Tencent Cloud

Event Bridge

User Tutorial

Product Documentation

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This document will help you quickly understand the core concepts of EventBridge and get started with it.

1. Tencent Cloud EventBridge Overview

Tencent Cloud EventBridge (EventBridge) is a secure, stable, and efficient serverless event management platform. EventBridge can receive real-time events and relevant data streams from your applications, SaaS services, and Tencent Cloud services and route them to other Tencent Cloud service targets such as SCF or TDMQ. In addition, it supports processing and filtering custom events. You can set event rules and customize event match conditions and filter logic. When event data matching the event pattern defined in a rule is received, EventBridge will send the event to one or multiple targets defined in the rule.

2. Concepts

Before using EventBridge, you need to understand the following concepts:

2.1 Event

An event is a data record of a status change. In EventBridge, events are divided into two types:
Tencent Cloud service events: Cloud Monitor events (such as CVM kernel faults and OOM exceptions) and **CloudAudit events** that are generated by Tencent Cloud services. After you activate EventBridge, all Tencent Cloud service events will be delivered to the **Tencent Cloud service event bus**, which is the default event bus and cannot be modified or deleted. For more information, see Tencent Cloud Service Event.
Custom events: Events generated by your own applications. You can create a custom event bus and configure an event connector or use an API/SDK to deliver custom events.
The formats of events delivered to EventBridge should comply with CloudEvents - Version 1.0. The following is a typical event structure. For more information, see Event Structure.
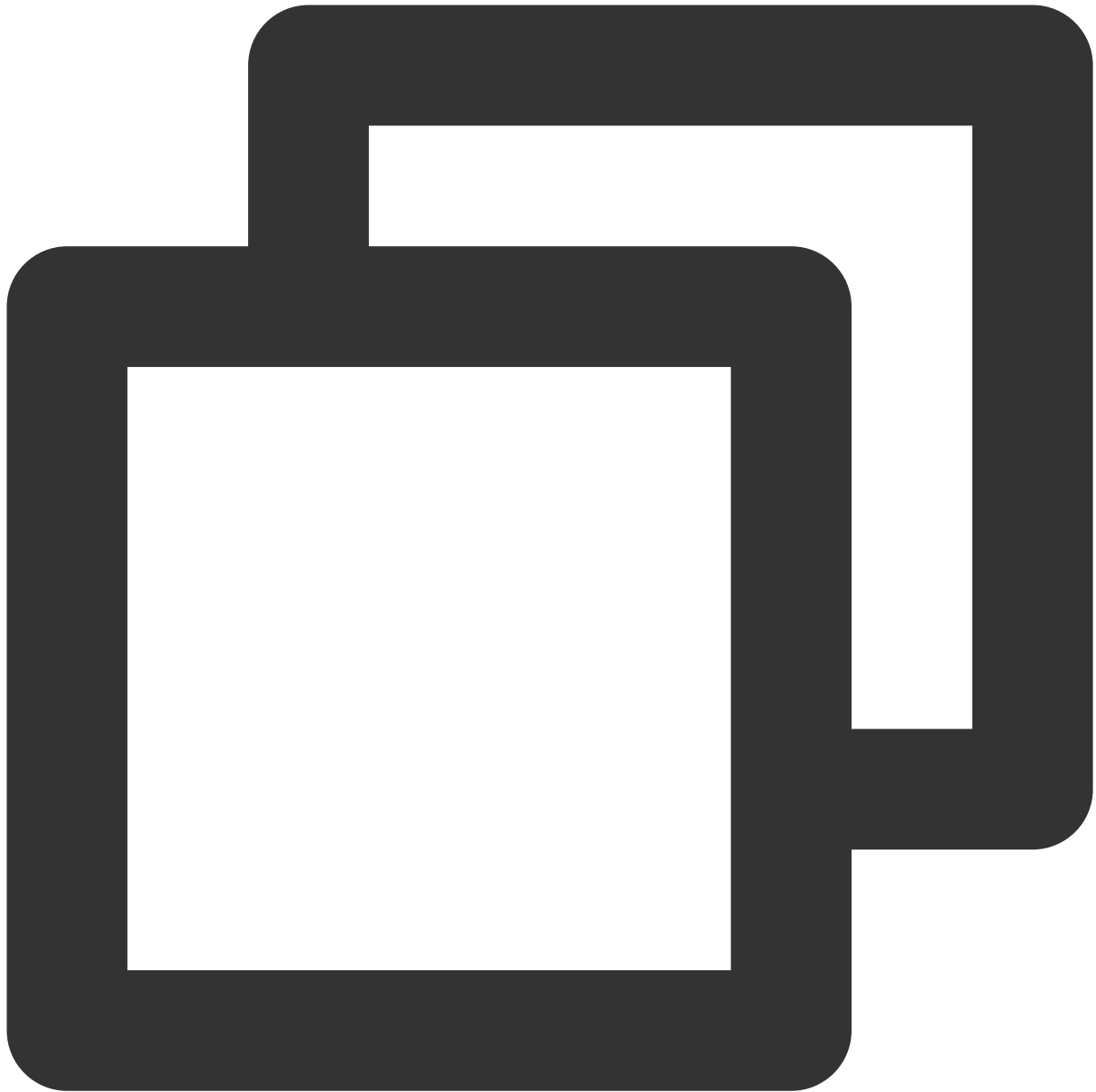
```
{
    "specversion":"1.0",
    "id":"13a3f42d-7258-4ada-da6d-023a333b4662",
    "type":"cos:created:object",
    "source":"cos.cloud.tencent",
    "subject":"qcs::cos:ap-guangzhou:uid1250000000:bucketname",
    "time":"1615430559146",
    "region":"ap-guangzhou",
    "datacontenttype": "application/json;charset=utf-8",
    "data":{
        $data_value
```

```
        }
    }
```

2.2 CloudEvents - Version 1.0

CloudEvents is a standard specification for defining the format of event data. For more information, see CloudEvents - Version 1.0.

2.3 Event source

An event source publishes produced events to Tencent Cloud EventBridge. EventBridge currently supports three types of event sources:

Tencent Cloud services: If you want to use the **Cloud Monitor events** (such as CVM kernel faults and OOM exceptions) and **CloudAudit events** (available soon) that are generated by Tencent Cloud services as event sources, you only need to activate the corresponding Tencent Cloud services, and then the Tencent Cloud services will be automatically connected to EventBridge. The events generated by Tencent Cloud services will be delivered to the **Tencent Cloud service event bus** by default. For more information, see Tencent Cloud Service Event.

Custom applications: If you want to connect a custom business as an event source, you can configure your application for connection to EventBridge through an API/SDK or an event connector.

Event connector: A connector is used to proactively pull events from event sources such as message queue services and gateways and push them to a custom event bus in **standard format**. You can bind one or more connectors to the custom event bus to automatically pull event content from message queues and gateways and push the event content to the specified custom event bus. For more information about connectors, see here.

2.4 Event bus

Event buses provide core capabilities of EventBridge, including event collection and storage. An event bus can be bound with several event rules and connectors. Event buses are divided into two types:

Tencent Cloud service event bus: This event bus collects the **monitoring and auditing events** generated by Tencent Cloud services. It is automatically created after you activate EventBridge and cannot be modified or deleted. You can manage the event rules in this event bus. All monitoring and auditing events generated by Tencent Cloud services are delivered to this event bus by default.

Custom event bus: It is an event bus created and managed by yourself and is used to receive events generated by your applications. Events of your applications can be published only to your custom event buses. For how to create a custom event bus, see Creating Event Bus.

2.5 Event rule

Each event bus has several event rules. As the core capability of EventBridge, event rules implement capabilities such as event triggering, filtering, and extraction. Event rules include:

Event match: Event match pattern that determines which events can be triggered and delivered to event targets. For how to write an event pattern, see Event Pattern.

Event target: Event processing terminal that consumes events.

You can specify several event targets for each event rule. When an event hits an event rule, the event will be pushed to the specified event target. For more information, see Event Rule.

2.6 Event target

Event targets are event egresses. Event targets currently supported by EventBridge include:

Message push services: For Tencent Cloud service events collected by the default Tencent Cloud service event bus, EventBridge allows you to configure message push services to push them to user terminals in real time. Currently, only the rules in the Tencent Cloud service event bus are supported.

CLS: As an event delivery pipeline on the cloud, EventBridge only filters, routes, and distributes events. If you need to log or store events, you can configure **CLS** as the delivery target.

SCF: You can deliver collected events to specified delivery targets for processing and consumption. Currently, EventBridge supports **SCF** as a delivery target and provides multiple preset templates to help you deliver events. For more information, see SCF Target Delivery.

2.7 Event delivery process

The process of delivering the monitoring and auditing events generated by Tencent Cloud services is as follows:
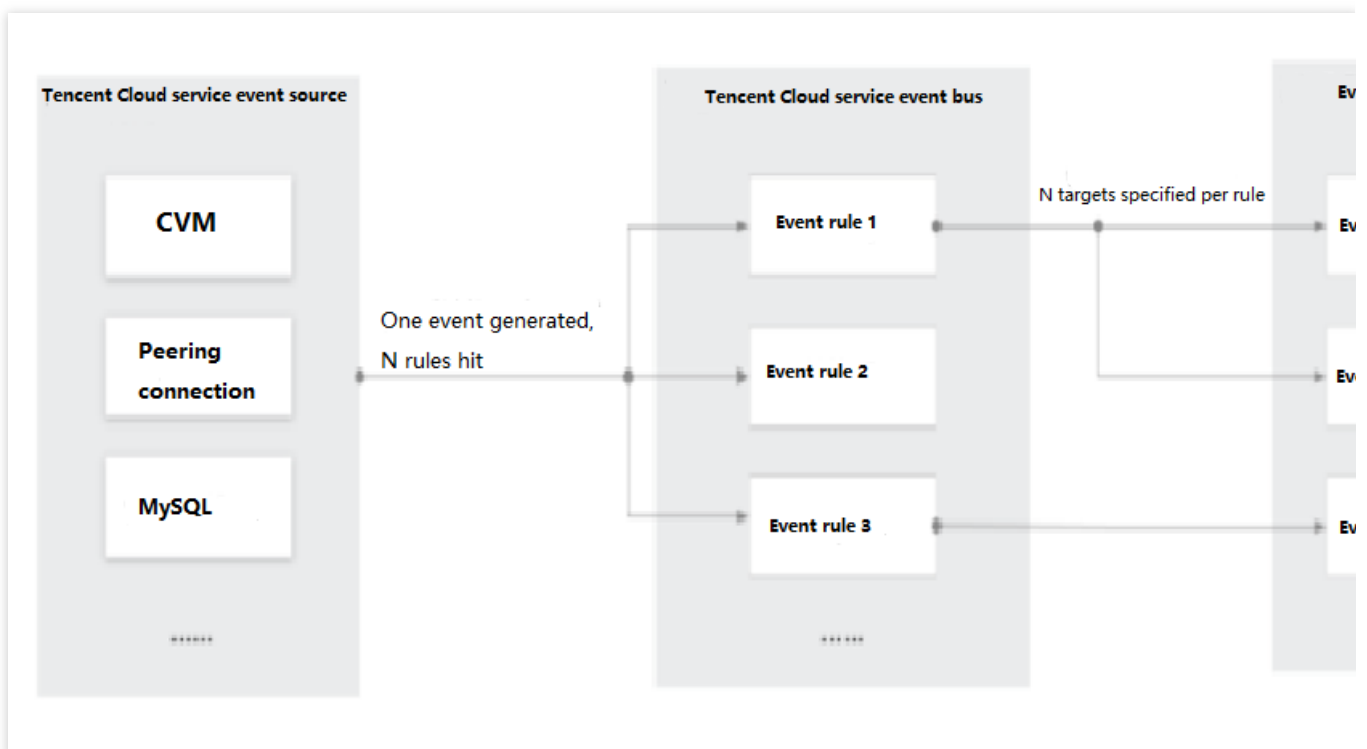
The process of delivering custom events via an event connector is as follows:
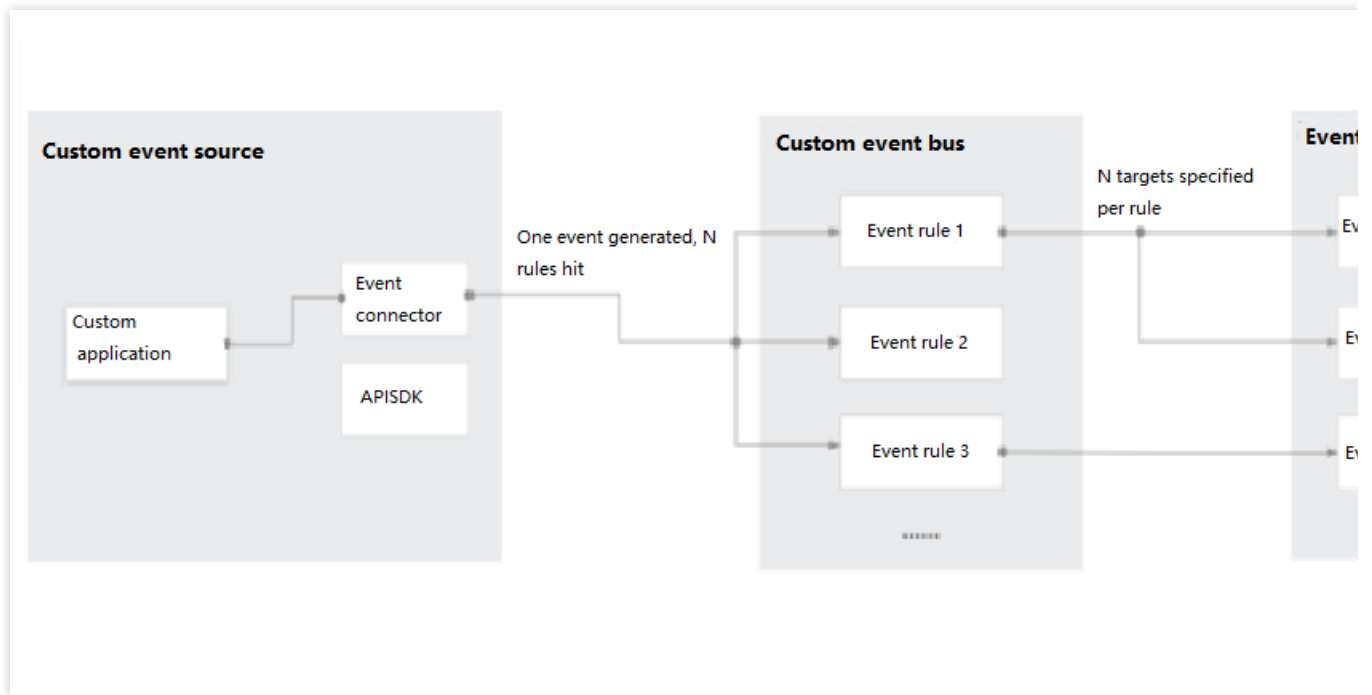
For more concepts in EventBridge, see Basic Concepts.

3. Features

Event collection: EventBridge provides a standard event delivery interface for standardized connection of different event sources, such as Tencent Cloud services and SaaS services.

Event management: EventBridge provides event management capabilities such as event format match, content filtering, format conversion, tracking, archiving, and replay to better support users in event-driven architecture (EDA).

Event delivery: EventBridge supports delivery to different types of targets with high scalability and can provide different solutions based on actual business scenarios.

4. Billing Mode

EventBridge is currently in beta test, during which you can use it free of charge.

5. Getting Started

Activating EventBridge

Quickly Configuring Tencent Cloud Service Alarm Push

Quickly Delivering Custom Events

6. FAQs

What are the application scenarios of EventBridge?

What are the benefits and strengths of EventBridge?

How to configure event filtering rules?

Tencent Cloud service event bus is created in Guangzhou by default. What about alarm events in other regions?

In event alarm scenarios, will instances under the current account be monitored globally?