Alibaba Cloud Quick Start Guide
Haivision Gateway 3.7 on Alibaba Cloud

This quick start guide describes how to create and configure a virtual Media Gateway/SRT Gateway server on Alibaba Cloud. For detailed configuration and operation information, please refer to the User's Guide.

About Alibaba Cloud

Alibaba Cloud is a cloud computing platform for building, deploying and managing applications and services through a network of hosted data centers. Alibaba Cloud allows you to deploy and manage your Haivision Media Gateway/SRT Gateway instances in this global network. For more information, please visit:

https://intl.aliyun.com

About Media Gateway/SRT Gateway

The Haivision Media Gateway/SRT Gateway serves as a bridge between video infrastructures, and is used to distribute live video to multiple sites, or to aggregate live video from multiple remote locations. Powered by Haivision's SRT (Secure Reliable Transport) technology, the Haivision Media Gateway/SRT Gateway is ideal for transporting high-quality, secure live video across public and private networks.

Before You Start

You must have an active Alibaba Cloud account to sign in to the AliCloud Console. For evaluation purposes you can subscribe to Alibaba Cloud for a 30-day trial period. For more information, please visit: https://intl.aliyun.com/campaign/free-trial

With Alibaba Cloud, you must "bring your own license" (BYOL). Please contact your Haivision representative to discuss your options. See Licensing Your Server for details.

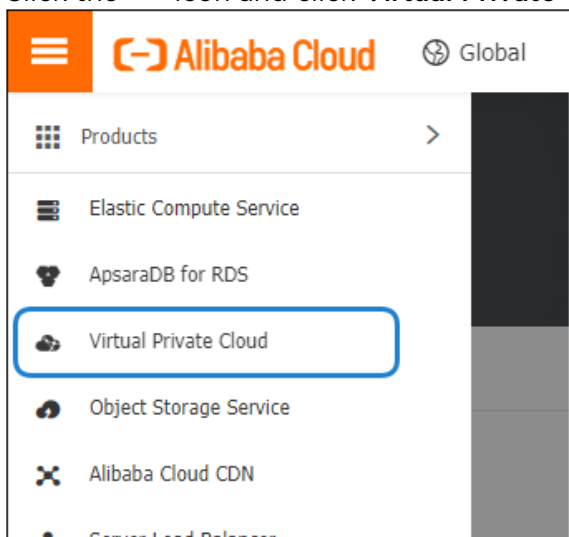> ⚠ **Note**
>
> When configuring the network bandwidth limit, the value of 200 Mbps is the peak value, not the dedicated fixed bandwidth. This means you can enjoy up to 200-Mbps internet bandwidth, but paying for the actual traffic only.
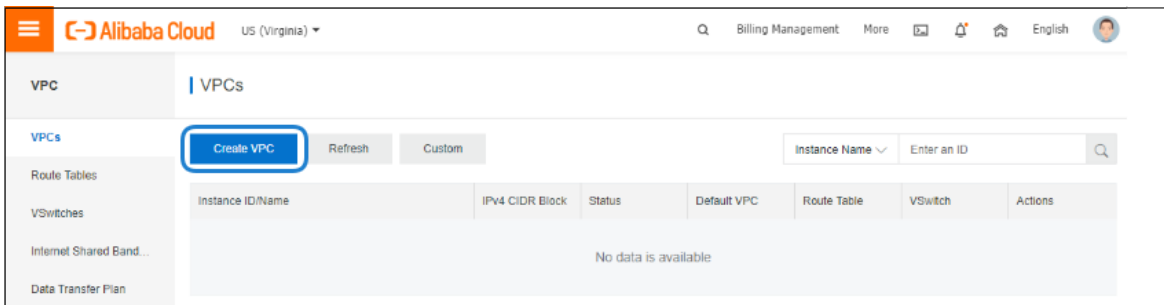
Creating a Virtual Server

- Creating the VPC and Network Subnets
- Creating a Virtual Instance
- Purchase an Elastic IP Address

Creating the VPC and Network Subnets

1. Sign in to your Alibaba Cloud account: https://home.console.aliyun.com
2. Click the ☰ icon and click **Virtual Private Cloud**.

3. In the VPC Manage Console, click **VPC**.
4. Click **Create VPC**.

5. In the popup window:
   a. Complete the VPC details.

   > ⚠️ **Note**
   >
   > There are only 3 options for the CIDR blocks, which is the base network address range for all the subsequent subnets created within this VPC.

   b. Complete the VSwitch details.
      - The CIDR block for this subnet must be a subset of the CIDR block of the VPC defined above.
      - All ECS instances created within this subnet have their private addresses assigned out of this subnet address range
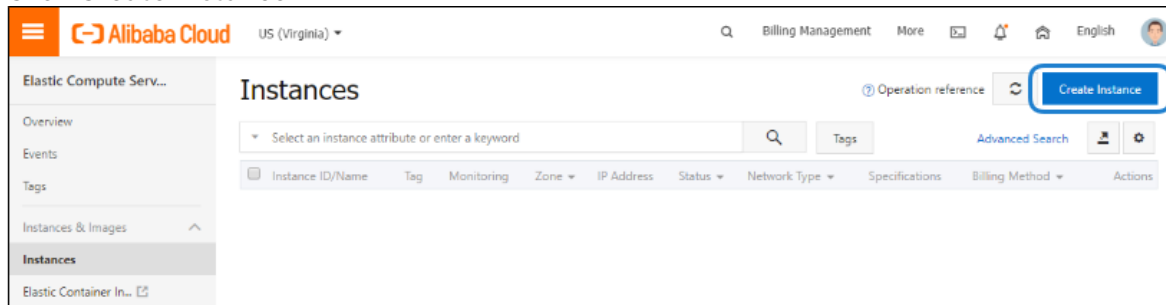   c. Click the **OK** button.

> **⚠ Note**
>
> In AliCloud all subnets are considered private subnets unless there is an Elastic IP assigned to an ECS running inside that particular subnet.

Creating a Virtual Instance

1. Click the ☰ icon and click **Elastic Compute Service**.
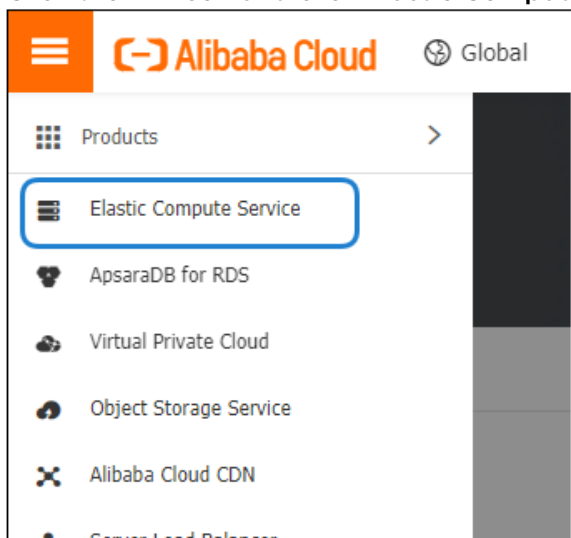
2. On the ECS Console, click **Instances**.
3. Click **Create Instance**.

4. Specify the details of your ECS purchase as follows:
   - In Billing Model, click **Pay as You Go**.
   - In Region, select the same Region used when you created the Virtual Private Cloud in Creating the VPC and Network Subnets .
   - In Instance Type, select the instance type per your workflow requirements.

   > ⚠ **Note**
   >
   > We do not recommend using instances with low CPU resources, because the resulting performance of your server will be inadequate.

   > ⚠ **Important**
   >
   > For high bandwidth streams or critical viewing requirements, we recommend using Compute Optimized C7 Instances (e.g. ecs.c7.xlarge, ecs.c7.2xlarge, etc.) tiers, as they are optimized for compute-intensive workloads and have high-performance network I/O.

   - In Image, click **Marketplace Image**, click **Select from Alibaba Cloud Marketplace**, and select **Haivision Media Gateway** or **Haivision SRT Gateway** in the list of images. Use the search textbox to quickly find the image.
   - In Storage, add disks and specify their sizes as required by your workflow.

   > ⚠ **Note**
   >
   > The default storage is sufficient for most operations. However, if you intend to use your server in conjunction with a video server (such as Media Gateway with Haivision Media Platform), having additional storage will allow you to benefit from local caching on the virtual server.

   - Click **Next: Networking**.
   - In Network Type, ensure the VPC and VSwitch that was created in Creating the VPC and Network Subnets is selected.
   - In Public IP Address, check **Assign Public IP Address** and select the appropriate network bandwidth limit. The value is the peak value, not the dedicated fixed bandwidth.

   > ⚠ **Note**
   >
   > Optionally, purchase an Elastic IP as described in Purchase an Elastic IP Address. An elastic IP address allows you to move the IP address between instances.

   - In Security Group, select the checkboxes next to Port 80 and Port 443, and deselect Port 3389.
   - Click **Next: System Configurations**.
   - For SSH access to the Console UI:

- Ensure Key Pair and root are selected in Logon Credentials and Logon Username, and in Key Pair click **Create Key Pair**.
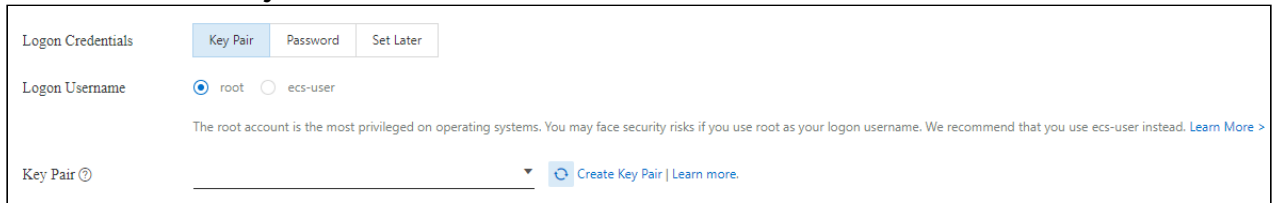
- A new browser tab opens to the Create SSH Key Pair page. Enter a name and click **OK**.

  A `.pem` private key file is downloaded in your browser. Close the Key Pair browser tab.

- Back in the Create ECS browser tab, click the Key Pair ⟳ refresh button and select the key pair you just created in the dropdown. You will use the `.pem` private key file later after the instance is running. See Signing in to Your Server after finishing this procedure.
- In Instance Name, specify an instance name for easy management. You may choose to launch multiple ECS instances simultaneously, all with the same server specifications.
- Click **Next: Grouping**.
- Optionally, set any tags or deployment set.
- Click **Next: Preview**.

  A summary is shown at the bottom of the ECS purchase page, as well as its associated cost.

5. When satisfied with your selection, click **Create Order**.
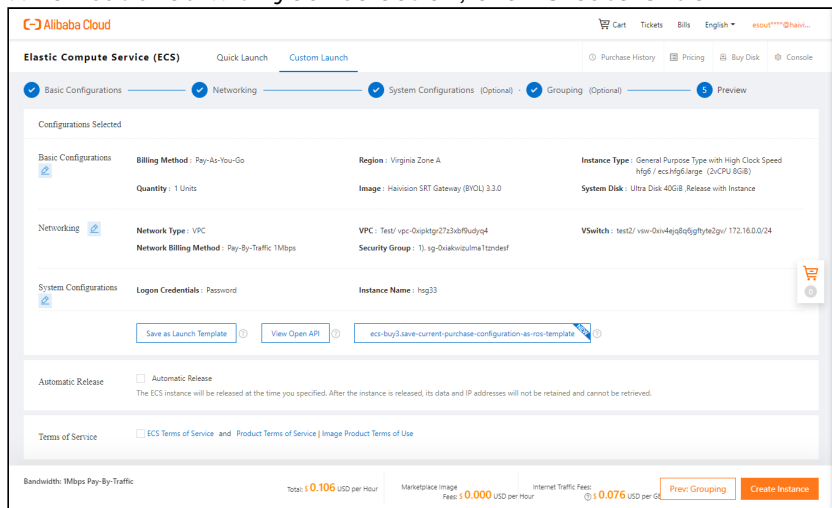
6. You should see a successful confirmation message. Return to the ECS web console by clicking **Console**.

In the ECS console, within a few minutes the ECS instance status changes to Running. Note that the ECS instance only has a private IP address for now, as shown in the following figure. To connect to this instance, continue to Purchase an Elastic IP Address to purchase a public Elastic IP address.
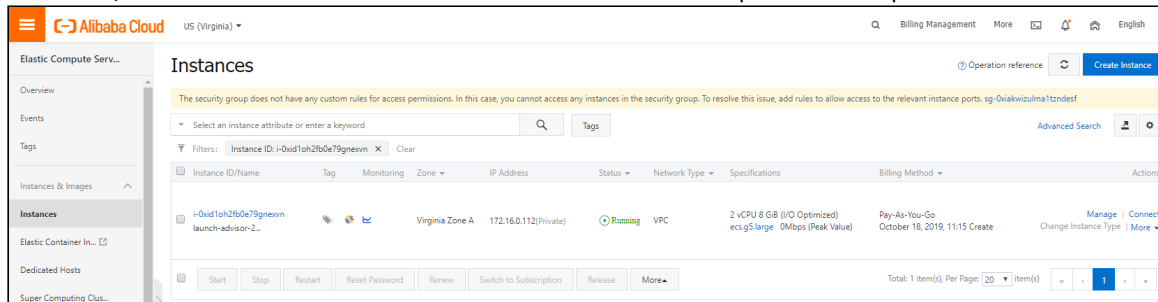
Purchase an Elastic IP Address

Instead of assigning a public IP directly with your instance, you may purchase an elastic IP address which can be moved between instances. The following instructions show how to purchase an elastic IP address and bind it to your instance:

1. Click the ☰ icon, click **Products**, and select **Elastic IP Address** under the Networking heading.
2. Click **Create EIP**.
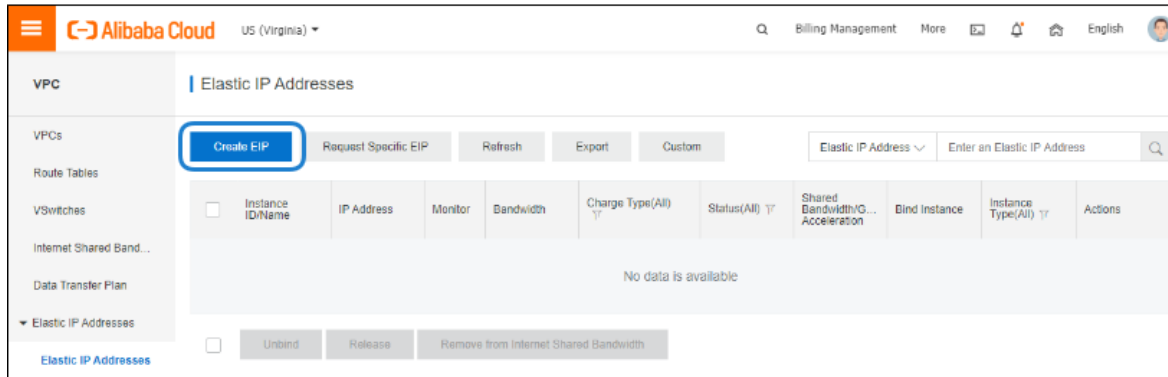
3. In the window that opens, select the options accordingly to the following:
   - In Network Traffic, click **By traffic**.
   - In Max Bandwidth, the value of 200 Mbps is the peak value, not the dedicated fixed bandwidth. This means you can enjoy up to 200-Mbps internet bandwidth, but paying for the actual traffic only.

   A summary is shown on the right of the page, as well as its associated cost.
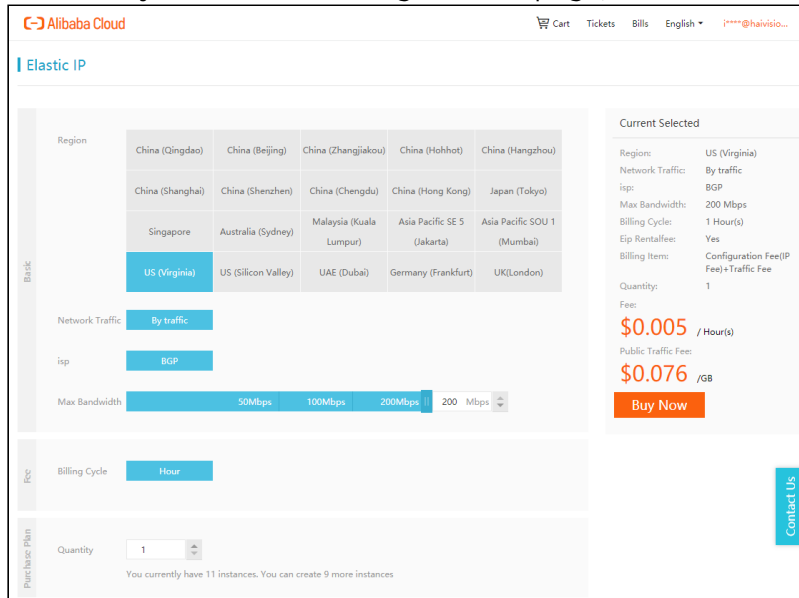
4. When satisfied with your selection, click **Buy Now**.
5. Confirm the order on the next page, and **Activate** to buy.
6. Return ECS web console by clicking **Console**, and you can see a public Elastic IP address has been allocated successfully.
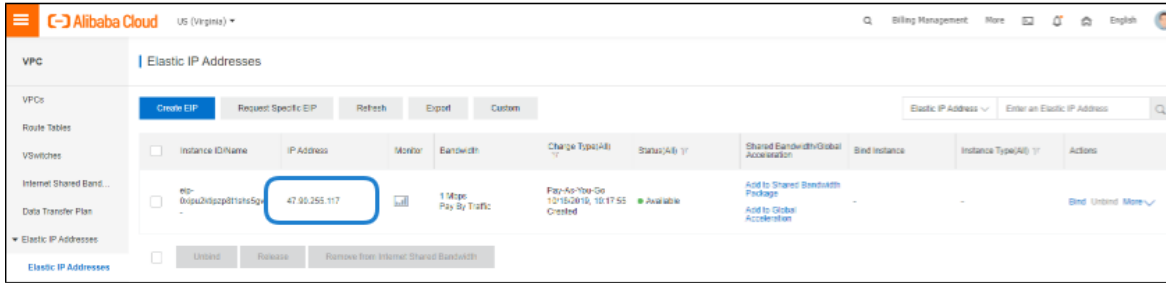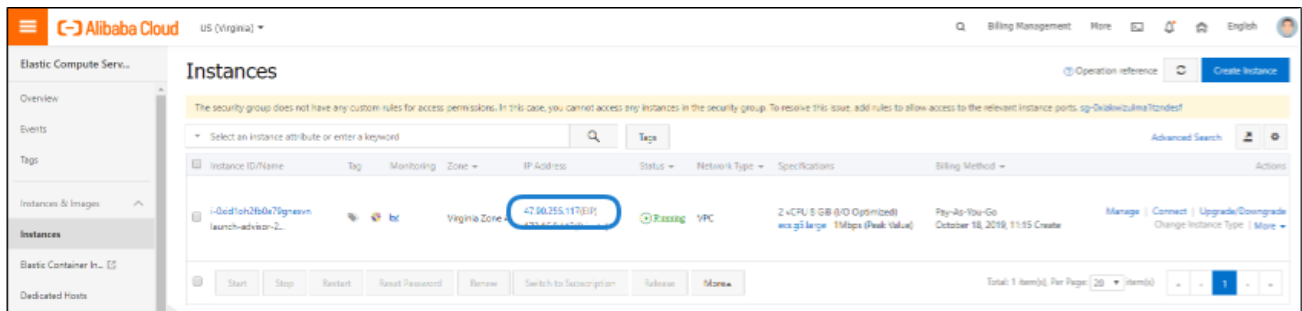
7. Click **Bind** next to the new Elastic IP address and associate it to the previously launched ECS instance.

> ⚠️ **Note**
>
> The instance must be stopped before the elastic IP address can be bound.
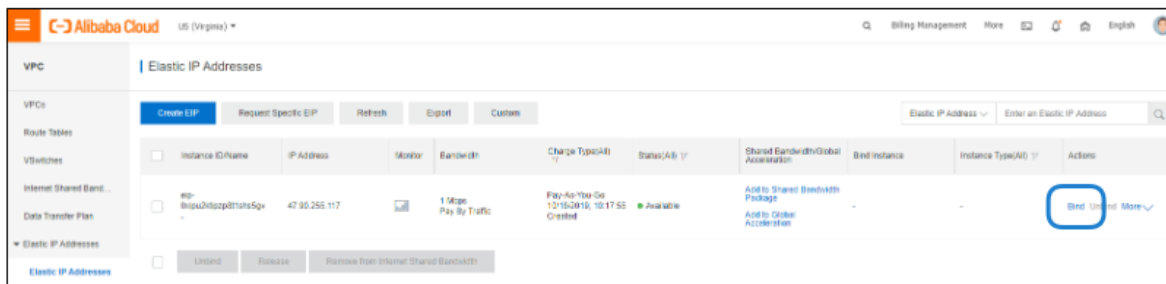
8. Return to the ECS Console and the ECS instance shows the public IP address where you can access the virtual server instance from the Internet.

Signing in to Your Server

Accessing the Web Interface

> ⚠️ **Note**
>
> Internet Explorer is no longer supported. We recommend using Microsoft Edge or Google Chrome.

1. Open a web browser, and enter the public IP Address of the virtual server. See Step 8 in Purchase an Elastic IP Address to find the assigned IP address. A message may appear warning that the connection to the server is untrusted. This is normal, and you can safely continue.

2. Sign in to the Web Interface, using the haiadmin username and the default password as specified in the *Important Notice* document available on the Haivision Support Portal.
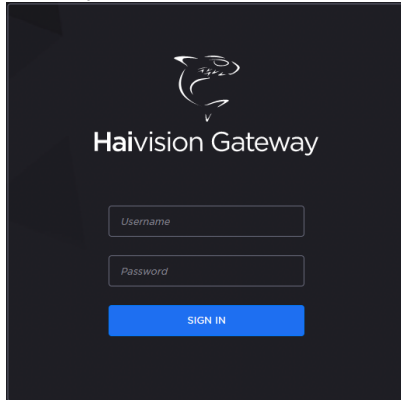
3. Click the **Sign In** button. A License Required modal appears. See Licensing Your Server to obtain a license.

For more details, refer to Signing into the Web Interface in the *User's Guide*.

Accessing the Console UI

You can log in to virtual server's Console UI via a Secure Shell (SSH) client (e.g. Terminal in Mac OS X or PowerShell on Windows) using the SSH key pair you downloaded in Creating a Virtual Instance.

1. In Terminal or Powershell, enter the following command pointing to the SSH private key and public IP address of the virtual server:

```
ssh -i mysshkey.pem hvroot@my.ip.address
```

2. The Console UI appears.
3. In the navigation sidebar, use the ↑↓ (up and down arrow) keys to highlight menu items, and then press the **Enter** key.
4. Change settings as necessary.

> ⚠ **Important**
>
> Network configuration settings are controlled by Microsoft Azure. Do not change them using the Haivision Console UI.

5. Press the **Enter** key to save your changes and return to the main screen.
6. Select **Log Out** and then press the **Enter** key to exit the Console UI.

Licensing Your Server

Before creating routes in your virtual server, you must obtain a license from Haivision.
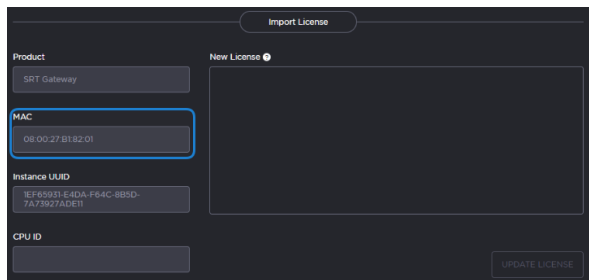
> ⚠ **Note**
>
> Without a valid license key, you can sign in, but you cannot create or edit routes.

To obtain a license:

1. On the Licensing page that appears after clicking the **Add License** button, copy the server's MAC Address.

2. To request a license for your product:
   a. Log in to the Haivision Support Portal (https://support.haivision.com).
   b. After logging in, click **License Requests**.
   c. Click the **New** button.
   d. Select the appropriate device type and click the **Next** button.
   e. Fill in the form with the appropriate information, and click **Save**.
   Your license request is submitted and you will be contacted by a Haivision representative shortly with a license key for your product.

   > ⚠ **Note**
   >
   > The license you receive is bound only to the instance corresponding to the MAC address you submit.

3. After you receive your license, sign back in to the virtual server. You should be prompted with a License Required message. Click **Add License**.
4. Copy and paste the license for your server into the License field.
5. Click **Update License**.

Your virtual server is now licensed and available. For more information on licensing, please refer to the User's Guide.

SRT Streams

Your virtual server can be used to receive and redistribute SRT streams. By default, on AliCloud all ports are open and no further configuration is needed within the AliCloud Console.

> ⚠ **Note**
>
> For more information on SRT, please refer to the User's Guide and the SRT Deployment Guide.

Stopping the Instance

You can stop and deallocate your server instance, while keeping all configurations active. After the instance is stopped, no further running charges are applied.

> ⚠ **Important**
>
> Please be aware that simply *shutting down* your server via the Console UI does not deallocate your instance, and you will continue to be charged for the running instance. To avoid unwanted charges, you must stop the AliCloud virtual machine.

To stop your server instance:

1. On the ECS Management Console, click **Instances**.

2. Find and select your server, then click **Stop**.
3. Select whether to **Retain Instance and Continue Charging** or **No Charges After Instance Is Stopped**.

> ⚠️ **Important**
>
> Selecting the latter option may result in a change in the MAC address the next time it is started, which causes the existing BYOL license to expire. If this happens, contact Haivision with the new MAC address to obtain a replacement license.

Obtaining Documentation

This document was generated from the Haivision InfoCenter. To ensure you are reading the most up-to-date version of this content, access the documentation online at https://doc.haivision.com. You may generate a PDF at any time of the current content. See the footer of the page for the date it was generated.

Getting Help

General Support	North America (Toll-Free) **1 (877) 224-5445** International **1 (514) 334-5445** *and choose from the following:* Sales - 1, Cloud Services - 3, Support - 4
Managed Services	U.S. and International 1 (512) 220-3463
Fax	1 (514) 334-0088
Support Portal	https://support.haivision.com
Product Information	info@haivision.com