Cloud Connect

Best Practices

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Contents

1 Overview

Cloud Connect enables you to connect VPCs across regions to build a globally connected network that features enterprise-class scalability and communication. By working with Direct Connect, Cloud Connect also enables on-premises data centers to access the VPCs across regions. **Table 1-1** describes the application scenarios of Cloud Connect.

Table 1-1 Application scenarios of Cloud Connect

Application Scenario	Operation Guide
Connecting VPCs in the same region	**Using a Cloud Connection to Connect VPCs in the Same Region**
Connecting VPCs in different regions	**Using a Cloud Connection to Connect VPCs in Different Regions** **Using a Central Network and Enterprise Routers to Connect VPCs in Different Regions**
Connecting on-premises data centers and VPCs	**Using a Cloud Connection and Direct Connect to Connect On-Premises Data Centers and VPCs**

2 Preparations

Before you use Cloud Connect, you need to make some preparations:

- **Register with Huawei Cloud**
- **Topping up Your Account**

Signing Up with Huawei Cloud

If you already have a Huawei Cloud account, skip this part. If you do not have a Huawei Cloud account, perform the following steps to register one:

1. Visit the **Huawei Cloud official website** and click **Register**.
2. Register an account as prompted on the displayed page.

   After the registration is successful, the system automatically redirects you to your personal information page.

Topping up Your Account

Top up your account to ensure that your account has sufficient balance.

- For details about Cloud Connect pricing, see **Product Pricing Details**.
- For details about how to top up an account, see **Topping up an Account (Prepaid Direct Customers)**.

3 Connecting VPCs in the Same Region

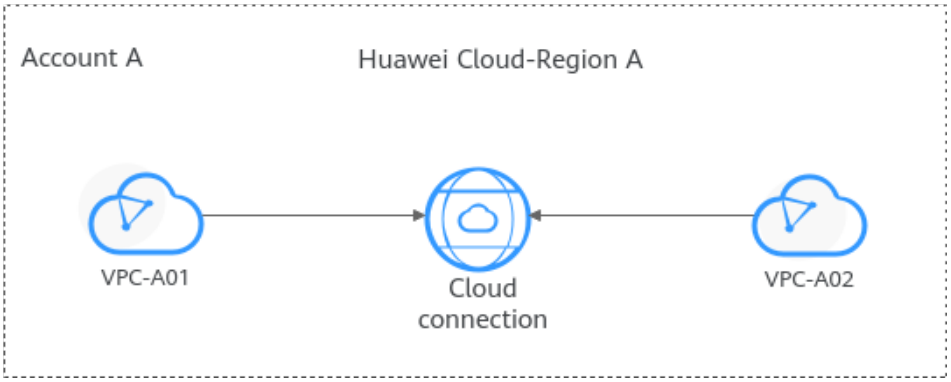
3.1 Using a Cloud Connection to Connect VPCs in the Same Region

In this section, the VPCs are in the same account and the same region.

NOTE

For details about the regions where cloud connections are available, see **Region Availability**.

Figure 3-1 How a cloud connection enables VPCs in the same region to communicate with each other



Procedure

Step	Description
Preparations	Before using cloud services, sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account.
Step 1: Create a Cloud Connection	Create a cloud connection.

Step	Description
Step 2: Load Network Instances	Load the VPCs to the created cloud connection based on your network plan.

Preparations

Before creating a cloud connection, you need to sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account. Ensure that your account has sufficient balance.

1. Sign up for a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication.

   If you already have a HUAWEI ID, skip this part. If you do not have a HUAWEI ID, perform the following operations to create one:

   a. Sign up for a HUAWEI ID and enable Huawei Cloud services.

   b. Complete real-name authentication.

2. Top up your account.

   Ensure that your account has sufficient balance. For details about how to top up an account, see Topping up an Account.

Step 1: Create a Cloud Connection

Step 1 Go to the Cloud Connections page.

Step 2 In the upper right corner of the page, click **Create Cloud Connection**.

Step 3 Configure the parameters based on Table 3-1.

Table 3-1 Parameters for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	**VPC**: VPCs or virtual gateways can use this cloud connection.
Tag	Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection. **NOTE** If a predefined tag has been created on Tag Management Service (TMS), you can directly select the corresponding tag key and value. For details about predefined tags, see Predefined Tags.

Parameter	Description
Description	Provides supplementary information about the cloud connection. The description can contain no more than 255 characters.

Step 4 Click **OK**.

----End

Step 2: Load Network Instances

Load the VPCs that need to communicate with each other to the created cloud connection.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Network Instances** tab.

Step 4 Click **Load Network Instance**.

Step 5 Configure the parameters based on **Table 3-2** and click **OK**.

Figure 3-2 Load Network Instance - Current account

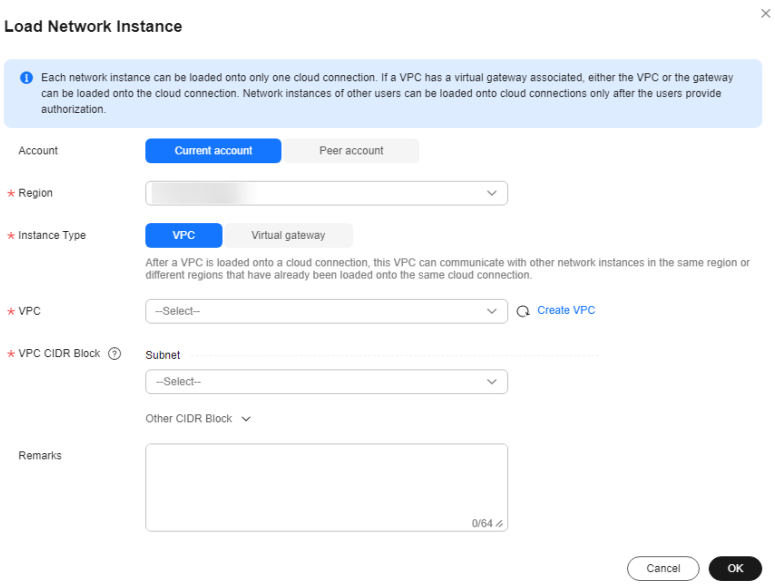


Table 3-2 Parameters for loading a network instance to a cloud connection

Parameter	Description
Account	Specifies the account that provides the network instance. Select **Current account**.

Parameter	Description
Region	Specifies the region where the VPC you want to connect is located.
Instance Type	Specifies the type of the network instance that needs to be loaded to the cloud connection. There are two options: • VPC • Virtual gateway Select **VPC**.
VPC	Specifies the VPC you want to load to the cloud connection. This parameter is mandatory if you have set **Instance Type** to **VPC**.
VPC CIDR Block	Specifies the subnets in the VPC and custom CIDR blocks. If you have set **Instance Type** to **VPC**, you need to configure the following two parameters: • **Subnet**: Select one or more subnets in the VPC. • **Other CIDR Block**: Add one or more custom CIDR blocks as needed.
Remarks	Provides supplementary information about the network instance.

Step 6 Click **Continue Loading** if you need to load another network instance. If you do not need to load another network instance now, close the dialog box and view the loaded network instance on the **Network Instances** tab.

----End

4 Connecting VPCs in Different Regions

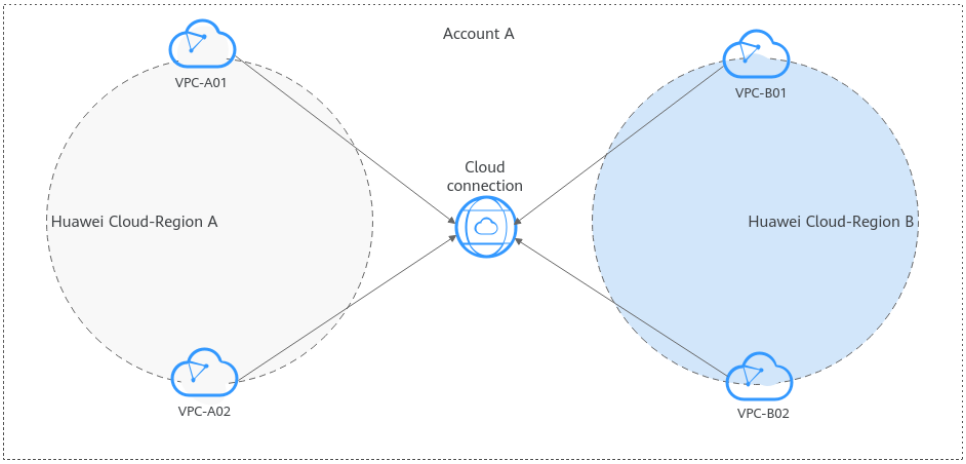
4.1 Using a Cloud Connection to Connect VPCs in Different Regions

In this section, the VPCs are in the same account but different regions.

NOTE

For details about the regions where cloud connections are available, see **Region Availability**.

Figure 4-1 How a cloud connection enables VPCs in different regions to communicate with each other



Procedure

Step	Description
Preparations	Before using cloud services, sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account.

Step	Description
Step 1: Apply for a Cross-Border Permit	If a VPC you want to connect is outside the Chinese mainland, you need to apply for a cross-border permit. Skip this step if cross-border communication is not required.
Step 2: Create a Cloud Connection	Create a cloud connection.
Step 3: Load Network Instances	Load the VPCs to the created cloud connection based on your network plan.
Step 4: Buy a Bandwidth Package	To enable normal communication between regions in the same geographic region or different geographic regions, you need to purchase bandwidth packages and bind them to the cloud connection.
Step 5: Assign Inter-Region Bandwidth	

Preparations

Before creating a cloud connection, you need to sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account. Ensure that your account has sufficient balance.

1. Sign up for a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication.

   If you already have a HUAWEI ID, skip this part. If you do not have a HUAWEI ID, perform the following operations to create one:

   a. **Sign up for a HUAWEI ID and enable Huawei Cloud services**.

   b. Complete **real-name authentication**.

2. Top up your account.

   Ensure that your account has sufficient balance. For details about how to top up an account, see **Topping up an Account**.

Step 1: Apply for a Cross-Border Permit

If a VPC you want to connect is outside the Chinese mainland, you need to apply for a cross-border permit.

Skip this step if cross-border communication is not required.

Step 1 Go to the **Bandwidth Packages** page.

Step 2 On the displayed page, click **apply now**.

If the registered address of your business entity is in the Chinese mainland, click **here** to go to the **Cross-Border Service Application System** page.

If the registered address of your business entity is outside the Chinese mainland, click **here** to go to the **Cross-Border Service Application System** page.

NOTE

Select the address for applying for the cross-border permit based on the registration address of your business entity.

Step 3 On the displayed page, select an applicant type, configure the parameters as prompted, and upload the required materials.

NOTICE

Prepare and upload the materials required on the application page.

Table 4-1 Online cross-border permit application

Parameter	Description
Applicant Name	The applicant name must be the same as the company name in the *Letter of Commitment to Information Security*.
Huawei Cloud UID	The account ID to log in to the management console. You can take the following steps to obtain your account ID. 1. Log in to the management console. 2. Click the username in the upper right corner and select **My Credentials** from the drop-down list. 3. On the **API Credentials** page, view the **Account ID**.
Bandwidth (Mbit/s)	For reference only
Start Date	For reference only
Termination Date	For reference only
Customer Type	Select a type based on the actual situation.
Country of the Customer	Country where the applicant is located.
Contact Name	-
Contact Number	-
Type of ID	-
ID Number	-
Scope of Business	Briefly describe the main business.
Number of Employees	For reference only
Branch Location Country	Country where the applicant branch is located. Set this parameter based on the actual situation.

Table 4-2 Required materials

Parameter	Description	Required Material	Signature	Company Seal
Business License	Upload a photo of the business license with the official seal. For the position of the seal, see the template.	A scanned copy of your company's business license	-	√
Service Agreement	Download the *Huawei Cloud Cross-Border Circuit Service Agreement*, fill in the blank, upload the copy of agreement with the signature and official seal. • Sign the material on the signature block. • Stamp the seal over the signature.	A scanned copy of the *Huawei Cloud Cross-Border Circuit Service Agreement*	√	√
Letter of Commitment to Information Security	Download the *China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service*, fill in the blank, and upload the copy of the letter with the signature and seal. • Sign the material on the signature block. • Stamp the seal over the signature. • Specify the bandwidth you estimated and your company name.	A scanned copy of the *China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service*	√	√

Step 4 Click **Submit**.

----End

Step 2: Create a Cloud Connection

Step 1 Go to the **Cloud Connections** page.

Step 2 In the upper right corner of the page, click **Create Cloud Connection**.

Step 3 Configure the parameters based on **Table 4-3**.

Table 4-3 Parameters for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	**VPC**: VPCs or virtual gateways can use this cloud connection.
Tag	Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection. **NOTE** If a predefined tag has been created on TMS, you can directly select the corresponding tag key and value. For details about predefined tags, see **Predefined Tags**.
Description	Provides supplementary information about the cloud connection. The description can contain no more than 255 characters.

Step 4 Click **OK**.

----End

Step 3: Load Network Instances

Load the VPCs that need to communicate with each other to the created cloud connection.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Network Instances** tab.

Step 4 Click **Load Network Instance**.

Step 5 Configure the parameters based on **Table 4-4** and click **OK**.

Figure 4-2 Load Network Instance - Current account

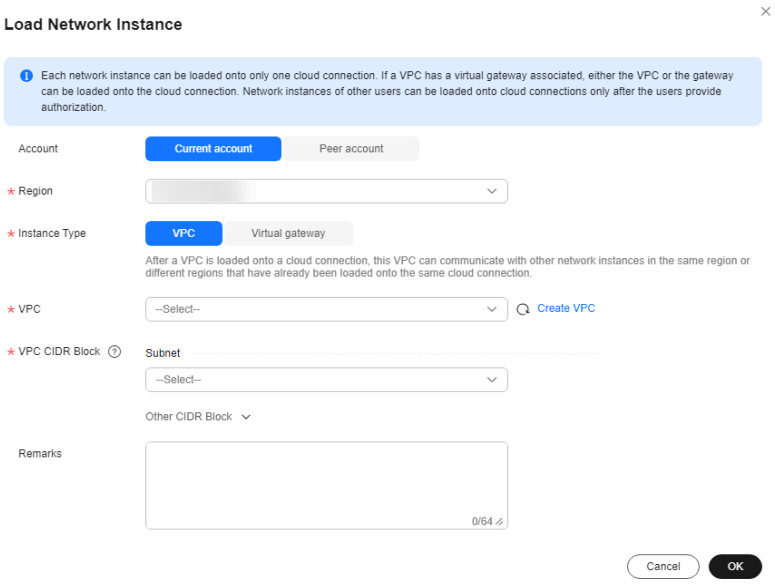


Table 4-4 Parameters for loading a network instance to a cloud connection

Parameter	Description
Account	Specifies the account that provides the network instance. Select **Current account**.
Region	Specifies the region where the VPC you want to connect is located.
Instance Type	Specifies the type of the network instance that needs to be loaded to the cloud connection. There are two options: • VPC • Virtual gateway Select **VPC**.
VPC	Specifies the VPC you want to load to the cloud connection. This parameter is mandatory if you have set **Instance Type** to **VPC**.
VPC CIDR Block	Specifies the subnets in the VPC and custom CIDR blocks. If you have set **Instance Type** to **VPC**, you need to configure the following two parameters: • **Subnet**: Select one or more subnets in the VPC. • **Other CIDR Block**: Add one or more custom CIDR blocks as needed.
Remarks	Provides supplementary information about the network instance.

Step 6 Click **Continue Loading** if you need to load another network instance. If you do not need to load another network instance now, close the dialog box and view the loaded network instance on the **Network Instances** tab.

----End

Step 4: Buy a Bandwidth Package

By default, a cloud connection provides 10 kbit/s of bandwidth for testing cross-region network connectivity. To enable normal communication between regions in the same geographic region or different geographic regions, you need to purchase a bandwidth package and bind it to the cloud connection.

NOTE

One cloud connection can only have one bandwidth package regardless of if the cloud connection is used for communication within a geographic region or between geographic regions. For example, if network instances are in the Chinese mainland and Asia Pacific, your cloud connection can only have one bandwidth package.

Step 1 Go to the **Buy Bandwidth Package** page.

Step 2 Configure the parameters based on **Table 4-5** and click **Buy Now**.

Table 4-5 Parameters for buying a bandwidth package

Parameter	Description
Billing Mode	The only option is **Yearly/Monthly**. You can purchase it by year or month as needed.
Name	Specifies the bandwidth package name. The name can contain 1 to 64 characters. Only digits, letters, underscores (_), hyphens (-), and periods (.) are allowed.
Billed By	Specifies by what you want the bandwidth package to be billed.
Applicability	Specifies whether you want to use the bandwidth package for communication within a geographic region or between geographic regions. There are two options: • **Single geographic region**: Use the bandwidth package between regions in the same geographic region. • **Across geographic regions**: Use the bandwidth package between regions in different geographic regions.
Geographic Region	Specifies the geographic region(s).
Bandwidth	Specifies the bandwidth you require for communication between regions, in Mbit/s. The sum of all inter-region bandwidths you assign cannot exceed the total bandwidth of the bandwidth package. Assign the bandwidth based on your network plan.

Parameter	Description
Tag	Identifies the bandwidth package. A tag consists of a key and a value. You can add 20 tags to a bandwidth package. **NOTE** If a predefined tag has been created on TMS, you can directly select the corresponding tag key and value. For details about predefined tags, see **Predefined Tags**.
Required Duration	Specifies how long you require the bandwidth package for. Auto renewal is supported.
Cloud Connection	Specifies the cloud connection you want to bind the bandwidth package to. There are two options: • Bind now • Bind later

Step 3 Confirm the configuration and click **Pay Now**.

Step 4 On the payment information page, click **Confirm**.

View the bandwidth package in the bandwidth package list. If the status changes to **Normal**, the purchase is successful.

----End

Bind the bandwidth package to the cloud connection.

Bind the purchased bandwidth package to the created cloud connection.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Bandwidth Packages** tab.

Step 4 Select the purchased bandwidth package and bind it to the cloud connection.

----End

Step 5: Assign Inter-Region Bandwidth

By default, a cloud connection provides 10 kbit/s of bandwidth for testing cross-region network connectivity.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Inter-Region Bandwidths** tab.

Step 4 Click **Assign Inter-Region Bandwidth** and configure the parameters based on **Table 4-6**.

Table 4-6 Parameters required for assigning inter-region bandwidth

Parameter	Description
Regions	Specifies the regions of the network instances that need to communicate with each other. Select two regions.
Bandwidth Package	Specifies the purchased bandwidth package that will be bound to the cloud connection.
Bandwidth	Specifies the bandwidth you require for communication between regions, in Mbit/s. The sum of all inter-region bandwidths you assign cannot exceed the total bandwidth of the bandwidth package. Plan the bandwidth in advance.

Step 5 Click **OK**.

Now the network instances in the two regions can communicate with each other.

NOTE

The default security group rules deny all the inbound traffic. Ensure that security group rules in both directions are correctly configured for resources in the regions to ensure normal communication.

----End

4.2 Using a Central Network and Enterprise Routers to Connect VPCs in Different Regions

In this section, a central network and enterprise routers are used to connect the VPCs in the same account but different regions.

Relying on the Huawei backbone network, you can build a central network to manage global network resources on premises and on the cloud easily and securely. After attaching the VPCs to enterprise routers in each region, you can add the enterprise routers to a central network, so that all the VPCs attached to the enterprise routers can communicate with each other across regions.

NOTE

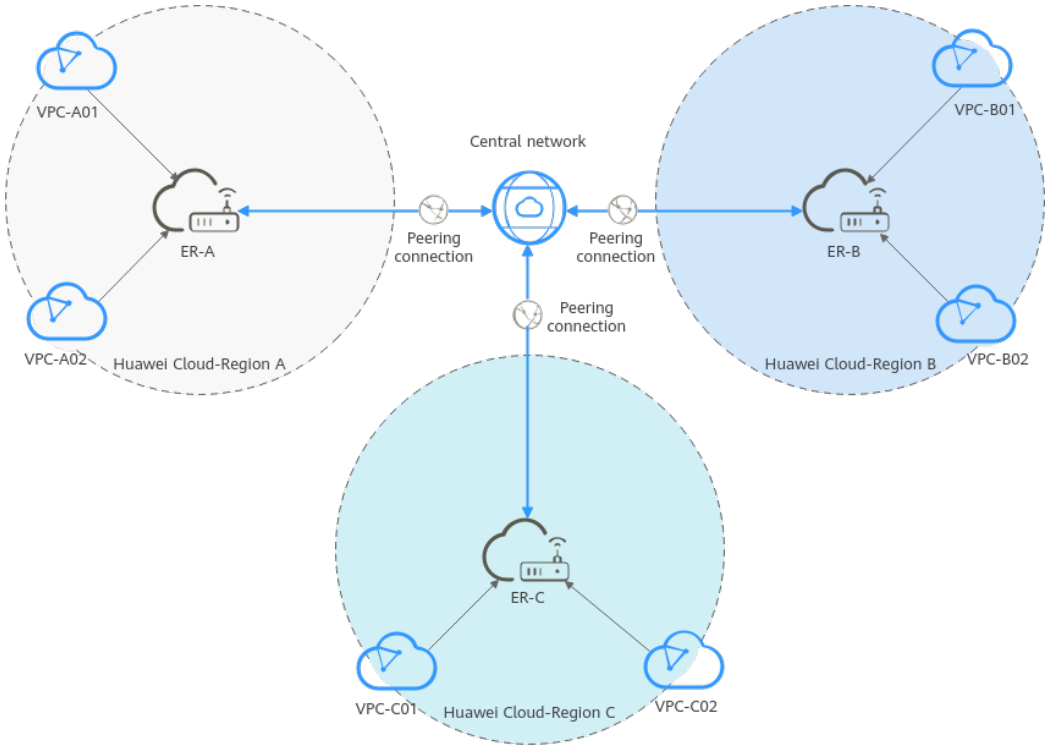
- For details about the regions where central networks are available, see **Region Availability**.
- The CIDR blocks of the VPCs must be unique. If there are overlapping CIDR blocks, the communication may fail.

Architecture

For nearby access, an enterprise runs workloads in regions A, B, and C. The VPCs in each region need to communicate with each other. To achieve this, you can:

1. Create an enterprise router in each region: ER-A in region A, ER-B in region B, and ER-C in region C.
2. Create a central network and add ER-A, ER-B, and ER-C to the central network as attachments so that the three enterprise routers can communicate with each other.
3. In region A, attach VPC-A01 and VPC-A02 to ER-A so that the two VPCs can communicate with each other. Perform the same operations in regions B and C. In this way, the VPCs in the three regions can communicate with each other over the central network.

Figure 4-3 Cross-region VPC network



NOTE

You can **share an enterprise router** with different accounts to attach VPCs of these accounts to the same enterprise router for communications.

Procedure

For details about how to use a central network and enterprise routers to enable VPCs in different regions to communicate with each other, see **Process of Connecting VPCs Across Regions Using Enterprise Router and Central Network**.

5 Connecting On-premises Data Centers and VPCs

5.1 Using a Cloud Connection and Direct Connect to Connect On-Premises Data Centers and VPCs

To enable on-premises data centers to communicate with VPCs in different regions, you first need to connect each on-premises data center to a VPC using Direct Connect and the load the VPCs and virtual gateways to a cloud connection. If there are VPCs in other accounts, you must request permission for these VPCs from the other accounts before you load them to the cloud connection. You also need to purchase bandwidth packages and assign inter-region bandwidths.

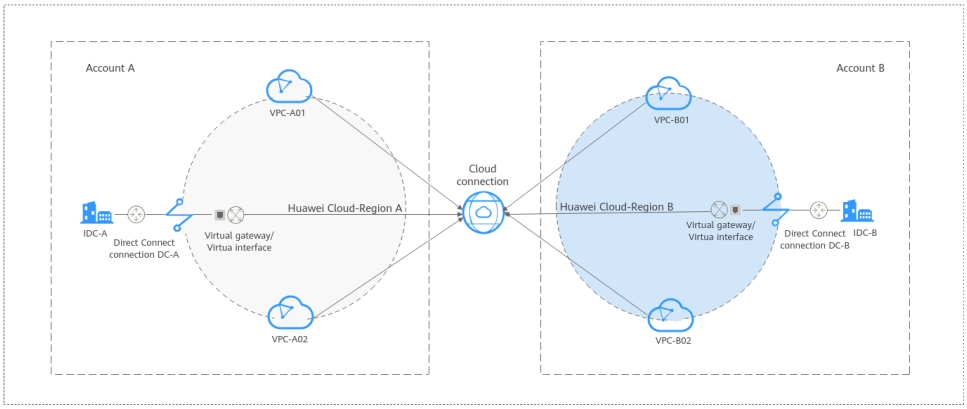
If a VPC or on-premises data center is outside the Chinese mainland, you need to apply for a cross-border permit before you purchase bandwidth packages.

Figure 5-1 shows an example.

NOTE

For details about the regions where cloud connections are available, see **Region Availability**.

Figure 5-1 How a cloud connection works with Direct Connect to enable multiple on-premises data centers to access the VPCs in different regions



Procedure

Step	Description
Preparations	Before using cloud services, sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account.
Step 1: Connect On-Premises Data Centers to the Cloud Using Direct Connect	Connect each on-premises data center to a nearest VPC over a Direct Connect connection.
Step 2: Apply for a Cross-Border Permit	If a VPC or on-premises data center you want to connect is outside the Chinese mainland, you need to apply for a cross-border permit. Skip this step if cross-border communication is not required.
Step 3: Create a Cloud Connection	Create a cloud connection.
Step 4: Request Permission to Use the VPCs in the Other Account	If the VPCs in your account need to communicate with the VPCs in other accounts, you need to ask the other accounts to grant you the permission to load their VPCs to your cloud connection. Skip this step if the VPCs in your account do not need to communicate with the VPCs in other accounts.
Step 5: Load Network Instances	Load the VPCs and virtual gateways to the created cloud connection based on your network plan.
Step 6: Buy Bandwidth Packages	To enable normal communication between regions in the same geographic region or different geographic regions, you need to purchase bandwidth packages and bind them to the cloud connection.
Step 7: Assign Inter-Region Bandwidth	

Preparations

Before creating a cloud connection, you need to sign up for a HUAWEI ID, enable Huawei Cloud services, complete real-name authentication, and top up your account. Ensure that your account has sufficient balance.

1. Sign up for a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication.

   If you already have a HUAWEI ID, skip this part. If you do not have a HUAWEI ID, perform the following operations to create one:

   a. **Sign up for a HUAWEI ID and enable Huawei Cloud services**.

   b. Complete **real-name authentication**.

2. Top up your account.

Ensure that your account has sufficient balance. For details about how to top up an account, see **Topping up an Account**.

Step 1: Connect On-Premises Data Centers to the Cloud Using Direct Connect

Connect each on-premises data center to a nearest VPC over a Direct Connect connection.

For details, see **Direct Connect Quick Start**.

NOTE

When you create a virtual gateway, specify the VPC CIDR block that the on-premises data center needs to access as a local subnet.

Step 2: Apply for a Cross-Border Permit

If a VPC or on-premises data center you want to connect is outside the Chinese mainland, you need to apply for a cross-border permit.

Skip this step if cross-border communication is not required.

Step 1 Go to the **Bandwidth Packages** page.

Step 2 On the displayed page, click **apply now**.

If the registered address of your business entity is in the Chinese mainland, click **here** to go to the **Cross-Border Service Application System** page.

If the registered address of your business entity is outside the Chinese mainland, click **here** to go to the **Cross-Border Service Application System** page.

NOTE

Select the address for applying for the cross-border permit based on the registration address of your business entity.

Step 3 On the displayed page, select an applicant type, configure the parameters as prompted, and upload the required materials.

NOTICE

Prepare and upload the materials required on the application page.

Table 5-1 Online cross-border permit application

Parameter	Description
Applicant Name	The applicant name must be the same as the company name in the *Letter of Commitment to Information Security*.

Parameter	Description
Huawei Cloud UID	The account ID to log in to the management console. You can take the following steps to obtain your account ID. 1. Log in to the management console. 2. Click the username in the upper right corner and select **My Credentials** from the drop-down list. 3. On the **API Credentials** page, view the **Account ID**.
Bandwidth (Mbit/s)	For reference only
Start Date	For reference only
Termination Date	For reference only
Customer Type	Select a type based on the actual situation.
Country of the Customer	Country where the applicant is located.
Contact Name	-
Contact Number	-
Type of ID	-
ID Number	-
Scope of Business	Briefly describe the main business.
Number of Employees	For reference only
Branch Location Country	Country where the applicant branch is located. Set this parameter based on the actual situation.

Table 5-2 Required materials

Parameter	Description	Required Material	Signature	Company Seal
Business License	Upload a photo of the business license with the official seal. For the position of the seal, see the template.	A scanned copy of your company's business license	-	√

Parameter	Description	Required Material	Signature	Company Seal
Service Agreement	Download the *Huawei Cloud Cross-Border Circuit Service Agreement*, fill in the blank, upload the copy of agreement with the signature and official seal. • Sign the material on the signature block. • Stamp the seal over the signature.	A scanned copy of the *Huawei Cloud Cross-Border Circuit Service Agreement*	√	√
Letter of Commitment to Information Security	Download the *China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service*, fill in the blank, and upload the copy of the letter with the signature and seal. • Sign the material on the signature block. • Stamp the seal over the signature. • Specify the bandwidth you estimated and your company name.	A scanned copy of the *China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service*	√	√

Step 4 Click **Submit**.

----End

Step 3: Create a Cloud Connection

Step 1 Go to the **Cloud Connections** page.

Step 2 In the upper right corner of the page, click **Create Cloud Connection**.

Step 3 Configure the parameters based on **Table 5-3**.

Table 5-3 Parameters for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	**VPC**: VPCs or virtual gateways can use this cloud connection.
Tag	Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection. **NOTE** If a predefined tag has been created on TMS, you can directly select the corresponding tag key and value. For details about predefined tags, see **Predefined Tags**.
Description	Provides supplementary information about the cloud connection. The description can contain no more than 255 characters.

Step 4 Click **OK**.

----End

Step 4: Request Permission to Use the VPCs in the Other Account

If the VPCs in your account need to communicate with the VPCs in other accounts, you need to ask the other accounts to grant you the permission to load their VPCs to your cloud connection.

Skip this step if the VPCs in your account do not need to communicate with the VPCs in other accounts. The following are steps that other accounts can take to grant you the permission.

NOTE

A VPC can only be authorized to one account. After the other account grants you the permission, you can load the VPC to your cloud connection so that your network can communicate with this VPC.

Step 1 Go to the **Cross-Account Authorization** page.

Step 2 On the **Network Instances Authorized by Me** tab, click **Authorize Network Instance**.

Step 3 Configure the parameters based on **Table 5-4**.

Figure 5-2 Cross-account authorization

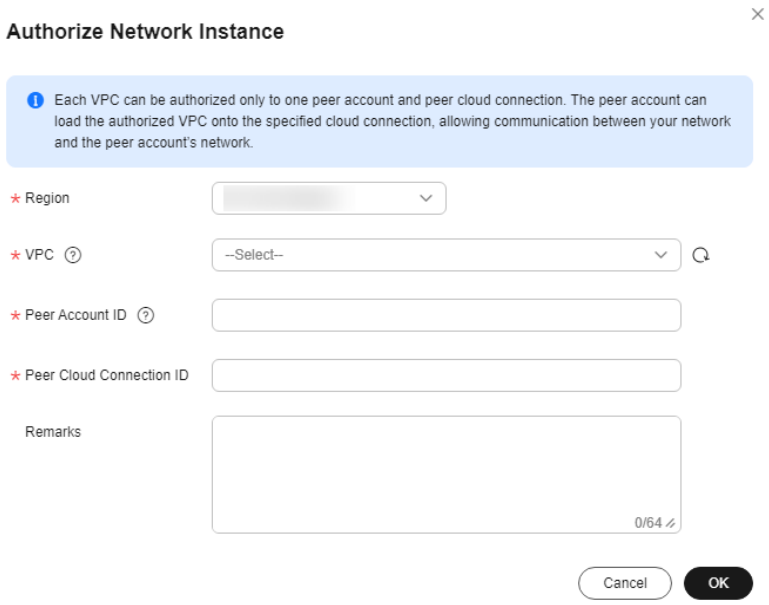


Table 5-4 Parameters for the other account to grant you the permission to load their VPC to your cloud connection

Parameter	Description
Region	Specifies the region where the VPC is located.
VPC	Specifies the VPC to be loaded to your cloud connection.
Peer Account ID	Specifies the ID of your account.
Peer Cloud Connection ID	Specifies the ID of your cloud connection that the VPC is to be loaded to.
Remarks	Provides supplementary information about cross-account authorization.

Step 4 Click **OK**.

----End

Step 5: Load Network Instances

Load the VPCs and virtual gateways to the created cloud connection based on your network plan.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Network Instances** tab.

Step 4 Click **Load Network Instance**.

- If the network instance to be loaded is in your account that was used to create the cloud connection, select **Current account**.

Configure the parameters based on **Table 5-5** and click **OK**.

Table 5-5 Parameters for loading a network instance to a cloud connection

Parameter	Description
Account	Specifies the account that provides the network instance. Select **Current account**.
Region	Specifies the region where the VPC you want to connect is located.
Instance Type	Specifies the type of the network instance that needs to be loaded to the cloud connection. There are two options: – VPC – Virtual gateway Select **VPC**.
VPC	Specifies the VPC you want to load to the cloud connection. This parameter is mandatory if you have set **Instance Type** to **VPC**.
VPC CIDR Block	Specifies the subnets in the VPC and custom CIDR blocks. If you have set **Instance Type** to **VPC**, you need to configure the following two parameters: – **Subnet**: Select one or more subnets in the VPC. – **Other CIDR Block**: Add one or more custom CIDR blocks as needed.
Remarks	Provides supplementary information about the network instance.

- If the network instance is in another account, select **Peer account**.
  Configure the parameters based on **Table 5-6** and click **OK**.

  Table 5-6 Parameters for loading network instances across accounts

Parameter	Description
Account	Specifies the account that provides the network instance. Select **Peer account**.
Peer Account ID	Specifies the ID of the other account.
Region	Specifies the region where the VPC you want to connect is located.
Peer Project ID	Specifies the project ID of the VPC in the other account.

Parameter	Description
Instance Type	VPC Specifies the type of the network instance that needs to be loaded to the cloud connection.
Peer VPC	Specifies the VPC to be loaded.
VPC CIDR Block	Specifies the subnets in the VPC you want to load and custom CIDR blocks.
Remarks	Provides supplementary information about the network instance.

NOTE

- A network instance can only be loaded to one cloud connection.
- If a VPC is loaded, the associated virtual gateway cannot be loaded.

Step 5 Click **Continue Loading** if you need to load another network instance. If you do not need to load another network instance now, close the dialog box and view the loaded network instance on the **Network Instances** tab.

----End

Step 6: Buy Bandwidth Packages

By default, a cloud connection provides 10 kbit/s of bandwidth for testing cross-region network connectivity. To enable normal communication between regions in the same geographic region or different geographic regions, you need to purchase a bandwidth package and bind it to the cloud connection.

NOTE

- One cloud connection can only have one bandwidth package regardless of if the cloud connection is used for communication within a geographic region or between geographic regions. For example, if network instances are in the Chinese mainland and Asia Pacific, your cloud connection can only have one bandwidth package.
- A bandwidth package can only be bound to one cloud connection.

Step 1 Go to the **Buy Bandwidth Package** page.

Step 2 Configure the parameters based on **Table 5-7** and click **Buy Now**.

Table 5-7 Parameters for buying a bandwidth package

Parameter	Description
Billing Mode	The only option is **Yearly/Monthly**. You can purchase it by year or month as needed.

Parameter	Description
Name	Specifies the bandwidth package name. The name can contain 1 to 64 characters. Only digits, letters, underscores (_), hyphens (-), and periods (.) are allowed.
Billed By	Specifies by what you want the bandwidth package to be billed.
Applicability	Specifies whether you want to use the bandwidth package for communication within a geographic region or between geographic regions. There are two options: • **Single geographic region**: Use the bandwidth package between regions in the same geographic region. • **Across geographic regions**: Use the bandwidth package between regions in different geographic regions.
Geographic Region	Specifies the geographic region(s).
Bandwidth	Specifies the bandwidth you require for communication between regions, in Mbit/s. The sum of all inter-region bandwidths you assign cannot exceed the total bandwidth of the bandwidth package. Assign the bandwidth based on your network plan.
Tag	Identifies the bandwidth package. A tag consists of a key and a value. You can add 20 tags to a bandwidth package. **NOTE** If a predefined tag has been created on TMS, you can directly select the corresponding tag key and value. For details about predefined tags, see **Predefined Tags**.
Required Duration	Specifies how long you require the bandwidth package for. Auto renewal is supported.
Cloud Connection	Specifies the cloud connection you want to bind the bandwidth package to. There are two options: • Bind now • Bind later

Step 3 Confirm the configuration and click **Pay Now**.

Step 4 On the payment information page, click **Confirm**.

View the bandwidth package in the bandwidth package list. If the status changes to **Normal**, the purchase is successful.

----End

Bind a bandwidth package to a cloud connection.

Bind the purchased bandwidth package to the created cloud connection.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Bandwidth Packages** tab.

Step 4 Select the purchased bandwidth package and bind it to the cloud connection.

----End

Step 7: Assign Inter-Region Bandwidth

By default, a cloud connection provides 10 kbit/s of bandwidth for testing cross-region network connectivity.

Step 1 Go to the **Cloud Connections** page.

Step 2 Click the name of the cloud connection to go to the **Basic Information** page.

Step 3 Click the **Inter-Region Bandwidths** tab.

Step 4 Click **Assign Inter-Region Bandwidth** and configure the parameters based on **Table 5-8**.

Table 5-8 Parameters required for assigning inter-region bandwidth

Parameter	Description
Regions	Specifies the regions of the network instances that need to communicate with each other. Select two regions.
Bandwidth Package	Specifies the purchased bandwidth package that will be bound to the cloud connection.
Bandwidth	Specifies the bandwidth you require for communication between regions, in Mbit/s. The sum of all inter-region bandwidths you assign cannot exceed the total bandwidth of the bandwidth package. Plan the bandwidth in advance.

Step 5 Click **OK**.

Now the network instances in the two regions can communicate with each other.

NOTE

The default security group rules deny all the inbound traffic. Ensure that security group rules in both directions are correctly configured for resources in the regions to ensure normal communication.

----End

