

Database and Application Migration UGO 24.11.0

Drawer Helper

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Contents

1 SMN Topic.....	1
2 Tags.....	2
3 DB Instances.....	3
4 Connecting to a Target Database Using VPC Endpoint.....	5

1 SMN Topic

Description

- What Is SMN?
Simple Message Notification (SMN) is a reliable and flexible messaging service that handles messages at scale. It can send messages to users by SMS message, email, or application.
- How Can I Subscribe to an SMN Topic for UGO?
First, [create a topic](#). It serves as a message sending channel, where publishers and subscribers can interact with each other. Then, [add a subscription to the topic](#) and [request subscription confirmation](#). After the subscription has been confirmed, alarm notifications will be sent to the subscription endpoint via SMN.

FAQs

Q: I have added a subscription to the topic on SMN, but why is this topic not displayed on UGO?

A: You may not have confirmed the subscription.

After you add a subscription to your topic, you need to request the subscription. The topic can only be selected when you are creating a database evaluation or an object migration project. For details, see [Requesting Subscription Confirmation](#).

2 Tags

Description

Tag Management Service (TMS) is designed to identify cloud resources. When you have many cloud resources of the same type, you can use tags to classify them by dimension (for example, by purpose, owner, or environment).

For more information, see [Tag Management Service](#).

FAQs

Q: Can I Configure Tags for Projects I Have Created?

A: Yes. You can also configure tags when creating a project. After a project is created, you can click the **Tags** tab on details page of the database evaluation or object migration project and add, edit, or delete tags. For details, see [Managing a Tag](#).

3 DB Instances

Before creating a migration project, you need to create a Huawei Cloud database as the target database.

Currently, UGO supports GaussDB, TaurusDB, RDS for MySQL, and RDS for PostgreSQL.

GaussDB

GaussDB is an enterprise-grade distributed relational database from Huawei. It features Hybrid Transactional/Analytical Processing (HTAP) workloads and intra-city cross-AZ deployment with zero data loss. With a distributed architecture, GaussDB supports petabytes of storage and more than 1,000 nodes per DB instance.

You can [buy a GaussDB instance](#).

TaurusDB

TaurusDB is an enterprise-grade distributed database and fully compatible with MySQL. It uses a decoupled compute and storage architecture and data functions virtualization (DFV) storage that auto-scales up to 128 TB per DB instance. There is no need to do sharding and there is virtually no risk of data loss. It combines the high availability and performance of commercial databases with the cost-effectiveness of open source databases.

You can [buy a TaurusDB instance](#).

RDS for MySQL

MySQL is one of the world's most popular open-source relational databases. It works with a LAMP stack (Linux, Apache, and Perl/PHP/Python) to deliver efficient web solutions. RDS for MySQL is reliable, secure, scalable, inexpensive, and easy to manage.

You can [buy an RDS for MySQL instance](#).

RDS for PostgreSQL

PostgreSQL is an open source object-relational database management system focused on extensibility and standards compliance. It is known as the most

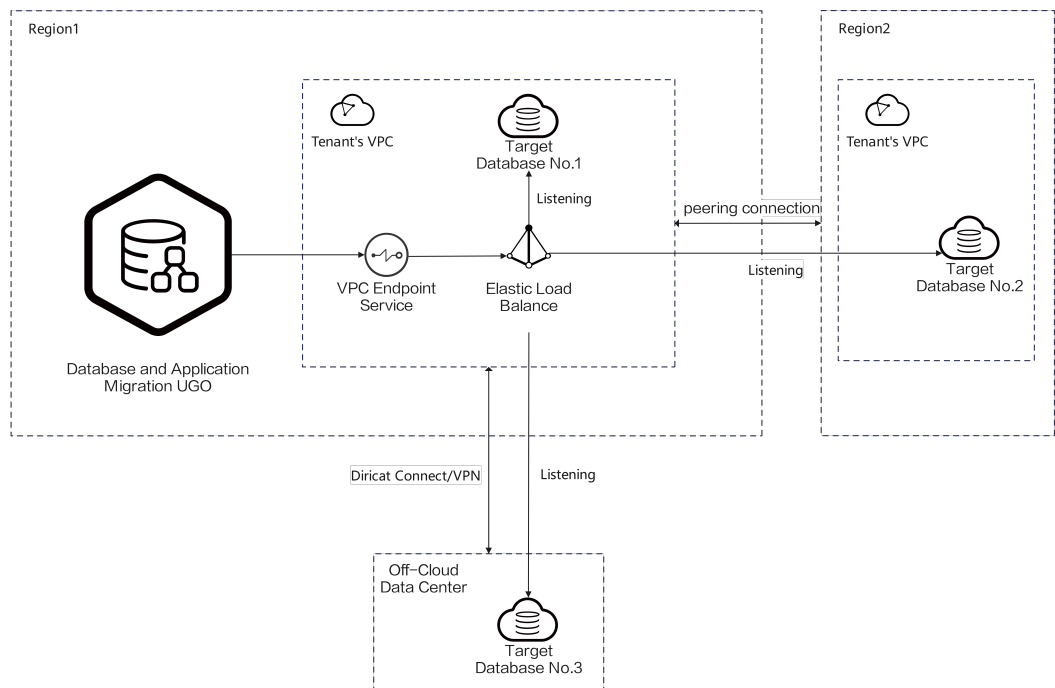
advanced open source database. RDS for PostgreSQL is designed for enterprise-oriented online transaction processing (OLTP) scenarios and supports NoSQL (JSON, XML, or hstore) and GIS data types. It has earned a reputation for reliability and data integrity, and is suitable for websites, location-based applications, and complex data object processing.

You can [buy an RDS for PostgreSQL instance](#).

4 Connecting to a Target Database Using VPC Endpoint

Figure 4-1 shows how data is migrated to a target database using VPC Endpoint.

Figure 4-1 Connecting to a target database using VPC Endpoint



Buying a Dedicated Load Balancer

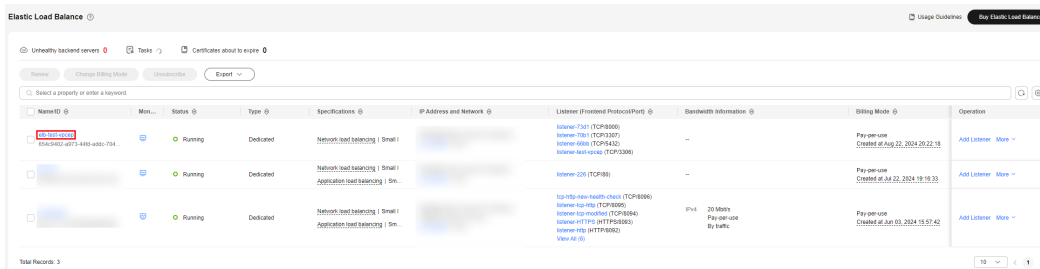
- Step 1** Log in to the [Huawei Cloud console](#).
- Step 2** Click the icon next to **All Services** and choose **Networking > Elastic Load Balance**.
- Step 3** Click **Buy Elastic Load Balancer**, select **Dedicated**, and configure other parameters.

NOTE

- For details about the billing mode, see [Billing Overview](#).
- For details about ELB configurations, see [Adding Backend Servers in a Different VPC from a Load Balancer](#) and [Adding Backend Servers in the Same VPC as a Load Balancer](#).

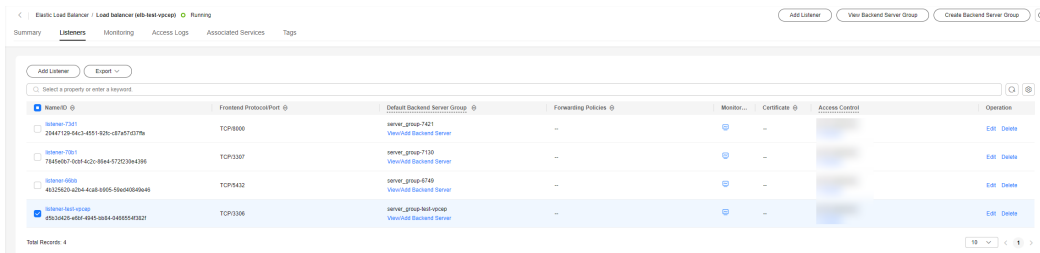
Step 4 Click the created load balancer.

Figure 4-2 Load balancer list



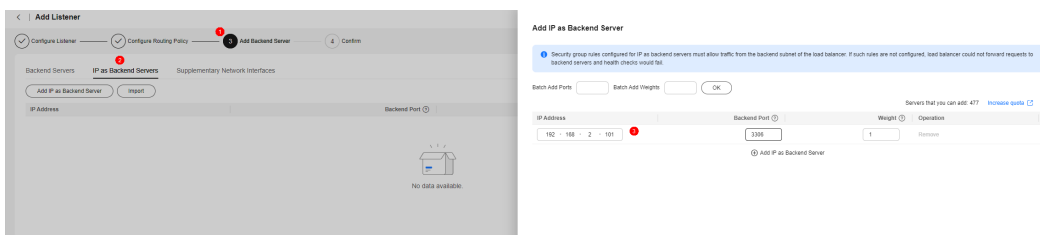
Step 5 Click the **Listeners** tab.

Figure 4-3 Listener list



Step 6 Click **Add Listener**. Configure the listener and go to the **Add Backend Server** page. Click **IP as Backend Servers**, configure the IP address, port number, and routing weight of the target database, and click **Submit**.

Figure 4-4 Add IP as Backend Server



----End

Creating a VPC Endpoint Service

Step 1 Log in to the [Huawei Cloud console](#).

Step 2 Click the icon next to **All Services** and choose **Networking > VPC Endpoint**. Choose **VPC Endpoint Services** in the navigation pane.

Step 3 Add a port mapping of the target database.

Step 4 Click **Buy VPC Endpoint** and select **Elastic load balancer** for **Backend Resource Type**.

Figure 4-5 Creating a VPC endpoint service

The screenshot shows the configuration page for creating a VPC endpoint service. The 'Backend Resource Type' is set to 'Elastic load balancer', which is highlighted with a red box. Other settings include Region: CN North-Ulanqab203, VPC: vpc-default(192.168.0.0/24), Service Type: interface, Connection Approval: on, Protocol: TCP, Service Port: 8089, Terminal Port: 80, Load Balancer: c30043652, and Access Control: off.

Step 5 Click **Create Now**.

NOTE

For details about how to create a VPC endpoint service, see [Creating a VPC Endpoint Service](#).

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Testing Database Connectivity

Step 1 On the **Basic Information** page, select **VPC Endpoint** for **DB Connection Mode**.

Step 2 Select the created VPC endpoint service from the **VPC Endpoint** drop-down list.

Figure 4-6 Selecting VPC Endpoint

The screenshot displays the 'Basic Information' step of a migration project configuration. At the top, there are three progress indicators: '1 Basic Information' (active), '2 Precheck', and '3 Migration Project Confirmation'. The form includes the following fields and options:

- Project Name:** A text input field with the placeholder '--Enter--'.
- Exception Notification Mode:** A blue button labeled 'SMN Topic'.
- SMN Topic Selection:** A dropdown menu with '--Select--' and a 'Create SMN Topic' link. Below it, a note states: 'After you create and subscribe to an SMN topic, UGO can send alarm notifications to your configured subscription endpoints through SMN.'
- Evaluation Project:** A dropdown menu.
- Target DB:** 'GaussDB Distributed' with an information icon.
- Target DB Version:** '3.2 Enterprise Edition'.
- DB Connection Mode:** Three buttons: 'Public network' (selected), 'VPC Endpoint', and 'Auto assigned by instance'. A note below reads: 'If the target DB network is restricted by the IP address whitelist, add (100.85.124.231) to the whitelist to ensure that UGO can connect to the target database.'
- Host Type:** Two buttons: 'Hostname' and 'Host IP Address' (selected).
- Host IP Address:** A text input field with an information icon.
- Host Port:** A text input field.
- DB Name:** A text input field with an information icon.
- Username:** A text input field with an information icon.
- Password:** A password input field with a visibility toggle.
- Schemas to Migrate:** A checkbox labeled 'Select all' which is checked. A note below reads: 'Select schemas to be collected by UGO from the source database.'
- SSL Type:** Three buttons: 'No SSL', 'SSL without authentication', and 'One-way SSL' (selected). A note below reads: 'Target database will be authenticated and the communication will be encrypted.'

Step 3 Select the created port mapping from the **Port Mapping** drop-down list.

Step 4 Set **DB Name**, **Username**, and **Password** and click **Test Connection**.

Figure 4-7 Test Connection

VPC Endpoint: cn-north-7.test-vpcep.ba092c5... [View VPC Endpoint](#)

Port Mapping: Protocol TCP | Service Port 33...

* DB Name: [Redacted]

* Username: [Redacted]

* Password: [Redacted]

Schemas to Migrate: Select all
Select schemas to be collected by UGO from the source database.

SSL Type: **No SSL** | SSL without authentication | One-way SSL
If you do not select SSL, there may be potential security risks.

Tags: It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)
To add a tag, enter a tag key and a tag value below.

[Empty text box for tag key and value]

Enter a tag key | Enter a tag value | Add

Tags you can still add: 20

* Test Connection: **Test Connection**

Test the connection between UGO and the target DB.

Connection Status: ● Connected

Database Version: RDS for MySQL 5.7

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