use the EventBridge features to create relevant resources.

Access Management

Activating EventBridge

If this is the first time that you use EventBridge with your root account, according to CAM requirements, you need to enable the EventBridge service role **EB_QCSRole** and grant permissions related to the service role to call other services. To do so, go to the [EventBridge console](#) and grant permissions as instructed:

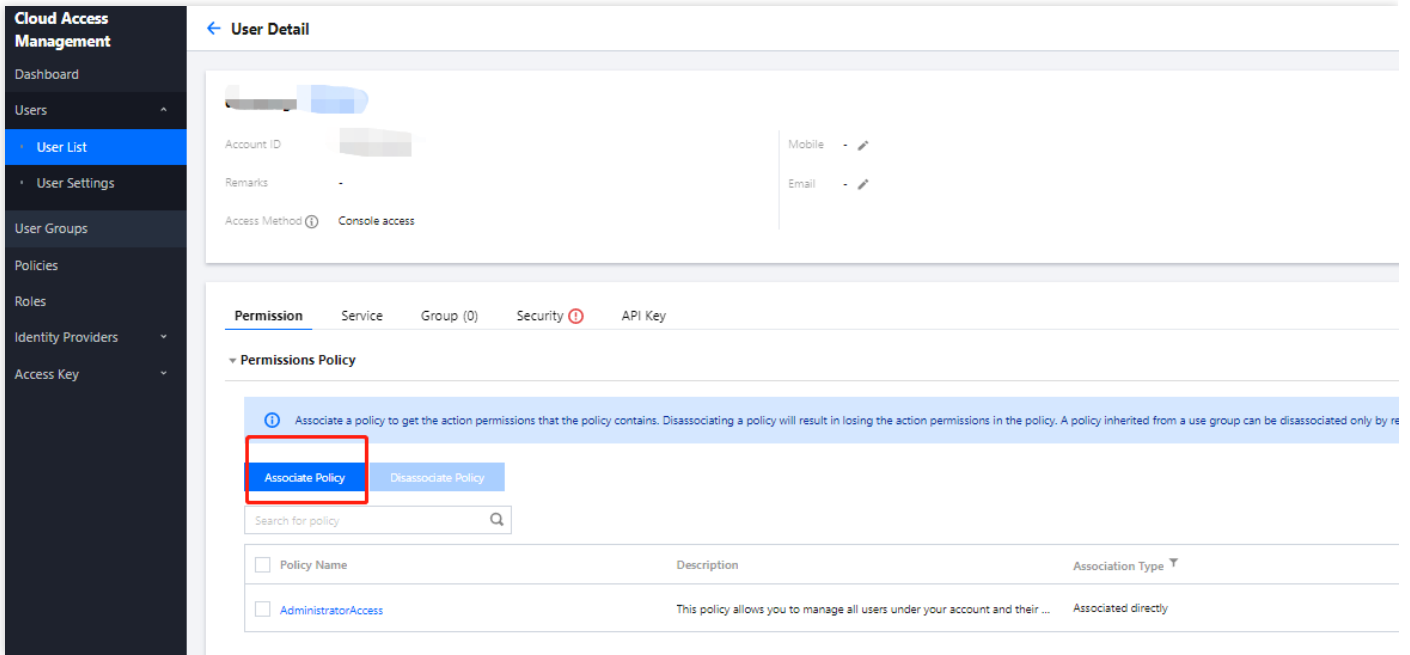


Granting permissions to sub-account

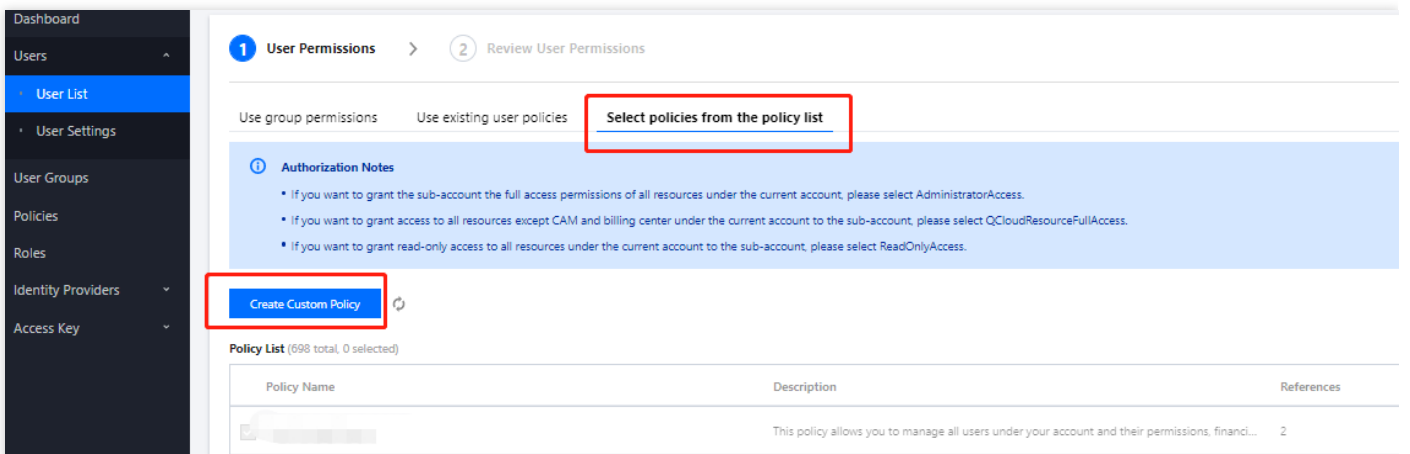
Note :

Before a sub-account can use EventBridge, you need to log in to the [CAM console](#) with the root account to check whether the `EB_QCSRole` role is created successfully. If not, create the role and grant permissions to it according to [Grant permissions with the root account](#). Otherwise, the sub-account cannot use the EventBridge console properly nor call other resources on the cloud via EventBridge.

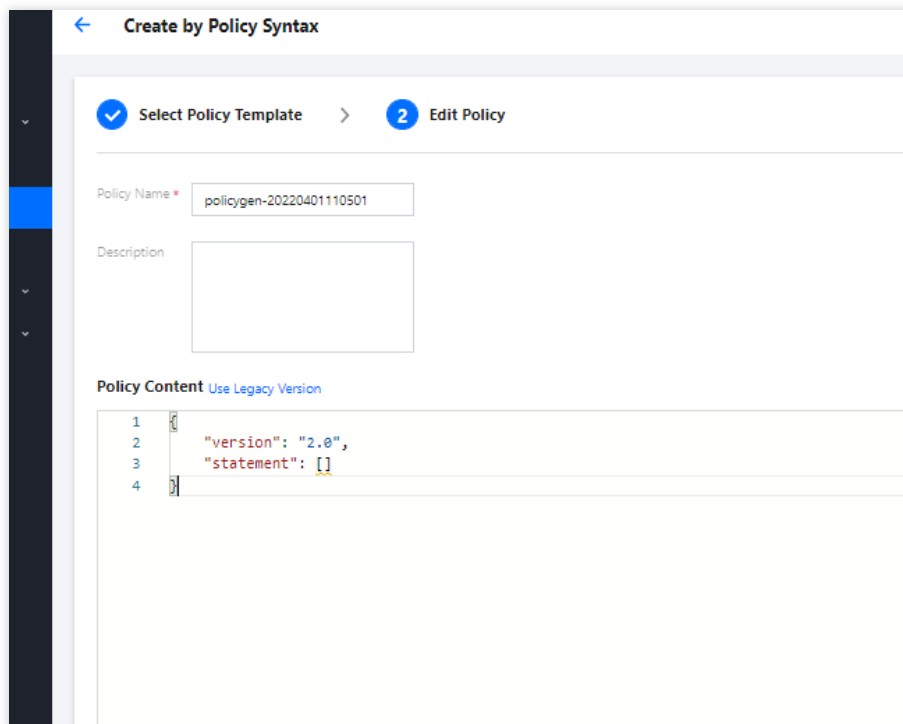
1. Log in to the [CAM console](#) with the root account, select a corresponding sub-account, and select **Associate Policy**.



2. Select **Select policies from the policy list > Create Custom Policy.**



3. Select **Create by Policy Syntax > Blank Template.** Enter the policy name and enter the following syntax content in **Policy Content**:



← Create by Policy Syntax

1 Select Policy Template > 2 Edit Policy

Policy Name *

Description

Policy Content [Use Legacy Version](#)

```
1 {  
2   "version": "2.0",  
3   "statement": [  
4     ]
```

```
{  
  "version": "2.0",  
  "statement": [  
    {  
      "effect": "allow",  
      "action": [  
        "apigw:DescribeServicesStatus",  
        "apigw:DescribeApi",  
        "apigw:DescribeService",  
        "apigw:CreateService",  
        "cam:ListGroup",  
        "cam:DescribeSubAccountContacts",  
        "cam:GetRole",  
        "cam:GetGroup",  
        "scf:ListNamespaces",  
        "scf:ListFunctions",  
        "scf:ListVersionByFunction",  
        "scf:ListAliases",  
        "scf:CreateFunction",  
        "scf:GetFunction",  
        "tdmq:CreateSubscription",  
        "tdmq:ResetMsgSubOffsetByTimestamp",  
        "tdmq:DescribeClusters",  
        "tdmq:DescribeEnvironments",  
        "tdmq:DescribeTopics",  
        "tdmq:DescribeSubscriptions",
```

```
"kafka:DescribeInstanceAttributes",
"kafka:DescribeInstances",
"kafka:DescribeTopic",
"kafka:DescribeRoute",
"cls:DescribeTopics",
"cls:DescribeLogsets",
"cls:SearchLog",
"cls:DescribeLogsets",
"cls:DescribeTopics",
"monitor:GetMonitorData",
"monitor:DescribeAlarmNotices",
"cam:CreateRole",
"cloudaudit:DescribeEventBridgeTracks",
"cloudaudit:DescribeProducts",
"cloudaudit:ModifyAuditTrack",
"cloudaudit:CreateEventBridgeTrack"
],
"resource": "*"
}
]
}
```

4. Bind the custom policy and the preset policy `QcloudEBFullAccess` with the sub-account. Then the sub-account can use the service properly.

Quickly Delivering Custom Events

Last updated : 2022-06-13 11:49:13

Overview

In addition to Cloud Monitor and CloudAudit events generated by official Tencent Cloud services, events generated by your own applications can only be published to custom event buses. You can [create custom event buses](#) and [configure event connectors](#) to deliver custom events. Alternatively, you can use an API/SDK to deliver custom events. This document describes how to deliver custom events via an **event connector**.

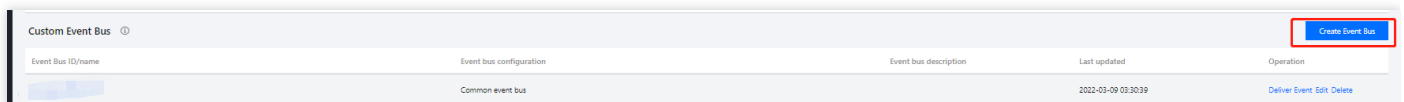
Note :

In addition to using an event connector, you can call an API to deliver custom events.

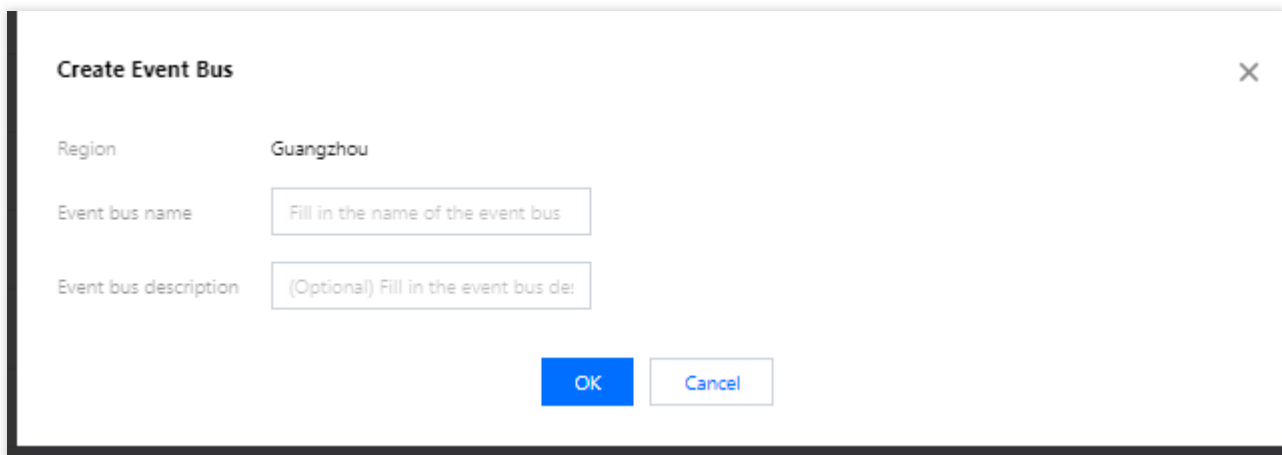
Delivering Custom Events

Step 1. Create a custom event bus

1. Log in to the [EventBridge console](#) and click **Create Event Bus**.



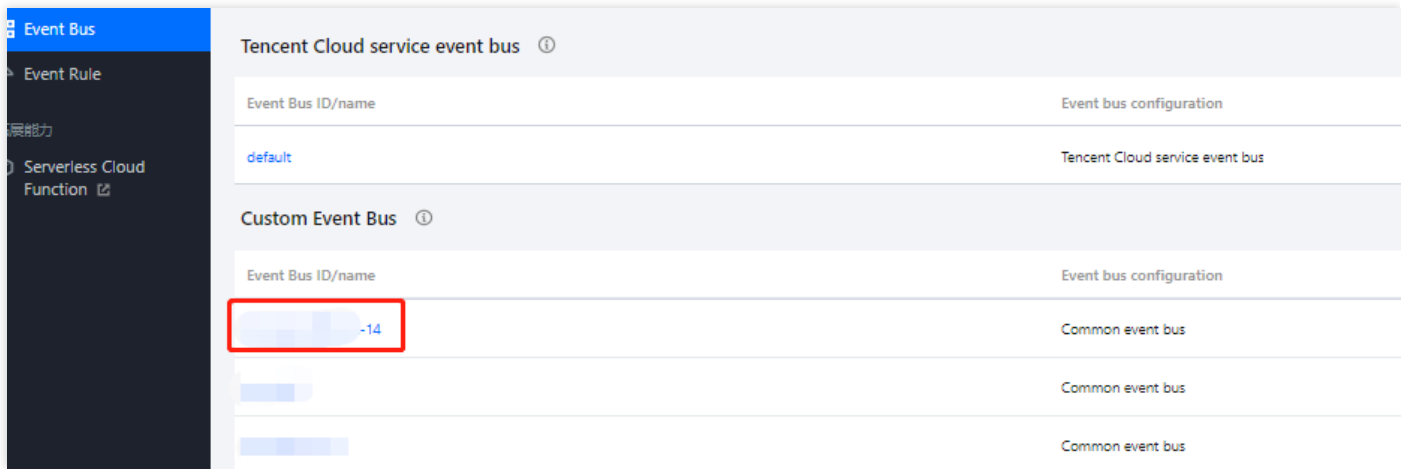
2. Enter the event bus name and description.

A screenshot of the 'Create Event Bus' dialog box. The title is 'Create Event Bus' with a close button (X) in the top right. The 'Region' is set to 'Guangzhou'. There are two input fields: 'Event bus name' with the placeholder text 'Fill in the name of the event bus' and 'Event bus description' with the placeholder text '(Optional) Fill in the event bus de:'. At the bottom, there are two buttons: 'OK' (blue) and 'Cancel' (white).

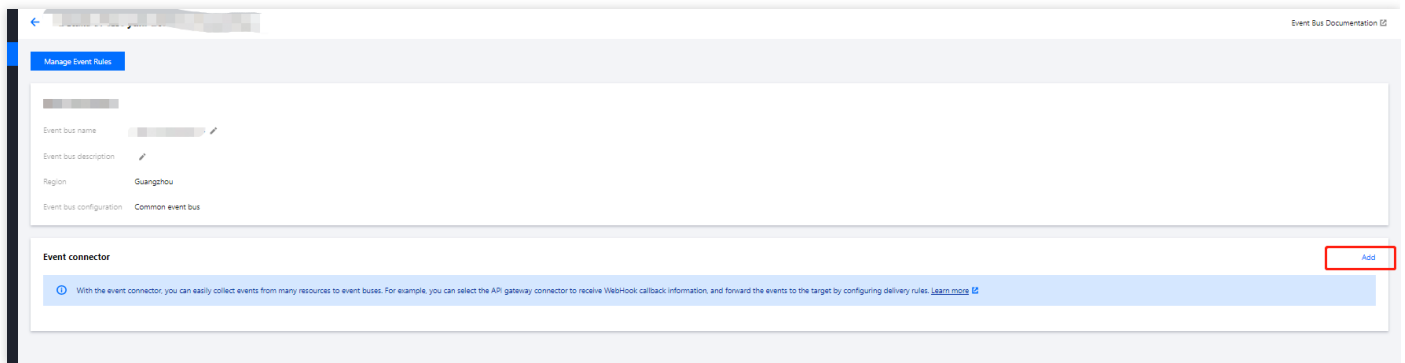
3. Click **OK**.

Step 2. Create an event connector

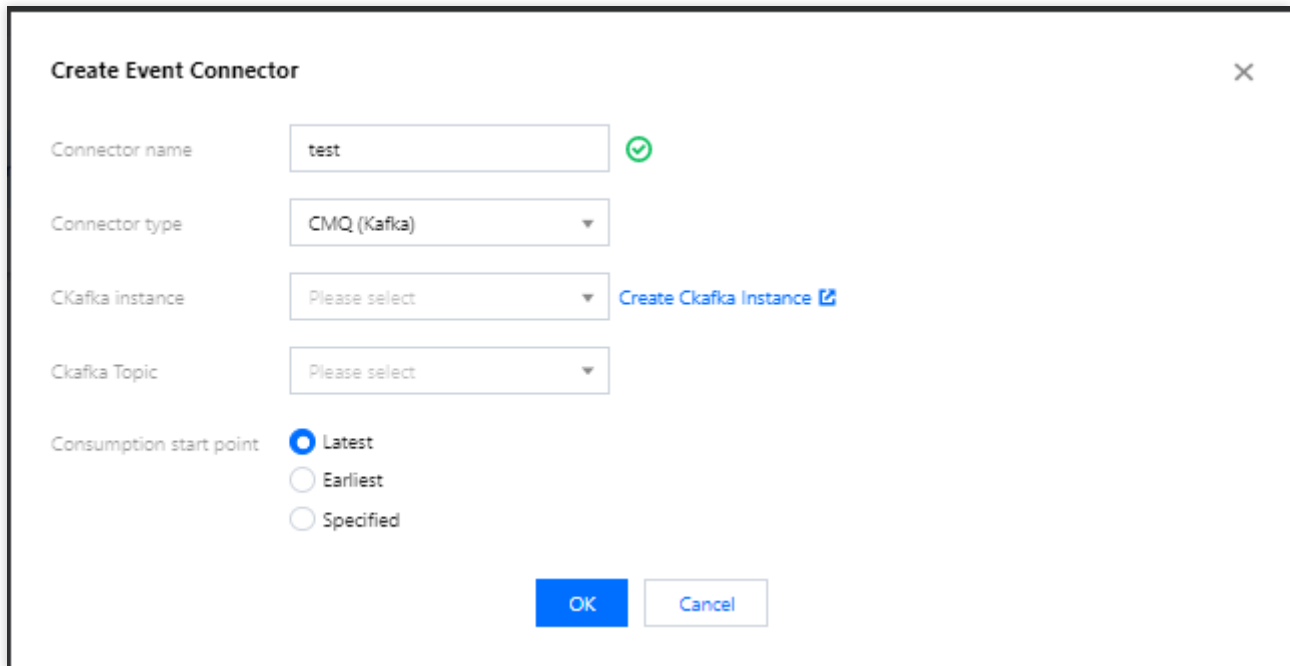
1. On the **Event Bus** page, click the name of the custom event bus to enter the event bus details page.



2. On the event bus details page, click **Add** in the **Event connector** area.



3. Enter information as instructed. (This example takes a CKafka event connector as an example.)



Create Event Connector [X]

Connector name: test ✓

Connector type: CMQ (Kafka) ▼

CKafka instance: Please select ▼ [Create Ckafka Instance](#)

Ckafka Topic: Please select ▼

Consumption start point: Latest
 Earliest
 Specified

OK Cancel

Set **Connector type** to **CMQ (Kafka)**, set other parameters as needed, and click **OK**. For how to configure other types of connectors, see [here](#).

4. Click **OK**. After the configuration is completed, the event connector can pull a message from CKafka, generate an event based on the message content, and deliver the event to the event bus. Taking the message "Hello from Ckafka again!" as an example, the event connector generates the following event:

```
{
  "specversion": "1.0",
  "id": "13a3f42d-7258-4ada-da6d-*****3b4662",
  "type": "connector:kafka",
  "source": "ckafka.cloud.tencent",
  "subject": "qcs::ckafka:ap-guangzhou:uin/1250000000:ckafkaId/uin/1250000000/ckafka-123456",
  "time": "1615430559146",
  "region": "ap-guangzhou",
  "datacontenttype": "application/json;charset=utf-8",
  "data": {
    "topic": "test-topic",
    "Partition": 1,
    "offset": 37,
    "msgKey": "test",
    "msgBody": "Hello from Ckafka again!"
  }
}
```

For more information about the event format, see [Event Structure](#).

Note

Currently, only delivery for Tencent Cloud CKafka instances is supported. Confirm that no username or password is configured for your CKafka instances. Otherwise, the connector may fail to get messages.

Step 3. Create an event rule

1. Select **Event Rule** on the left sidebar.
2. At the top of the **Event Rule** page, select the created event bus from the **Event Bus** drop-down list and click **Create Event Rule**.
3. Enter information as instructed.

The screenshot displays the 'Event Rule' configuration page in the Tencent Cloud console. The interface is divided into two main sections: 'Basic Information' and 'Event Matching'. In the 'Basic Information' section, the 'Region' is set to 'Guangzhou' and the 'Event Bus' is 'eb-my0aecoe(default)'. There are input fields for 'Rule Name' and 'Rule Description'. The 'Event Matching' section shows the 'Rule Pattern' set to 'Custom events'. A 'Rule Pattern Preview' window displays a JSON snippet: `{ "source": "apigw.cloud.tencent" }`. Below the preview are 'Edit' and 'Examples' buttons. At the bottom of the page, there are 'Previous' and 'Next' navigation buttons.

This event pattern means to receive all messages from the TDMQ connector. For how to write an event pattern, see [Event Pattern](#).

4. Click **Next** and configure the event target, which can be [Serverless Cloud Function \(SCF\)](#), [Cloud Log Service \(CLS\)](#), [message pushing service](#), or [CMQ \(Kafka\)](#). Here takes SCF as an example. Event content will be delivered to SCF as parameters.

The screenshot shows the 'Delivery Target' configuration page in the Tencent Cloud Event Bridge console. The page is titled 'Delivery Target' and is part of a 'Rule Pattern' configuration. The configuration includes:

- Trigger: Serverless Cloud Function (SCF)
- Function source: Existing function (selected)
- Namespace: forrester
- Function resource: remoteDebug
- Version and alias: Version: \$LATEST
- Batch delivery: Enable (unchecked)

At the bottom of the configuration area, there is an 'Add' button and a checked checkbox labeled 'Enable event rules now'. Below the configuration area, there are 'Previous' and 'Complete' buttons.

The `test` function here is to print the events received, and you can write your function based on the actual business scenario. Alternatively, you can quickly deliver events to CKafka or a downstream SaaS service through a template function provided by the platform. For more information, see [SCF Target Delivery](#).

Step 4. Test an event

After sending a message to the target topic, you can see the following information on the corresponding SCF log page:

```
START RequestId:79e6d53e-7a98-11ec-8f0d-*****4284e2
Received event: {
  "data": {
    "Partition": 1,
    "msgBody": "Hello from Ckafka again!",
    "msgKey": "test",
    "offset": 37,
    "topic": "target-topic"
  },
  "datacontenttype": "application/json;charset=utf-8",
```

```
"id": "13a3f42d-7258-4ada-da6d-*****3b4662",
"region": "ap-guangzhou",
"source": "ckafka.cloud.tencent",
"specversion": "0",
"status": "",
"subject": "qcs::ckafka:ap-guangzhou:uin/1250000000:ckafkaId/uin/1250000000/ckafka-123456",
"tags": null,
"time": 1615430559146,
"type": "connector:kafka"
}
```

Step 5. Trace the event delivery history

EventBridge provides the event tracing capability. After enabling [event tracing](#), you can view the event delivery history on the event query page of an event bus.

If the event tracing mode is set to **Default**, only the matched events that failed to be delivered to the downstream can be queried. If you want to query all events, choose **Event Bus > Event Tracking**, set the delivery type to **All logs**, and select **Always report logs of rule matching failures**.

Quickly Configuring Cloud Monitor Event Alarm Push

Last updated : 2022-07-21 15:16:28

Overview

After EventBridge is activated, it will automatically create a **default Tencent Cloud service event bus** in **Guangzhou** region, to which alarm events (Cloud Monitor events and CloudAudit events) generated by services connected to it will be automatically delivered. You can also set event rules and delivery targets to configure an alarm linkage.

Notes

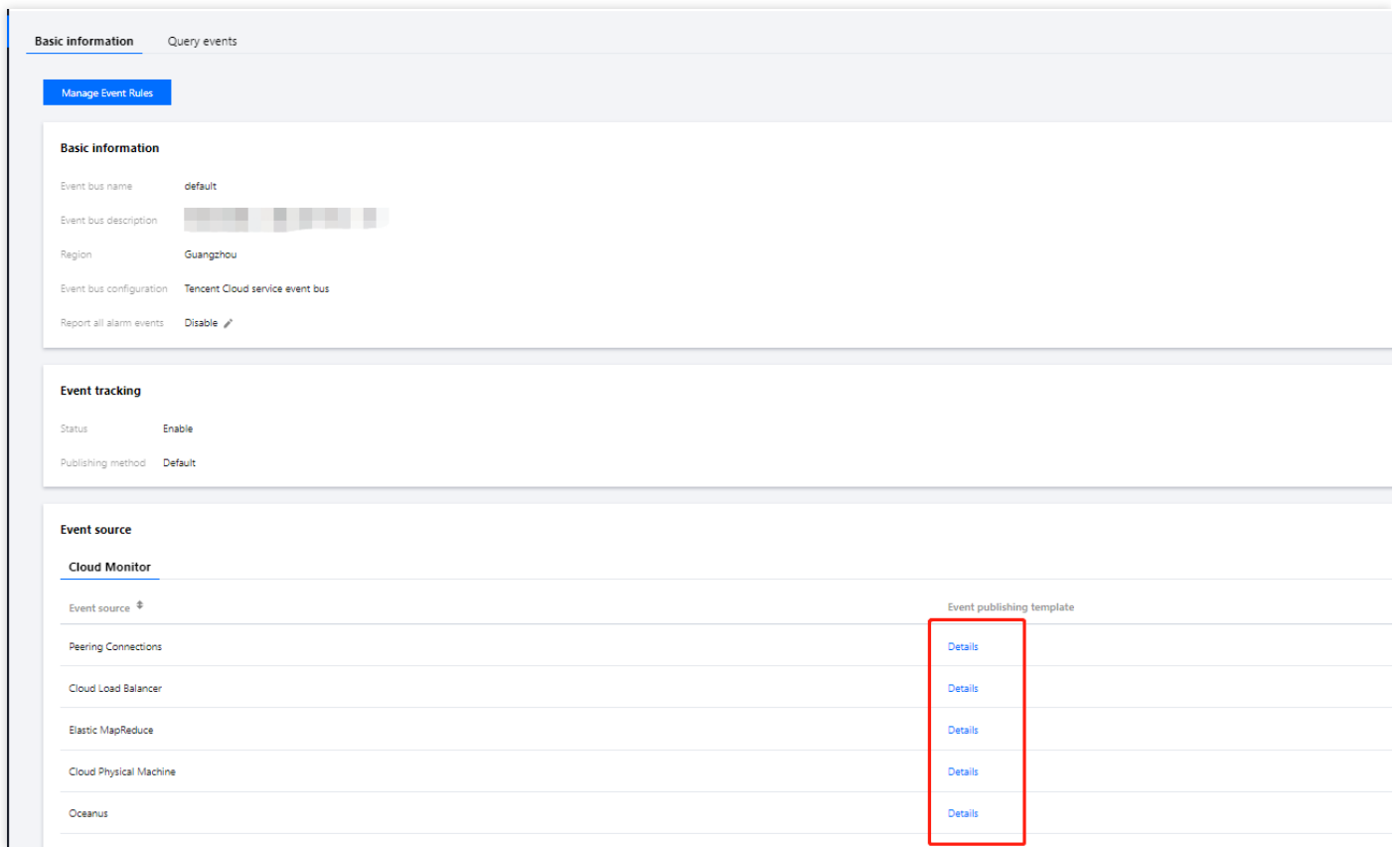
Cloud Monitor Event Center related features had been gradually disused since November 30, 2021 and will be replaced by EventBridge capabilities. In addition to the original features, new features such as rule matching, custom event buses, and multi-target delivery have been added. For existing Cloud Monitor users, we have completed automatic migration of existing alarm policies in April 2022. The number of alarm policies remains unchanged after the migration. To modify or add alarm policies, manually adjust them in the EventBridge console.

Alarm Configuration Directions

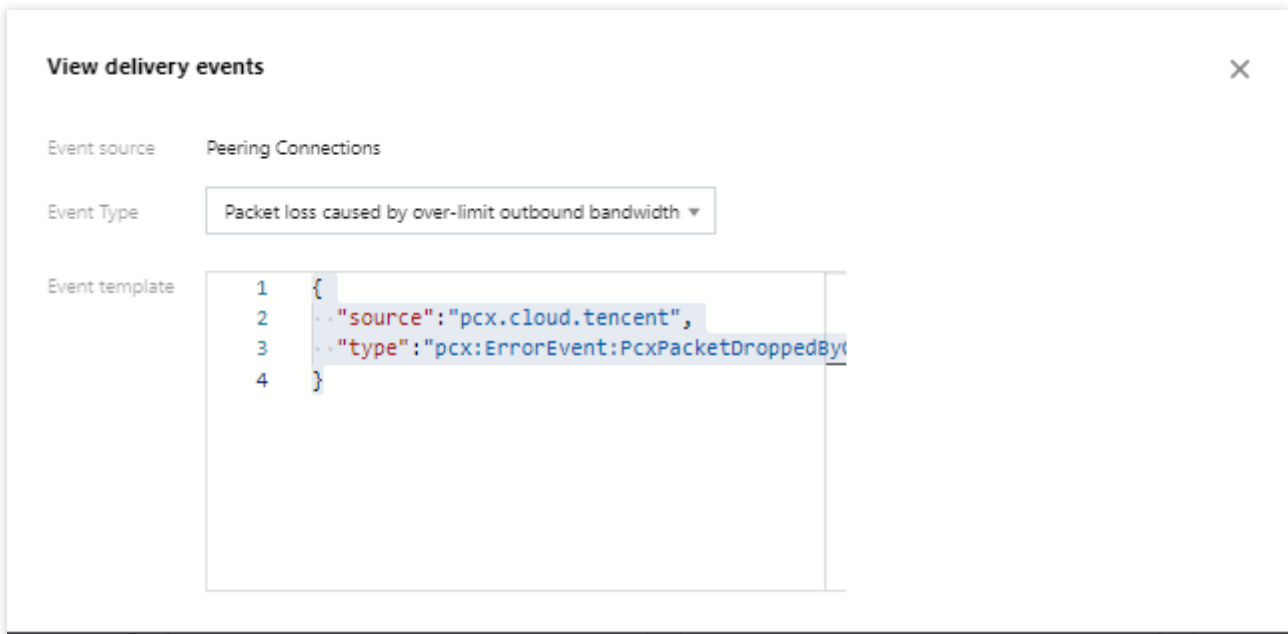
1. View the event list

1. Log in to the [EventBridge console](#).
2. Select the event bus region.
3. Click **the default Tencent Cloud service event bus** and enter the details page of the Tencent Cloud service event bus. On the details page, you can see the Tencent Cloud service events that have been delivered to the Tencent Cloud service event bus.

4. In the **Event Connector** area, you can view all Tencent Cloud services that support alarm event push.



You can click **Details** to view all alarm event types that are currently supported.



Sample

Taking a "ping unreachable" event generated by CVM as an example, the standard format for delivering the event to the Tencent Cloud service event bus is as follows:

```
{
  "specversion": "1.0",
  "id": "13a3f42d-7258-4ada-da6d-023a333b4662",
  "source": "${ProductName}.cloud.tencent",
  "type": "cvm:ErrorEvent:ping_unreachable",
  "subject": "${six-segment service description in CAM}",
  "time": 1615430559146,
  "region": "ap-guangzhou",
  "resource": [
    "qcs::eb:ap-guangzhou:uid1250000000:eventbusid/eventruleid"
  ],
  "datacontenttype": "application/json;charset=utf-8",
  "tags": {
    "key1": "value1",
    "key2": "value2"
  },
  "status": "1",
  "data": {
    "appId": "1250000011",
    "instanceId": "ins-xxxxxxx",
    "projectId": "11",
    "dimensions": {
      "ip": "127.0.0.1"
    },
    "additionalMsg": {
      "IP": "something unnormal"
    }
  }
}
```

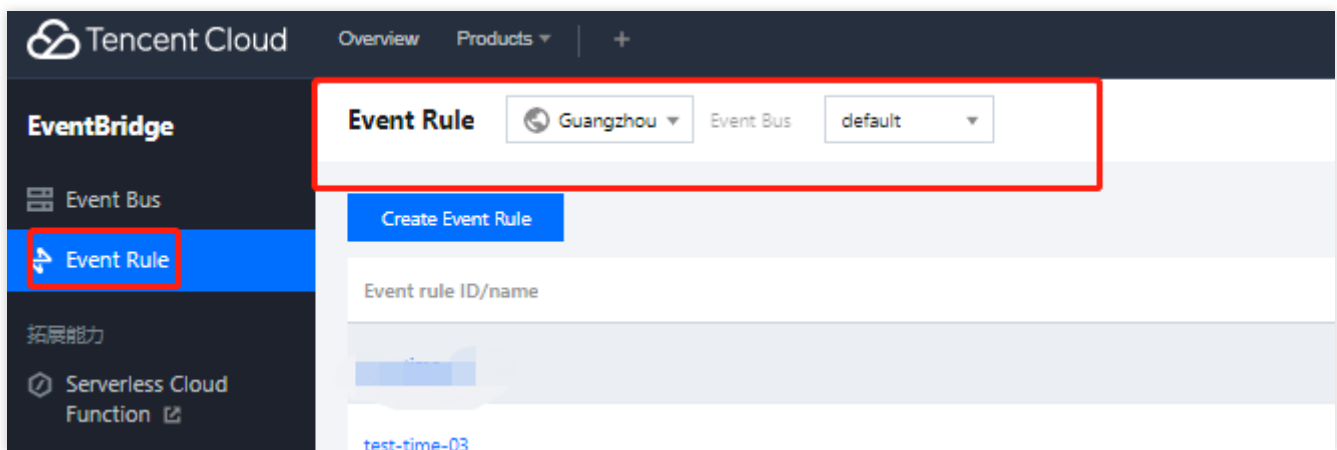
Field description

Field	Description	Data Type
specversion	Event structure version (CloudEvents version. Currently, only v1.0 is supported.)	String
id	ID returned by <code>PUT Event</code> .	String

Field	Description	Data Type
type	Type of the event input through <code>PUT Event</code> . The standard format of a Tencent Cloud service alarm event is <code>\${ProductName}:ErrorEvent:\${EventType}</code> , where colons are used to separate type fields.	String
source	Event source (which is required for a Tencent Cloud service event and is the abbreviation of <code>subject</code>). The value is <code>xxx.cloud.tencent</code> by default for a Tencent Cloud service.	String
subject	Event source details, which can be customized. QCS description such as <code>qcs::dts:ap-guangzhou:appid/uin:xxx</code> is used for a Tencent Cloud service by default.	String
time	Event time, which is a GMT+0 timestamp in milliseconds, such as <code>1615430559146</code> .	Timestamp
datacontenttype	Data structure declaration.	String
region	Region information.	String
status	Alarm event status. Valid values: 1 (abnormal), 0 (resolved), - (stateless).	String
tags	Resource tag.	String
data	Details of the event input through <code>PUT Event</code> , which are customizable by the specific business.	String

2. Configure an alarm event rule

1. Go to the **Event Rule** page, select the target event bus, and create an event rule under it to filter the events for which to configure alarm push.



2. Taking CVM alarm configuration as an example, you can also select another event alarm or all events. For more information on event match rules, see [Event Pattern](#).

Event matching

Rule pattern: Default

Tencent Cloud service: Cloud Virtual Machine

Event Type *: OOM ✔

Rule pattern preview *

```
1 {
2   "source": "cvm.cloud.tencent",
3   "type": [
4     "cvm:ErrorEvent:GuestOom"
5   ]
6 }
7
```

[Edit](#) [Examples](#)

3. If you want to limit the alarm scope to a specific instance, click **Edit** and add the **subject** field to the event pattern.

3. Configure delivery targets

For event alarm scenarios, you can set **Notification message** for the delivery target.

Notification message: You can configure a notification message to push your alarm events in the specified delivery

method to promptly reach users.

The screenshot shows the 'Create event rule' configuration page in the Tencent Cloud console. The page is divided into two steps: 'Rule pattern' (completed) and 'Delivery target' (current step). The 'Delivery target' section includes the following fields and options:

- Trigger method ***: A dropdown menu set to 'Notification message'.
- Message template ***: Two radio buttons: 'Monitoring alert template' (selected) and 'General notification template'.
- Notification method ***: A dropdown menu set to 'All methods'.
- publishing channel**: A section header.
- Recipients ***: A dropdown menu set to 'User' and an empty text input field.
- Notification period ***: A time range selector set to '09:30:00 ~ 23:30:00' with a clock icon for editing.
- Delivery Method ***: A section with five checkboxes: 'Email' (checked), 'SMS' (checked), 'WeChat' (unchecked), 'Phone' (unchecked), and 'Message Center' (unchecked).
- API callback**: A section header.
- Callback address ***: A dropdown menu set to 'WeCom Chatbot' and an empty text input field.

After completing the configuration, you can view and configure the push of alarm events in the EventBridge console.

Note :

- Use limits: For SMS message delivery, a notification message can contain up to 500 characters. For phone delivery, a notification message can contain up to 350 characters. If fields such as the instance name are too long, notification messages may fail to be sent due to excessive length. We recommend you configure multiple delivery channels at the same time.
- Cross-MLC-border API callback may fail due to network instability. Exercise caution when selecting API callback.

Quickly Migrating Cloud Monitor Event Center for Existing Users

For existing users of Cloud Monitor Event Center, we have completed automatic migration of existing policies at the end of April 2022. For more information, see [Quick Migration Guide](#). The backend service will automatically perform the following operations:

1. Automatically convert the existing alarm policies in Event Center to event rules in the Tencent Cloud service event bus (one policy corresponds to one rule).
2. Create the corresponding message push target for each existing notification template in Event Center and bind it to the default Tencent Cloud service event bus to complete alarm push configuration.