Amazon AWS Quick Start Guide
Haivision Gateway 3.3 on Amazon AWS

This quick start guide describes how to create and configure a virtual Media Gateway/SRT Gateway server on Amazon Web Service (AWS). For detailed configuration and operation information, please refer to the User's Guide. For the default credentials, refer to the *Important Notice* document (shipped with the appliance or available on the Haivision Support Portal).

About Amazon AWS

Amazon AWS is a collection of remote computing services that make up a cloud computing platform for building, deploying and managing applications and services through a network of datacenters across several geographical regions. Amazon AWS allows you to deploy and manage your Haivision Media Gateway/SRT Gateway instances in this global network. For more information, please visit:

https://aws.amazon.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 Amazon AWS account to sign in to the AWS management portal. For evaluation purposes you can subscribe to AWS for a 12-month trial period. For more information, please visit: https://aws.amazon.com

With Amazon AWS, you can choose from different licensing options for Media Gateway/SRT Gateway. You may "bring your own license" (BYOL) or "pay as you go" (PAYG). For BYOL, please contact your Haivision representative to discuss your options. See Licensing Your Server for details.

Creating a Virtual Server

Signing in to AWS

1. Sign in to your AWS account: https://console.aws.amazon.com
2. After you have successfully logged in to the AWS portal, click **Services > EC2**.
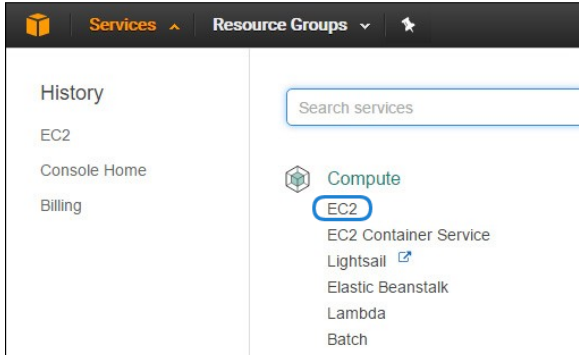
Creating a Virtual Instance

1. On the EC2 Dashboard, click **Launch Instance**.
2. Click **AWS Marketplace**.
3. Type "Haivision" in the search box and press **Enter** to find the Media Gateway/SRT Gateway image.
4. Click the **Select** button corresponding to the version of the Amazon Machine Image (AMI) you wish to use, PAYG or BYOL.
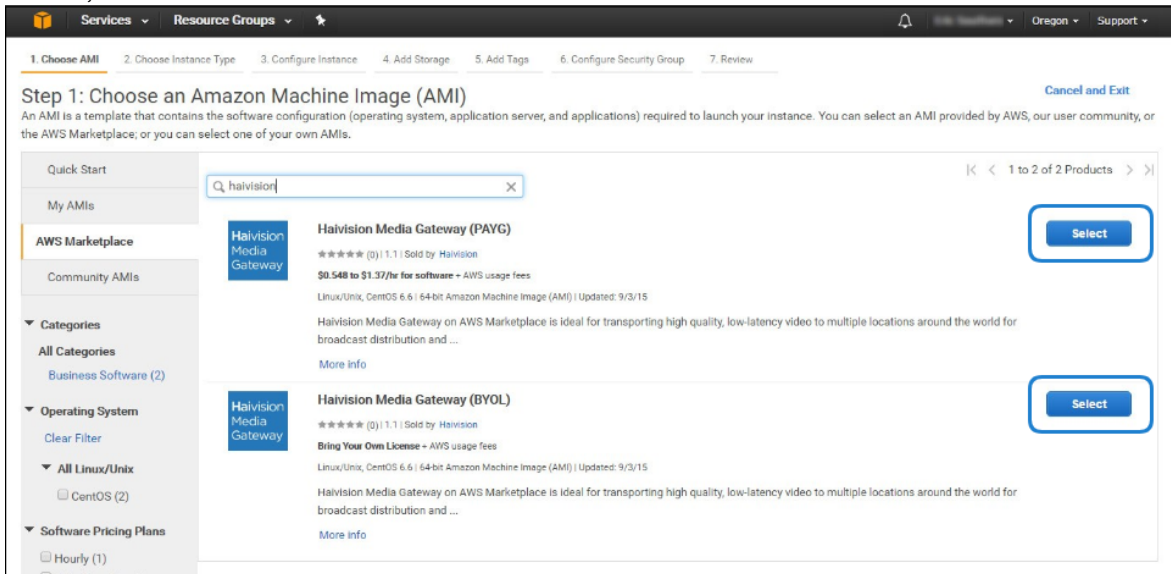
5. Review the product and pricing details, and then click **Continue**.
6. Choose an Instance Type, and then click **Next: Configure Instance Details**:

> **ⓘ Note**
>
> We do not recommend using tiers 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 c4.xlarge or c4.2xlarge tiers, as they are optimized for compute-intensive workloads and have high-performance network I/O.

7. Modify your Instance Details as needed, and then click **Next: Add Storage**:
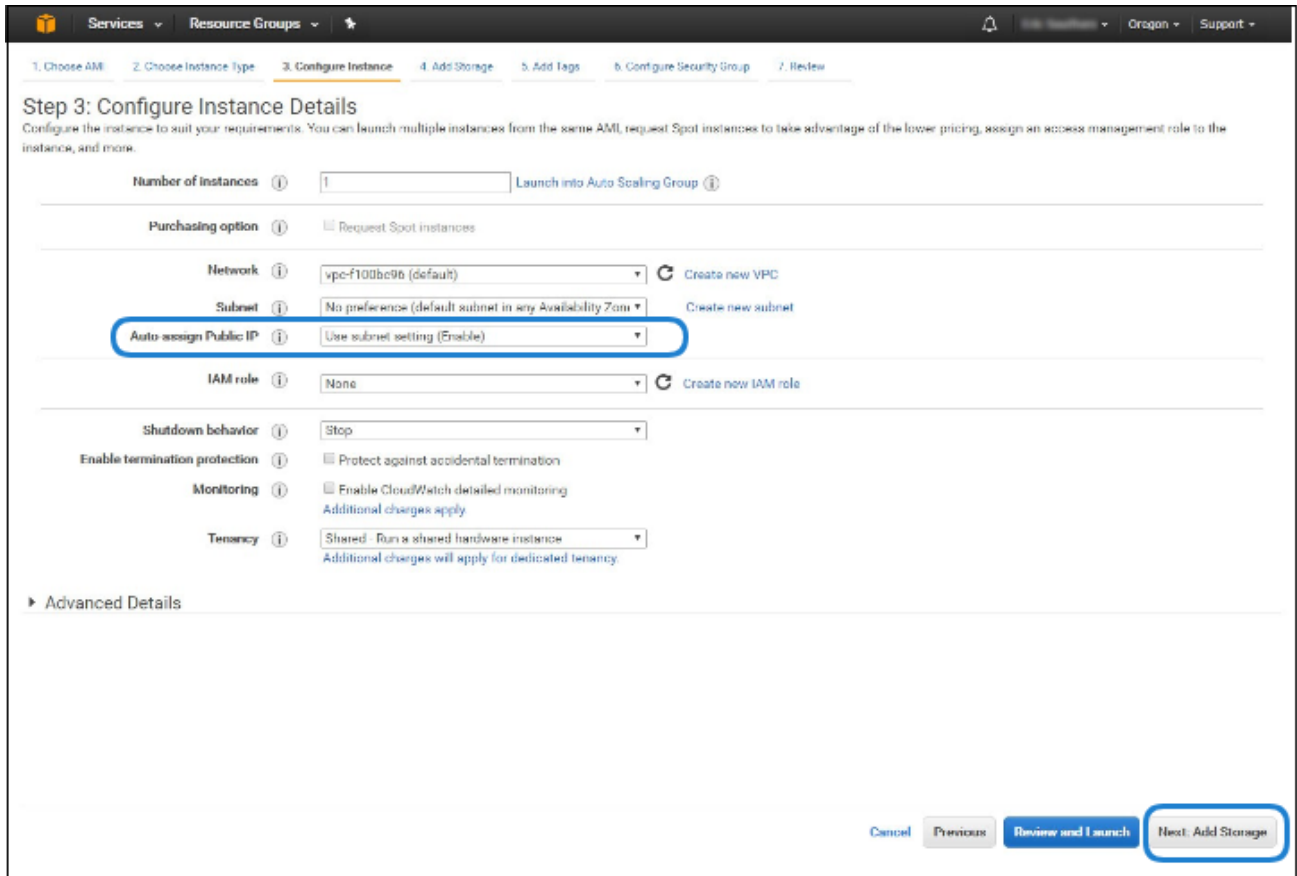
> **ℹ Note**
>
> You may wish to choose Enable under Auto-assign Public IP to give your server an IP address reachable from any location.

8. Set the amount of storage space you wish to make available to the server, and then click **Next: Add Tags**:

> **ⓘ Note**
>
> The default storage is sufficient for most Media Gateway/SRT Gateway operations. However, if you intend to use Media Gatewa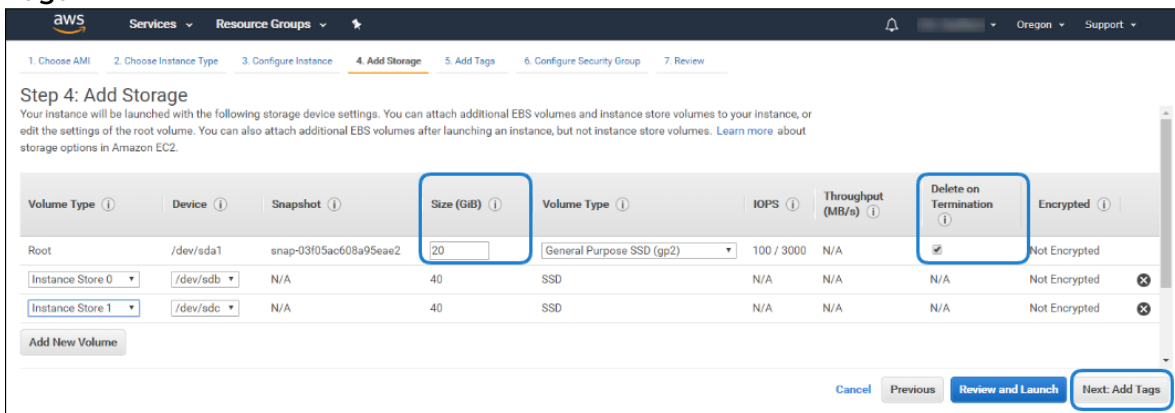y/SRT Gateway in conjunction with a video server (such as using Media Gateway with Haivision Media Platform), having additional storage allows you to benefit from local caching on the virtual server.

> **ⓘ Note**
>
> You may wish to choose Delete on Termination to have the storage space automatically removed if you cancel your subscription for the server instance.

9. Apply one or more tags (such as a Name) to the server, and then click **Next: Configure Security Group**:
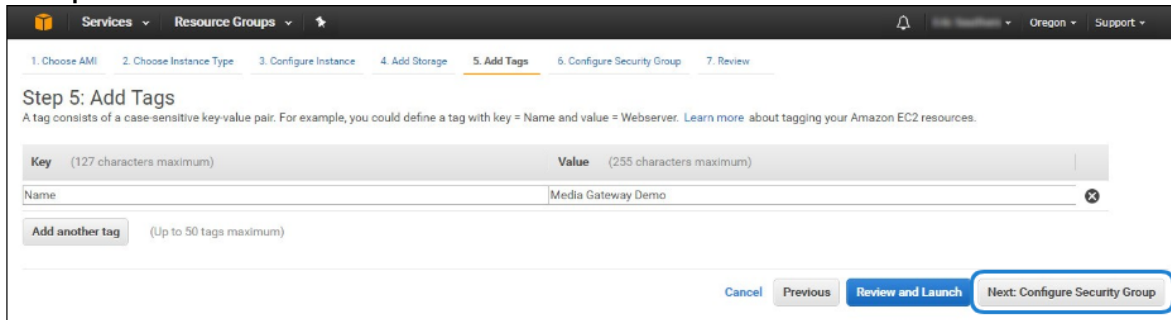
10. Create a new security group, or select from a list of existing groups. Make sure you have the following ports open:
    - Port 443 for HTTPS access to the web interface
    - Port 22 for SSH access to the Console UI interface
    - A custom port to allow incoming UDP traffic, such as SRT streams (use Custom UDP Rule). See SRT for more information.
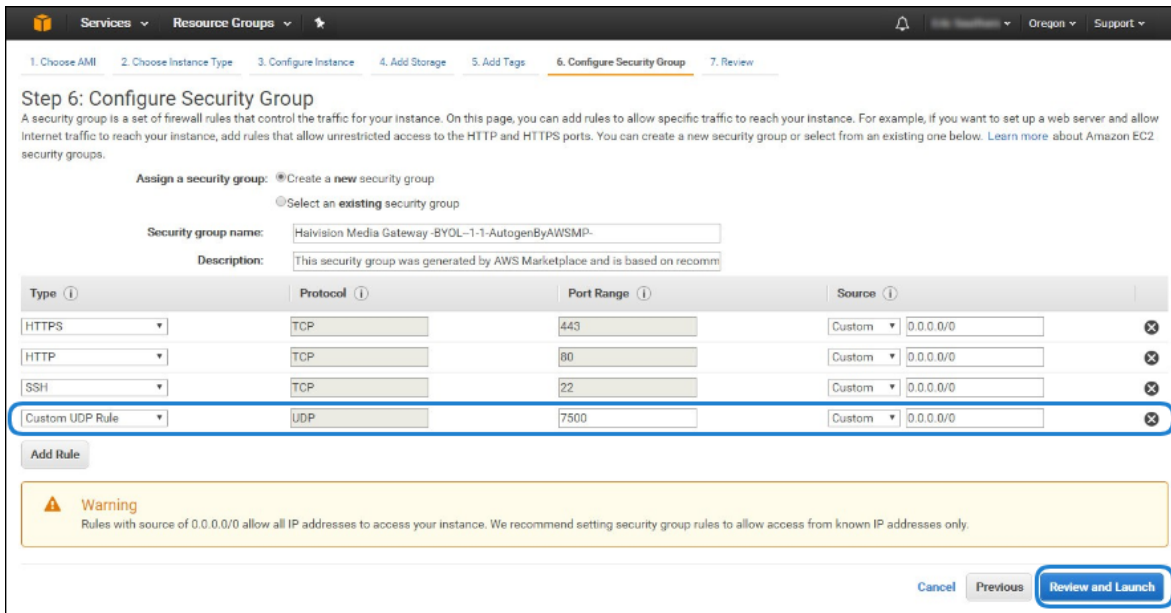
11. Click **Review and Launch**.

12. Review your settings, and make any necessary corrections or changes. When you are satisfied, click **Launch**:
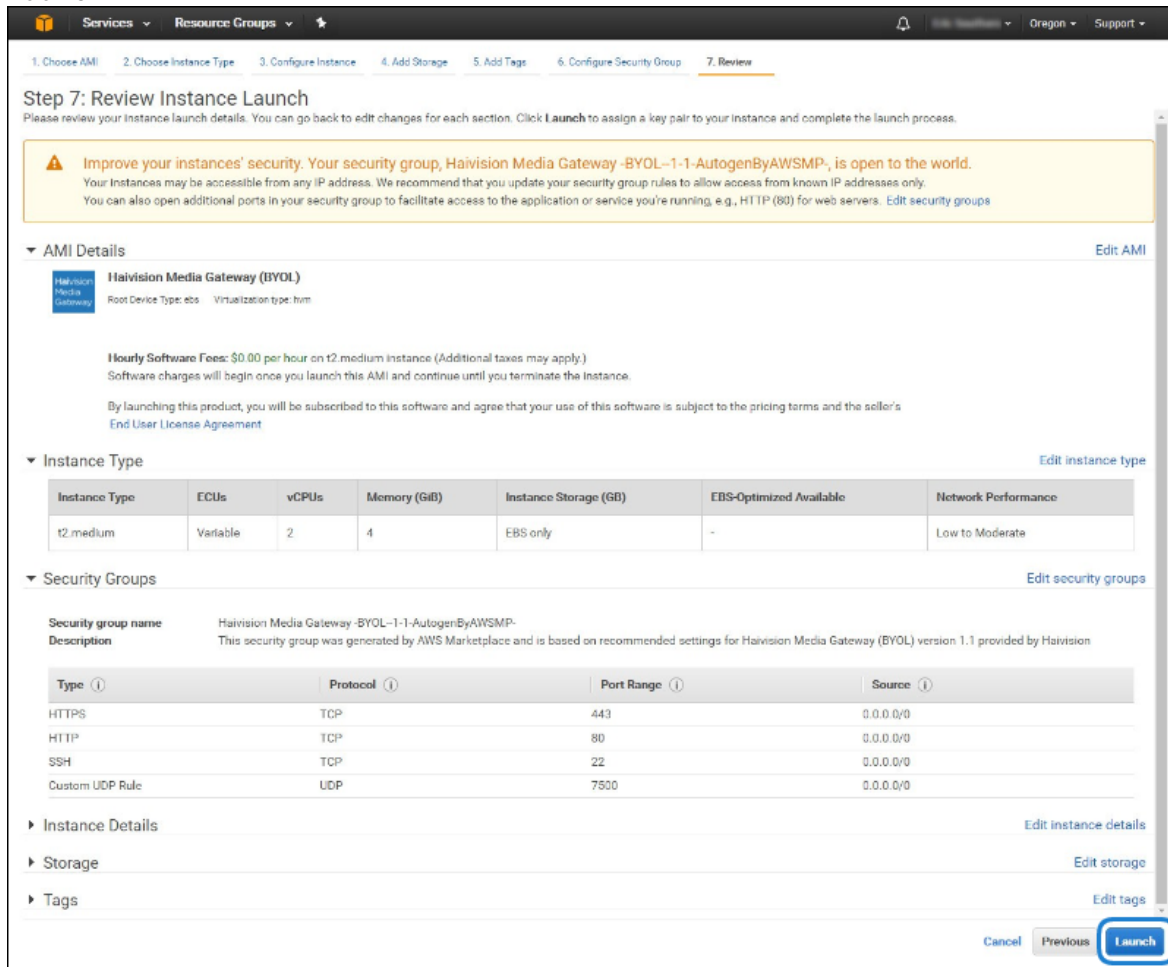
13. When prompted, select or create a public/private RSA key pair that is used to authenticate SSH sessions, and then click **Launch Instances**:

> **ⓘ Note**
>
> SSH access to the Console UI is only allowed via SSH public key.

14. In a few moments, a Launch Status page appears, informing you that your instance is in the process of launching. Creating your server instance can take up to several minutes. At any time, click **View Instances** to see more details:
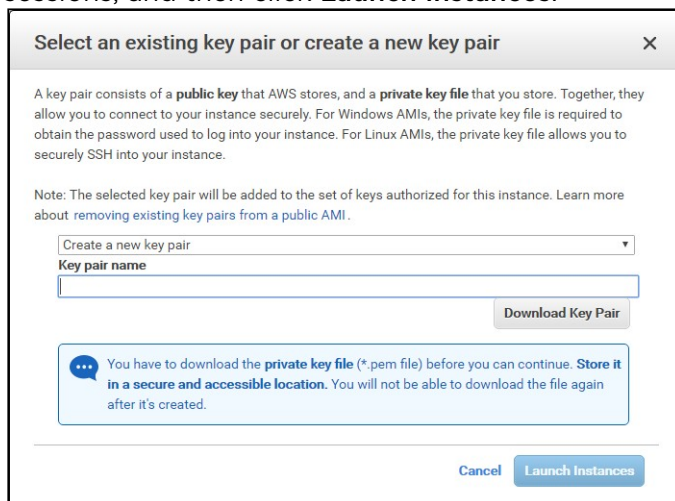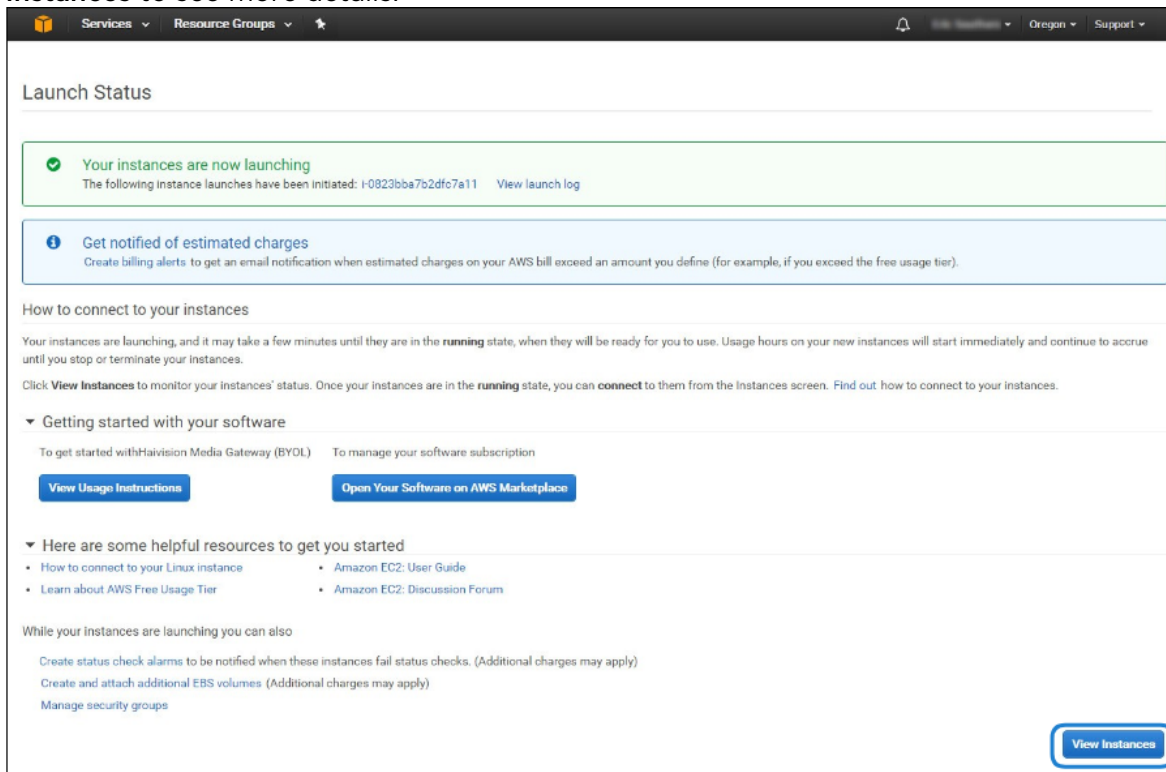

15. After the Instance State changes to "running", reboot the virtual server by selecting it in the AWS View Instances page and clicking **Actions > Instance State > Reboot**.
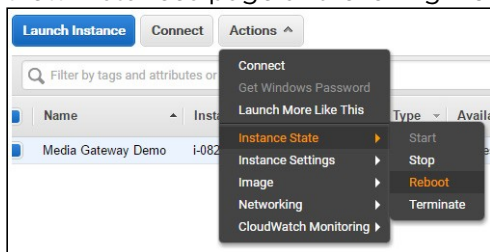
16. Confirm rebooting in the confirmation dialog box.
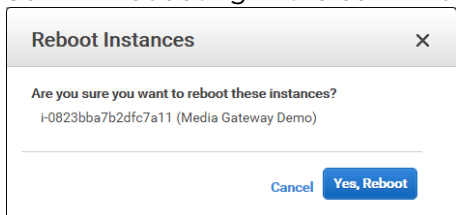
17. Return to the AWS View Instances page. In the row corresponding to your server, take note of the Public IP address and Instance ID assigned by AWS to your instance. The Instance ID is the default password for signing into web interface.

At this point, your virtual server is up and running!

- If you have created a BYOL instance, before continuing you need to license your server. See Licensing Your Server.
- If you have created a PAYG instance, you are ready to sign in and begin using your server. See Signing in to Media Gateway.

Signing in to Your Gateway

Accessing the Web Interface

1. Open a web browser, and enter the public IP Address of the virtual server. See Step #17 in Creating a Virtual Media Gateway Server 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 password. (By default, the password is the Instance ID of the virtual server. See Step #17 in Creating a Virtual Media Gateway Server.)
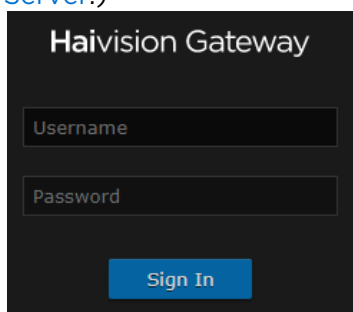
3. Click the **Sign In** button. The Browse Routes screen appears.

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

Accessing the Console UI

> **Note**
>
> You must have the private RSA key corresponding to the public key with which the virtual server was configured. See Step #13 in Creating a Virtual Media Gateway Server.

1. In a terminal window, enter the following command:

```
ssh -i ~/.ssh/<public-key_rsa> hvroot@<public-ip-address>
```

   For instructions on specifying a public key on PuTTY for Windows, see the AWS documentation at: http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/putty.html .
   The Console UI appears.
2. In the navigation sidebar, use the ↑↓ (up and down arrow) keys to highlight menu items, and then press the **Enter** key.

3.

> ❗ **Important**
>
> Network configuration settings are controlled by Amazon AWS. Do not change them using the Haivision Console UI.

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

For more details, refer to Using the Console UI with Haivision Hardware.

Licensing Your Server

For **BYOL** instances, before creating routes in your virtual server, you must obtain a license from Haivision.

> ℹ️ **Note**
>
> Without a valid license key, you can sign in, but you cannot create or edit routes.

To obtain a license:

1. Sign into the Media Gateway/SRT Gateway as described in Signing in to Media Gateway.
2. Click the ☰ icon and click **Administration**.
3. Click **System Settings** in the admin toolbar, and click **Network** in the sidebar.
4. Copy the server's MAC Address.
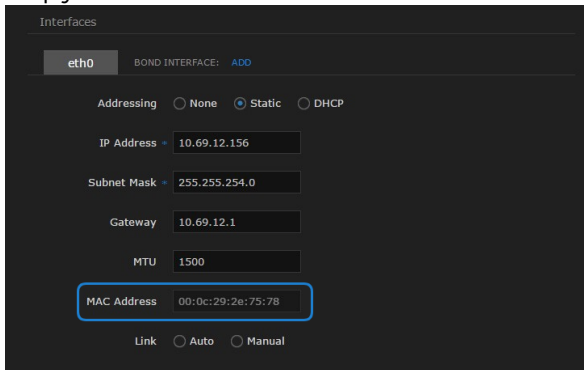
5. To request a license for your product:
   a. Log in to the Haivision Support Portal (https://support.haivision.com).
   b. After logging in, click **License Requests**.
   c. Click the **New** button.
   d. Select the appropriate device type and click the **Next** button.
   e. Fill in the form with 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.

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

6. After you receive your license, sign back in to the virtual server. You should be prompted with a License Required message. (Otherwise, click the ☰ icon, click **Administration**, click **System Settings** in the admin toolbar, and click **Licensing** in the sidebar). Click **Add License**.
7. Copy and paste the license for your server into the License field.

8. Click **Add**.

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

SRT

Your virtual server can be used to receive and redistribute SRT streams. You must first verify that the Security Group is set to your network configuration, and you must open a UDP port for your network if you want to use SRT Listener mode. This was completed in Step #10 in Creating a Virtual Media Gateway Server when setting up your AWS resource.

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

Stopping the Instance

> ❗ **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 AWS virtual machine.

To stop your server instance:

1. Navigate to the AWS View Instances page.
2. Find and select your server, then click **Actions > Instance State > Stop**.
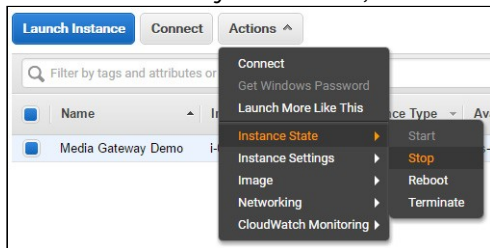
> ❗ **Important**
>
> It is possible that shutting down an AMI instance results in a change in the MAC address the next time it is started, which causes the existing BYOL license to expire. If this happens, contact Haivision with the new MAC address to obtain a replacement license.

Obtaining Documentation

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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