

**Cloud Connect**

# Getting Started

**Issue**            01  
**Date**             2022-07-30



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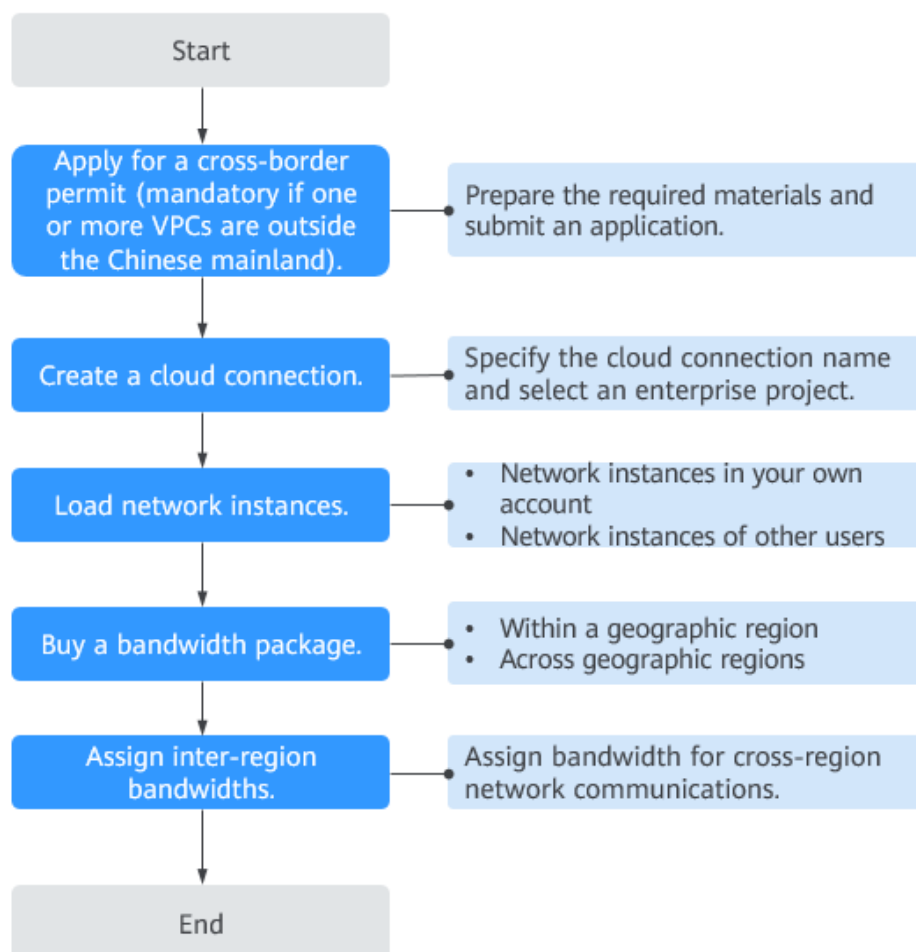
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# 1 Overview

With Cloud Connect, you can connect VPCs in different regions for private communications.

**Figure 1-1** shows the process.

**Figure 1-1** Process for connecting VPCs in different regions



# 2 Preparations

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

- [Register with Huawei Cloud](#)
- [Topping Up Your Account](#)

## Registering with Huawei Cloud

Skip this part if you already have a Huawei Cloud account. If you do not have a Huawei Cloud account:

1. Visit the [Huawei Cloud official website](#) and click **Register**.
2. On the displayed **Huawei Cloud Account Registration** page, register an account as prompted.

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

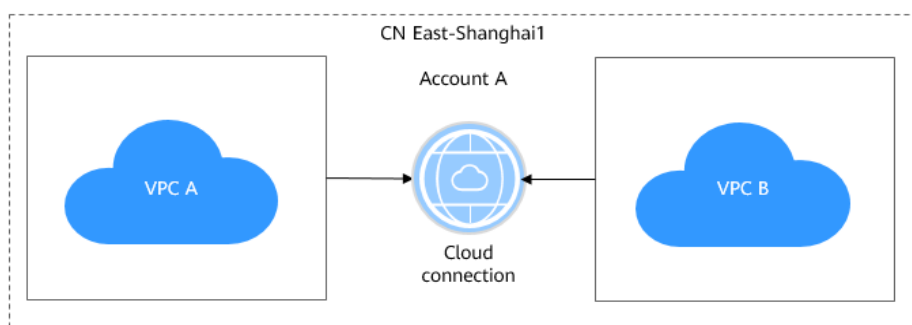
## 3.1 Connecting VPCs in the Same Account

### Process Description

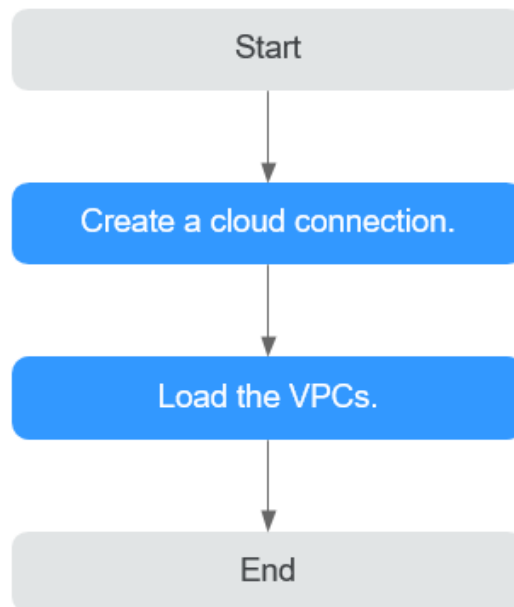
You can create a cloud connection and load the VPCs in the same region and the same account to enable cross-VPC communications.

[Connecting VPCs in the Same Account](#) shows an example.

**Figure 3-1** Network communications among VPCs in the same region and the same account



**Figure 3-2** illustrates how you can enable network communications among VPCs in the same region and the same account.

**Figure 3-2** Process for enabling network communications among VPCs**NOTE**

You can use either Cloud Connect or VPC Peering to enable communications among VPCs.

- If there are two VPCs in the same region, choose VPC Peering and create a VPC peering connection between the VPCs.
- If there are multiple VPCs, use Cloud Connect, regardless of if they are in the same region or different regions.

**Procedure****Step 1** Create a cloud connection.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. On the **Cloud Connections** page, click **Create Cloud Connection**.

**Figure 3-3** Create Cloud Connection

**Create Cloud Connection** X

★ Name

★ Enterprise Project  [Create Enterprise Project](#)

★ Scenario VPC

If you select VPC here, only VPCs or virtual gateways can use this cloud connection.

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Description  0/255

Cancel OK

4. Configure the parameters based on [Table 3-1](#).

**Table 3-1** Parameters required for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	<b>VPC:</b> VPCs or virtual gateways can use this cloud connection.



Parameter	Description
Tag	<p>Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection.</p> <p>Tag keys and values must meet the requirements listed in <a href="#">Table 3-2</a>.</p> <p><b>NOTE</b> 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 <a href="#">Predefined Tags</a>.</p>
Description	<p>Provides supplementary information about the cloud connection.</p> <p>The description can contain a maximum of 255 characters.</p>

**Table 3-2** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>- Cannot be left blank.</li> <li>- Must be unique for each resource.</li> <li>- Can contain a maximum of 36 characters.</li> <li>- Can contain only letters, digits, hyphens, and underscores.</li> </ul>
Value	<ul style="list-style-type: none"> <li>- Can be left blank.</li> <li>- Can contain a maximum of 43 characters.</li> <li>- Can contain only letters, digits, period, hyphens, and underscores.</li> </ul>

5. Click **OK**.

**Step 2** Load network instances.

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

1. In the cloud connection list, locate the cloud connection and click its name.
2. Click **Network Instances**.
3. Click **Load Network Instance**.
4. Select the VPC you want to load.

Configure other parameters based on [Table 3-3](#) and then click **OK**.

**Figure 3-4** Loading a VPC

**Load Network Instance** [Close]

**Warning:** Each network instance can be loaded onto only one cloud connection. If a VPC has a virtual gateway associated, either the VPC or the gateway can be loaded onto the cloud connection. Network instances of other users can be loaded onto cloud connections only after the users provide authorization.

Account: **Current account** | Peer account

\* Region: [Dropdown]

\* Instance Type: **VPC** | Virtual gateway

After a VPC is loaded onto a cloud connection, this VPC can communicate with other network instances in the same region or different regions that have already been loaded onto the same cloud connection.

\* VPC: [--Select--] [Create VPC](#)

\* VPC CIDR Block: Subnet [--Select--] | Other CIDR Block [Dropdown]

Remarks: [Text Area] 0/64

[Cancel] [OK]

**Table 3-3** Parameters required for loading network instances to a cloud connection

Parameter	Description
Account	Specifies whether the network instances are in the current account or in another account.
Region	Specifies the region where the VPC you want to connect is located.
Instance Type	Specifies the type of the network instance. Two options are available, <b>VPC</b> and <b>Virtual gateway</b> .
VPC	Specifies the VPC you want to load to the cloud connection.  This parameter is mandatory if you have set <b>Instance Type</b> to <b>VPC</b> .
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks.  If you have set <b>Instance Type</b> to <b>VPC</b> , configure the following two parameters: <ul style="list-style-type: none"> <li>– <b>Subnet:</b> Select one or all subnets of the VPC.</li> <li>– <b>Other CIDR Block:</b> Add one or more custom CIDR blocks as needed.</li> </ul>
Remarks	Provides supplementary information about the network instance.

5. Click **Load Another Instance** to add all the VPCs that need to communicate with each other. Then click the **Network Instances** tab to view the VPCs you loaded.

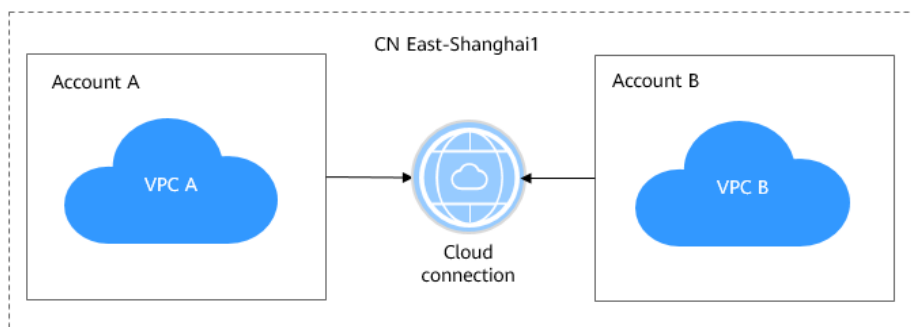
----End

## 3.2 Connecting VPCs in Different Accounts

### Process Description

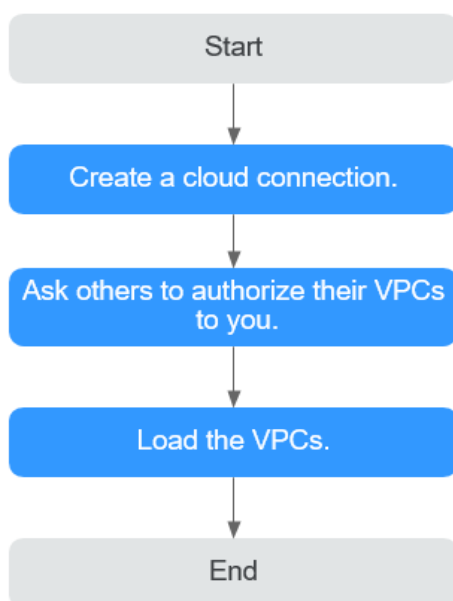
If you want to connect the VPCs in your account to VPCs in another user's account, you can create a cloud connection, request this other user to allow you to load their VPCs to the cloud connection, and load all the VPCs to the cloud connection.

**Figure 3-5** Network communications among VPCs in the same region but in different accounts



**Figure 3-6** illustrates how you can enable network communications among VPCs in the same region but in different accounts.

**Figure 3-6** Process for enabling network communications among VPCs



## Procedure

### Step 1 Create a cloud connection.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. On the **Cloud Connections** page, click **Create Cloud Connection**.

**Figure 3-7** Create Cloud Connection

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

**Table 3-4** Parameters required for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	<b>VPC:</b> VPCs or virtual gateways can use this cloud connection.

Parameter	Description
Tag	<p>Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection.</p> <p>Tag keys and values must meet the requirements listed in <a href="#">Table 3-5</a>.</p> <p><b>NOTE</b> 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 <a href="#">Predefined Tags</a>.</p>
Description	<p>Provides supplementary information about the cloud connection.</p> <p>The description can contain a maximum of 255 characters.</p>

**Table 3-5** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>- Cannot be left blank.</li> <li>- Must be unique for each resource.</li> <li>- Can contain a maximum of 36 characters.</li> <li>- Can contain only letters, digits, hyphens, and underscores.</li> </ul>
Value	<ul style="list-style-type: none"> <li>- Can be left blank.</li> <li>- Can contain a maximum of 43 characters.</li> <li>- Can contain only letters, digits, period, hyphens, and underscores.</li> </ul>

5. Click **OK**.

**Step 2** Request the other user to allow you to load their VPCs to your cloud connection.

If your VPCs need to communicate with the VPCs of another user, ask this other user to grant you the permissions to load their VPCs to your cloud connection. This other user can take the following steps to grant you the permissions to load their VPCs:

1. In the navigation pane, choose **Cloud Connect > Cross-Account Authorization**.
2. Click **Network Instances Authorized by Me**.
3. Click **Authorize Network Instance**.

Configure the parameters based on [Table 3-6](#).

**Table 3-6** Parameters required for asking the other user to grant the permissions on access to their VPCs

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 to which the VPCs are to be loaded.
Remarks	Provides supplementary information about cross-account authorization, if any.

4. Click **OK**.

**Figure 3-8** Cross-account authorization

**Step 3** Load network instances.

Load the VPCs that need to communicate with each other to the cloud connection. To load a VPC in this other user's account, perform the following steps:

1. Log in to the management console.
2. In the cloud connection list, locate the cloud connection and click its name.
3. Click **Network Instances**.
4. Click **Load Network Instance**.
5. Select **Peer account** for **Account**, select this other user's account ID, project ID, and the VPC, and specify the CIDR blocks.

For details about the parameters, see [Table 3-7](#).

**Table 3-7** Parameters for loading network instances across accounts

Parameter	Description
Account	Specifies whether the network instance is in the current account or another account.
Peer Account ID	Specifies the ID of this other user's account.
Region	Specifies the region where the VPC is located.
Peer Project ID	Specifies the project ID of the VPC in the other user's account.
Instance Type	Specifies the type of the network instance to be loaded. Currently, you can load only VPCs across accounts.
Peer VPC	Specifies the ID of the VPC you want to load.
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks.
Remarks	Provides supplementary information about the network instance.

6. Click **OK**.

**Figure 3-9** Loading the instance in another account

**Load Network Instance** ×

**ⓘ** Each network instance can be loaded onto only one cloud connection. If a VPC has a virtual gateway associated, either the VPC or the gateway can be loaded onto the cloud connection. Network instances of other users can be loaded onto cloud connections only after the users provide authorization.

Account: Current account **Peer account**

\* Peer Account ID: --Select--

\* Region: --Select--

\* Peer Project ID: --Select--

\* Instance Type: **VPC**

After a VPC is loaded onto a cloud connection, this VPC can communicate with other network instances in the same region or different regions that have already been loaded onto the same cloud connection.

\* Peer VPC: --Select--

\* VPC CIDR Block ⓘ Enter IP CIDR blocks, with each on a separate line. Example:  
192.168.0.0/16  
172.16.0.0/12 ⓘ

Adding 100.64.0.0/10 may cause cloud services such as OBS, DNS, and API Gateway to become unavailable.

Remarks: [Text Area] 0/64

Cancel **OK**

7. Click **Load Another Instance** to add all the VPCs that need to communicate with each other. Then click the **Network Instances** tab to view the VPCs you loaded.

 **NOTE**

- You can load a network instance to only one cloud connection.
- A VPC and the associated virtual gateway cannot be both loaded.
- If the VPCs are in another user's account, you need to request for the permissions to load the network instances before you can load them to your cloud connection.

----End



# 4 Connecting VPCs in Different Regions

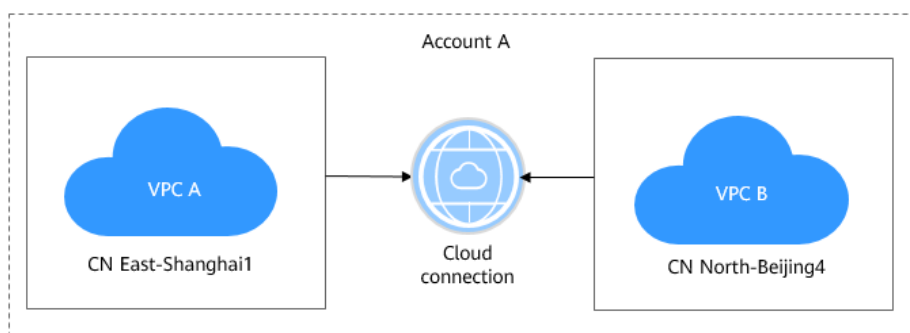
## 4.1 Connecting VPCs in the Same Account

### Process Description

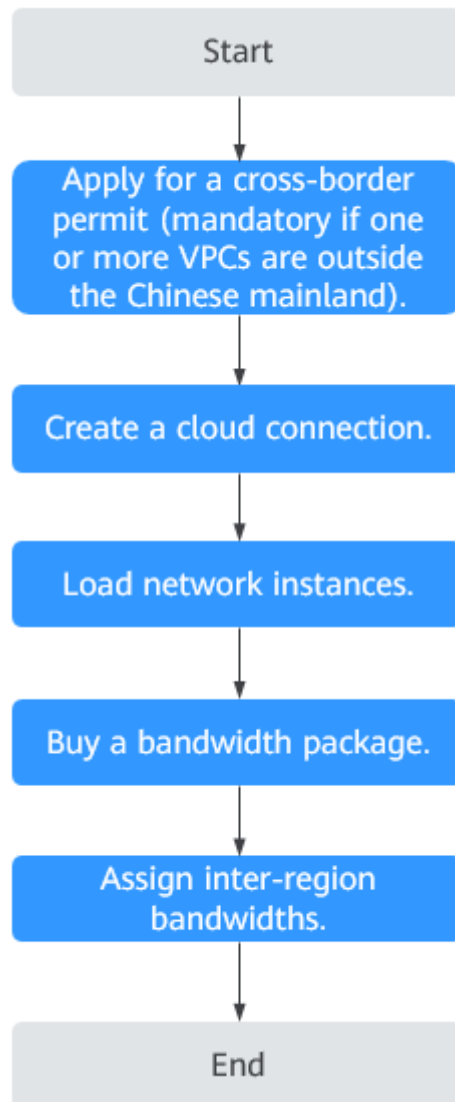
You can create a cloud connection and load the VPCs in the same account to enable cross-VPC communications. Because the VPCs are in different regions, you need to buy bandwidth packages and assign inter-region bandwidths. If a VPC is outside the Chinese mainland and other VPCs are inside the Chinese mainland, you need to apply for a cross-border permit before you purchase bandwidth packages.

**Figure 4-1** shows an example.

**Figure 4-1** Network communications among VPCs in the same account but different regions



**Figure 4-2** illustrates how you can enable network communications among VPCs that are in the same account but different regions.


**Figure 4-2** Process for enabling network communications among VPCs

## Procedure

### Step 1 Apply for a cross-border permit.

Skip this step if you do not require cross-border communications.

Apply for a cross-border permit only when a VPC to be connected is outside the Chinese mainland and other VPCs are inside the Chinese mainland.

1. Log in to the management console.
2. Hover on  to display **Service List** and choose **Networking > Cloud Connect**.
3. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
4. On the displayed page, click **apply now**.  
The **Cross-Border Service Application System** page is displayed.

5. On the application page, configure the parameters and upload the required materials.

**Table 4-1** Online cross-border permit application

Parameter	Description
Applicant Name	The applicant name, which must be the same as the company name in the <i>Letter of Commitment to Information Security</i> .
Huawei Cloud UID	The account ID to log in to the management console. You can take the following steps to obtain your account ID. <ol style="list-style-type: none"><li>1. Log in to the management console.</li><li>2. Click the username in the upper right corner and select <b>My Credentials</b> from the drop-down list.</li><li>3. On the <b>API Credentials</b> page, view the <b>Account ID</b>.</li></ol>
Type of Product	Select <b>Cloud Connect</b> .
Bandwidth (M)	The bandwidth must be the same as the bandwidth in the <i>Letter of Commitment to Information Security</i> . The information is for reference only and does not affect the actual service bandwidth.
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
Per Capita Bandwidth	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

Material	Signature	Seal	Description
A scanned copy of your company's business license	N/A	Required	For the position of the seal, see the template provided by Huawei Cloud.
A scanned copy of the <i>Huawei Cloud Cross-Border Circuit Service Agreement</i>	Required	Required	<ul style="list-style-type: none"> <li>- Sign the material on the signature block.</li> <li>- Stamp the seal over the signature.</li> </ul>
A scanned copy of the <i>China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service</i>	Required	Required	<ul style="list-style-type: none"> <li>- Sign the material on the signature block.</li> <li>- Stamp the seal over the signature.</li> <li>- Specify the bandwidth you estimated and your company name.</li> </ul>

6. Click **Submit**.

**Step 2** Create a cloud connection.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. On the **Cloud Connections** page, click **Create Cloud Connection**.

**Figure 4-3** Create Cloud Connection

**Create Cloud Connection** X

\* Name

\* Enterprise Project  [Create Enterprise Project](#)

\* Scenario VPC

If you select VPC here, only VPCs or virtual gateways can use this cloud connection.

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Description  0/255

Cancel OK

4. Configure the parameters based on [Table 4-3](#).

**Table 4-3** Parameters required for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	<b>VPC:</b> 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. Tag keys and values must meet the requirements listed in <a href="#">Table 4-4</a> . <b>NOTE</b> 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 <a href="#">Predefined Tags</a> .

Parameter	Description
Description	Provides supplementary information about the cloud connection. The description can contain a maximum of 255 characters.

**Table 4-4** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"><li>- Cannot be left blank.</li><li>- Must be unique for each resource.</li><li>- Can contain a maximum of 36 characters.</li><li>- Can contain only letters, digits, hyphens, and underscores.</li></ul>
Value	<ul style="list-style-type: none"><li>- Can be left blank.</li><li>- Can contain a maximum of 43 characters.</li><li>- Can contain only letters, digits, period, hyphens, and underscores.</li></ul>

5. Click **OK**.

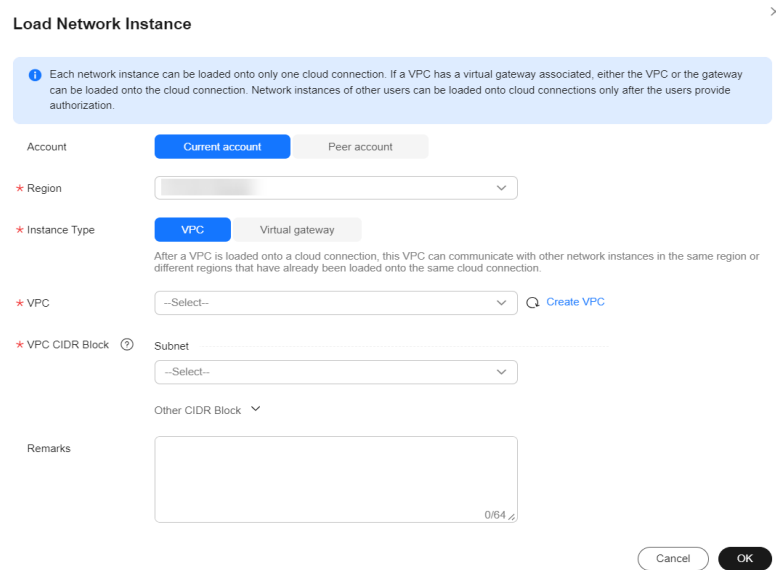
**Step 3** Load network instances.

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

1. In the cloud connection list, locate the cloud connection and click its name.
2. Click **Network Instances**.
3. Click **Load Network Instance**.
4. Select the VPC you want to load.

Configure other parameters based on [Table 4-5](#) and then click **OK**.

**Figure 4-4** Loading a VPC



**Table 4-5** Parameters required for loading network instances to a cloud connection

Parameter	Description
Account	Specifies whether the network instance is in the current account or another account.
Region	Specifies the region where the VPC you want to connect is located.
Instance Type	Specifies the type of the network instance. Two options are available, <b>VPC</b> and <b>Virtual gateway</b> .
VPC	Specifies the VPC you want to load to the cloud connection. This parameter is mandatory if you have set <b>Instance Type</b> to <b>VPC</b> .
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks. If you have set <b>Instance Type</b> to <b>VPC</b> , configure the following two parameters: <ul style="list-style-type: none"> <li>– <b>Subnet</b>: Select one or all subnets of the VPC.</li> <li>– <b>Other CIDR Block</b>: Add one or more custom CIDR blocks as needed.</li> </ul>
Remarks	Provides supplementary information about the network instance.

5. Click **Load Another Instance** to add all the VPCs that need to communicate with each other. Then click the **Network Instances** tab to view the VPCs you loaded.

**Step 4** Buy a bandwidth package and bind it to the cloud connection.

By default, the system allocates 10 kbit/s of bandwidth for testing network connectivity across regions. To enable network communications across regions regardless of if they are in the same geographic region or in different geographic regions, you need to purchase a bandwidth package, bind it to the cloud connection, and assign bandwidths for inter-region communications.

 **NOTE**

One cloud connection can only have one bandwidth package regardless of if the cloud connection is used for communications 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.

Buy a bandwidth package.

1. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
2. Click **Buy Bandwidth Package**.
3. Configure the parameters based on [Table 4-6](#) and click **Buy Now**.

**Table 4-6** Parameters required for buying a bandwidth package

Parameter	Description
Billing Mode	Specifies how you want the bandwidth package to be billed. Currently, only <b>Yearly/Monthly</b> is available.
Name	Specifies the bandwidth package name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Billed By	Specifies by what you want the bandwidth package to be billed.
Applicability	Specifies whether you want to use the bandwidth package for network communications within a geographic region or between geographic regions. Two options are available: <ul style="list-style-type: none"><li>– <b>Single geographic region</b>: Use the bandwidth package between regions in the same geographic region.</li><li>– <b>Across geographic regions</b>: Use the bandwidth package between regions in different geographic regions.</li></ul>
Geographic Region	Specifies the geographic region.



Parameter	Description
Bandwidth	Specifies the bandwidth you require for network communications across 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. Tag keys and values must meet the requirements listed in <a href="#">Table 4-7</a> . <b>NOTE</b> 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 <a href="#">Predefined Tags</a> .
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. Two options are available, <b>Bind now</b> and <b>Bind later</b> .

**Table 4-7** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>- Cannot be left blank.</li> <li>- Must be unique for each resource.</li> <li>- Can contain a maximum of 36 characters.</li> <li>- Can contain only letters, digits, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li> </ul>
Value	<ul style="list-style-type: none"> <li>- Can be left blank.</li> <li>- Can contain a maximum of 43 characters.</li> <li>- Can contain only letters, digits, period, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li> </ul>

4. Confirm the information and click **Pay Now**.
5. Click **Pay**.

Go back to the bandwidth package list and locate the bandwidth package. If its status changes to **Normal**, you can bind the bandwidth package to the cloud connection.

**Bind the bandwidth package to the cloud connection.**

Bind the purchased bandwidth package to the created cloud connection to enable communication between network instances.

1. In the cloud connection list, click the name of the created cloud connection.
2. On the **Bound Bandwidth Packages** tab, click **Bind Bandwidth Package**.
3. Select the purchased bandwidth package and bind it to the cloud connection.

**Step 5** Assign inter-region bandwidth.

1. In the cloud connection list, click the name of the created cloud connection.
2. Click **Inter-Region Bandwidths**.
3. Click **Assign Inter-Region Bandwidth** and configure the parameters based on [Table 4-8](#).

**Table 4-8** Parameters required for assigning inter-region bandwidth

Parameter	Description
Regions	Specifies the two regions between which network communications are required.
Bandwidth package	Specifies the bandwidth package you want to bind to the cloud connection.
Bandwidth	Specifies the bandwidth you require for communications 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.

4. Click **OK**.  
Now the VPCs in the two regions can communicate with each other.

 **NOTE**

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

----End

## 4.2 Connecting VPCs in Different Accounts

### Process Description

If you want to connect VPCs in your account to the VPCs in another user's account, you can create a cloud connection, request this other user to allow you to load their VPCs to the cloud connection, and load all the VPCs to the cloud connection. Then, purchase a bandwidth package and assign bandwidths between regions so that VPCs in these regions can communicate with each other. If a VPC is outside the Chinese mainland and other VPCs are inside the Chinese mainland, you need to apply for a cross-border permit before you purchase bandwidth packages.

Figure 4-5 shows an example.

**Figure 4-5** Network communications among VPCs in different accounts and regions

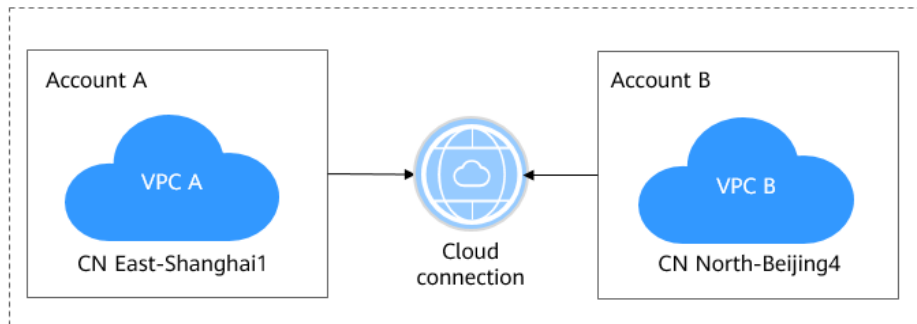
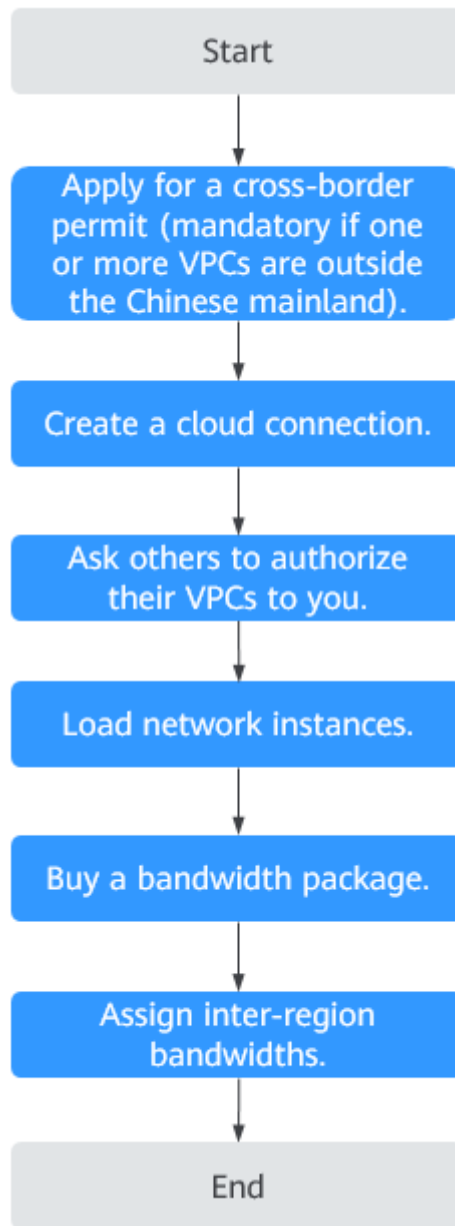


Figure 4-6 illustrates how you can enable network communications among VPCs that are in different accounts and regions.

**Figure 4-6** Process for enabling network communications among VPCs




## Procedure

### Step 1 Apply for a cross-border permit.

Skip this step if you do not require cross-border communications.

Apply for a cross-border permit only when a VPC to be connected is outside the Chinese mainland and other VPCs are inside the Chinese mainland.

1. Log in to the management console.
2. Hover on  to display **Service List** and choose **Networking > Cloud Connect**.

3. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
4. On the displayed page, click **apply now**.  
The **Cross-Border Service Application System** page is displayed.
5. On the application page, configure the parameters and upload the required materials.

**Table 4-9** Online cross-border permit application

Parameter	Description
Applicant Name	The applicant name, which must be the same as the company name in the <i>Letter of Commitment to Information Security</i> .
Huawei Cloud UID	The account ID to log in to the management console. You can take the following steps to obtain your account ID. <ol style="list-style-type: none"><li>1. Log in to the management console.</li><li>2. Click the username in the upper right corner and select <b>My Credentials</b> from the drop-down list.</li><li>3. On the <b>API Credentials</b> page, view the <b>Account ID</b>.</li></ol>
Type of Product	Select <b>Cloud Connect</b> .
Bandwidth (M)	The bandwidth must be the same as the bandwidth in the <i>Letter of Commitment to Information Security</i> . The information is for reference only and does not affect the actual service bandwidth.
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
Per Capita Bandwidth	For reference only

Parameter	Description
Branch Location Country	Country where the applicant branch is located. Set this parameter based on the actual situation.

**Table 4-10** Required materials

Material	Signature	Seal	Description
A scanned copy of your company's business license	N/A	Required	For the position of the seal, see the template provided by Huawei Cloud.
A scanned copy of the <i>Huawei Cloud Cross-Border Circuit Service Agreement</i>	Required	Required	<ul style="list-style-type: none"> <li>- Sign the material on the signature block.</li> <li>- Stamp the seal over the signature.</li> </ul>
A scanned copy of the <i>China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service</i>	Required	Required	<ul style="list-style-type: none"> <li>- Sign the material on the signature block.</li> <li>- Stamp the seal over the signature.</li> <li>- Specify the bandwidth you estimated and your company name.</li> </ul>

6. Click **Submit**.

**Step 2** Create a cloud connection.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. On the **Cloud Connections** page, click **Create Cloud Connection**.

**Figure 4-7** Create Cloud Connection

**Create Cloud Connection** X

\* Name

\* Enterprise Project  [Create Enterprise Project](#)

\* Scenario **VPC**

If you select VPC here, only VPCs or virtual gateways can use this cloud connection.

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Description  0/255

4. Configure the parameters based on [Table 4-11](#).

**Table 4-11** Parameters required for creating a cloud connection

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	<b>VPC:</b> 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. Tag keys and values must meet the requirements listed in <a href="#">Table 4-12</a> . <b>NOTE</b> 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 <a href="#">Predefined Tags</a> .

Parameter	Description
Description	Provides supplementary information about the cloud connection. The description can contain a maximum of 255 characters.

**Table 4-12** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>- Cannot be left blank.</li> <li>- Must be unique for each resource.</li> <li>- Can contain a maximum of 36 characters.</li> <li>- Can contain only letters, digits, hyphens, and underscores.</li> </ul>
Value	<ul style="list-style-type: none"> <li>- Can be left blank.</li> <li>- Can contain a maximum of 43 characters.</li> <li>- Can contain only letters, digits, period, hyphens, and underscores.</li> </ul>

5. Click **OK**.

**Step 3** Request the other user to allow you to load their VPCs to your cloud connection.

If your VPCs need to communicate with the VPCs of another user, ask this other user to grant you the permissions to load their VPCs to your cloud connection. This other user can take the following steps to grant you the permissions to load their VPCs:

1. In the navigation pane, choose **Cloud Connect > Cross-Account Authorization**.
2. Click **Network Instances Authorized by Me**.
3. Click **Authorize Network Instance**.

Configure the parameters based on [Table 4-13](#).

**Table 4-13** Parameters required for asking the other user to grant the permissions on access to their VPCs

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 to which the VPCs are to be loaded.



Parameter	Description
Remarks	Provides supplementary information about cross-account authorization, if any.

4. Click **OK**.

**Figure 4-8** Cross-account authorization

**Authorize Network Instance** ×

i Each VPC can be authorized only to one peer account and peer cloud connection. The peer account can load the authorized VPC onto the specified cloud connection, allowing communication between your network and the peer account's network.

\* Region

\* VPC ?  Q

\* Peer Account ID ?

\* Peer Cloud Connection ID

Remarks  0/64

**Step 4** Load network instances.

Load the VPCs that need to communicate with each other to the cloud connection. To load a VPC in this other user's account, perform the following steps:

1. Log in to the management console
2. In the cloud connection list, locate the cloud connection and click its name.
3. Click **Network Instances**.
4. Click **Load Network Instance**.
5. Select **Peer account** for **Account**, select this other user's account ID, project ID, and the VPC, and specify the CIDR blocks.

For details, see [Table 4-14](#).

**Table 4-14** Parameters for loading network instances across accounts

Parameter	Description
Account	Specifies whether the network instance is in the current account or another account.
Peer Account ID	Specifies the ID of this other user's account.
Region	Specifies the region where the VPC is located.

Parameter	Description
Peer Project ID	Specifies the project ID of the VPC in the other user's account.
Instance Type	Specifies the type of the network instance to be loaded. Currently, you can load only VPCs across accounts.
Peer VPC	Specifies the ID of the VPC you want to load.
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks.
Remarks	Provides supplementary information about the network instance.

6. Click **OK**.

**Figure 4-9** Loading a network instance

✕

### Load Network Instance

**i** Each network instance can be loaded onto only one cloud connection. If a VPC has a virtual gateway associated, either the VPC or the gateway can be loaded onto the cloud connection. Network instances of other users can be loaded onto cloud connections only after the users provide authorization.

Account: Current account Peer account

\* Peer Account ID:

\* Region:

\* Peer Project ID:

\* Instance Type: VPC

After a VPC is loaded onto a cloud connection, this VPC can communicate with other network instances in the same region or different regions that have already been loaded onto the same cloud connection.

\* Peer VPC:

\* VPC CIDR Block ?  ?

Adding 100.64.0.0/10 may cause cloud services such as OBS, DNS, and API Gateway to become unavailable.

Remarks:

Cancel
OK

7. Click **Load Another Instance** to add all the VPCs that need to communicate with each other. Then click the **Network Instances** tab to view the VPCs you loaded.

 NOTE

You can load a network instance to only one cloud connection.

A VPC and the associated virtual gateway cannot be both loaded.

If the VPCs are in another user's account, you need to request for the permissions to load the network instances before you can load them to your cloud connection.

**Step 5** Buy a bandwidth package and bind it to the created cloud connection.

By default, the system allocates 10 kbit/s of bandwidth for testing network connectivity across regions. To ensure normal network communications between regions in the same geographic region or across geographic regions, you need to purchase a bandwidth package and bind it to a cloud connection.

 NOTE

One cloud connection can only have one bandwidth package regardless of if the cloud connection is used for communications 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.

**Buy a bandwidth package.**

1. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
2. Click **Buy Bandwidth Package**.
3. Configure the parameters based on [Table 4-15](#) and click **Buy Now**.

**Table 4-15** Parameters required for buying a bandwidth package

Parameter	Description
Billing Mode	Specifies how you want the bandwidth package to be billed. Currently, only <b>Yearly/Monthly</b> is available.
Name	Specifies the bandwidth package name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Billed By	Specifies by what you want the bandwidth package to be billed.
Applicability	Specifies whether you want to use the bandwidth package for network communications within a geographic region or between geographic regions. Two options are available: <ul style="list-style-type: none"><li>- <b>Single geographic region:</b> Use the bandwidth package between regions in the same geographic region.</li><li>- <b>Across geographic regions:</b> Use the bandwidth package between regions in different geographic regions.</li></ul>

Parameter	Description
Geographic Region	Specifies the geographic region.
Bandwidth	Specifies the bandwidth you require for network communications across 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. Unit: Mbit/s
Tag	Identifies the bandwidth package. A tag consists of a key and a value. You can add 20 tags to a bandwidth package. Tag keys and values must meet the requirements listed in <a href="#">Table 4-16</a> . <b>NOTE</b> 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 <a href="#">Predefined Tags</a> .
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. Two options are available, <b>Bind now</b> and <b>Bind later</b> .

**Table 4-16** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>- Cannot be left blank.</li> <li>- Must be unique for each resource.</li> <li>- Can contain a maximum of 36 characters.</li> <li>- Can contain only letters, digits, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li> </ul>
Value	<ul style="list-style-type: none"> <li>- Can be left blank.</li> <li>- Can contain a maximum of 43 characters.</li> <li>- Can contain only letters, digits, period, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li> </ul>

4. Confirm the information and click **Pay Now**.
5. Click **Pay**.

Go back to the bandwidth package list and locate the bandwidth package. If its status changes to **Normal**, you can bind the bandwidth package to the cloud connection.

#### Bind the bandwidth package to the cloud connection.

Bind the purchased bandwidth package to the created cloud connection to enable communication between network instances.

1. In the cloud connection list, click the name of the created cloud connection.
2. On the **Bound Bandwidth Packages** tab, click **Bind Bandwidth Package**.
3. Select the purchased bandwidth package and bind it to the cloud connection.

#### Step 6 Assign inter-region bandwidth.

1. In the cloud connection list, click the name of the created cloud connection.
2. Click **Inter-Region Bandwidths**.
3. Click **Assign Inter-Region Bandwidth** and configure the parameters based on [Table 4-17](#).

**Table 4-17** Parameters required for assigning inter-region bandwidth

Parameter	Description
Regions	Specifies the two regions between which network communications are required.
Bandwidth Package	Specifies the bandwidth package you want to bind to the cloud connection.
Bandwidth	Specifies the bandwidth you require for communications 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.

4. Click **OK**.  
Now the VPCs in the two regions can communicate with each other.

#### NOTE

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

----End

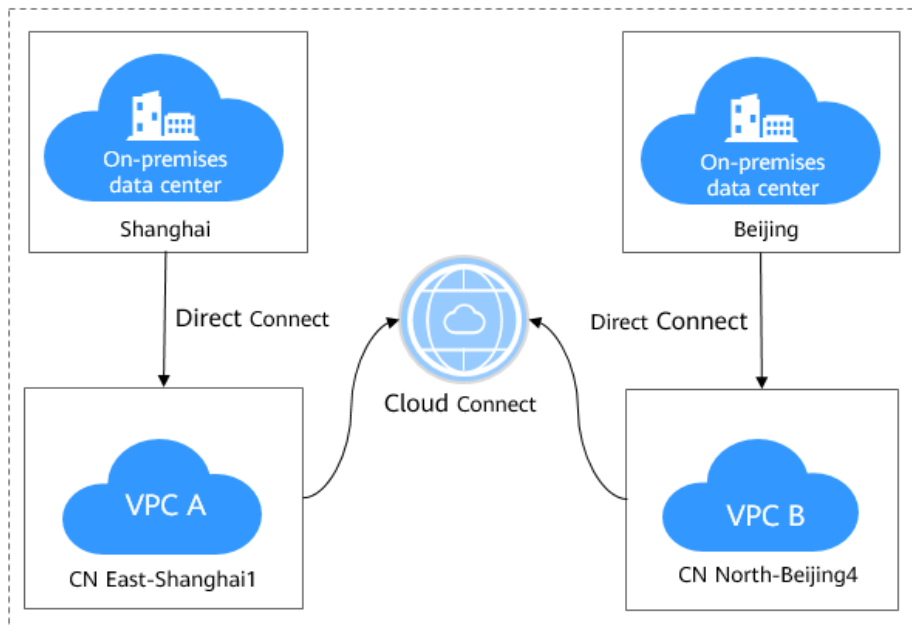
# 5 Connecting On-Premises Data Centers to VPCs in Different Regions

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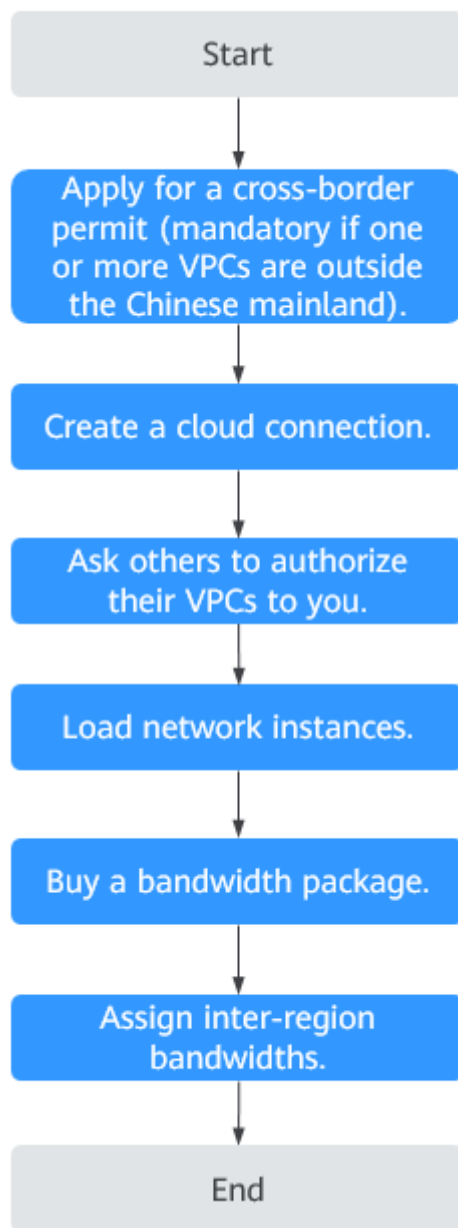
## 5.1 Process Overview

To enable on-premises data centers to communicate with VPCs in different regions, connect each data center to a VPC using Direct Connect. Then create a cloud connection and load all the VPCs and virtual gateways used by Direct Connect to the cloud connection. If you require VPCs of another user, ask this other user to grant the permissions to load their VPCs to your cloud connection. Finally, purchase bandwidth packages and assign bandwidth between VPCs in different regions so that they can communicate with each other. If a VPC or on-premises data center is outside the Chinese mainland and other VPCs or on-premises data centers are inside the Chinese mainland, you need to apply for a cross-border permit before you purchase bandwidth packages.

**Figure 5-1** Network communications between on-premises data centers and VPCs in different regions



**Figure 5-2** illustrates how you can enable network communications between data centers and VPCs across regions.

**Figure 5-2** Process for enabling network communications

## 5.2 Connecting On-Premises Data Centers to the Cloud

### Scenarios

Connect each data center to a nearest VPC using Direct Connect.

### Procedure

For details, see [Direct Connect Quick Start](#).



 NOTE

When you create virtual gateways, the VPC CIDR block of each virtual gateway must include IP address ranges of the VPCs required for communication with on-premises data centers based on your network plan.


## 5.3 Step 1: Apply for a Cross-Border Permit

### Scenarios

You need to apply for a cross-border permit only when a VPC to be connected is outside the Chinese mainland and other VPCs are inside the Chinese mainland.

Skip this step if you do not require cross-border communications in your network plan.

### Procedure

1. Log in to the management console.
2. Hover on  to display **Service List** and choose **Networking > Cloud Connect**.
3. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
4. On the displayed page, click **apply now**.  
The **Cross-Border Service Application System** page is displayed.
5. On the application page, configure the parameters and upload the required materials.

**Table 5-1** Online cross-border permit application

Parameter	Description
Applicant Name	The applicant name, which must be the same as the company name in the <i>Letter of Commitment to Information Security</i> .
Huawei Cloud UID	The account ID to log in to the management console. You can take the following steps to obtain your account ID. <ol style="list-style-type: none"><li>1. Log in to the management console.</li><li>2. Click the username in the upper right corner and select <b>My Credentials</b> from the drop-down list.</li><li>3. On the <b>API Credentials</b> page, view the <b>Account ID</b>.</li></ol>
Type of Product	Select <b>Cloud Connect</b> .

Parameter	Description
Bandwidth (M)	The bandwidth must be the same as the bandwidth in the <i>Letter of Commitment to Information Security</i> . The information is for reference only and does not affect the actual service bandwidth.
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
Per Capita Bandwidth	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

Material	Signature	Seal	Description
A scanned copy of your company's business license	N/A	Required	For the position of the seal, see the template provided by Huawei Cloud.
A scanned copy of the <i>Huawei Cloud Cross-Border Circuit Service Agreement</i>	Required	Required	<ul style="list-style-type: none"> <li>• Sign the material on the signature block.</li> <li>• Stamp the seal over the signature.</li> </ul>

Material	Signature	Seal	Description
A scanned copy of the <i>China Unicom Letter of Commitment to Information Security of the Cross-Border Circuit Service</i>	Required	Required	<ul style="list-style-type: none"> <li>• Sign the material on the signature block.</li> <li>• Stamp the seal over the signature.</li> <li>• Specify the bandwidth you estimated and your company name.</li> </ul>

6. Click **Submit**.

## 5.4 Step 2: Create a Cloud Connection

### Procedure

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. On the **Cloud Connections** page, click **Create Cloud Connection**.

**Figure 5-3** Create Cloud Connection

**Create Cloud Connection** X

★ Name

★ Enterprise Project  [Create Enterprise Project](#)

★ Scenario VPC

If you select VPC here, only VPCs or virtual gateways can use this cloud connection.

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Description  0/255

Cancel OK

4. Configure the parameters based on [Table 5-3](#).

**Table 5-3** Parameters

Parameter	Description
Name	Specifies the cloud connection name. The name can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
Enterprise Project	Provides a cloud resource management mode, in which cloud resources and members are centrally managed by project.
Scenario	<b>VPC:</b> VPCs or virtual gateways can use this cloud connection.

Parameter	Description
Tag	<p>Identifies the cloud connection. A tag consists of a key and a value. You can add 20 tags to a cloud connection.</p> <p>Tag keys and values must meet the requirements listed in <a href="#">Table 5-4</a>.</p> <p><b>NOTE</b> If a predefined tag has been created on TMS, you can directly select the corresponding tag key and value.</p> <p>For details about predefined tags, see <a href="#">Predefined Tags</a>.</p>
Description	<p>Provides supplementary information about the cloud connection.</p> <p>The description can contain a maximum of 255 characters.</p>

**Table 5-4** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"> <li>• Cannot be left blank.</li> <li>• Must be unique for each resource.</li> <li>• Can contain a maximum of 36 characters.</li> <li>• Can contain only letters, digits, hyphens, and underscores.</li> </ul>
Value	<ul style="list-style-type: none"> <li>• Can be left blank.</li> <li>• Can contain a maximum of 43 characters.</li> <li>• Can contain only letters, digits, period, hyphens, and underscores.</li> </ul>

5. Click **OK**.

## 5.5 Step 3: Ask for the Permissions to Load the VPCs

### Scenarios

If your network needs to communicate with the VPCs of other users, you need to ask the other users to grant you the permission to load their VPCs to your cloud connection.

Skip this step if your network plan does not involve communications with other user's VPCs.

 **NOTE**

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

## Procedure

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. In the navigation pane, choose **Cloud Connect > Cross-Account Authorization**.
4. Click **Network Instances Authorized by Me**.
5. Click **Authorize Network Instance**.

Configure the parameters based on [Table 5-5](#).

**Table 5-5** Parameters required for asking the other user to grant the permissions on access to their VPCs

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 to which the VPCs are to be loaded.
Remarks	Provides supplementary information about cross-account authorization, if any.

6. Click **OK**.

**Figure 5-4** Cross-account authorization

**Authorize Network Instance** ×

**i** Each VPC can be authorized only to one peer account and peer cloud connection. The peer account can load the authorized VPC onto the specified cloud connection, allowing communication between your network and the peer account's network.

\* Region

\* VPC ?  Q

\* Peer Account ID ?

\* Peer Cloud Connection ID

Remarks  0/64 ↵

## 5.6 Step 4: Load Network Instances

### Scenarios

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

### Procedure

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. In the cloud connection list, click the name of the created cloud connection.
4. Under **Network Instances**, click **Load Network Instance**.
5. In the **Load Network Instance** dialog box, specify the account.
  - If the network instance is from the same account, select **Current account**. For details, see [Connecting VPCs in the Same Account](#).  
Configure the parameters based on [Table 5-6](#) and then click **OK**.
  - If the network instance is from another account, select **Peer account**. For details, see [Connecting VPCs in Different Accounts](#).  
Configure the parameters based on [Table 5-7](#) and then click **OK**.

**Table 5-6** Parameters for loading network instances in the current account

Parameter	Description
Account	Specifies whether the network instance is in the current account or another 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 you want to load to the cloud connection. Two options are available, <b>VPC</b> and <b>Virtual gateway</b> .
VPC	Specifies the VPC you want to load to the cloud connection. This parameter is mandatory if you have set <b>Instance Type</b> to <b>VPC</b> .
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks. If you have set <b>Instance Type</b> to <b>VPC</b> , configure the following two parameters: <ul style="list-style-type: none"> <li>• <b>Subnet</b></li> <li>• <b>Other CIDR Block</b></li> </ul>
Virtual Gateway	Specifies the virtual gateway you want to load to the cloud connection. This parameter is mandatory if you have set <b>Instance Type</b> to <b>Virtual gateway</b> .
Virtual Gateway CIDR Block	Specifies the VPC and the network segment route of the remote user site in the virtual gateway you want to load to the cloud connection. If you have set <b>Instance Type</b> to <b>Virtual gateway</b> , you need to configure the following two parameters: <ul style="list-style-type: none"> <li>• <b>VPC CIDR Block</b></li> <li>• <b>Remote Subnet</b></li> </ul>
Remarks	Provides supplementary information about the network instance.

**Table 5-7** Parameters for loading network instances across accounts

Parameter	Description
Account	Specifies whether the network instance is in the current account or another account.
Peer Account ID	Specifies the ID of this other user's 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 user's account.



Parameter	Description
Instance Type	Specifies the type of the network instance you want to load to the cloud connection. Two options are available, <b>VPC</b> and <b>Virtual gateway</b> .
Peer VPC	Specifies the ID of the VPC you want to load.
VPC CIDR Block	Specifies the subnets of the VPC you want to load and the custom CIDR blocks.
Remarks	Provides supplementary information about the network instance.

 **NOTE**

- You can load a network instance to only one cloud connection.
  - If a VPC is loaded, the associated virtual gateway cannot be loaded.
6. Click **Load Another Instance to load other VPCs and virtual gateways**. Then click **Network Instances** to view the network instances you loaded.

## 5.7 Step 5: Buy a Bandwidth Package

### Scenarios

To ensure normal network communications across regions regardless of if they are in the same geographic region or different geographic regions, you need to purchase a bandwidth package and bind it to a cloud connection. By default, the system allocates 10 kbit/s of bandwidth for testing network connectivity across regions.

 **NOTE**

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

### Procedure

#### Buy a bandwidth package.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. In the navigation pane on the left, choose **Cloud Connect > Bandwidth Packages**.
4. Click **Buy Bandwidth Package**.

5. Configure the parameters based on [Table 5-8](#) and click **Buy Now**.

**Table 5-8** Parameters required for buying a bandwidth package

Parameter	Description
Billing Mode	Specifies how you want the bandwidth package to be billed. Currently, only <b>Yearly/Monthly</b> is available.
Name	Specifies the bandwidth package name. The name can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.).
Billed By	Specifies by what you want the bandwidth package to be billed.
Applicability	Specifies whether you want to use the bandwidth package for network communications within a geographic region or between geographic regions. Two options are available: <ul style="list-style-type: none"><li>• <b>Single geographic region:</b> Use the bandwidth package between regions in the same geographic region.</li><li>• <b>Across geographic regions:</b> Use the bandwidth package between regions in different geographic regions.</li></ul>
Geographic Region	Specifies the geographic region.
Bandwidth	Specifies the bandwidth you require for network communications across 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. Unit: Mbit/s
Tag	Identifies the bandwidth package. A tag consists of a key and a value. You can add 20 tags to a bandwidth package. Tag keys and values must meet the requirements listed in <a href="#">Table 5-9</a> . <b>NOTE</b> 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 <a href="#">Predefined Tags</a> .
Required Duration	Specifies how long you require the bandwidth package for. Auto renewal is supported.

Parameter	Description
Cloud Connection	Specifies the cloud connection you want to bind the bandwidth package to. Two options are available, <b>Bind now</b> and <b>Bind later</b> .

**Table 5-9** Tag key and value requirements

Parameter	Requirements
Key	<ul style="list-style-type: none"><li>• Cannot be left blank.</li><li>• Must be unique for each resource.</li><li>• Can contain a maximum of 36 characters.</li><li>• Can contain only letters, digits, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li></ul>
Value	<ul style="list-style-type: none"><li>• Can be left blank.</li><li>• Can contain a maximum of 43 characters.</li><li>• Can contain only letters, digits, period, hyphens, underscores, and Unicode characters from \u4e00 to \u9fff.</li></ul>

6. Confirm the information and click **Pay Now**.
7. Click **Pay**.

Go back to the bandwidth package list and locate the bandwidth package. If its status changes to **Normal**, you can bind the bandwidth package to the cloud connection.

#### **Bind the bandwidth package to the cloud connection.**

Bind the purchased bandwidth package to the cloud connection created in step 2.

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. In the cloud connection list, click the name of the cloud connection.
4. On the **Bound Bandwidth Packages** tab, click **Bind Bandwidth Package**.
5. Select the purchased bandwidth package and bind it to the cloud connection.

## 5.8 Step 6: Assign Inter-Region Bandwidths

### Scenarios

By default, the system allocates 10 kbit/s of bandwidth for testing network connectivity across regions. To ensure normal network communications, you need to assign inter-region bandwidths.

## Procedure

1. Log in to the management console.
2. Hover on the upper left corner to display **Service List** and choose **Networking > Cloud Connect**.
3. In the cloud connection list, click the name of the created cloud connection.
4. Click **Inter-Region Bandwidths**.
5. Click **Assign Inter-Region Bandwidth** and configure the parameters based on [Table 5-10](#).

**Table 5-10** Parameters required for assigning inter-region bandwidth

Parameter	Description
Regions	Specifies the two regions between which network communications are required.
Bandwidth Package	Specifies the bandwidth package you want to bind to the cloud connection.
Bandwidth	Specifies the bandwidth you require for communications 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.

6. Click **OK**.  
Now the VPCs in the two regions can communicate with each other, and on-premises data centers can access all the VPCs loaded to the cloud connection.

### NOTE

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