

**Solution as code**

# **Build an ERP Based on Odoo**

|              |            |
|--------------|------------|
| <b>Issue</b> | 1.0        |
| <b>Date</b>  | 2026-06-02 |



**Copyright © Huawei Technologies Co., Ltd. 2026. All rights reserved.**

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

## **Trademarks and Permissions**



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

## **Notice**

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

# Security Declaration

## Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process*. For details about this process, visit the following web page:

<https://www.huawei.com/en/psirt/vul-response-process>

For vulnerability information, enterprise customers can visit the following web page:

<https://securitybulletin.huawei.com/enterprise/en/security-advisory>

# Contents

**1 Solution Overview..... 1**

**2 Resource Planning and Costs..... 3**

**3 Procedure..... 7**

3.1 Preparations..... 7

3.2 Quick Deployment..... 10

3.3 Getting Started..... 20

3.4 Quick Uninstallation..... 23

**4 Appendix..... 25**

**5 Change History..... 26**

# 1 Solution Overview

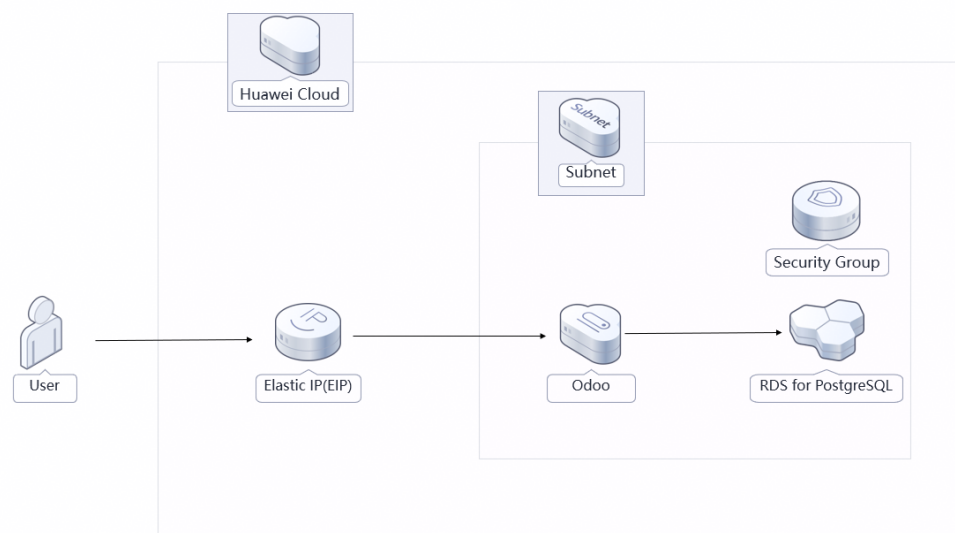
## Application Scenarios

This solution helps users quickly build an ERP system on Huawei Cloud based on the open source Odoo software. **Odoo** is a popular open source enterprise management suite worldwide, which provides a wide range of functions, covering a complete set of enterprise information needs, such as CRM, sales, procurement, inventory management, production, quality management, integrated HR, financial management, project management, and PLM.

## Architecture

The following figure shows the deployment architecture of this solution:

**Figure 1-1** Architecture



The solution will deploy the following resources:

- Create a **FlexusX instance (Elastic Cloud Server (ECS))** to deploy the Odoo Community Edition.

- Create an [Elastic IP \(EIP\)](#) and associate it with the FlexusX instance to enable the instance to access the Internet and be accessed by the Internet.
- Create an [RDS for PostgreSQL](#) to provide read and write capabilities for service data.

## Advantages

- **Low Cost**  
Provides cost-effective ECSs. You can select ECSs with different specifications based on your service requirements.
- **One-Click Deployment**  
With just one click, you can easily deploy an ECS and install and deploy the Odoo ERP system (community edition).
- **Open source and customization**  
This solution is open source, and users can use it for free for commercial purposes and even perform customized development based on the source code.

## Constraints

- Before deploying this solution, you need to register a Huawei account, enable Huawei Cloud, complete real-name authentication, and ensure that the account is not in arrears or frozen. If you select the yearly/monthly billing mode, ensure that your account balance is sufficient to automatically pay for resources when you deploy them with one click; or, during the one-click deployment process, access the [Billing Center](#), find the "Pending Payment Orders" and manually complete the payment.
- If you choose to deploy resources using an IAM agency, ensure that the Huawei Cloud account you use has sufficient IAM permissions. For details, see [\(Optional\) Creating the rf\\_admin\\_trust Agency](#). If you use the Huawei Cloud account or an IAM member account under the admin user group, you do not need to select an agency. In this case, the permissions of the currently logged-in user will be used for the deployment.

# 2 Resource Planning and Costs

This solution will deploy the resources listed in the following table. The costs are only estimates and may differ from the final prices. For details, see [Price Calculator](#).

Table 2-1 Resource planning and costs (pay-per-use)

| Huawei Cloud Service | Configuration Example                                                                                                                                                                                                                                                                             | Quantity | Estimated Monthly Cost |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------|
| Flexus X Instance    | <ul style="list-style-type: none"><li>• Pay-per-use: \$0.08 USD/ hour</li><li>• Region: ME-Riyadh</li><li>• Specifications: Flexus X Instance   Performance Mode (Disabled)   x1.2u.4g   2vCPUs   4GB</li><li>• Image: Ubuntu 22.04 server 64bit</li><li>• System Disk: High I/O   40GB</li></ul> | 1        | USD 59.21              |

| Huawei Cloud Service        | Configuration Example                                                                                                                                                                                                                                                 | Quantity | Estimated Monthly Cost                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------|
| Elastic IP (EIP)            | <ul style="list-style-type: none"> <li>Region: ME-Riyadh</li> <li>Pay-per-use: USD 0.12/GB/hour</li> <li>Routing Type: Dynamic BGP</li> <li>Billed By: traffic</li> <li>Bandwidth: 300Mbit/s</li> </ul>                                                               | 1        | USD 0.12/GB/hour                                 |
| Relational Database Service | <ul style="list-style-type: none"> <li>Pay-per-use: \$0.10 USD/hour</li> <li>Region: ME-Riyadh</li> <li>Billing mode: pay-per-use</li> <li>Specifications: rds.pg.n1.large.2 (2 vCPUs   4 GB)</li> <li>Storage: SSD   40 GB</li> <li>DB engine: PostgreSQL</li> </ul> | 1        | USD 72.29                                        |
| <b>Total</b>                | -                                                                                                                                                                                                                                                                     |          | <b>USD 131.50 + Public network traffic price</b> |

**Table 2-2** Resource planning and costs (yearly/monthly)

| Huawei Cloud Service        | Configuration Example                                                                                                                                                                                                                                                                        | Quantity | Estimated Monthly Cost |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------|
| Flexus X Instance           | <ul style="list-style-type: none"> <li>Billing Mode: Yearly/Monthly</li> <li>Region: ME-Riyadh</li> <li>Specifications: Flexus X Instance   Performance Mode (Disabled)   x1.2u.4g   2vCPUs   4GB</li> <li>Image: Ubuntu 22.04 server 64bit</li> <li>System Disk: High I/O   40GB</li> </ul> | 1        | USD 43.83              |
| Elastic IP (EIP)            | <ul style="list-style-type: none"> <li>Region: ME-Riyadh</li> <li>Pay-per-use: USD 0.12/GB/hour</li> <li>Routing Type: Dynamic BGP</li> <li>Billed By: traffic</li> <li>Bandwidth: 300Mbit/s</li> </ul>                                                                                      | 1        | USD 0.12/GB/hour       |
| Relational Database Service | <ul style="list-style-type: none"> <li>Region: ME-Riyadh</li> <li>Billing mode: Yearly/Monthly</li> <li>Specifications: rds.pg.n1.large.2 (2 vCPUs   4 GB)</li> <li>Storage: SSD   40 GB</li> <li>DB engine: PostgreSQL</li> </ul>                                                           | 1        | USD 58.30              |

| Huawei Cloud Service | Configuration Example | Quantity | Estimated Monthly Cost                    |
|----------------------|-----------------------|----------|-------------------------------------------|
| Total                | -                     |          | USD 102.13 + Public network traffic price |

# 3 Procedure

---

- [3.1 Preparations](#)
- [3.2 Quick Deployment](#)
- [3.3 Getting Started](#)
- [3.4 Quick Uninstallation](#)

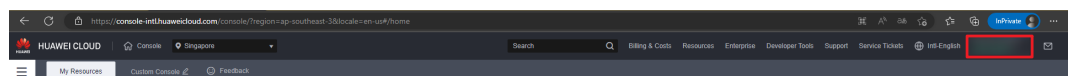
## 3.1 Preparations

If you use the account registered when you first used Huawei Cloud, you do not need to perform this preparation. If you use an IAM user account, check whether you are in the admin user group. If you are not in the admin user group, [grant the necessary permissions](#) to your account and complete the following preparations.

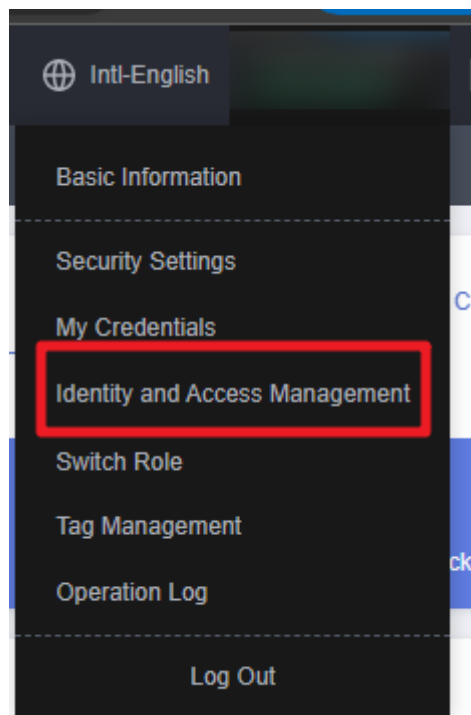
### (Optional) Creating the `rf_admin_trust` Agency

- Step 1** Log in to the Huawei Cloud official website, open the [console](#), hover over the account name, and choose **Identity and Access Management**.

**Figure 3-1** Console page

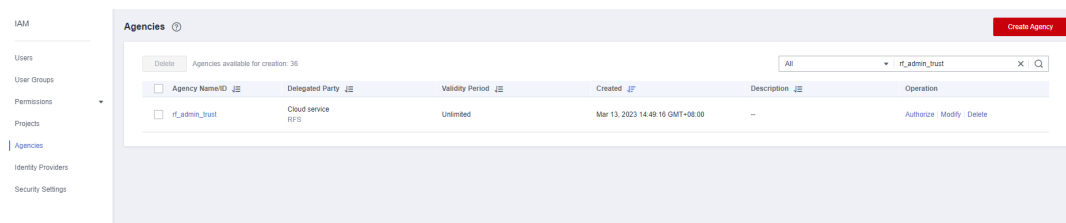


**Figure 3-2** Identity and access management page



**Step 2** Choose **Agencies** in the left navigation pane and search for the **rf\_admin\_trust** agency.

**Figure 3-3** Agencies



- If the agency is found, skip the following steps.
- If the agency is not found, perform the following steps to create it.

**Step 3** Click **Create Agency** in the upper right corner of the page. On the displayed page, enter **rf\_admin\_trust** for **Agency Name**, select **Cloud service** for **Agency Type** and **RFS** for **Cloud Service**, and click **Next**.

Figure 3-4 Creating the rf\_admin\_trust agency

Agencies / Create Agency

★ Agency Name

★ Agency Type ☐ Account  
Delegate another HUAWEI CLOUD account to perform operations on your resources.  
☒ Cloud service  
Delegate a cloud service to access your resources in other cloud services.

★ Cloud Service

★ Validity Period

Description

0/255

Step 4 Search for **Tenant Administrator**, select it in the search results, and click **Next**.

Figure 3-5 Selecting a policy/role

< Authorize Agency

1 Select Policy/Role 2 Select Scope 3 Finish

Assign selected permissions to rf\_admin\_trust1. Create Policy

View Selected (1) Copy Permissions from Another Project

| Policy/Role Name                                                                                                    | Type                  |
|---------------------------------------------------------------------------------------------------------------------|-----------------------|
| <input type="checkbox"/> CME AdministratorAccess<br>Data Model Engine tenant administrator with full permissions.   | System-defined policy |
| <input checked="" type="checkbox"/> Tenant Administrator<br>Tenant Administrator (Exclude IAM)                      | System-defined role   |
| <input type="checkbox"/> CS Tenant Admin<br>Cloud Stream Service Tenant Administrator, can manage multiple CS users | System-defined role   |

Step 5 Select **All resources** and click **OK**.

Figure 3-6 Setting the authorization scope

< Authorize Agency

1 Select Policy/Role 2 Select Scope 3 Finish

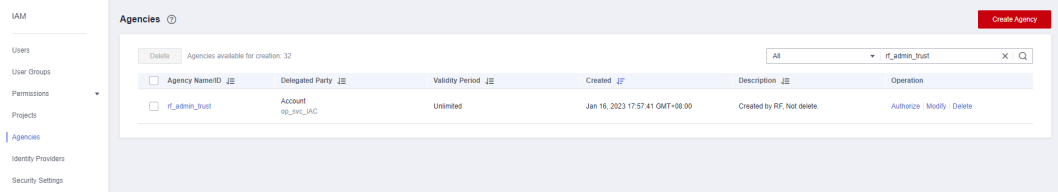
**i** The following are recommended scopes for the permissions you selected. Select the desired scope requiring minimum authorization.

Scope

☒ All resources  
IAM users will be able to use all resources, including those in enterprise projects, region-specific projects, and global services under your account based on assigned permissions.  
[Show More](#)

Step 6 Check that the **rf\_admin\_trust agency** is created and displayed in the agency list.

Figure 3-7 Agenciespe



----End

## 3.2 Quick Deployment

This section describes how to quickly deploy the solution.

Table 3-1 parameter description

| Parameter | Type   | Mandatory | Description                                                                                                                                                                               | Default Value          |
|-----------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| vpc_name  | string | Mandatory | VPC name. This template creates a new VPC, duplicate names are not allowed. Valid characters: 1-54 characters, supporting numbers, letters, Chinese, _ (underscore), - (hyphen), . (dot). | erp-based-on-odoo-demo |

| Parameter           | Type   | Mandatory | Description                                                                                                                                                                                                                                                 | Default Value          |
|---------------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| security_group_name | string | Mandatory | Security group name. This template creates a new security group. For details, see <a href="#">(Optional) Modifying Security Group Rules</a> . Valid characters: 1-64 characters, supporting numbers, letters, Chinese, _ (underscore), - (hyphen), . (dot). | erp-based-on-odoo-demo |
| eip_bandwidth_size  | number | Mandatory | EIP bandwidth size. This template uses pay-per-traffic billing. Unit: Mbit/s, range: 1-300Mbit/s.                                                                                                                                                           | 300                    |
| ecs_name            | string | Mandatory | ECS instance name. Duplicate names are not allowed. Valid characters: 1-64 characters, supporting letters, numbers, Chinese, underscore (_), hyphen (-), dot (.).                                                                                           | erp-based-on-odoo-demo |

| Parameter        | Type   | Mandatory | Description                                                                                                                                                                                                                                                            | Default Value |
|------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| ecs_flavor       | string | Mandatory | ECS instance type, supporting ECS and Huawei Cloud Flexus X instances. Flexus X instance type ID naming rule is x1.?u.?g, e.g., 2vCPUs4GiB type ID is x1.2u.4g. For details about ECS specifications, see the <a href="#">Summary List of x86 ECS Specifications</a> . | x1.2u.4g      |
| system_disk_size | number | Mandatory | ECS system disk size, disk type defaults to High IO. Unit: GB, range: 40 ~ 1,024, shrinking not supported.                                                                                                                                                             | 40            |

| Parameter     | Type   | Mandatory | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Default Value |
|---------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| ecs_password  | string | Mandatory | ECS password. Requirements: 8-26 characters, containing at least three of the following: uppercase letters, lowercase letters, numbers, special characters (!@#\$%^&_-=+[]{});,./?~#*). For Windows, password cannot contain username or its reverse, or more than two consecutive characters from username. For details about how to change the password, see <a href="#">Resetting the Password</a> for Logging In to an ECS on the Console. Default administrator account: root. | Empty         |
| charging_mode | string | Mandatory | Billing mode, defaults to pay-as-you-go. Options: postPaid (pay-as-you-go), prePaid (subscription).                                                                                                                                                                                                                                                                                                                                                                                 | postPaid      |

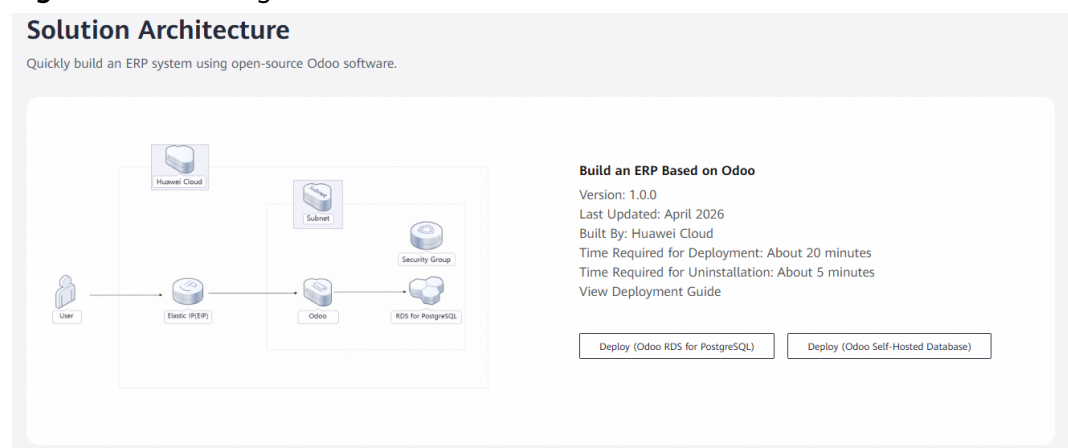
| Parameter       | Type   | Mandatory | Description                                                                                                                                                                                    | Default Value |
|-----------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| charging_unit   | string | Mandatory | Subscription period type, only effective when charging_mode is prePaid (subscription), then this parameter is required. Options: month, year.                                                  | month         |
| charging_period | number | Mandatory | The subscription term. This parameter is only mandatory when charging_mode is set to prePaid (yearly/monthly). Value range: 1-9 (charging_unit set to month); 1-3 (charging_unit set to year). | 1             |

| Parameter  | Type   | Mandatory | Description                                                                                                                                                                                                                                                                  | Default Value          |
|------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| rds_name   | string | Mandatory | RDS for PostgreSQL name, duplicate names not allowed. Length: 4-64 characters (note: one Chinese character occupies 3 bytes), must start with letter or Chinese, case sensitive, can contain letters, numbers, hyphens, underscores or Chinese, no other special characters. | erp-based-on-odoo-demo |
| rds_flavor | string | Mandatory | RDS for PostgreSQL type, this solution defaults to creating a single node. Default: rds.pg.n1.large.2 (2U4G), For details about other specifications, see the <a href="#">RDS for PostgreSQL instance types</a> on the official website.                                     | rds.pg.n1.large.2      |

| Parameter       | Type   | Mandatory | Description                                                                                                                                                                                                                               | Default Value |
|-----------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| rds_volume_size | number | Mandatory | RDS for PostgreSQL instance disk size. Unit: GB, range: 40-4000, must be multiples of 10.                                                                                                                                                 | 40            |
| rds_password    | string | Mandatory | RDS for PostgreSQL root user password. Requirements: must be 8 to 32 characters long and contain at least three types of the following characters: uppercase letters, lowercase letters, digits, and special characters(~!@#\$%^*-_+?,.). | Empty         |

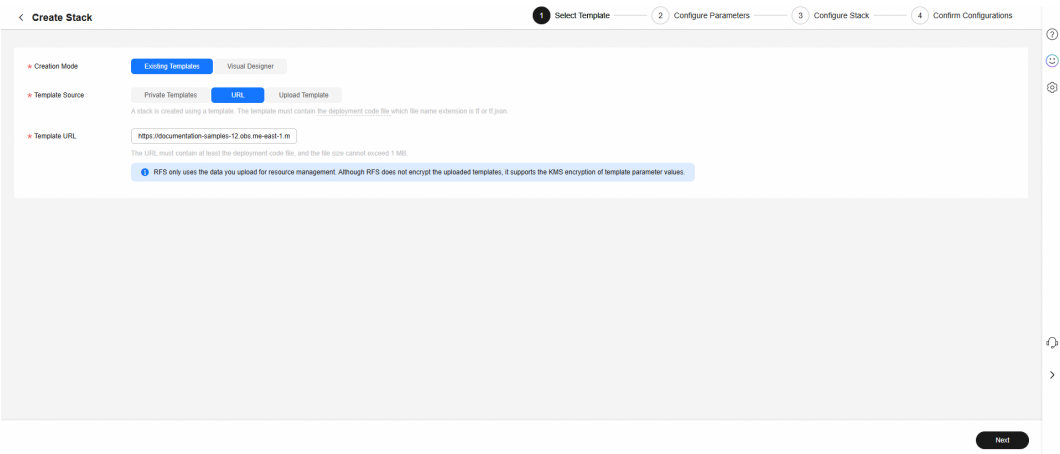
**Step 1** Log in to [Huawei Cloud Quick-Start Guides](#) and choose "Build an ERP Based on Odoo", click "Deploy" The page for creating a solution resource stack is displayed.

**Figure 3-8** Selecting a solution



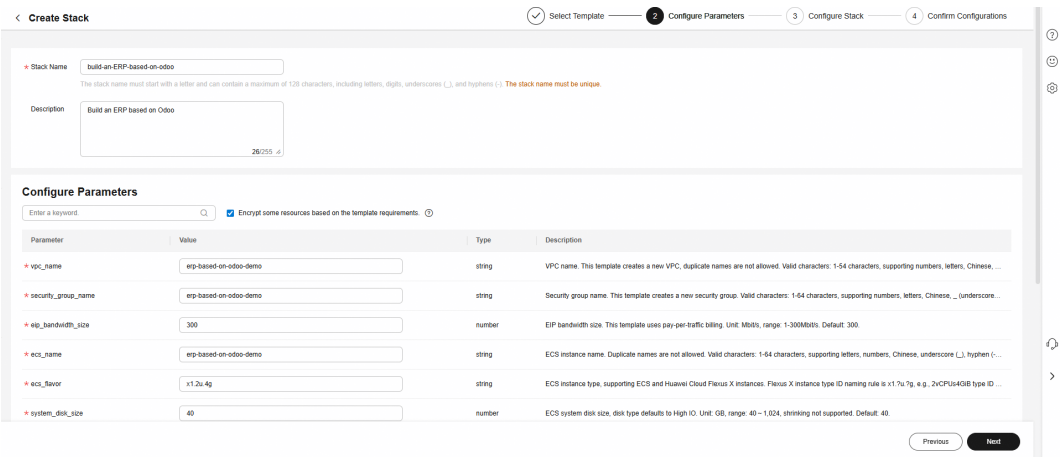
**Step 2** On the **Select Template** page, click **Next**.

**Figure 3-9** Selecting a solution



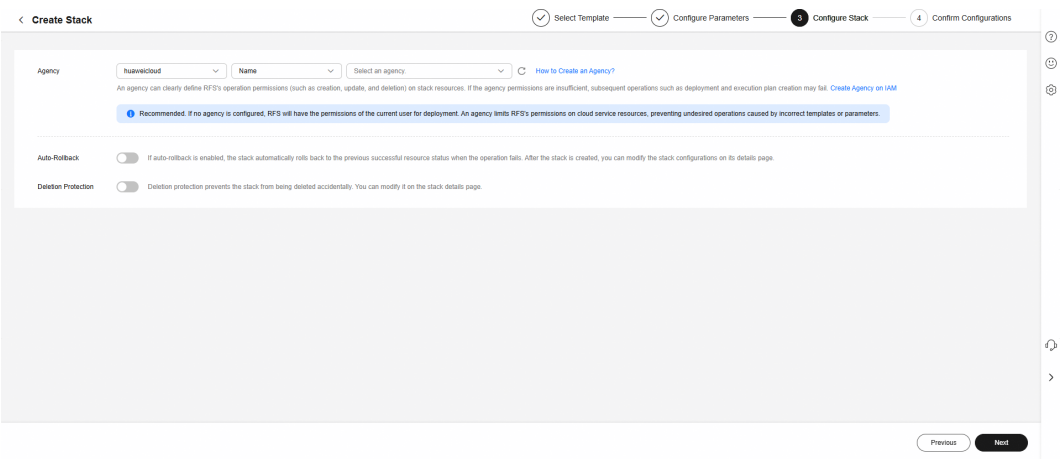
**Step 3** On the **Configure Parameters** page, enter a stack name, configure parameters based on [Table1 Parameter description](#), and click **Next**.

**Figure 3-10** Configuring parameters



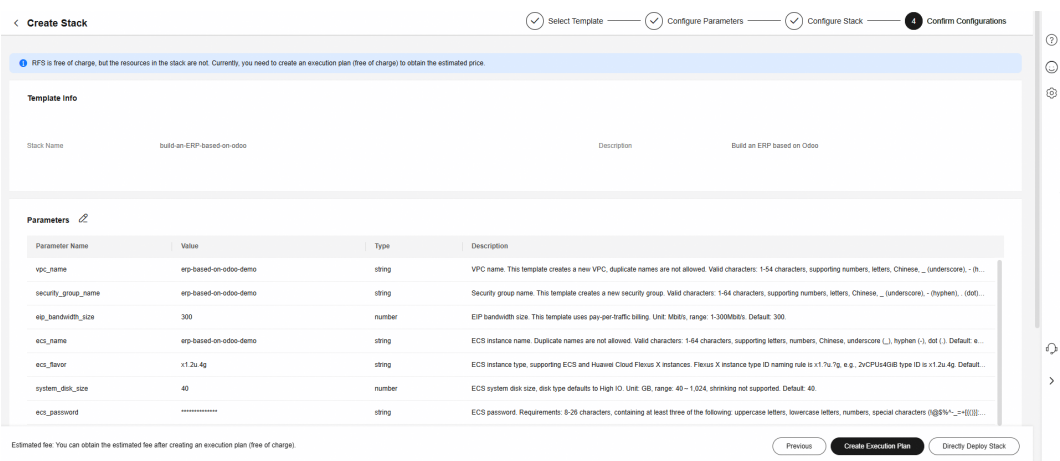
**Step 4** On the **Configure Stack** page, select **rf\_admin\_trust** from the **Agency** drop-down list and click **Next**. This step is optional if you use an account (HUAWEI ID) or use an IAM user in the admin user group.

Figure 3-11 Configuring a stack



**Step 5** On the **Confirm Configurations** page, confirm the configurations and click **Create Execution Plan**.

Figure 3-12 Confirming the configurations



**Step 6** In the displayed **Create Execution Plan** dialog box, enter an execution plan name and click **OK**.

Figure 3-13 Creating an execution plan

Create Execution Plan

To preview your resource billing information, you can create an execution plan.

★ Execution Plan Name

executionPlan\_20260420\_1043\_meor

Description

Enter a description of the execution plan.

0/255

OK

Cancel

**Step 7** Wait until the status of the execution plan changes to **Available** and then click **Deploy** in the **Operation** column. In the displayed dialog box, click **Execute**.

Figure 3-14 Execution plan page

build-an-ERP-based-on-odoo

Delete

Update TemplateParameter

Basic information

Resources

Outputs

Events

Template

Execution Plans

Deploy

Enter a keyword

| Execution Plan NameID                       | Status    | Estimated Price              | Created                         | Description | Operation                                     |
|---------------------------------------------|-----------|------------------------------|---------------------------------|-------------|-----------------------------------------------|
| executionPlan_20260420_1043_meor<br>ID: 127 | Available | <a href="#">View Details</a> | Apr 20, 2026 10:44:47 GMT+08:00 | -           | <a href="#">Deploy</a> <a href="#">Delete</a> |

Figure 3-15 Confirming the execution plan

Execution Plan

Are you sure you want to execute the plan?

| Execution Plan Name          | Status    | Created                       |
|------------------------------|-----------|-------------------------------|
| executionPlan_20260420_10... | Available | Apr 20, 2026 10:44:47 GMT+... |

After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements.

Execute

No

- Step 8** (Optional) If you select the yearly/monthly billing mode and your account balance is insufficient (for details about the total fee required, see the yearly/monthly fee table for one-click deployment of cloud services in "[2. Resource Planning and Costs](#)"), log in to the Billing Center and manually pay the outstanding order..
- Step 9** Click the **Events** tab and check whether the message "Apply required resource success." is displayed in the **Description** column. If it is, the solution is successfully deployed.

**Figure 3-16** Solution deployed



----End

## 3.3 Getting Started

### (Optional) Modifying Security Group Rules

#### NOTICE

- This solution uses port 8069 to access Odoo. By default, all traffic is allowed to pass through. You can configure the IP address whitelist by referring to the instructions for [modifying security group rules](#).

A security group is a network traffic access control policy, which includes inbound and outbound rules. These rules provide security protection for cloud servers, cloud containers, cloud databases, and other instances that have the same protection requirements and are mutually trusted within the security group.

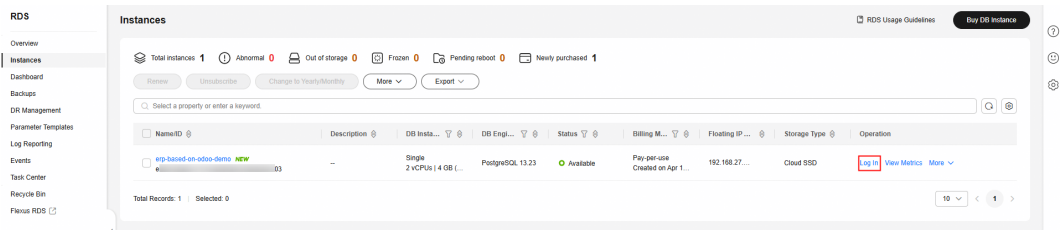
If the security group policies associated with your instance cannot meet your requirements, for example, you need to add, modify, or delete a TCP port, perform the following operations to modify the policies.

- Adding a security group rule:** If you need to open a TCP port for your service, add an inbound rule to open the specified TCP port. For details, see.
- Modifying a security group rule:** Inappropriate security group rules may cause severe security risks. You can modify the rules to ensure network security of instances such as cloud servers. For details, see.
- Deleting a security group rule:** If the source or destination IP address of an inbound or outbound security group rule changes, or you do not need to open a port, you can delete the security group rule. For details, see.

### Initializing the Odoo

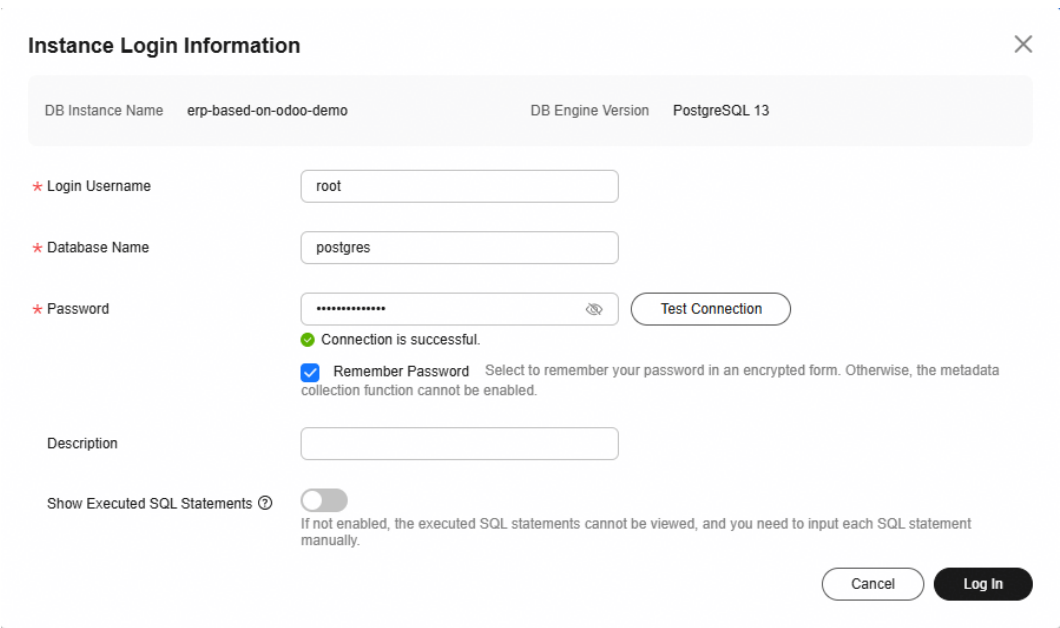
- Step 1** Log in to the RDS console, find the created RDS DB instance, and click Login.

Figure 3-17 Logging In to RDS



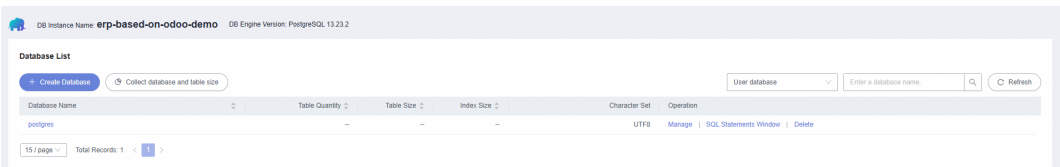
**Step 2** Enter the username and password of the RDS database, and click Test Connection. After the connection is successful, click Login.

Figure 3-18 Logging In to an RDS DB Instance



**Step 3** The RDS login page is displayed.

Figure 3-19 The login to the RDS page is successful



**Step 4** On the stack details page, view the URL for accessing the Odoo page in the output. Wait for about 10 to 20 minutes, and then access http://Public IP address:8069 in the browser to initialize the Odoo page. The default master password is my\_admin\_passwd. Then, customize the database information (the database is a new database) and click Create database.

Figure 3-20 URL of the Odoo initialization page

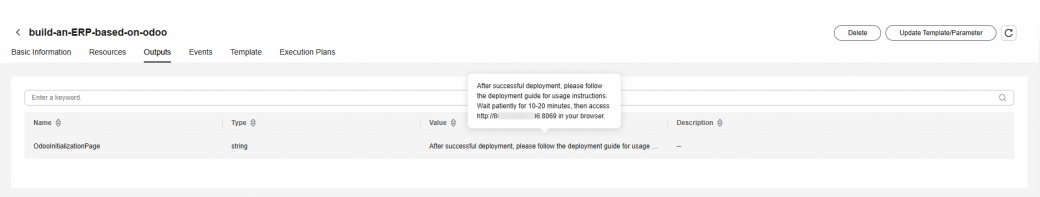


Figure 3-21 Page initialization



Master Password

my\_admin\_passwd

Database Name

odoo\_db

Email

\*\*\*\*\*@163.com

Password

\*\*\*\*\*

Phone Number

Language

English (US)

Country

Demo Data

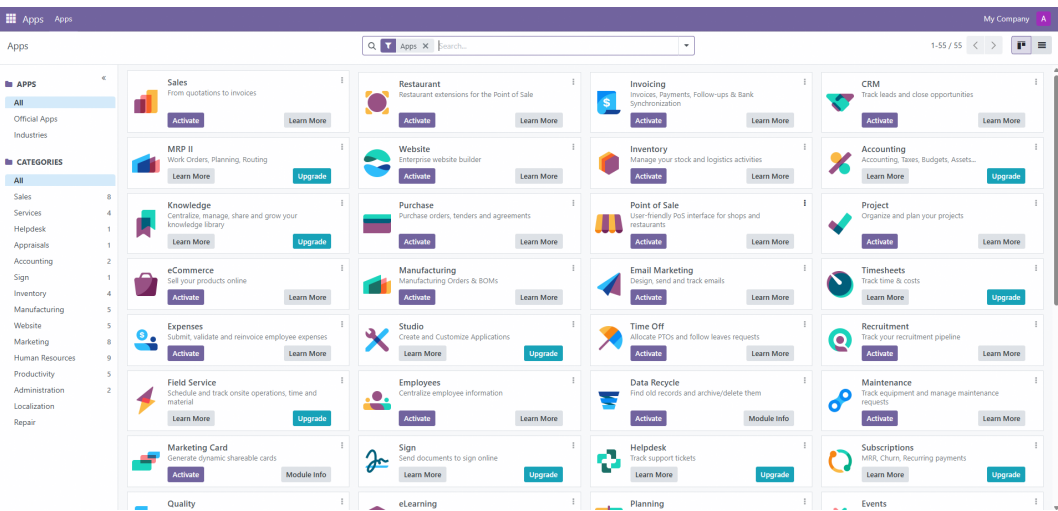
☐

Create database

 or [restore a database](#)

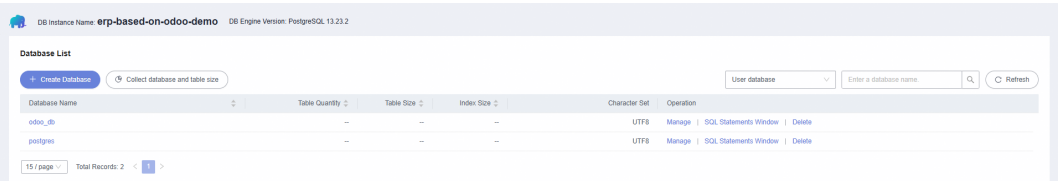
Step 5 Go to the Odoo page.

Figure 3-22 Go to the Odoo page



Step 6 Log in to the cloud database RDS and verify whether the database creation is successful.

Figure 3-23 View the newly created database

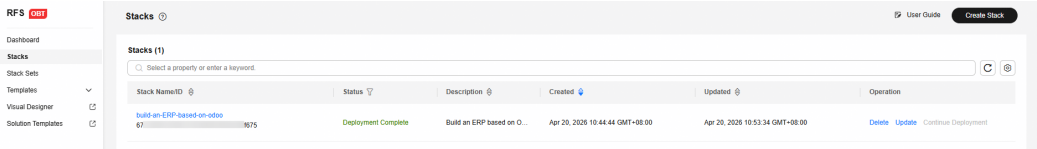


----End

3.4 Quick Uninstallation

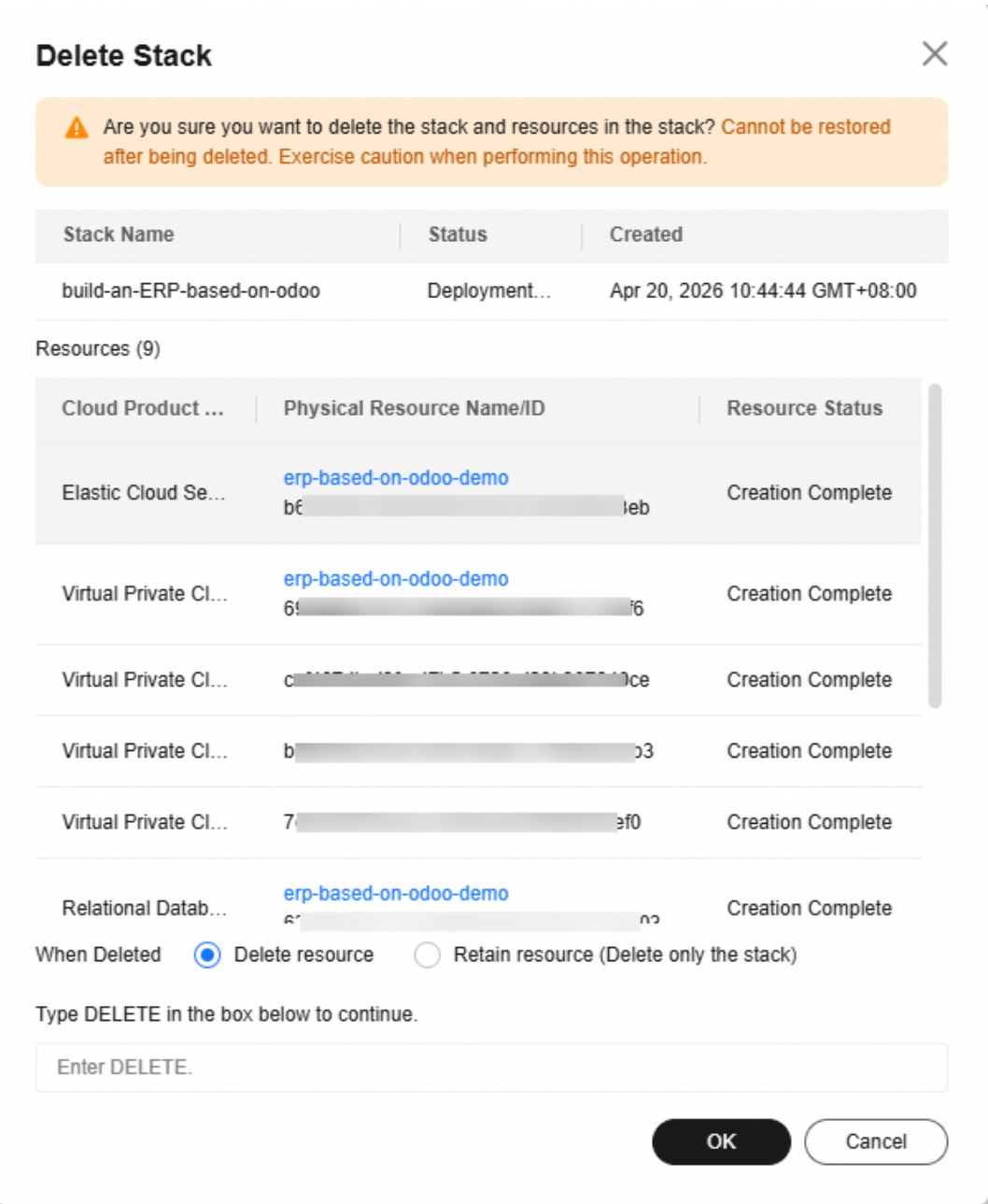
Step 1 Log in to the [RFS console](#). On the Stacks page, locate the resource stack you created and click Delete in the Operation column.

Figure 3-24 Deleting a stack



Step 2 In the displayed Delete Stack dialog box, set When Deleted to Delete resource, enter "Delete" and click OK.

Figure 3-25 Confirming the deletion



----End

# 4 Appendix

---

## Terms

- **Flexus X Instance (FlexusX):** FlexusX is a next-generation flexible cloud server service designed for small- and medium-sized enterprises (SMEs) and developers. FlexusX provides functions similar to what ECS provides. In addition, with FlexusX, you can flexibly configure vCPU to memory ratios to match your specific needs and change server specifications without service interruptions. For details, see [Flexus X Instance \(FlexusX\)](#).
- **Elastic IP (EIP):** EIP provides static public IP addresses and scalable bandwidths that enable your cloud resources to communicate with the Internet. You can easily bind an EIP to a FlexusX instance, ECS, BMS, virtual IP address, NAT gateway, or load balancer, enabling immediate Internet access.
- **RDS for PostgreSQL (RDS):** is a stable, reliable, scalable, and easy-to-manage online cloud database service based on the cloud computing platform. It provides a comprehensive performance monitoring system, multiple security protection measures, and a professional database management platform.

# 5 Change History

---

| Released On | Description                               |
|-------------|-------------------------------------------|
| 2022-07-30  | This issue is the first official release. |
| 2023-02-28  | Revising the implementation procedure.    |
| 2026-06-30  | International website launch.             |