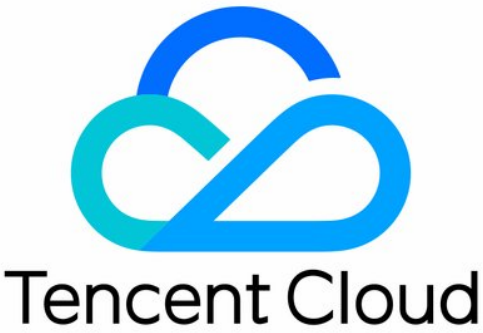
Grafana

Operation Guide

Product Documentation



©2013-2022 Tencent Cloud. All rights reserved.

Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice

Tencent Cloud

All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

- Operation Guide
  - Instance
    - Creating Instance
    - Searching for Instance
    - Terminating Instance
    - Upgrading Instance
    - Rebooting Instance
    - Viewing Instance's Basic Information
  - Tencent Cloud Service Integration
    - Tencent Cloud Service Integration
    - Service Role
  - Plugin Management
    - Installing Plugin
    - Uninstalling Plugin
  - Logging in to Grafana
  - Notification Channel
  - Configuration Management
  - Image Rendering
  - Account Management

©2013-2022 Tencent Cloud. All rights reserved.

Operation Guide
Instance
Creating Instance

Last updated：2024-01-02 18:00:32

This document describes how to create a TencentCloud Managed Service for Grafana (TCMG) instance.

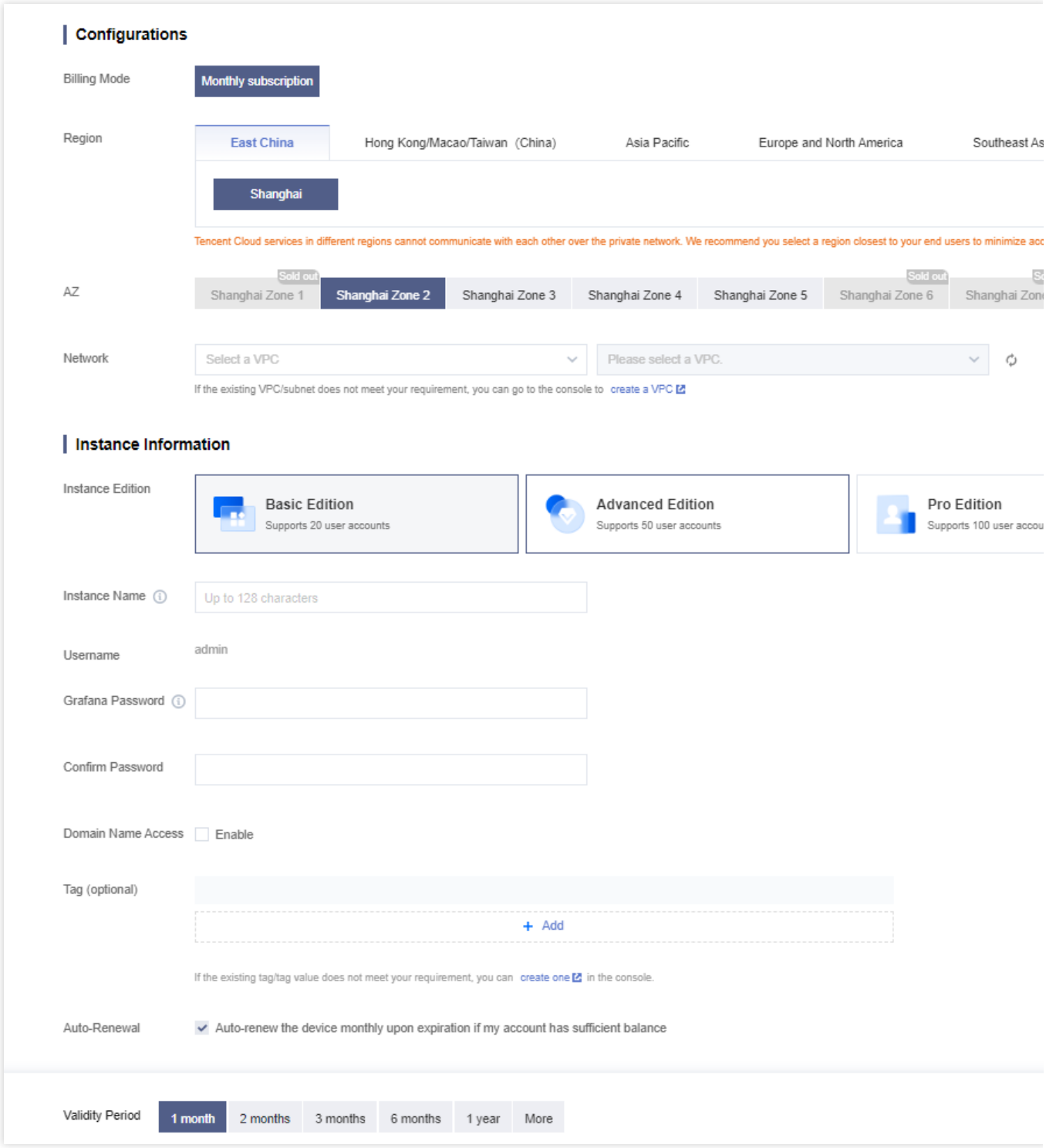
Directions

1. Enter the TCMG purchase page and configure the following items as needed:

Configuration Item	Required	Configuration Description
Billing Mode	Yes	Currently, only monthly subscription billing is supported.
Region and AZ	Yes	Select a region based on the region of your Tencent Cloud service. Tencent Cloud services in different regions cannot interconnect with each other over private network. Selecting the region closet to your end users can minimize access latency. Once the instance is created, you cannot switch the region.
Network	Yes	Currently, only subnets in certain AZs are supported. For more information, see the TCMG purchase page. “Network” refers to a logically isolated network space in Tencent Cloud. A VPC consists of at least one subnet. The system will provide a default VPC and subnet for you in each region. If the existing VPCs/subnets don't meet your requirements, you can create new ones as instructed in Creating VPC and Creating Subnets.
Instance Edition	Yes	Three instance editions are supported: Basic, Advanced, and Pro. They only differ in the number of accounts they support. For more information, see Monthly Subscription.
Instance Name	Yes	You can customize the name of a TCMG instance.
Username	Yes	The default username is “admin” and cannot be changed.
Password	Yes	A custom Grafana login password, which must contain 8–16 characters in at least three of the following four character types: uppercase letters, lowercase letters, digits, and symbols (-!@#$%^&*+=_;:.?).
Tag	No	Tags can be configured to manage resources by category in different dimensions. For more information, see Managing Instances via Tags.

©2013-2022 Tencent Cloud. All rights reserved.

Auto-Renewal	No	Your instance will be automatically renewed monthly upon expiration if your account has a sufficient balance.



2. Confirm the information you enter, click **Buy Now**, and make payments.

©2013-2022 Tencent Cloud. All rights reserved.

Searching for Instance

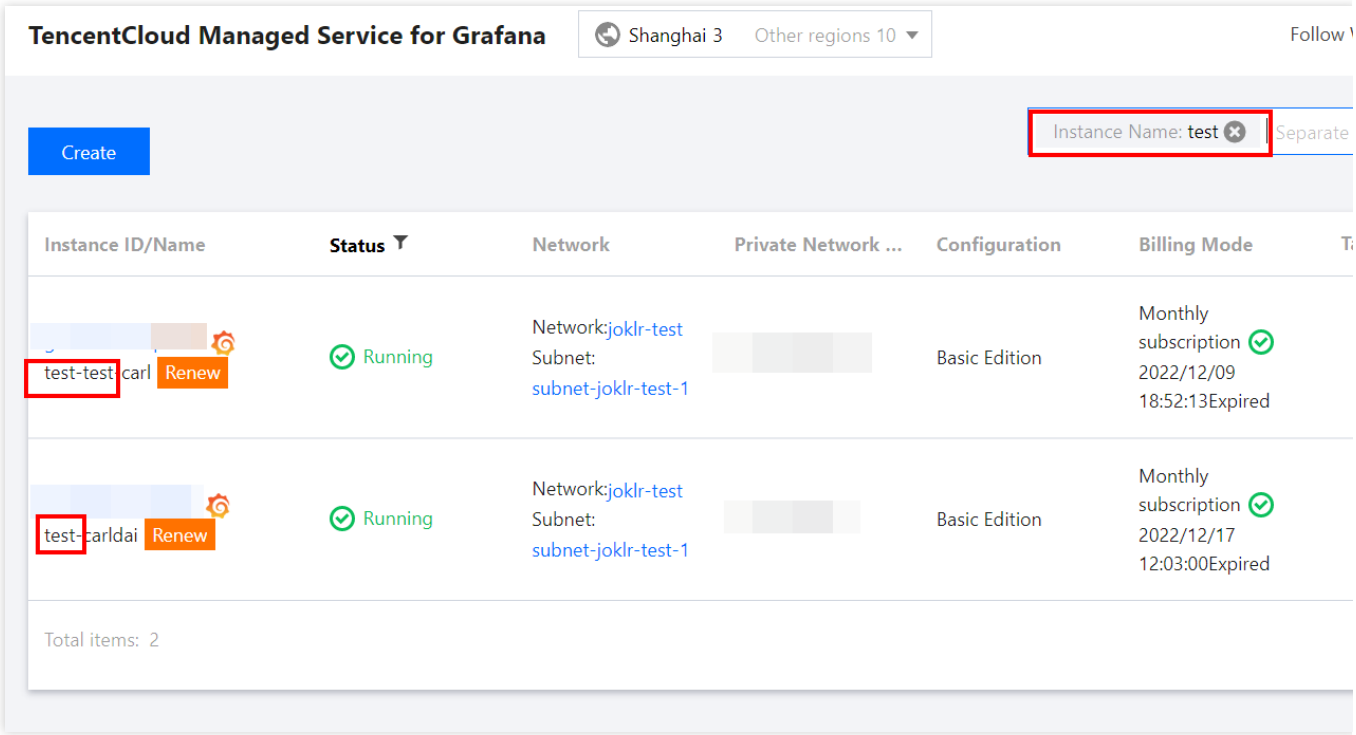
Last updated：2024-01-02 18:00:39

By default, Grafana instances in the current region are displayed in the TCMG console. To help you quickly find the instances in the current region, Tencent Cloud provides the search feature and allows you to filter instances by resource attributes such as instance ID, name, status, and tag.

Directions

1. Log in to the TCMG console.
2. Enter the conditions in the search box as needed and click

.



3. You can filter instances by different conditions. Currently, the following dimensions are supported:

Instance ID: you can directly enter multiple instance IDs for quick filtering. Each instance ID supports only full match-based filtering.

Instance name: you can enter only one instance name for filtering. Fuzzy match-based filtering is supported.

Status: you can enter multiple status values for filtering. You can also configure the list header for quick filtering.

©2013-2022 Tencent Cloud. All rights reserved.

Tag: you can enter multiple tags to filter instances. You can also directly click a tag value in the instance list for filtering.

©2013-2022 Tencent Cloud. All rights reserved.

Terminating Instance

Last updated：2024-01-02 18:00:46

If you no longer use an instance, you can terminate/return it, and it will be suspended once terminated/returned. You can reboot suspended instances according to different scenarios and needs.

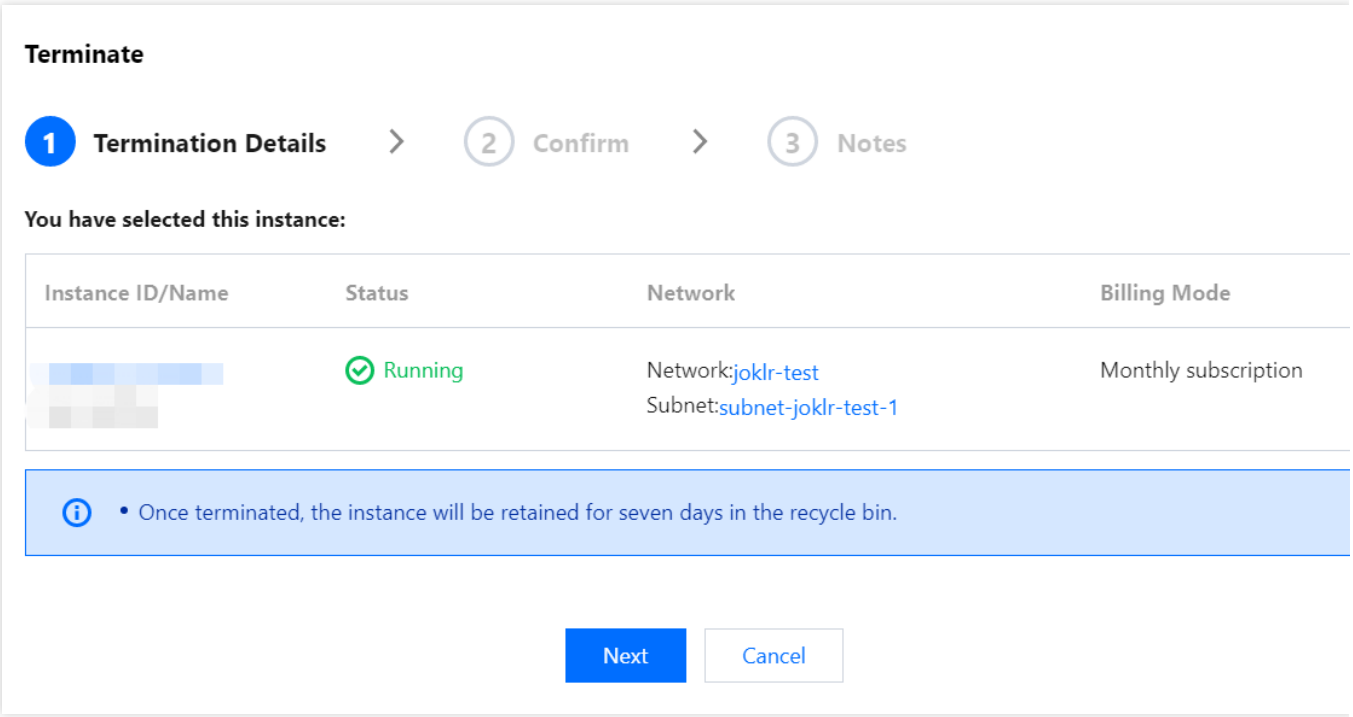
Impact

Once an instance is suspended, its data will be affected as follows:
IP: the corresponding IP address will be returned.
Grafana: Grafana cannot be accessed at the corresponding domain name.
Data retention: after an instance is terminated/returned, it will be suspended and retained for 7 days, after which it will be terminated and its data will be deleted and cannot be recovered.

Directions

1. Log in to the TCMG console.
2. In the instance list, select the Grafana instance to be terminated/returned and click **More** > **Instance Status** > **Terminate**/**Return** on the right.
3. As termination/return is a high-risk operation, in the **Terminate**/**Return** window that pops up, complete the three termination/return steps as prompted and click **OK**.

©2013-2022 Tencent Cloud. All rights reserved.



©2013-2022 Tencent Cloud. All rights reserved.

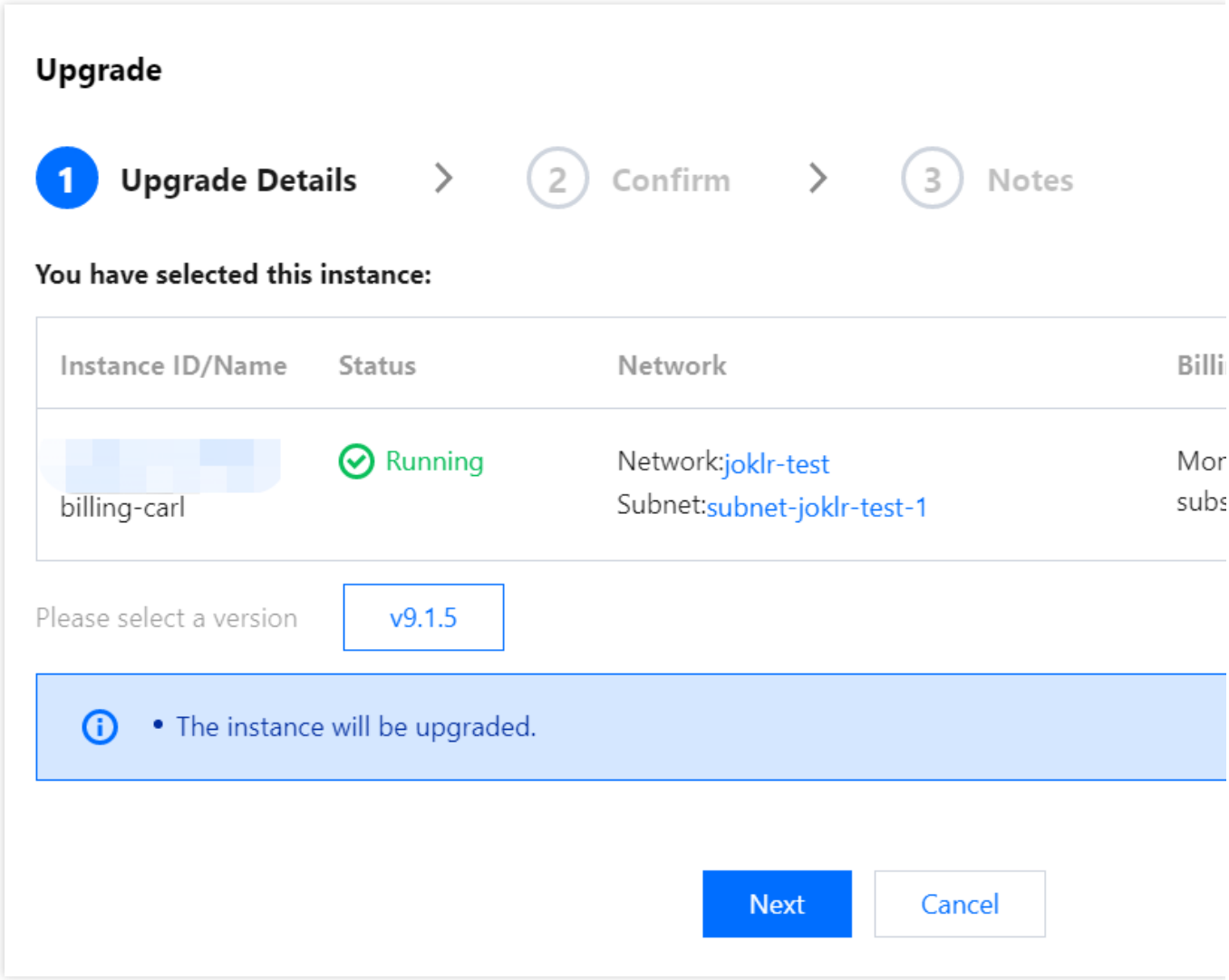
Upgrading Instance

Last updated：2024-01-02 18:00:52

This document describes how to upgrade a Grafana instance.

Directions

1. Log in to the TCMG console.
2. In the instance list, select the Grafana instance to be upgraded and click **More** > **Instance Status** > **Upgrade** on the right.
3. In the pop-up window, select the target version to upgrade to.



4. After all steps are completed, the instance will be upgraded and rebooted.

©2013-2022 Tencent Cloud. All rights reserved.

Notes

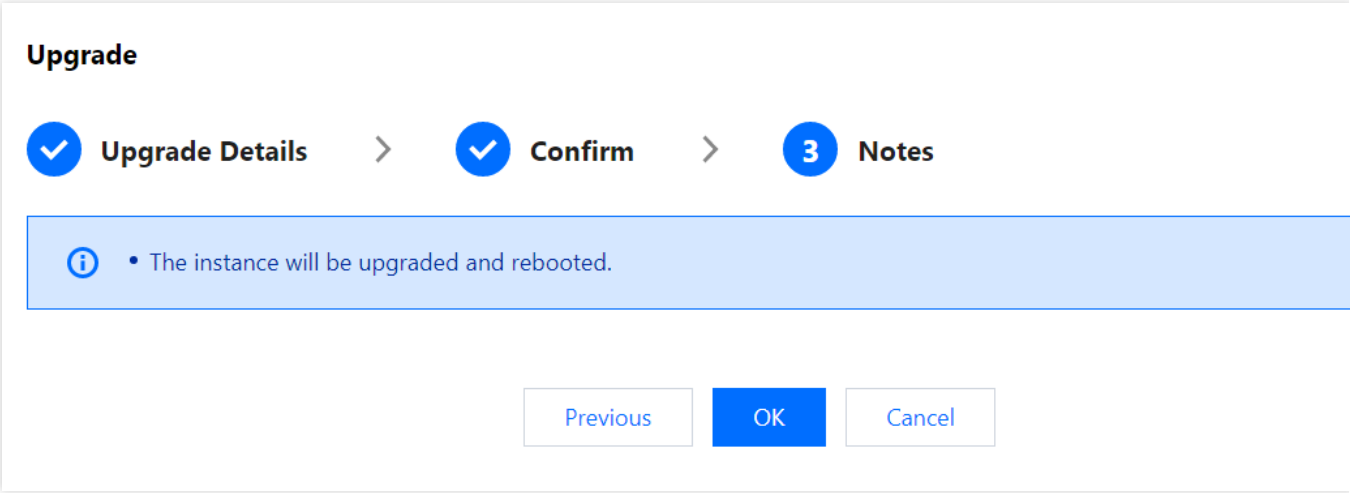
1. Open-Source Grafana can be upgraded only from one version to the next version, and for instance upgrade across more than two versions, you can upgrade the instance multiple times.
2. When an instance is upgraded, its data will be backed up on the backend. If the upgrade fails, the instance will be automatically restored to the status before the upgrade.

©2013-2022 Tencent Cloud. All rights reserved.

Rebooting Instance

Last updated：2024-01-02 18:00:59

Instance rebooting will be triggered when you modify the following Grafana configuration items.
SSO and disablement.
Custom DNS.
Tencent Cloud service integration.
Installed plugin.
Notification channel.
Grafana INI configuration.
LDAP configuration.
Environment variable.



Notes

1. The instance rebooting process takes about one minute.
2. During rebooting, to ensure data consistency, you can still access Grafana to view the monitoring data at the domain name, but editing operations will not take effect.
3. During rebooting, you can still edit the Grafana configuration in the console.

©2013-2022 Tencent Cloud. All rights reserved.

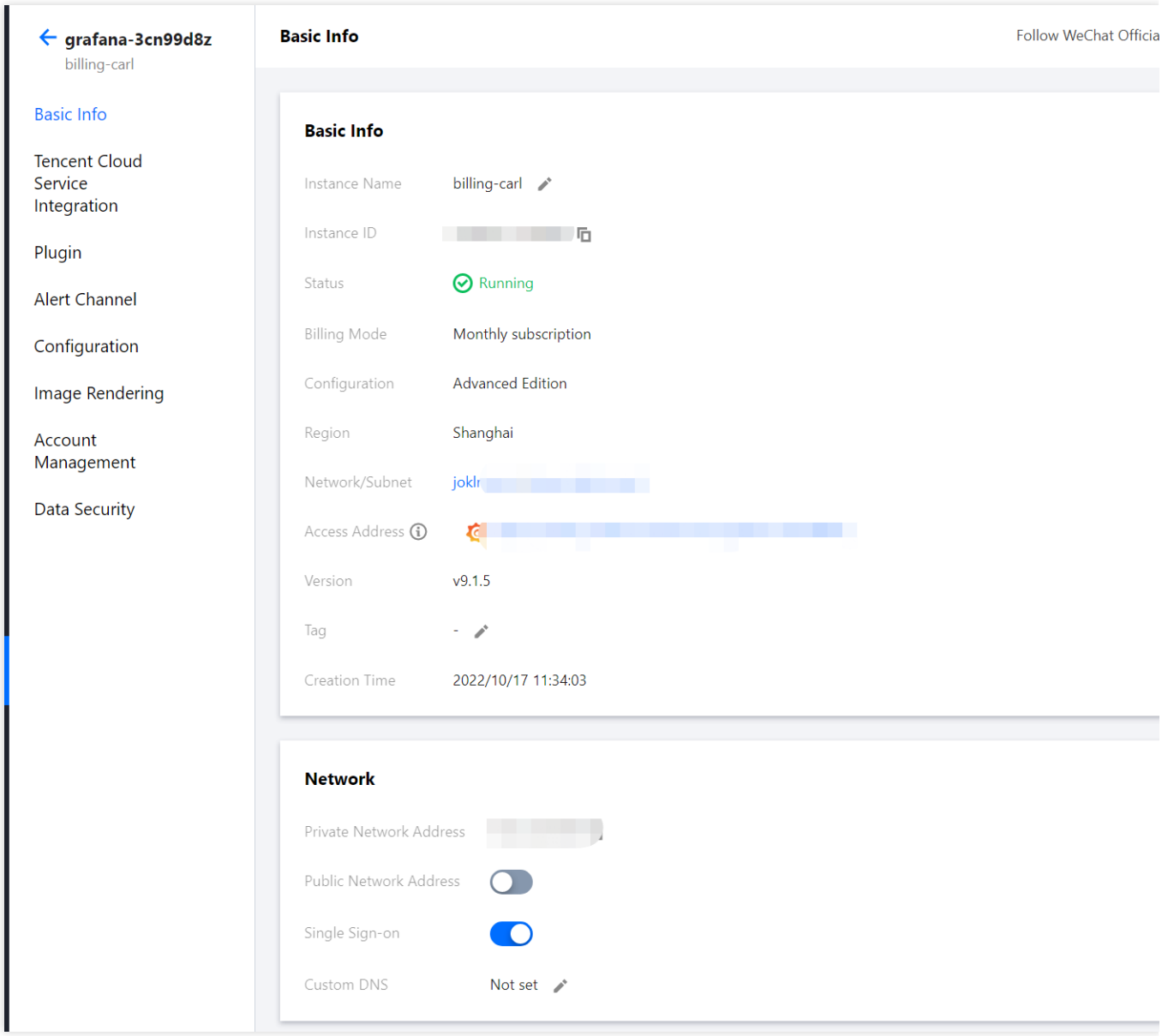
Viewing Instance's Basic Information

Last updated：2024-01-02 18:01:04

This document describes how to view the basic information of an instance.

Directions

1. Log in to the TCMG console.
2. In the instance list, find the target instance and click its **instance ID** or **Management** on the right to view its basic information.



©2013-2022 Tencent Cloud. All rights reserved.

3. You can perform the following operations on the basic information page:

Rename the instance.

Edit instance tags.

Enable public network access.

Configure a public IP allowlist to enhance security.

Enable SSO. SSO is a unified authentication and authorization mechanism. After it is enabled, you can log in to Grafana with your Tencent Cloud account.

Customize your private DNS as needed to allow Grafana to resolve and access domain names through it.

Notes on SSO

1. SSO supports tags. You can configure tags for your instance, and sub-accounts that have permissions of the tag will automatically get the login permission.

2. The account permission for SSO login is Admin. Grafana itself doesn't support getting the Server Admin permission through SSO. You can log in with your password and configure the Server Admin permission for SSO.

©2013-2022 Tencent Cloud. All rights reserved.

Tencent Cloud Service Integration

Tencent Cloud Service Integration

Last updated：2024-01-02 18:01:11

You can perform the following operations on the Tencent Cloud service integration page:
View available integrations
Manage installed integrations
Configure service roles

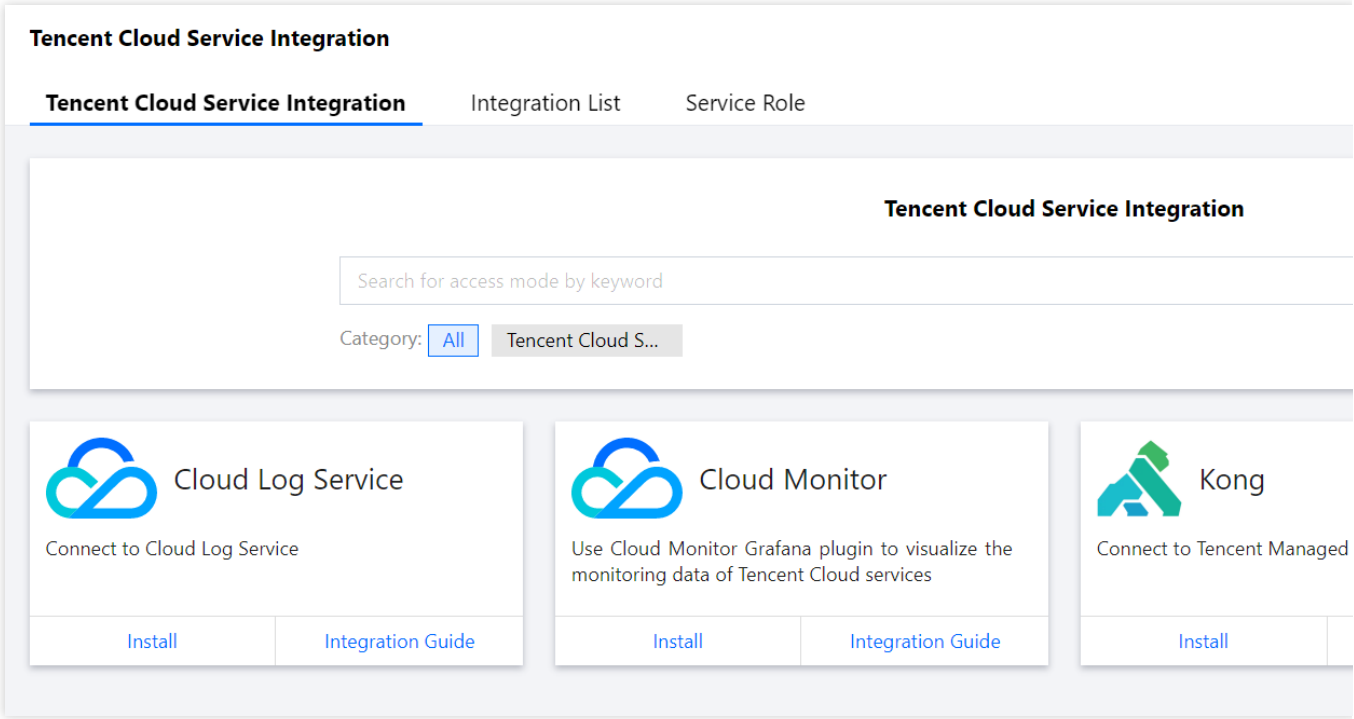
Prerequisites

1. Log in to the TCMG console.
2. Find the corresponding Grafana instance in the list and click its **instance ID** to enter the Grafana instance management page.
3. Click **Tencent Cloud Service Integration** on the left sidebar.

Viewing Available Integrations

On the **Tencent Cloud Service Integration** page, you can view and search for the available integrations of the current instance and install and connect them. After they are connected successfully, their monitoring data will be displayed on the Grafana dashboard.

©2013-2022 Tencent Cloud. All rights reserved.



Prometheus

1. Click **Install** below **Prometheus** to enter the installation page.
2. Configure the data source:

Data Source Name: enter the Prometheus instance ID.

Data Source Address: enter the private network address of Prometheus such as `http://x.x.x.x:9090`.

UID: it is the unique data source ID. We recommend you enter the Prometheus instance ID.

Account: `Appid` of your Tencent Cloud account, i.e., the account on the Prometheus instance details page.

Password: token on the Prometheus instance details page.

Dashboard Configuration: the dashboards in the Prometheus integration center will be automatically installed through this optional parameter, so you don't need to enter it.

3. After completing the configuration, click **Save**. After the system is rebooted, you can view the installed Prometheus data source on the Grafana data source page.

CM

1. Click **Install** below **CM** to enter the installation page.
2. Configure the data source:

Data Source Name: enter the data source name.

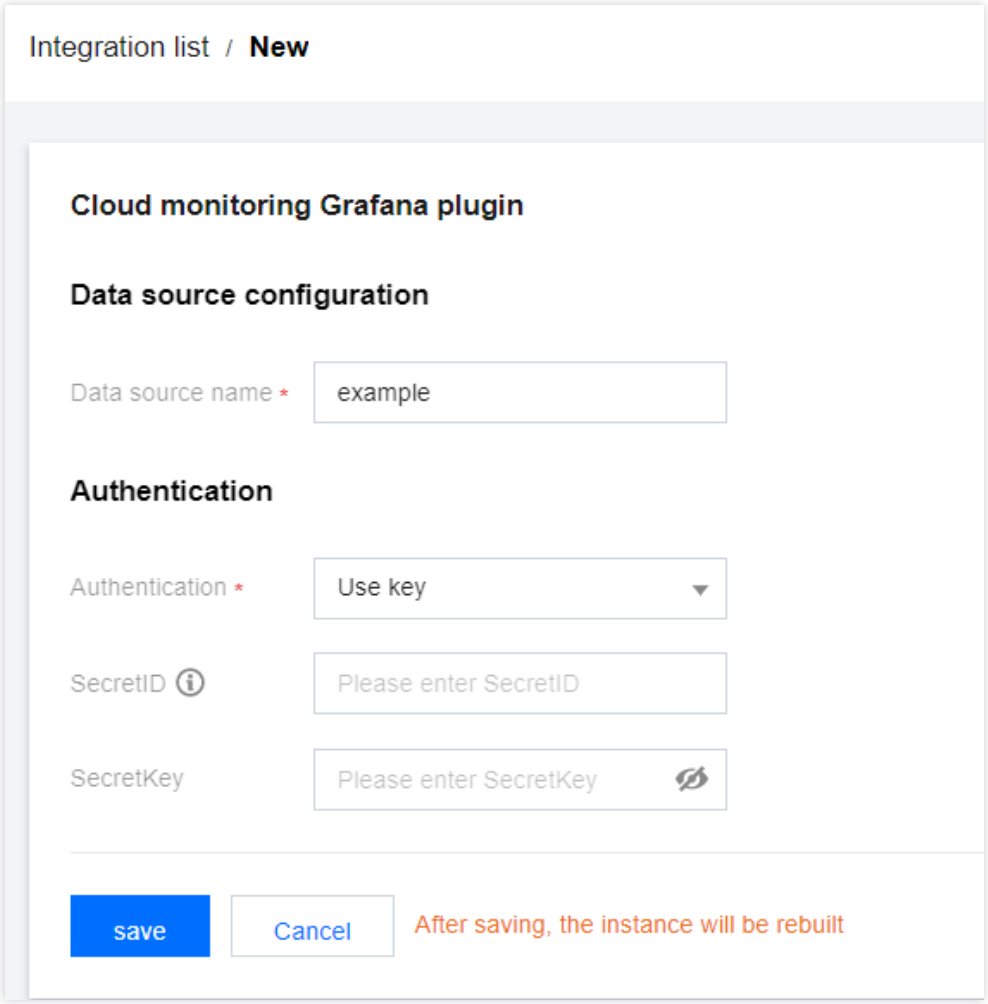
Authentication: select the authentication type.

With key:

SecretID: enter your `SecretID`.

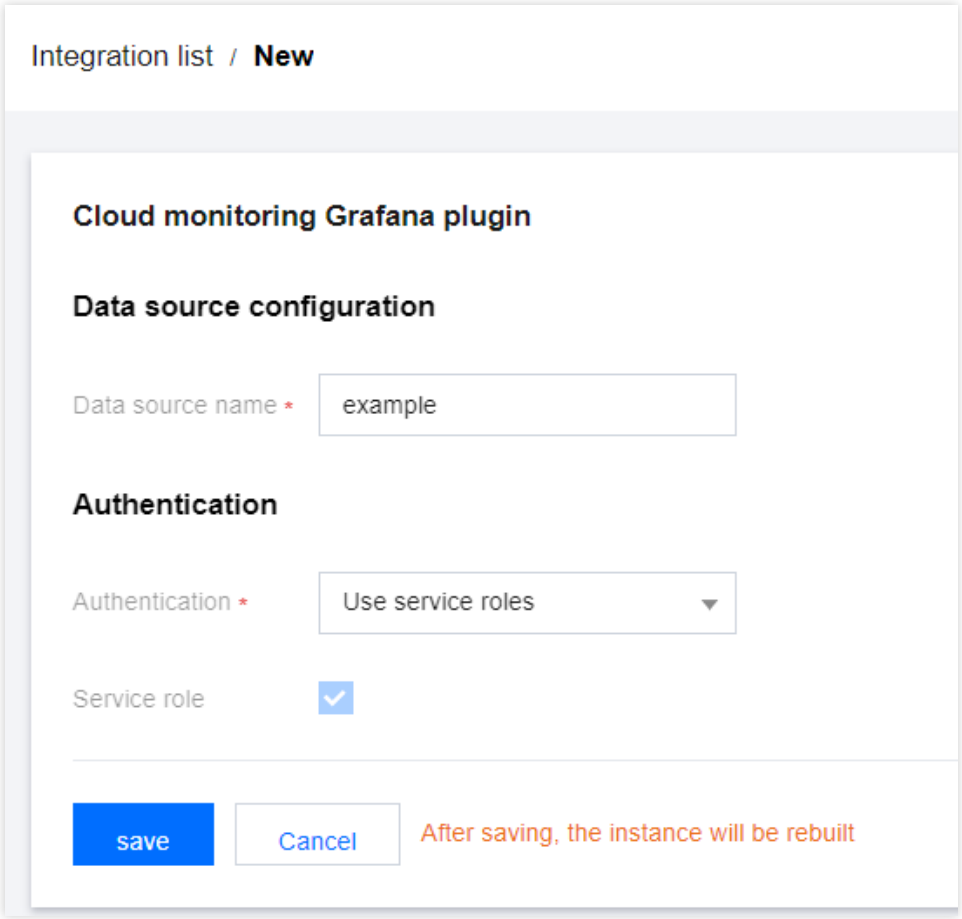
SecretKey: enter your `SecretKey`.

©2013-2022 Tencent Cloud. All rights reserved.



With service role: this option requires you to configure the service role with corresponding permissions for your instance. For detailed directions, see Service Role.

©2013-2022 Tencent Cloud. All rights reserved.

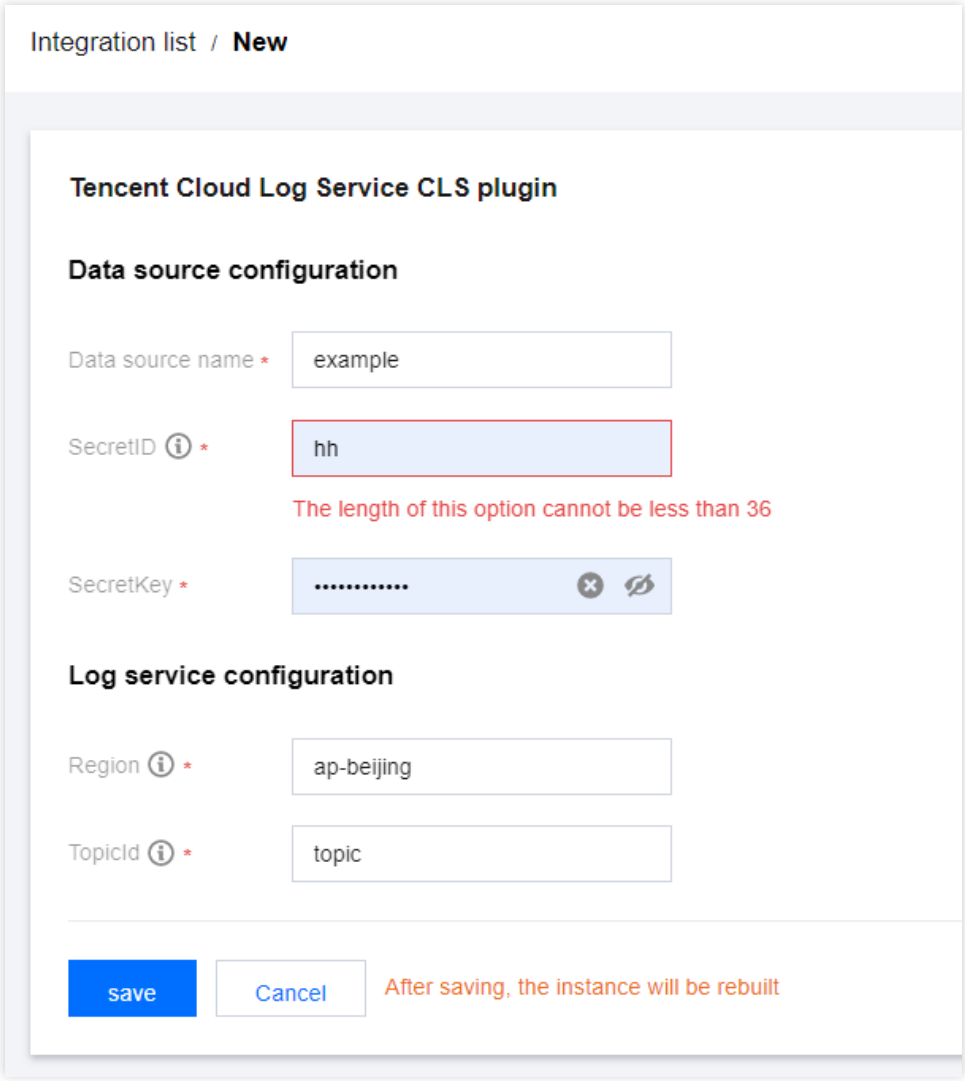


3. After completing the configuration, click **Save**. After the system is rebooted, you can view the installed CM data source on the Grafana data source page.

CLS

1. Click **Install** below **CLS** to enter the installation page.

©2013-2022 Tencent Cloud. All rights reserved.



2. Configure the data source:

Data Source Name: enter the data source name.

SecretID: enter your `SecretID` .

SecretKey: enter your `SecretKey` .

3. Configure CLS:

Region: region such as `ap-guangzhou` . For the complete list, see Available Regions.

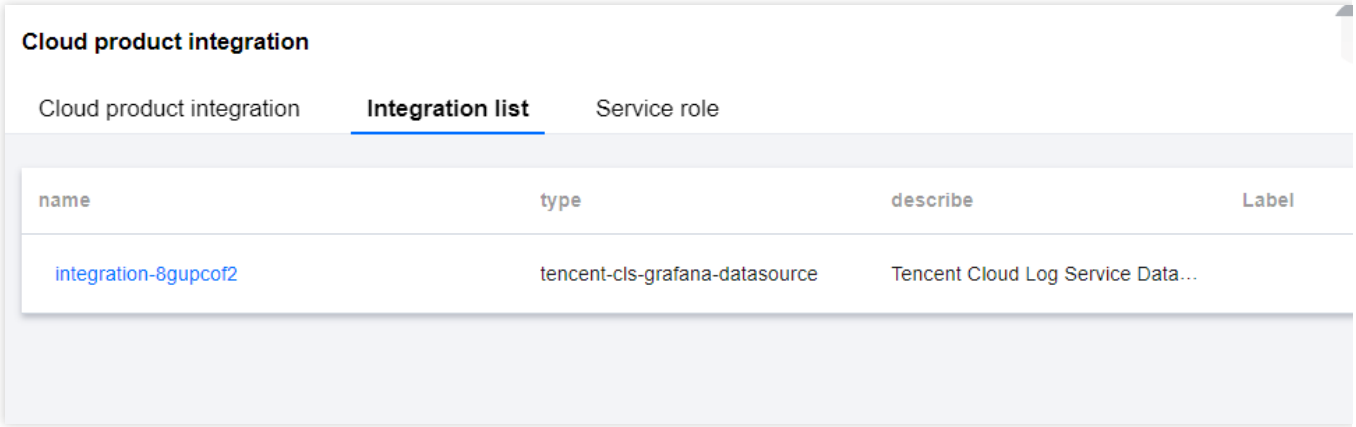
TopicId: log topic. For more information, see Log Topic.

4. After completing the configuration, click **Save**. After the system is rebooted, you can view the installed CLS data source on the Grafana data source page.

Managing Installed Integrations

Select **Integration List** to view the installed integrations, which may be installed by you or automatically by Tencent Cloud services through the binding relationship and can be deleted in the **Operation** column.

©2013-2022 Tencent Cloud. All rights reserved.



©2013-2022 Tencent Cloud. All rights reserved.

Service Role

Last updated：2024-01-02 18:01:19

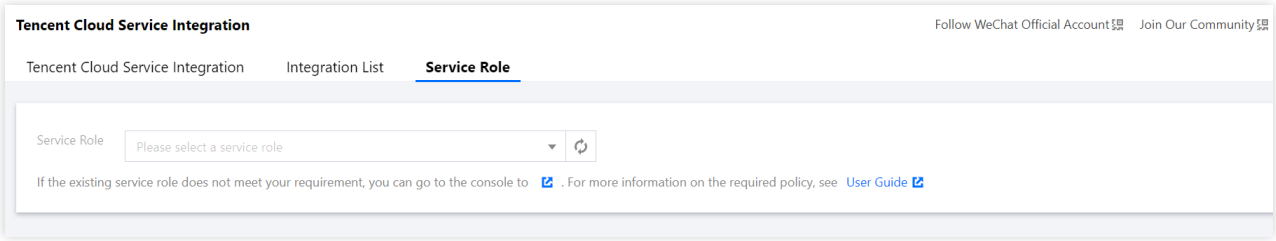
After you authorize your Grafana instance with a service role, it can access corresponding APIs with the temporary key of the service role. Do not enter sensitive `SecretID` / `SecretKey` ; otherwise, the data security may be compromised.

Prerequisites

1. Log in to the TCMG console.
2. In the instance list, find the target instance and click **Instance ID**.
3. On the instance details page, click **Tencent Cloud Service Integration** in the list on the left.

Directions

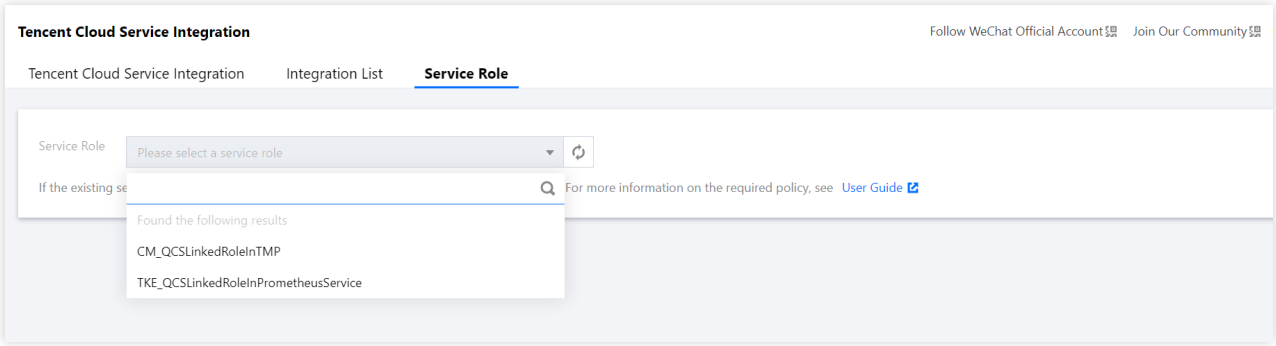
Click the **service role editing** icon in the top-right corner of the **Tencent Cloud Service Integration** page to configure a service role for the current instance.



Selecting service role

1. Click the **Service Role** drop-down list, and eligible service roles will be automatically loaded.
2. Select a preconfigured or self-created service role. Different Tencent Cloud services have different requirements for service role permissions, and you can create service roles as needed.
3. Click **Save**, and the instance will be rebooted.

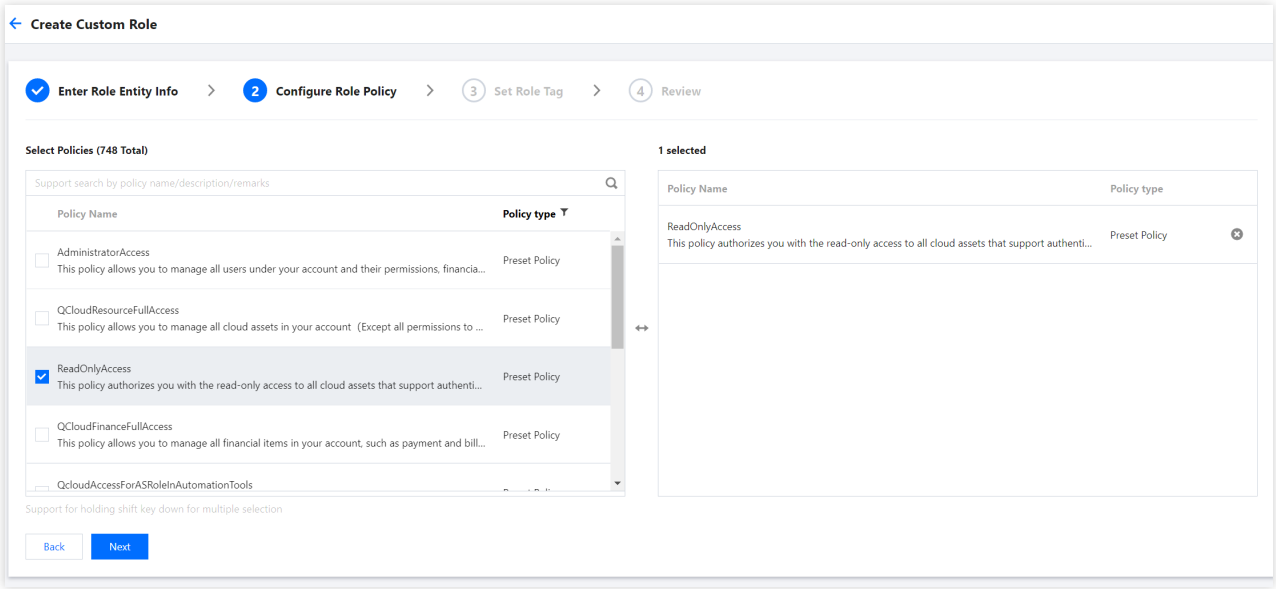
©2013-2022 Tencent Cloud. All rights reserved.



Creating service role

For demonstration purposes, this section uses the preconfigured `ReadOnlyAccess` policy as an example. You can view the policies required by Tencent Cloud services at the end of this document and configure read-only access as needed.

1. Go to the CAM > Role page.
2. Click **Create Role** in the top-right corner and select **Tencent Cloud Product Service** in the pop-up window.
3. In the **Enter role entity info** step, select **Cloud Virtual Machine (CVM)** and click **Next**.
4. In the **Configure role policy** step, search for and select **ReadOnlyAccess** and click **Next**.



5. Preview the custom role, name it, and click **Complete**.

Policies required by Tencent Cloud services

Policies required by TCMG plugins

Policy Description	Policy Name

©2013-2022 Tencent Cloud. All rights reserved.

Read-Only access to CM	QcloudMonitorReadOnlyAccess
Read-Only access to CVM resources	QcloudCVMReadOnlyAccess
Read-Only access to CLS	QcloudCLSReadOnlyAccess

Policy required by CLS

Policy Description	Policy Name
Read-Only access to CLS	QcloudCLSReadOnlyAccess

©2013-2022 Tencent Cloud. All rights reserved.

Plugin Management
Installing Plugin

Last updated：2024-01-02 18:01:28

Currently, TCMG provides common Grafana plugins for you to install as needed. This document describes how to install plugins.

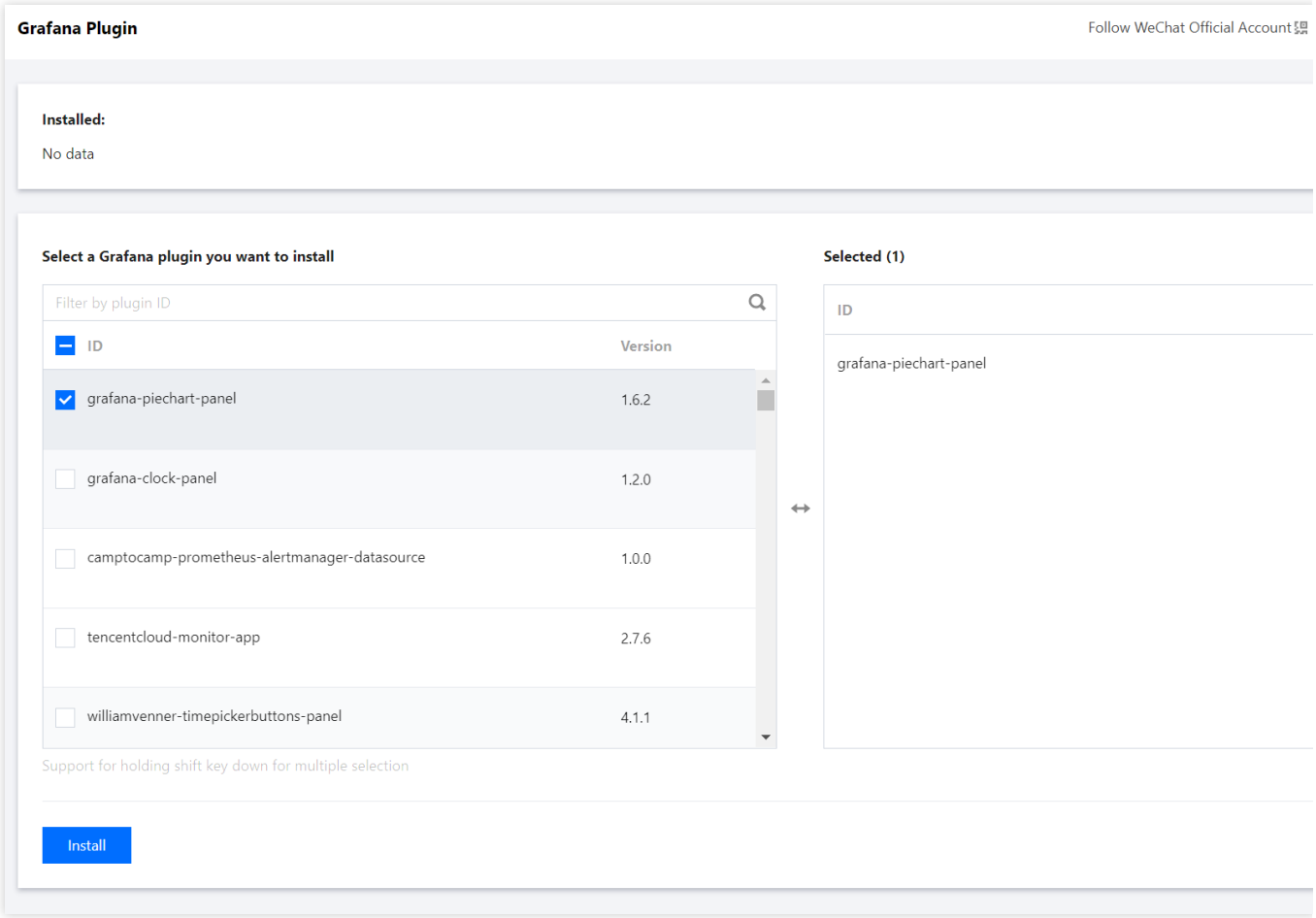
Prerequisites

You have created a Grafana instance.

Directions

1. Log in to the TCMG console.
2. Select the Grafana instance from the instance list.
3. Click **Plugin** on the left sidebar.
4. Select the desired plugin in the list and click **Install**.

©2013-2022 Tencent Cloud. All rights reserved.



©2013-2022 Tencent Cloud. All rights reserved.

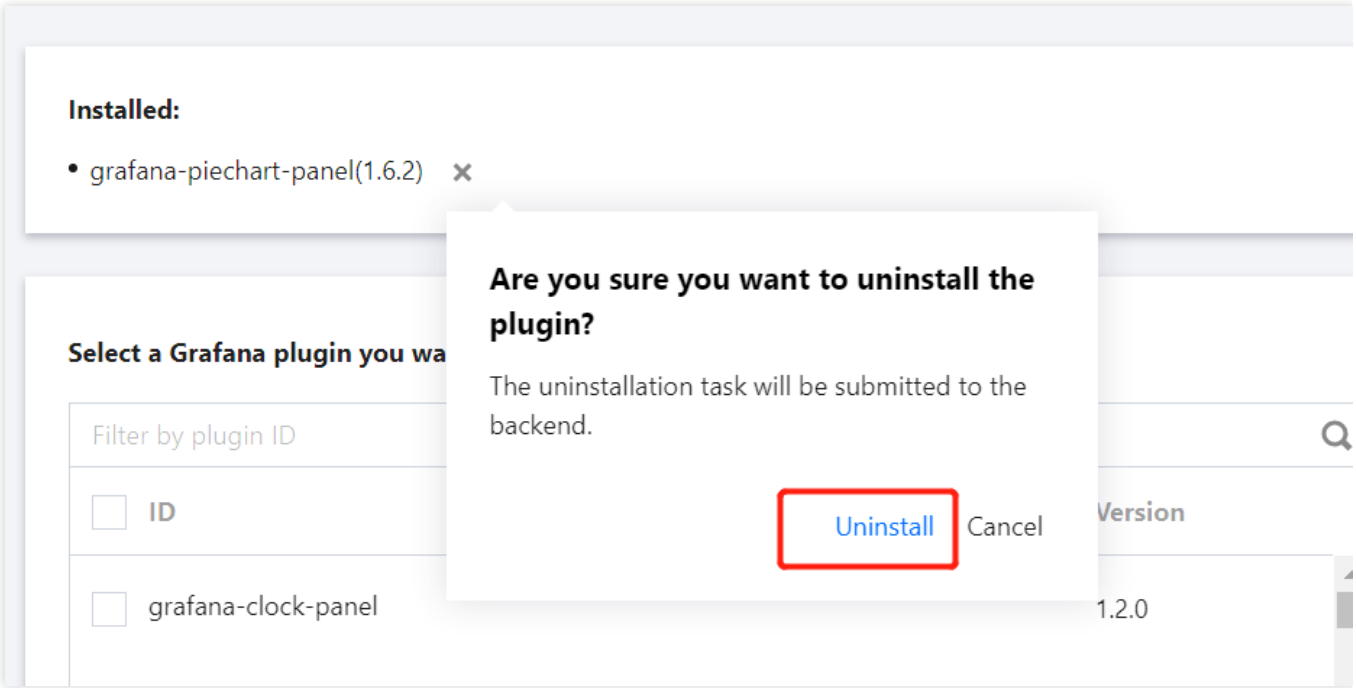
Uninstalling Plugin

Last updated：2024-01-02 18:01:34

This document describes how to uninstall a TCMG plugin.

Directions

1. Log in to the TCMG console.
2. Select the Grafana instance from the instance list.
3. Click **Plugin** on the left sidebar.
4. Select the plugin to be uninstalled in the list of installed plugins, click × on the right, click **Uninstall** > **OK** in the pop-up window, and wait for the instance to be rebooted.



©2013-2022 Tencent Cloud. All rights reserved.

Logging in to Grafana

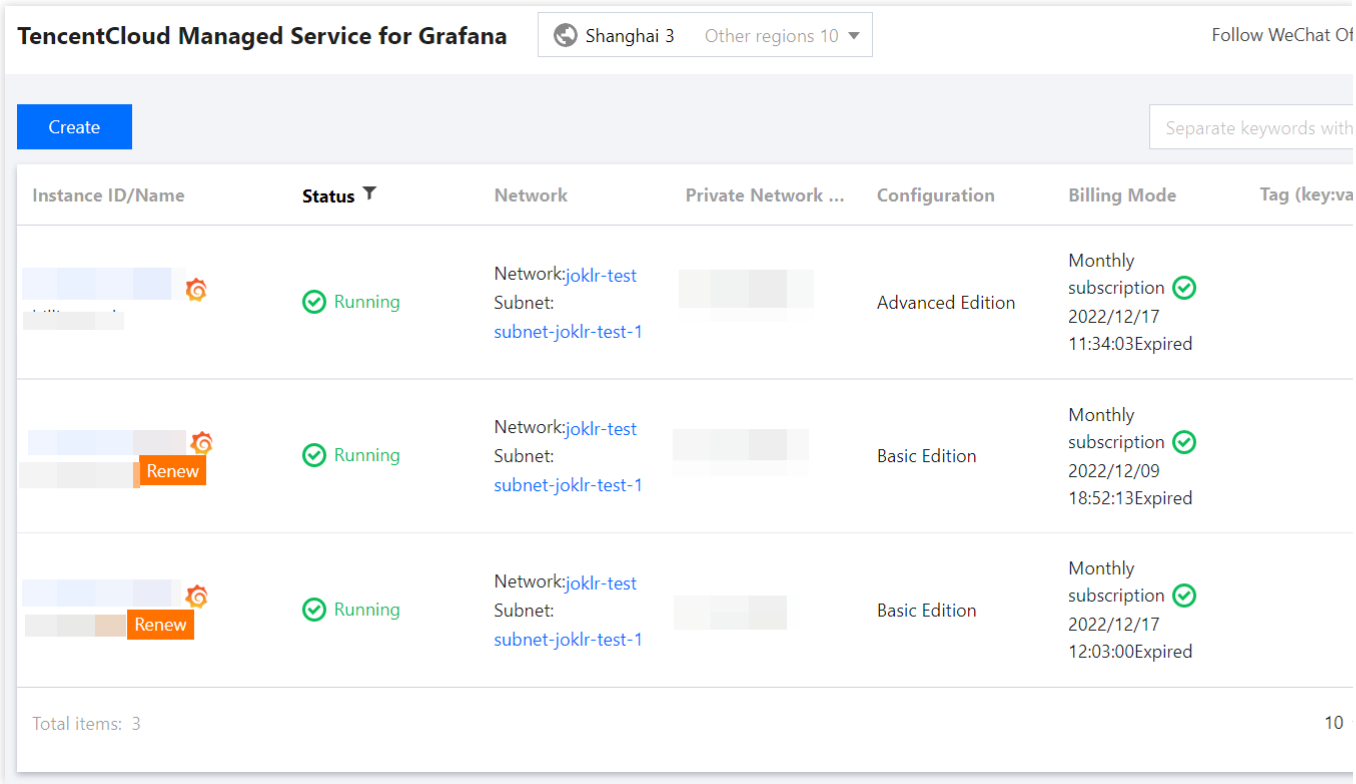
Last updated：2024-01-02 18:01:39

This document describes how to log in to Grafana.

Directions

1. Log in to the TCMG console.
2. In the instance list, find the target instance and click the **Grafana icon**

.



3. On the Grafana login page, enter your account and password or log in with SSO.

©2013-2022 Tencent Cloud. All rights reserved.

Notification Channel

Last updated：2024-01-02 18:01:45

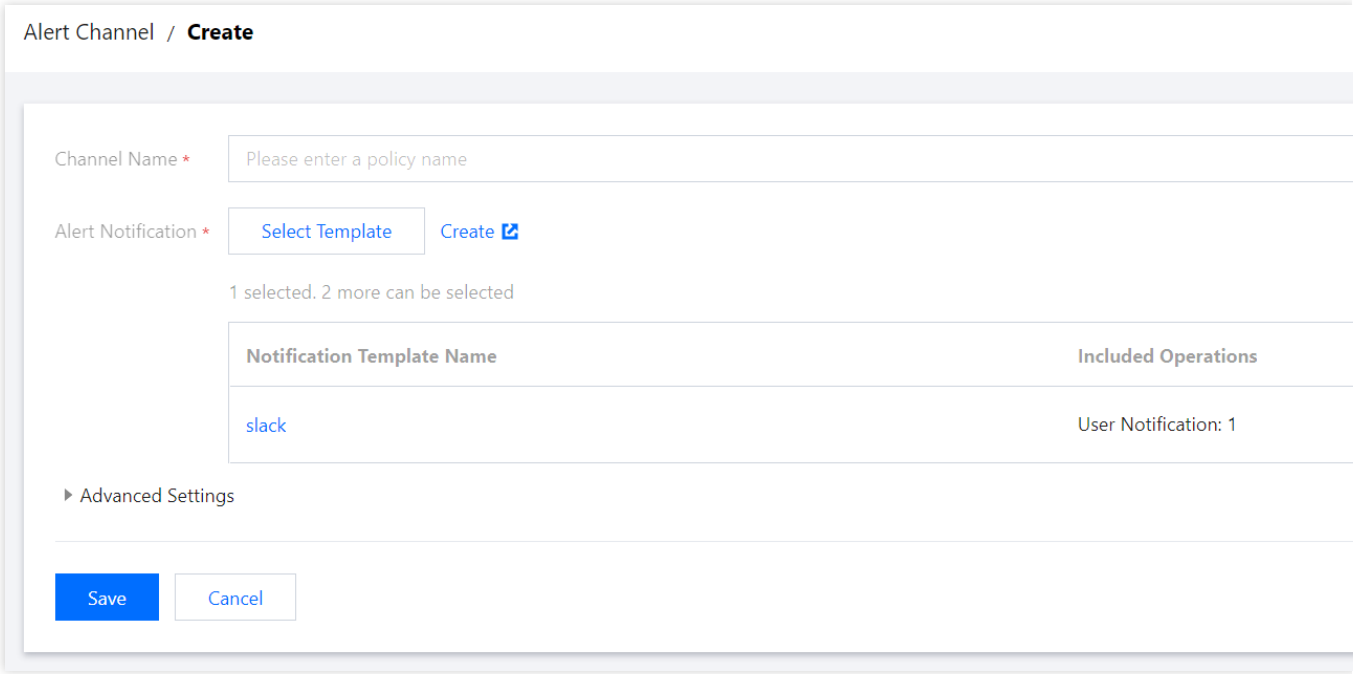
TCMG allows you to add notification channels. Alert notifications can be sent through multiple channels such as webhook, email, SMS, and phone.

Prerequisites

1. Log in to the TCMG console.
2. In the instance list, find the target instance and click **Instance ID**.

Directions

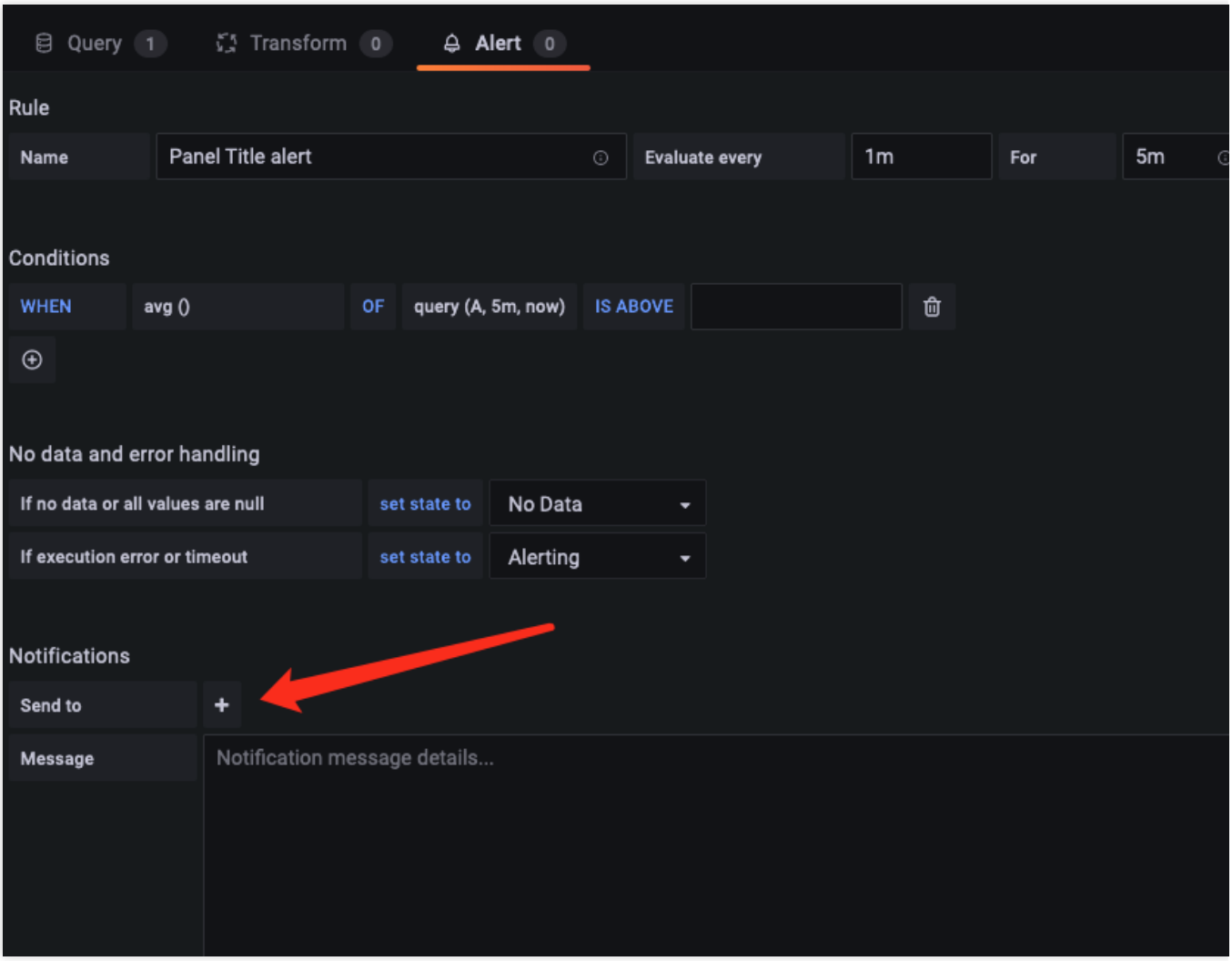
1. Enter the instance details page and click **Notification Channel** in the list on the left.
2. On the **Notification Channel** management page, click **Create** in the top-left corner.
3. On the **Create Notification Channel** page, enter the channel name and select or create a notification template as instructed in Creating Notification Template.



4. After a notification template is created, you can return to the notification channel creation page, select the created template, and click **Save**. You can view the created notification channel on the **Grafana Alert Notification Channel** page after the instance is rebooted.

©2013-2022 Tencent Cloud. All rights reserved.

5. When configuring a Grafana alert, select the name of the added channel in the **Notification Channel** configuration block.



©2013-2022 Tencent Cloud. All rights reserved.

Configuration Management

Last updated：2024-01-02 18:02:00

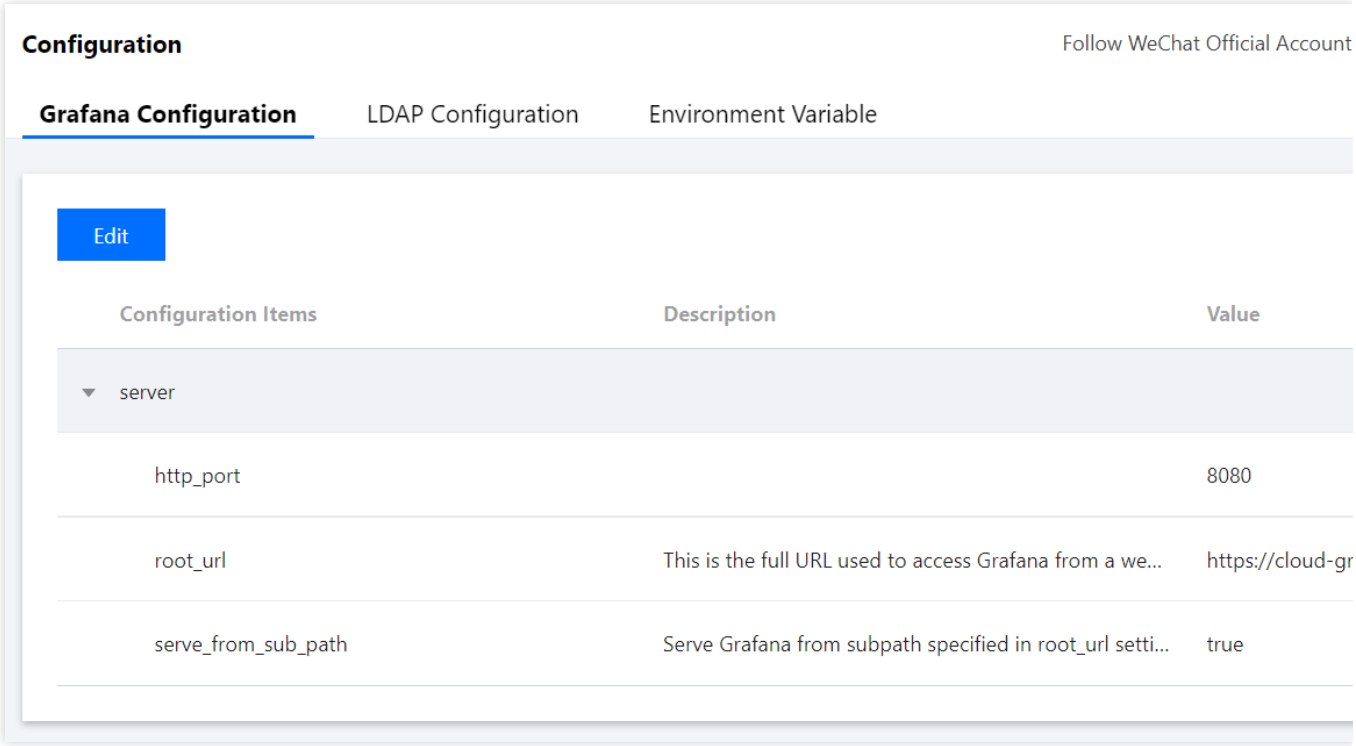
TCMG allows you to customize the Grafana configuration parameters, LDAP configuration parameters, and environment variables.

Prerequisites

1. Log in to the TCMG console.
2. Find the target instance and click **Instance ID**.

Grafana Configuration

1. Enter the instance details page and click **Configuration** in the list on the left.
2. On the **Configuration** management page, click **Create** in the top-left corner.



3. In the pop-up window, enter the custom configuration file content in INI format, click **Save**, and the instance will be rebooted. For more information, see Configuration.

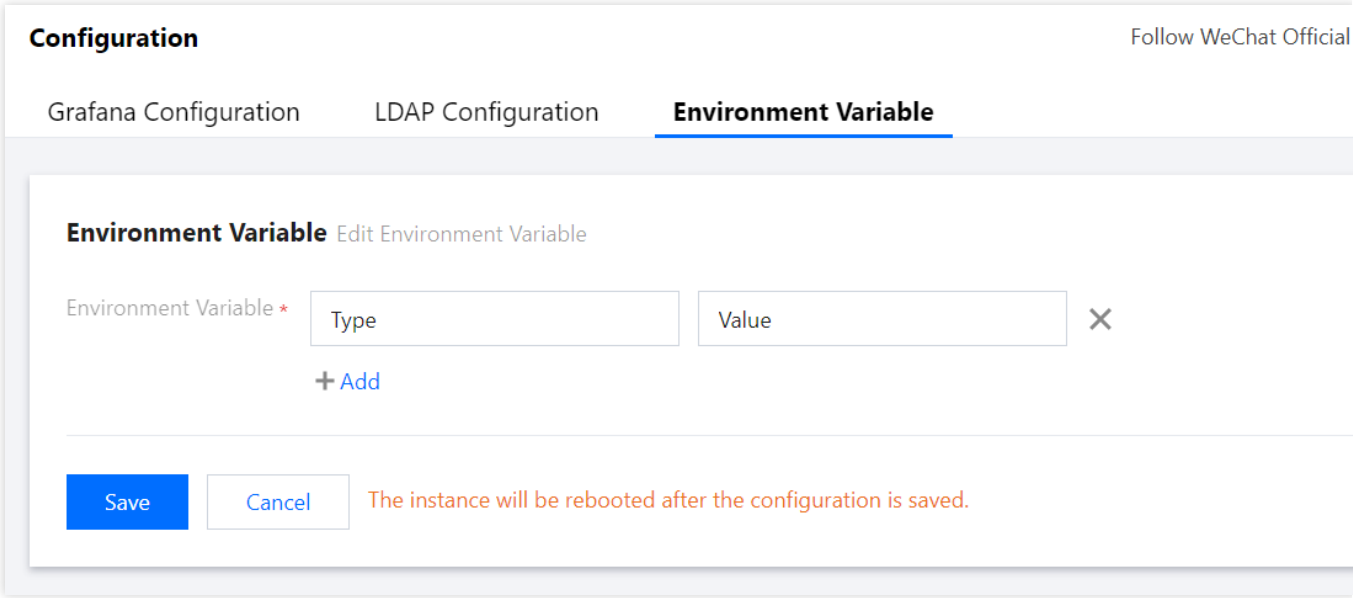
©2013-2022 Tencent Cloud. All rights reserved.

LDAP Configuration

1. Enter the instance details page and click **Configuration** in the list on the left.
2. On the **Configuration** management page, switch to the **LDAP Configuration** tab and click **Modify** in the top-left corner.
3. Enter the custom LDAP configuration content in INI format as instructed in LDAP Authentication, click **Save**, and the instance will be rebooted.

Environment Variable

1. Enter the instance details page and click **Configuration** in the list on the left.
2. Switch to the **Environment Variable** tab and click **Modify** in the top-left corner.
3. Configure the environment variable as needed, click **Save**, and the instance will be rebooted.



Notes

1. Currently, you cannot configure credentials for LDAP.
2. The environment variable name must start with a letter or underscore and can contain only letters, underscores, and digits.

©2013-2022 Tencent Cloud. All rights reserved.

Image Rendering

Last updated：2024-01-02 18:02:06

TCMG is preconfigured with a remote image rendering server, so you can use the image rendering capabilities without performing any additional operations. This document lists common use cases of image rendering.

Prerequisites

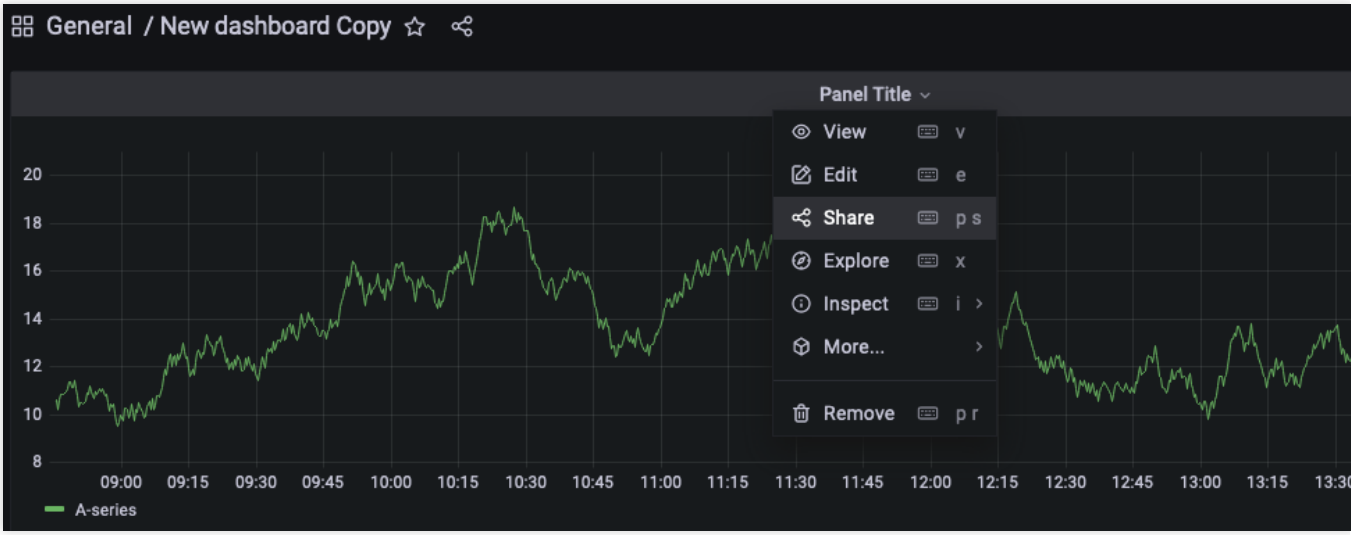
1. Log in to the TCMG console.
2. In the instance list, find the target instance and click the **Grafana icon**

.

3. Enter your Grafana account and password and click any dashboard in Grafana.

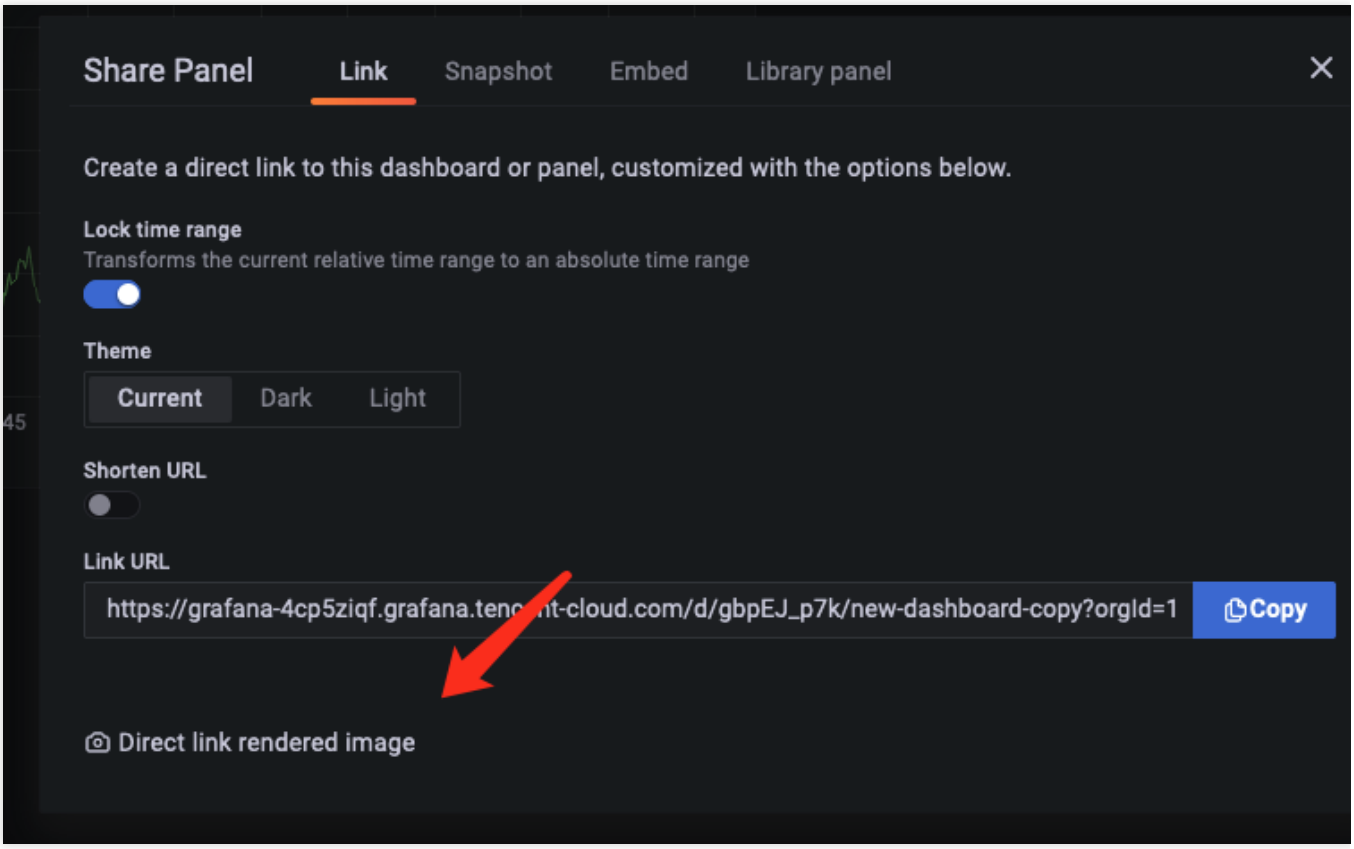
Sharing Dashboard

1. On any dashboard, click **Title** and select **Share** in the pop-up window.



2. Click **Direct link rendered image** at the bottom of the pop-up window.

©2013-2022 Tencent Cloud. All rights reserved.

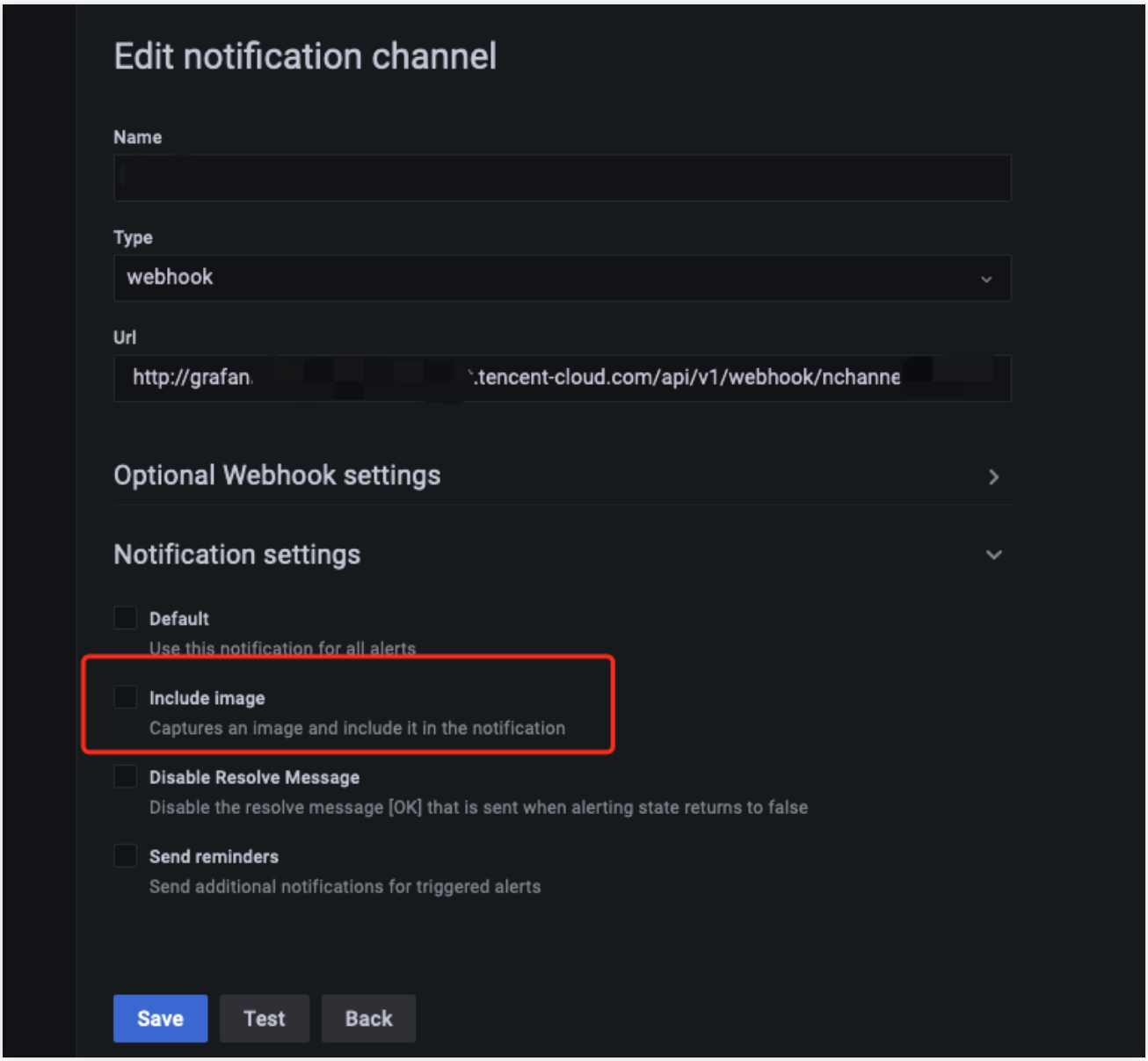


3. Get the address of the dashboard rendered as an image and share it.

©2013-2022 Tencent Cloud. All rights reserved.

Setting Alarm

Similarly, you can select **Include Image** in **Notification settings** to render the alert dashboard as an image as shown below:



Note:

Remote image rendering is not supported for dashboards with data sources of the `Browser` type.

©2013-2022 Tencent Cloud. All rights reserved.

Account Management

Last updated：2024-01-02 18:02:13

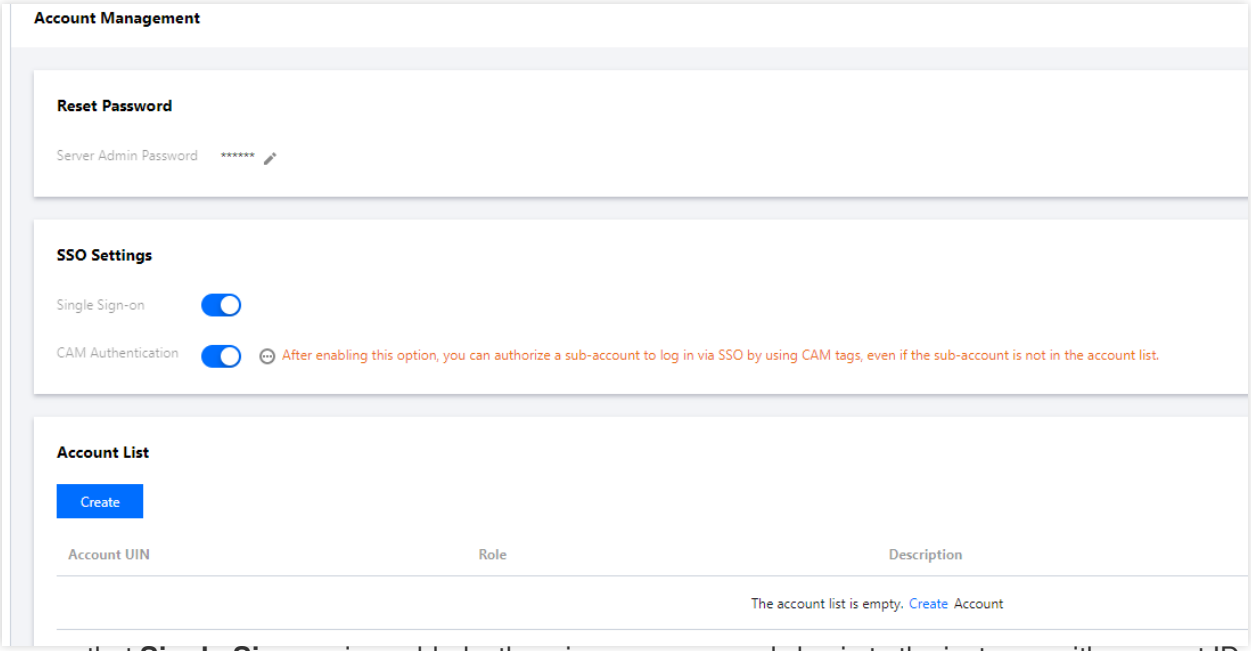
TencentCloud Managed Service for Grafana (TCMG) provides the account management feature that allows you to determine which users support single sign-on (SSO) login and manage their permissions.

Preparations

1. Log in to the TCMG console.
2. Find the target instance and click **Instance ID**.

Directions

1. Enter the instance details page and click **Account Management** in the list on the left.

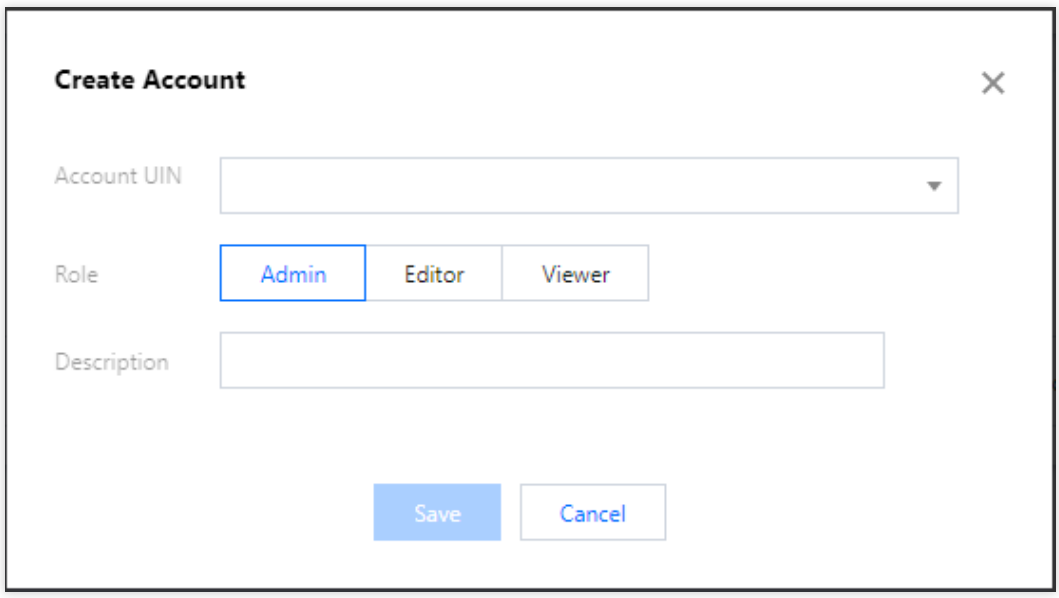


2. Make sure that **Single Sign-on** is enabled; otherwise, users can only log in to the instance with account ID and password.
If you want to authorize sub-accounts to log in via SSO by using CAM tags, enable **CAM Authentication**, after which unauthorized sub-accounts will be denied SSO login. You can go to the **Account List** module to control the permissions of sub-accounts that have successfully logged in via SSO.
If you want to allow unauthorized sub-accounts to log in via SSO, disable **CAM Authentication** and go to the **Account List** module to grant them the SSO login permission.

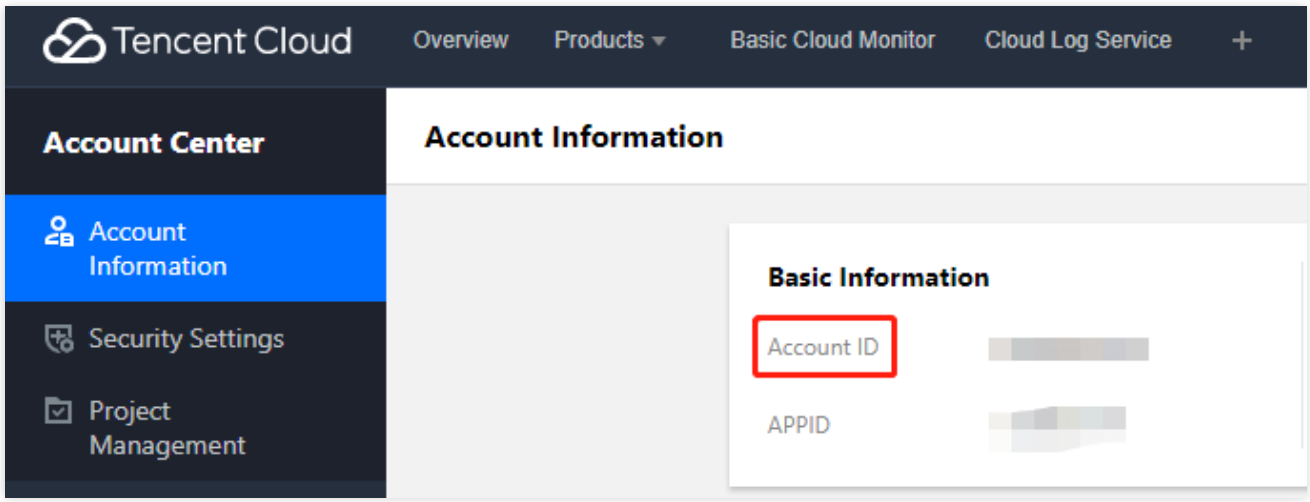
©2013-2022 Tencent Cloud. All rights reserved.

Account List

On the **Account Management** page, click **Create** in the **Account List** module, enter the account UIN, and select a role that defines the TCMG user's permission.



The account UIN here corresponds to the **Account ID** on the **Account Information** page in Account Center.



FAQ

What should I do if I cannot log in via SSO?

1. Check whether your root account is the same as the instance's.

Currently, TCMG doesn't support cross-root account SSO login.

2. Check whether the configurations on the **Account Management** page are correct.

©2013-2022 Tencent Cloud. All rights reserved.

If **CAM Authentication** is enabled, a user's Tencent Cloud account will be authenticated by CAM, and only the authorized user can successfully log in via SSO. If the user account is in the account list on the **Account Management** page, permissions set in the list will apply.
If **CAM Authentication** is disabled, you can go to the **Account List** module to manage users who have the SSO login permission. Users in the account list can log in via SSO with the permissions they've been granted. Note that the account UIN corresponds to the **Account ID** on the **Account Information** page in the **Account Center** console.

©2013-2022 Tencent Cloud. All rights reserved.