

Amazon AWS Quick Start Guide

Haivision Gateway 3.7 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](#).

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

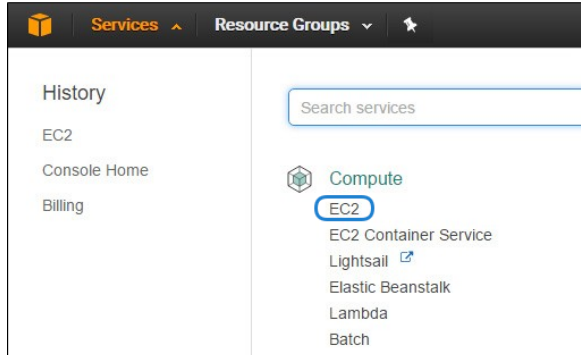
You must have an active Amazon AWS account to sign in to the AWS management portal. For evaluation purposes you can subscribe to AWS for a 12-month trial period. For more information, please visit: <https://aws.amazon.com>

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), which is already licensed for your use. For BYOL, please contact your Haivision representative to discuss your options. See [Licensing Your Server](#) for details.

Creating a Virtual Server

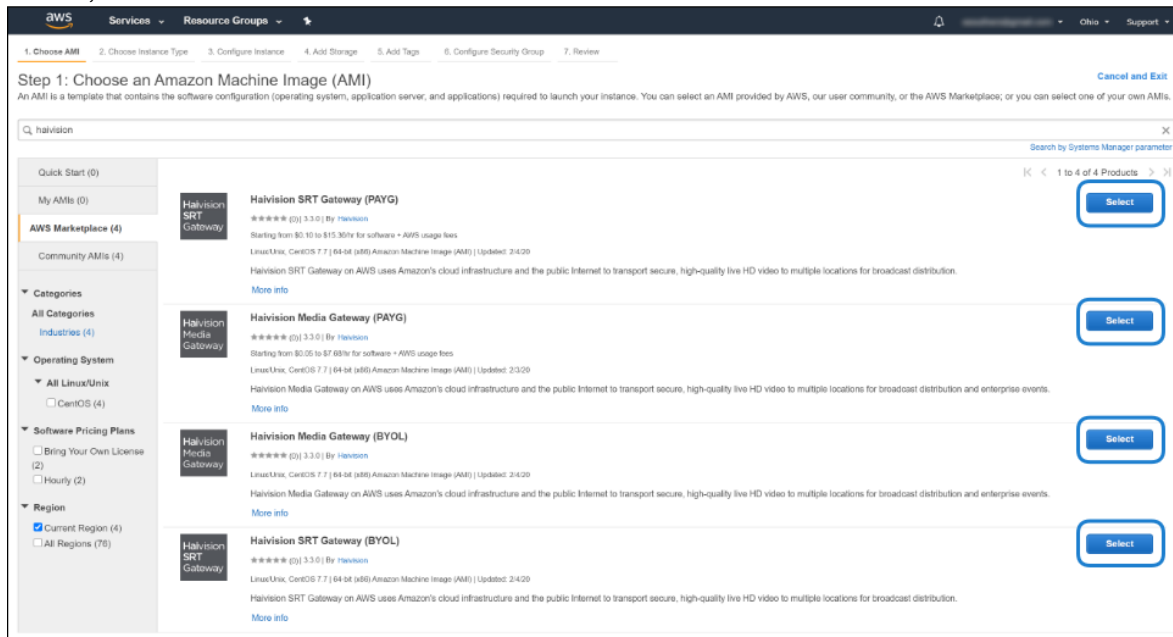
Signing in to AWS

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

- Only instances built on the Nitro system are supported. Please see the following link for a list of compatible instances: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instance-types.html#ec2-nitro-instances>
- For high bandwidth streams or critical viewing requirements, we recommend using Compute Optimized C5 Instances (e.g. c5.xlarge, c5.2xlarge, etc.) tiers, as they are optimized for compute-intensive workloads and have high-performance network I/O.

The screenshot shows the AWS console interface for selecting an EC2 instance type. The breadcrumb trail indicates the current step is '2. Choose Instance Type'. The page title is 'Step 2: Choose an Instance Type'. Below the title, there is a filter section with 'Filter by: c5' and 'Current generation'. A table lists various instance types, with 'c5.xlarge' selected. The table columns include Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, Network Performance, and IPv6 Support. At the bottom, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Configure Instance Details'.

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	c5	c5.large	2	4	EBS only	Yes	Up to 10 Gigabit	Yes
<input checked="" type="checkbox"/>	c5	c5.xlarge	4	8	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	c5	c5.2xlarge	8	16	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	c5	c5.4xlarge	16	32	EBS only	Yes	Up to 10 Gigabit	Yes
<input type="checkbox"/>	c5	c5.9xlarge	36	72	EBS only	Yes	10 Gigabit	Yes
<input type="checkbox"/>	c5	c5.12xlarge	48	96	EBS only	Yes	12 Gigabit	Yes
<input type="checkbox"/>	c5	c5.18xlarge	72	144	EBS only	Yes	25 Gigabit	Yes
<input checked="" type="checkbox"/>	c5	c5.24xlarge	96	192	EBS only	Yes	25 Gigabit	Yes
<input checked="" type="checkbox"/>	c5	c5.metal	96	192	EBS only	Yes	25 Gigabit	Yes

7. Modify your Instance Details as needed, and then click **Next: Add Storage:**

Step 3: Configure Instance Details
 Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of Instances: 1 Launch into Auto Scaling Group

Purchasing option: Request Spot instances

Network: vpc-f100bc9b (default)

Subnet: No preference (default subnet in my Availability Zone)

Auto-assign Public IP: **Use subnet setting (Enable)**

IAM role: None

Shutdown behavior: Stop

Enable termination protection: Protect against accidental termination

Monitoring: Enable CloudWatch detailed monitoring
 Additional charges apply

Tenancy: Shared - Run a shared hardware instance
 Additional charges will apply for dedicated tenancy.

Advanced Details

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**:

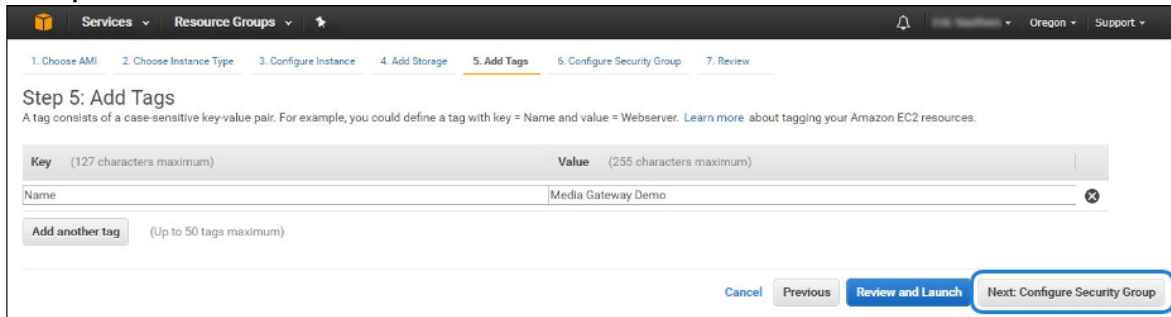
Step 4: Add Storage
 Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda1	snap-03f05ac608a95eae2	20	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted
Instance Store 0	/dev/sdb	N/A	40	SSD	N/A	N/A	N/A	Not Encrypted
Instance Store 1	/dev/sdc	N/A	40	SSD	N/A	N/A	N/A	Not Encrypted

Note

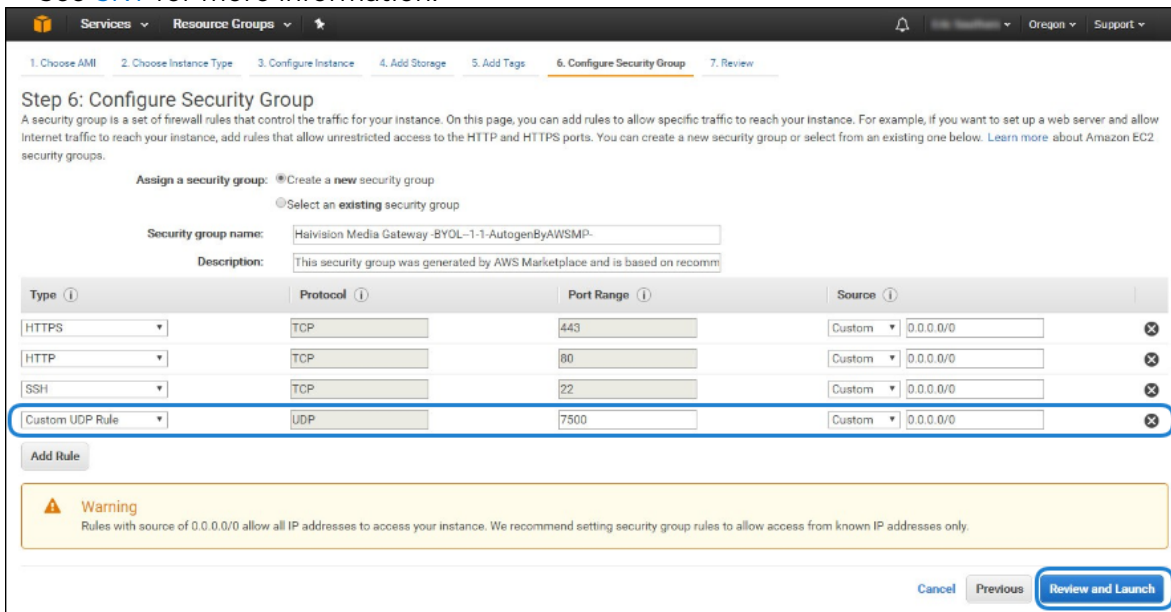
- The default storage is sufficient for most Media Gateway/SRT Gateway operations. However, if you intend to use Media Gateway/SRT Gateway in conjunction with a video server (such as using Media Gateway with Haivision Media Platform), having additional storage allows you to benefit from local caching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



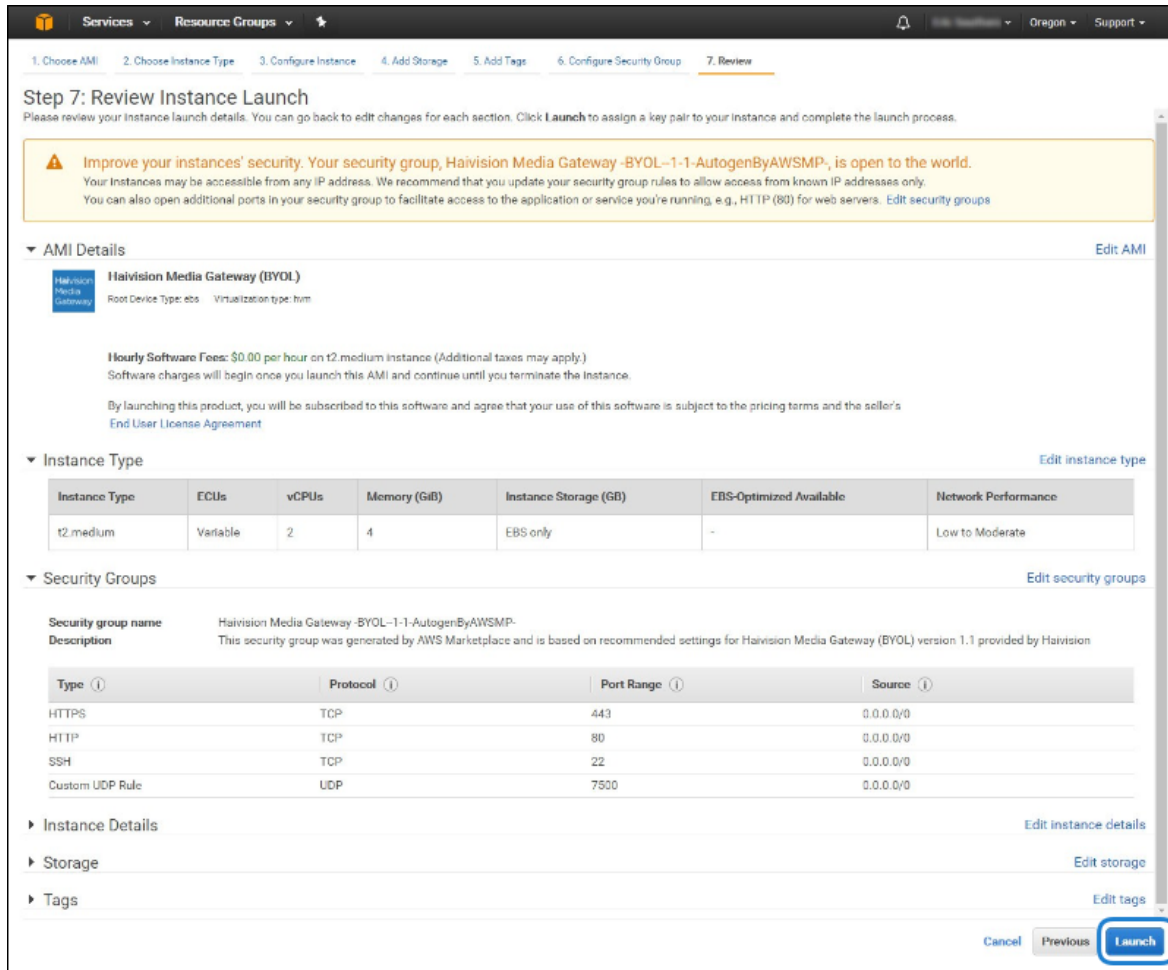
10. Create a new security group, or select from a list of existing groups. Make sure you have the following ports open:

- 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.

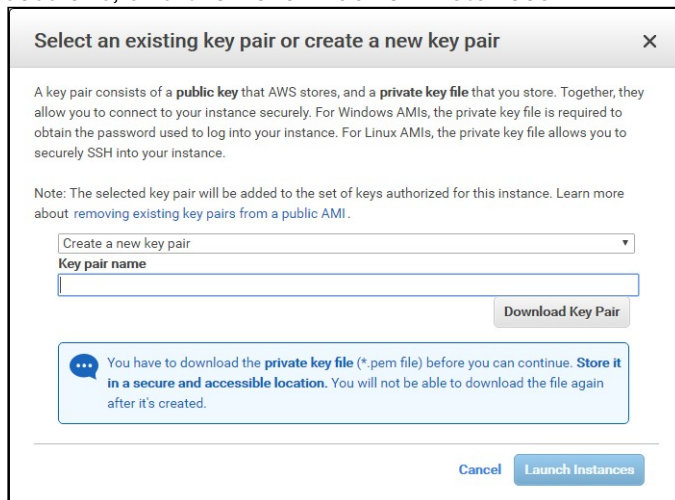


11. Click **Review and Launch**.

12. Review your settings, and make any necessary corrections or changes. When you are satisfied, click **Launch**:



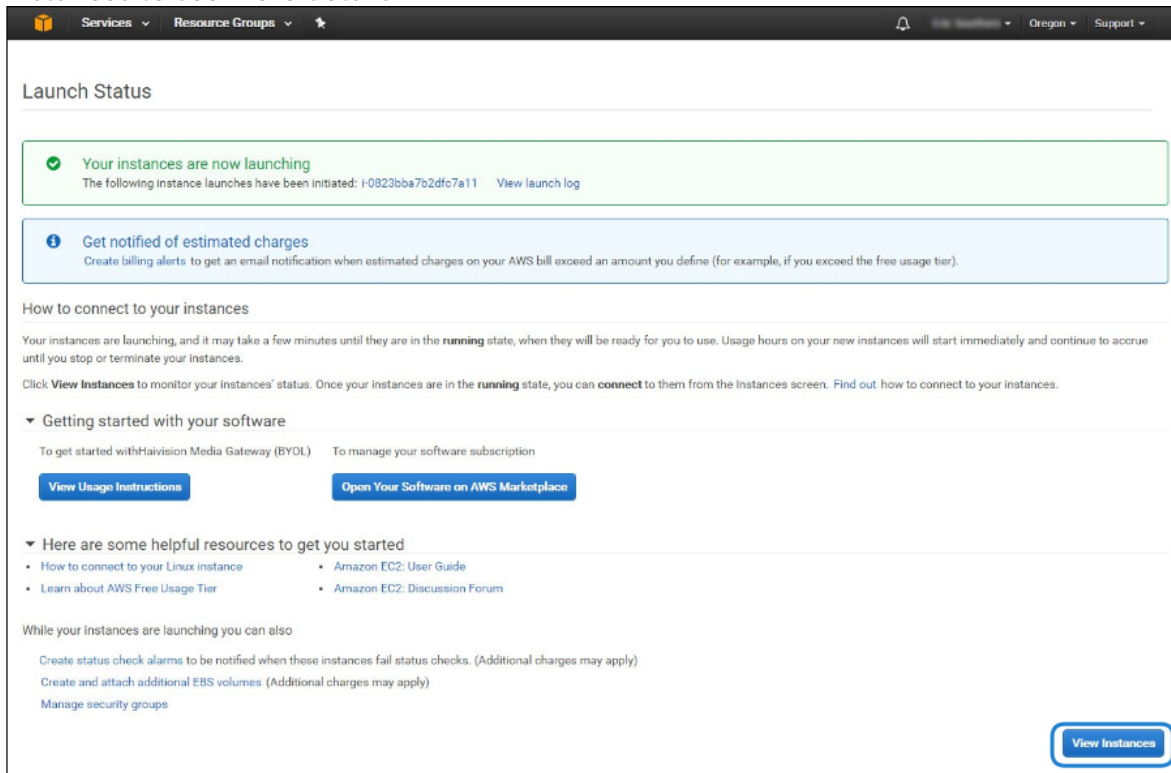
13. When prompted, select or create a public/private RSA key pair that is used to authenticate SSH sessions, and then click **Launch Instances**:



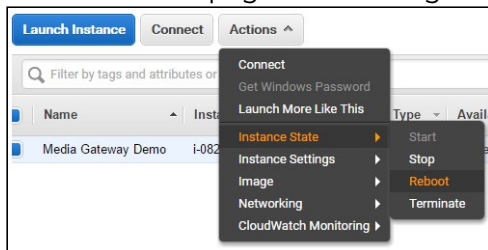
Note

SSH access to the Console UI is only allowed via SSH public key.

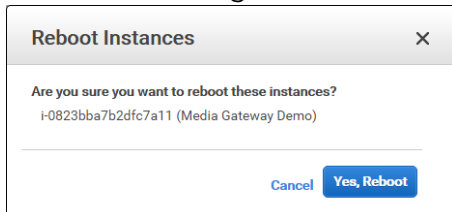
- In a few moments, a Launch Status page appears, informing you that your instance is in the process of launching. Creating your server instance can take up to several minutes. At any time, click **View Instances** to see more details:



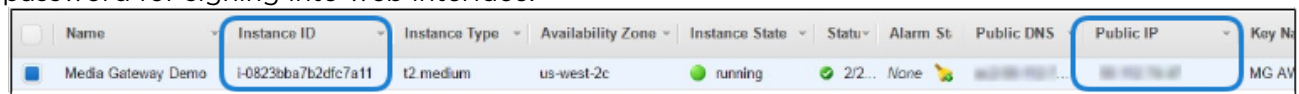
- After the Instance State changes to "running", reboot the virtual server by selecting it in the AWS View Instances page and clicking **Actions > Instance State > Reboot**.



- Confirm rebooting in the confirmation dialog box.



- 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

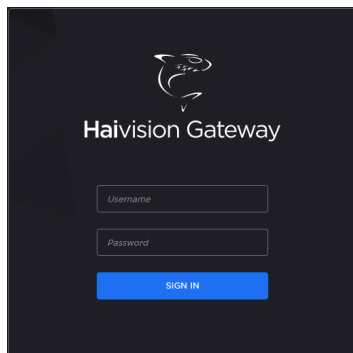
Note

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 #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](#).)

Tip

The Instance ID is the initial password for all user accounts.



3. Click the **Sign In** button.
 - For BYOL instances, a License Required modal appears. See [Licensing Your Server](#) to obtain a license.
 - For PAYG instances, the Route List screen appears.

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 PuTTY on Windows).

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. Change settings as necessary.

⚠ 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

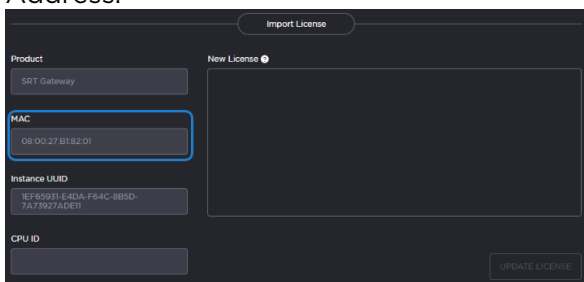
For **BYOL** instances, before creating routes in your virtual server, you must obtain a license from Haivision.

⚠ 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) (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 New 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

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.

Note

For more information on SRT, please refer to the [User's Guide](#) and the [SRT Deployment Guide](#).

Stopping the Instance

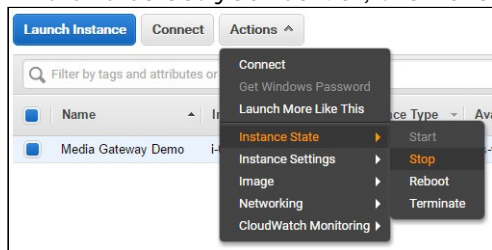
You can stop and deallocate your server instance, while keeping all configurations active. After the instance is stopped, no further running charges are applied.

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 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

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	<p>North America (Toll-Free) 1 (877) 224-5445</p> <p>International 1 (514) 334-5445</p> <p><i>and choose from the following:</i> Sales - 1, Cloud Services - 3, Support - 4</p>
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