

# Kraken AWS Quick Start Guide

## Kraken 3.6 on Amazon AWS

This quick start guide describes how to create and configure a virtual Kraken server on Amazon Web Service (AWS). For detailed configuration and operation information, please refer to the [Kraken User's Guide](#).

For the default credentials, refer to the *Important Notice* (postcard shipped with appliances). You may download the *Important Notice* as well as the latest software and Release Notes through the [Download Center](#) 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 Kraken instances in this global network. For more information, please visit:

<https://aws.amazon.com>

## Before You Start

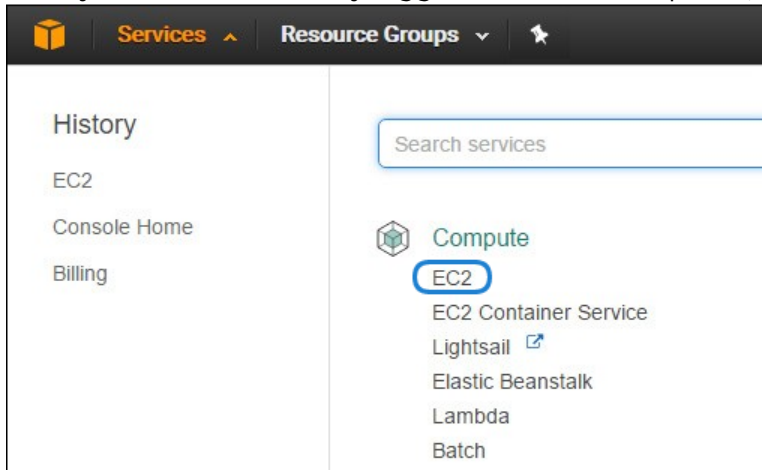
You must have an active Amazon AWS account to sign in to the AWS management portal. For evaluation purposes you can subscribe to AWS for a 12-month trial period. For more information, please visit: <https://aws.amazon.com>

With Amazon AWS, you must "bring your own license" (BYOL) for Kraken. Please contact your Haivision representative to discuss your licensing options. See [Licensing Your Server](#) for details.

# Creating a Virtual Kraken Server

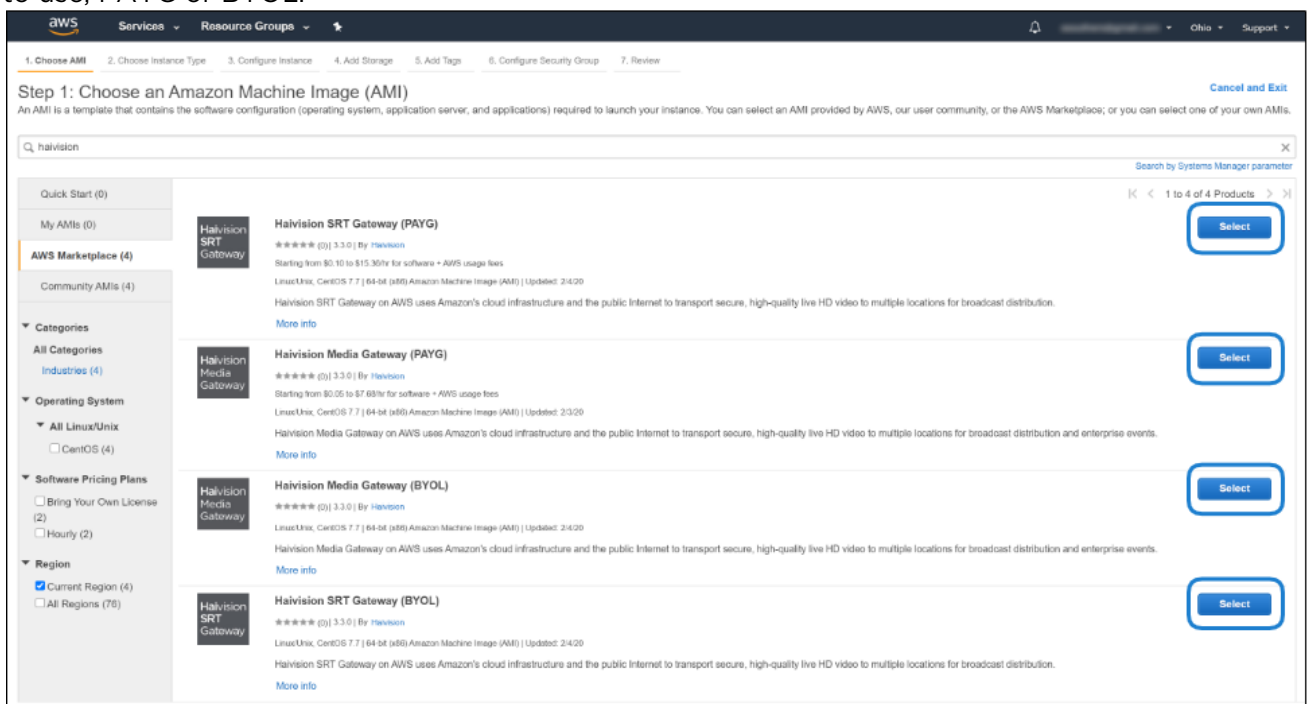
## Signing in to AWS

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 Kraken image.
4. Click the **Select** button corresponding to the version of the Amazon Machine Image (AMI) you wish to use, PAYG or BYOL.



- Review the product and pricing details, and then click **Continue**.
- Choose an Instance Type, and then click **Next: Configure Instance Details**:

**Step 2: Choose an Instance Type**

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: **All Instance types** | **Current generation** | **Show/Hide Columns**

**Currently selected:** m4.xlarge (13 ECUs, 4 vCPUs, 2.4 GHz, Intel Xeon E5-2676v3, 16 GiB memory, EBS only)

**Note:** The vendor recommends using a **m3.xlarge** instance (or larger) for the best experience with this product.

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
<input checked="" type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
<input checked="" type="checkbox"/>	General purpose	t2.micro <small>Free tier eligible</small>	1	1	EBS only	-	Low to Moderate
<input checked="" type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
<input checked="" type="checkbox"/>	General purpose	t2.xlarge	4	16	EBS only	-	Moderate
<input checked="" type="checkbox"/>	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate
<input type="checkbox"/>	General purpose	m4.large	2	8	EBS only	Yes	Moderate
<input checked="" type="checkbox"/>	General purpose	<b>m4.xlarge</b>	<b>4</b>	<b>16</b>	EBS only	Yes	<b>High</b>
<input type="checkbox"/>	General purpose	m4.2xlarge	8	32	EBS only	Yes	High
<input type="checkbox"/>	General purpose	m4.4xlarge	16	64	EBS only	Yes	High
<input checked="" type="checkbox"/>	General purpose	m4.10xlarge	40	160	EBS only	Yes	10 Gigabit

Buttons: Cancel | Previous | **Review and Launch** | **Next: Configure Instance Details**

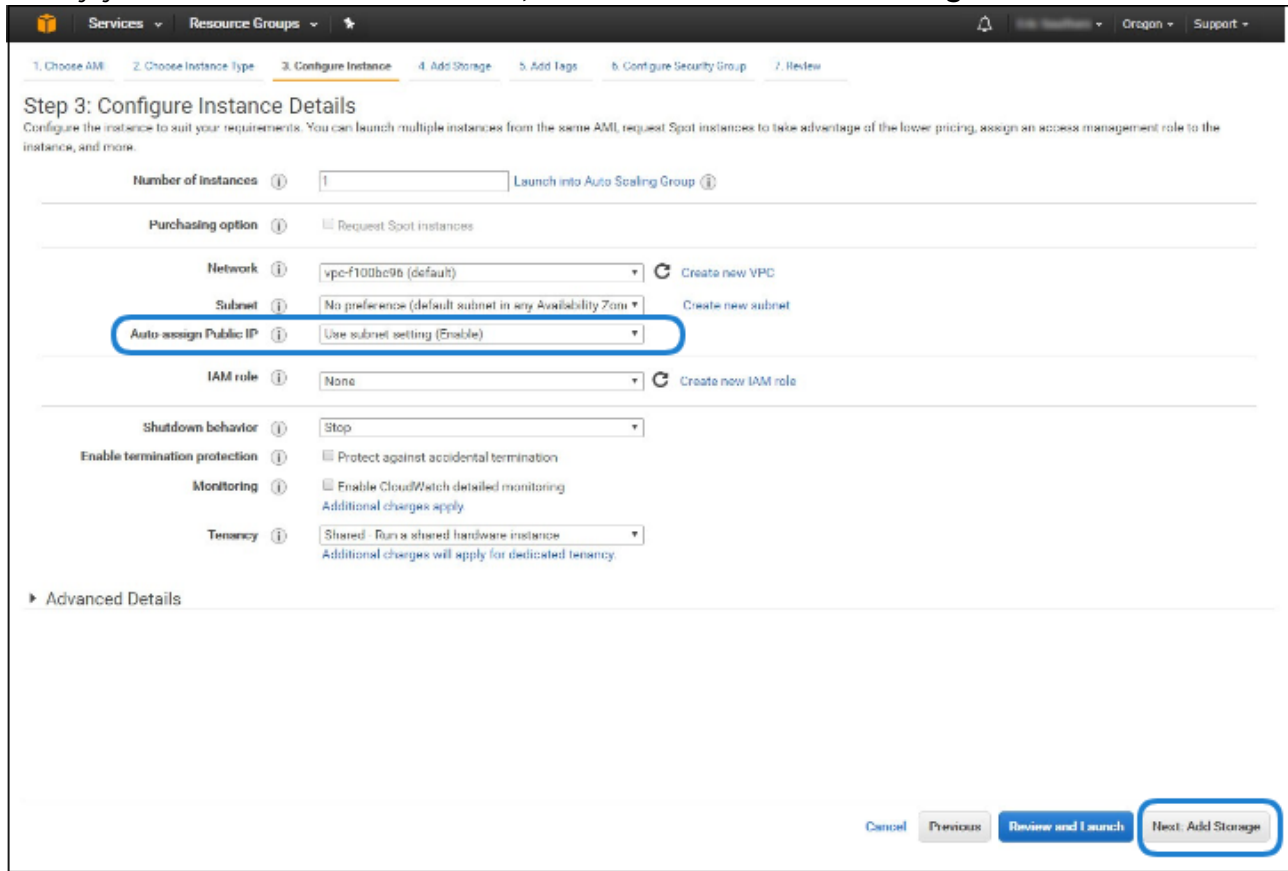
**Note**

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 compute-optimized (C5) instance tiers, as they are optimized for compute-intensive workloads and have high-performance network I/O. **c5.2xlarge** is generally recommended for Kraken AWS.

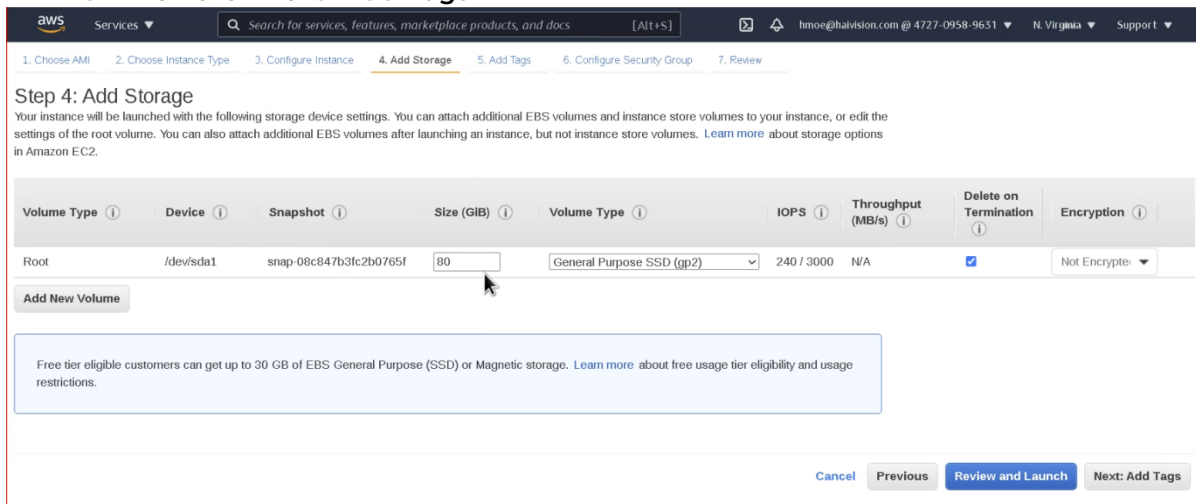
7. Modify your Instance Details as needed, and then click **Next: Add Storage**:

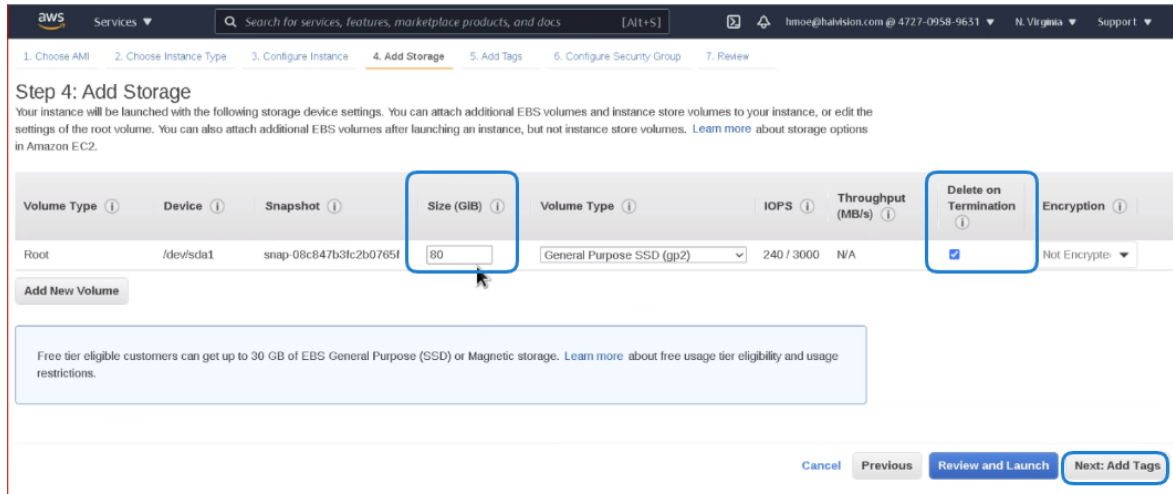


**Note**

You may wish to choose Enable under Auto-assign Public IP to give your server an IP address reachable from any location.

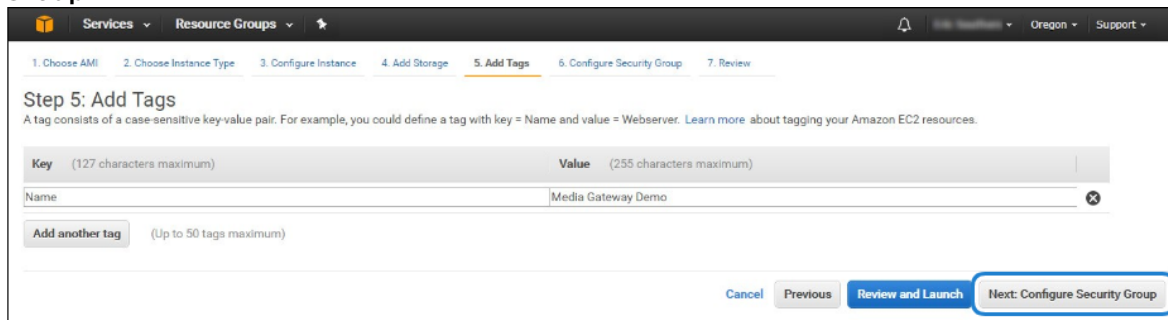
8. Set the amount of storage space you wish to make available to the server. For Kraken, set 75GB as minimal. Then click **Next: Add Tags**:





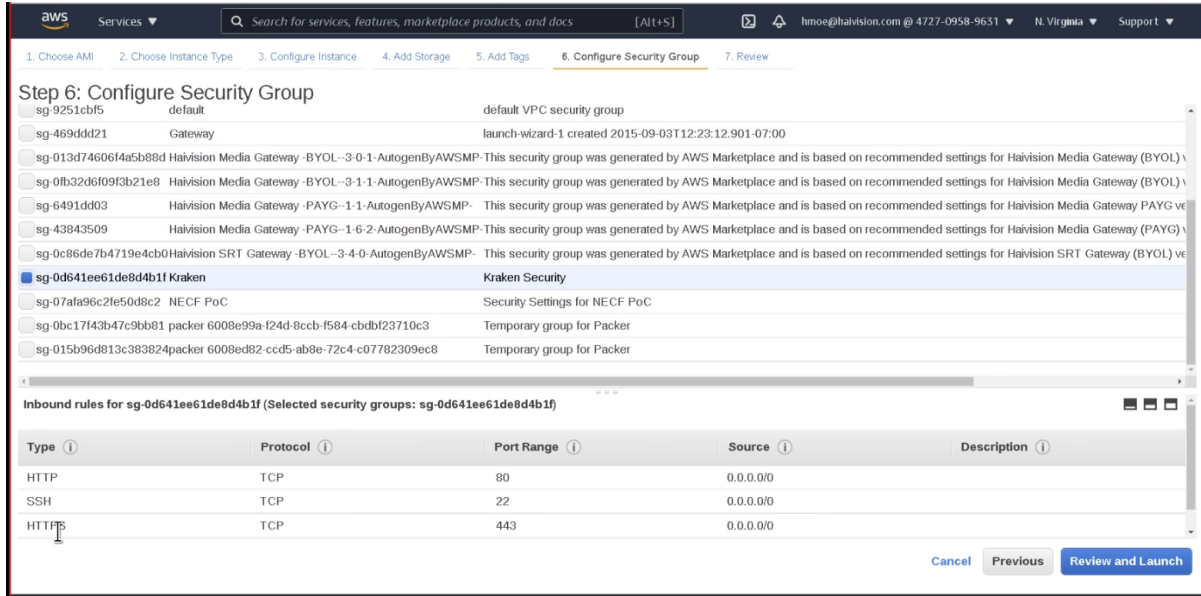
**Note**  
 You may wish to choose Delete on Termination to have the storage space automatically removed if you cancel your subscription for the server instance.

9. Apply one or more tags (such as a Name) to the server, and then click **Next: Configure Security Group**:



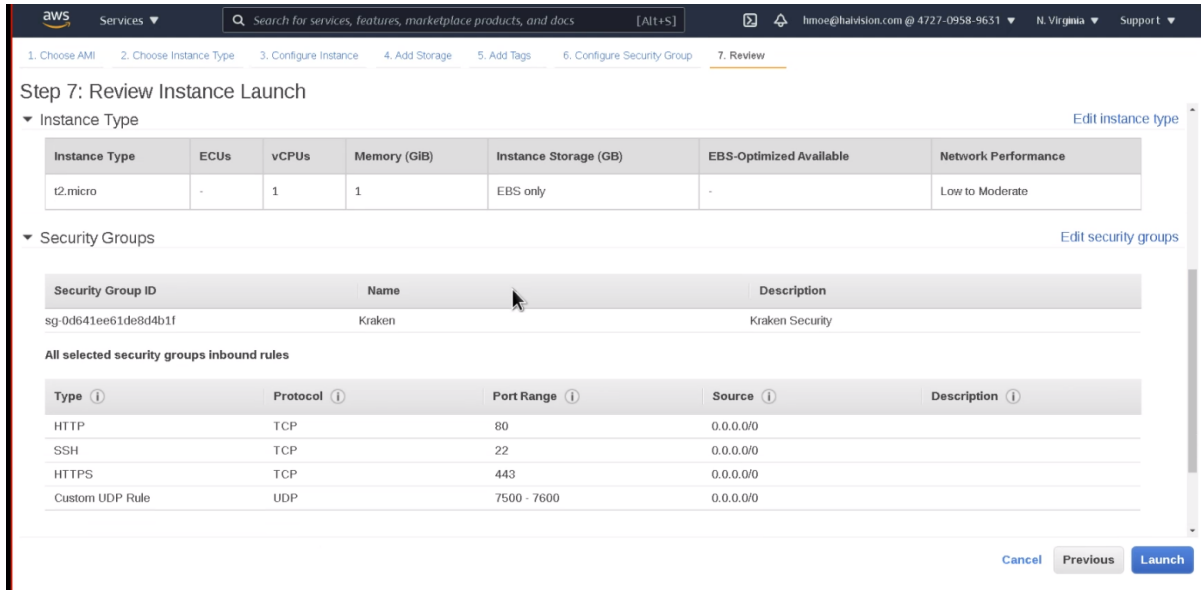
10. Create a new security group, or select from a list of existing groups. Make sure you have the following ports open:

- 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.

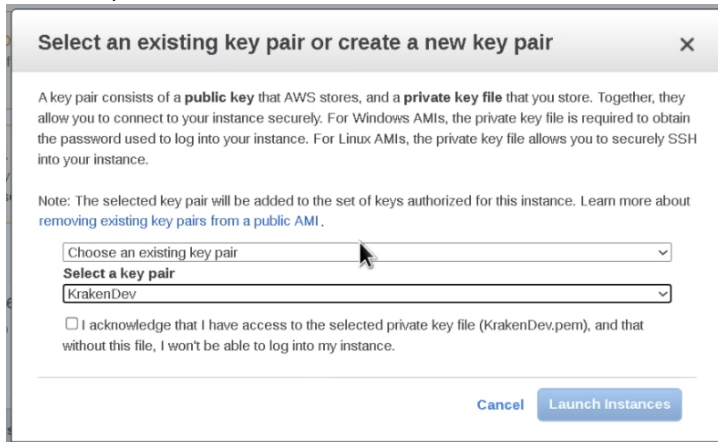


11. Click **Review and Launch**.

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



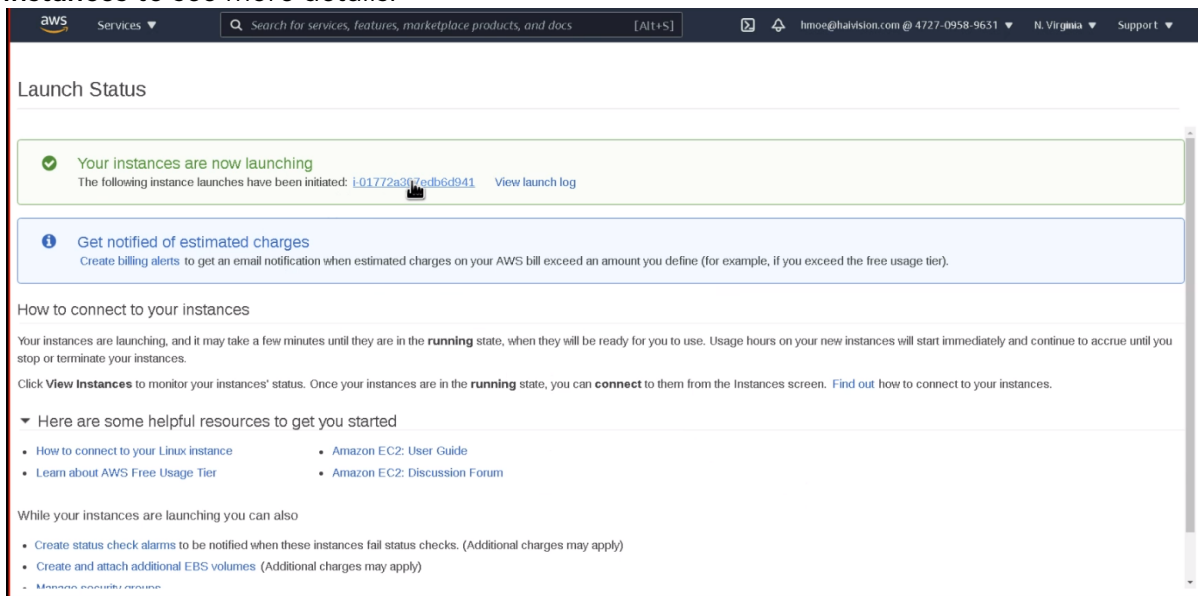
- When prompted, select or create a public/private RSA key pair that is used to authenticate SSH sessions, and then click **Launch Instances**:



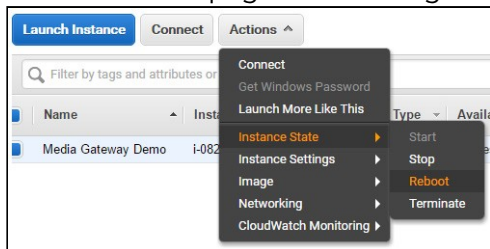
**Note**

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:

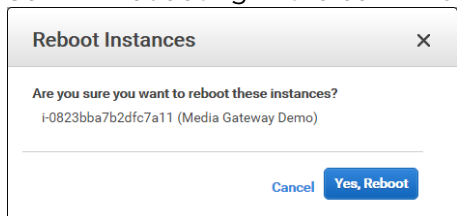


- After the Instance State changes to "running", reboot the virtual server by selecting it in the AWS View Instances page and clicking **Actions > Instance State > Reboot**.

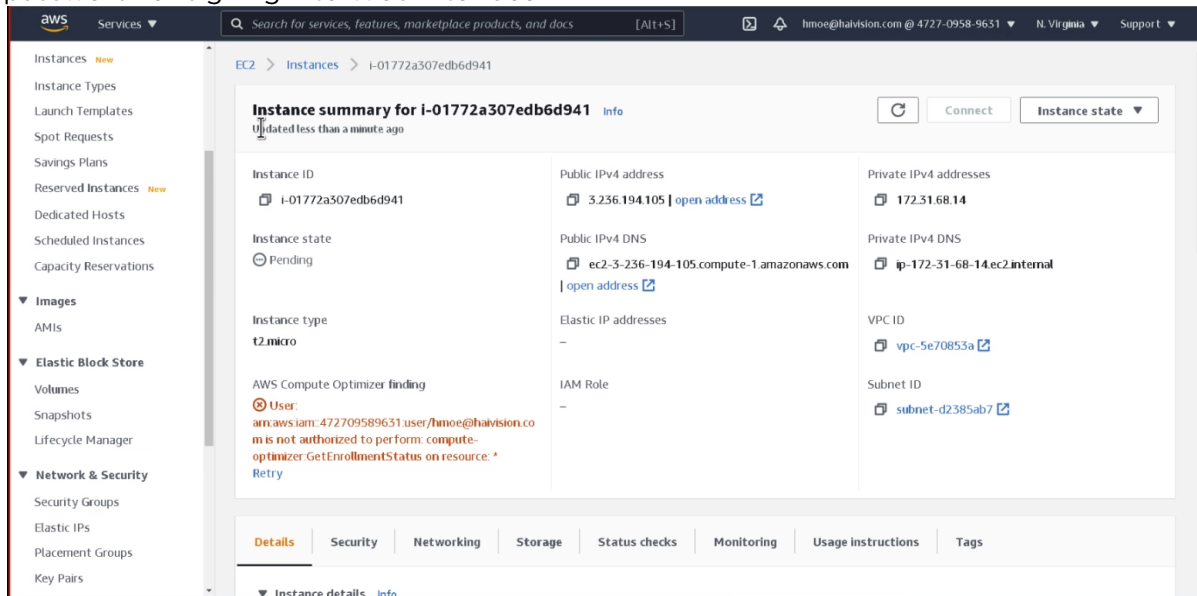




16. Confirm rebooting in the confirmation dialog box.



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 Your Server](#).



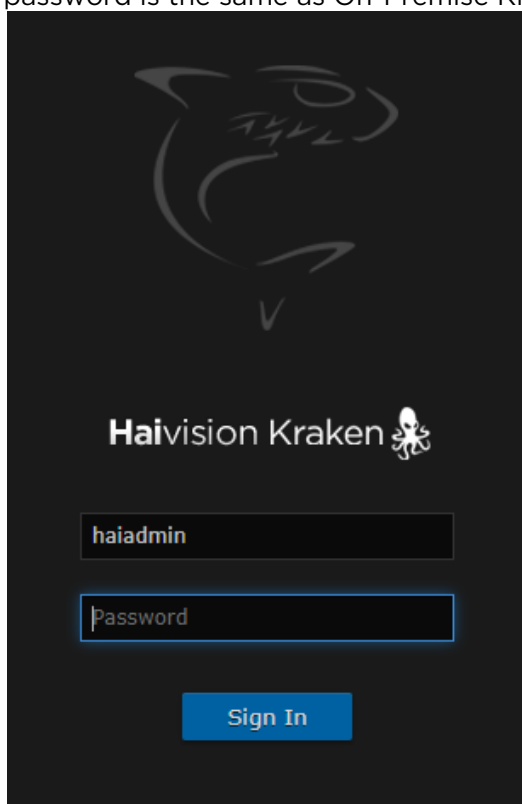
# Signing in to Your Server

## 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 #17 in [Creating a Virtual 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 same as On-Premise Kraken password.)



3. Click the **Sign In** button.  
For BYOL instances, 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 on macOS, or PuTTY on Windows).

### Note

You must have a private RSA key corresponding to the public key with which the virtual server was configured. See Step #13 in [Creating a Virtual Server](#).

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

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

The Console UI appears. Note that the Root user is disabled; however, Root commands can be run with `sudo`.

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

Before beginning to transcode or encode video, you must obtain a license from Haivision.

**Note**


Without a valid license key, you can sign in, but you cannot encode or transcode video.

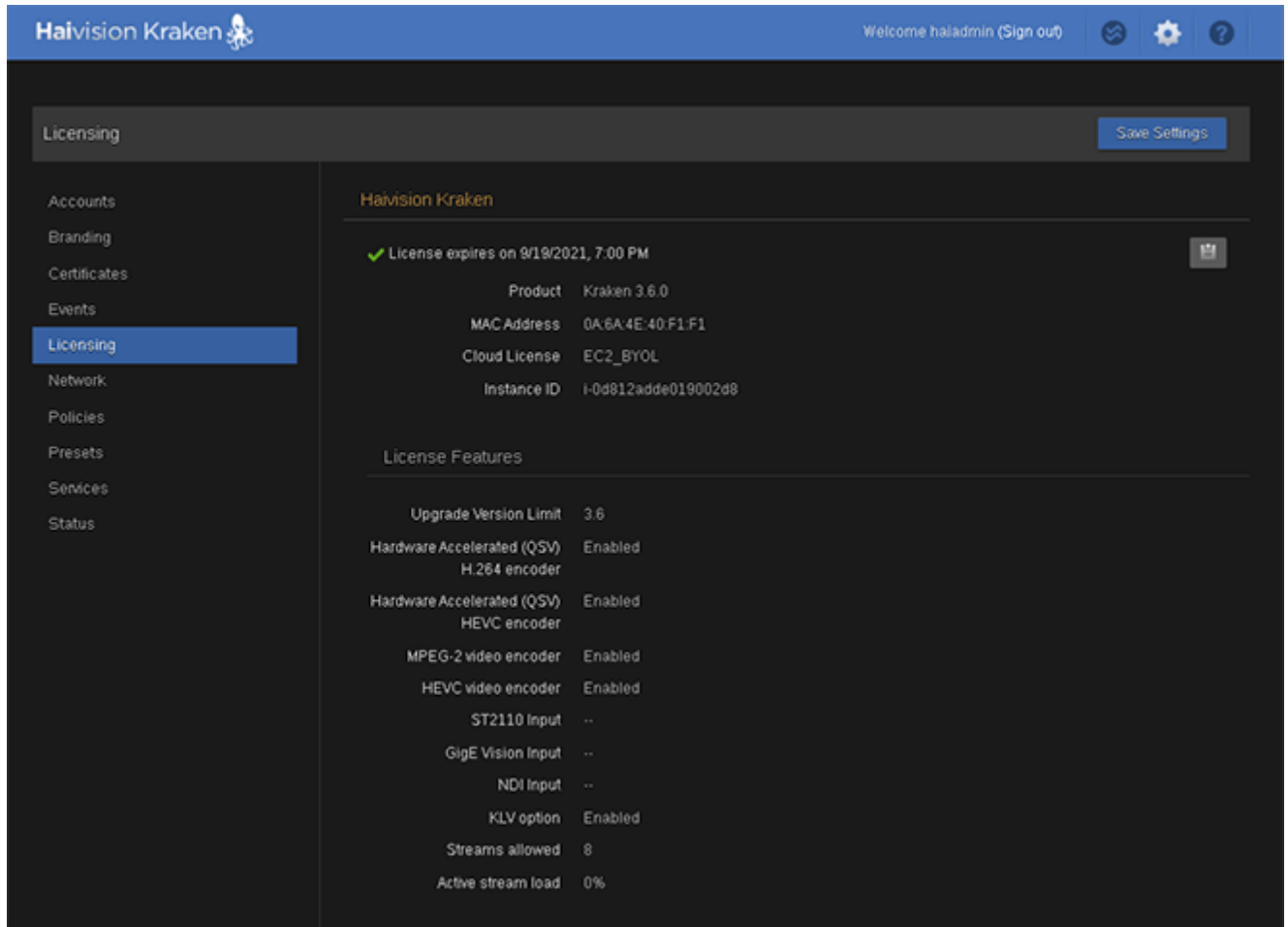
Generally, Kraken AWS uses the EC2 instance ID instead of the MAC address for licensing. The Kraken license service on Kraken VMs periodically retrieves the VM information (including the instance ID) from the [Retrieve instance metadata - Amazon Elastic Compute Cloud](#) for license validation.

You can find the Kraken AWS instance ID on the AWS instance detail view of the Kraken VM and can copy it to the clipboard.

The screenshot displays the AWS Management Console interface. At the top, there are buttons for 'Launch Instance', 'Connect', and 'Actions'. Below this is a search bar with the text 'Filter by tags and attributes or search by keyword'. A table lists several EC2 instances with columns for Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, and Alarm Status. The instance 'KK36PublicH...' with ID 'i-0d812adde019002d8' is selected. Below the table, the instance details are shown for 'i-0d812adde019002d8 (KK36PublicHenry)'. The details include Instance ID, Instance state (running), Instance type (t2.xlarge), Finding (You may not have permission to access AWS Compute Optimizer.), Private DNS (ip-172-31-13-95.ec2.internal), Private IPs (172.31.13.95), Secondary private IPs, VPC ID (vpc-5e70853a), Platform (Other Linux), Platform details (Linux/UNIX), Usage operation (RunInstances), Source/dest. check (True), T2/T3 Unlimited (Disabled), EBS-optimized (False), Root device type (ebs), Root device (/dev/sda1), Block devices (/dev/sda1), Elastic Graphics ID (-), Elastic Inference accelerator ID (-), Capacity Reservation (-), Capacity Reservation Settings (Open), and Outpost Arn (-).

To obtain a license for the Kraken AWS server:


1. Sign in to the Web interface using one of the credentials provided in the *Important Notice*.
2. Click the  **Administration** icon on the toolbar (the settings gear) and click **Licensing** from the sidebar.
3. Once the Kraken AWS instance server is licensed, the instance ID used for licensing will show on Kraken Licensing page, along with cloud license type: EC2\_BYOL.



The Licensing page provides three pieces of information required to generate the Azure license:

- MAC Address
- Cloud License
- Instance ID

The License Features list is updated to show the new license information.

5. Click the  icon to copy the current product details to the clipboard for use in the following step.
6. 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.
7. After you receive a license key, paste the license string in the License text box.
8. Click **Save Settings** to load the license.

Your virtual server is now licensed and available. For more information on licensing, please refer to [Licensing Your Kraken](#) in the [User's Guide](#).

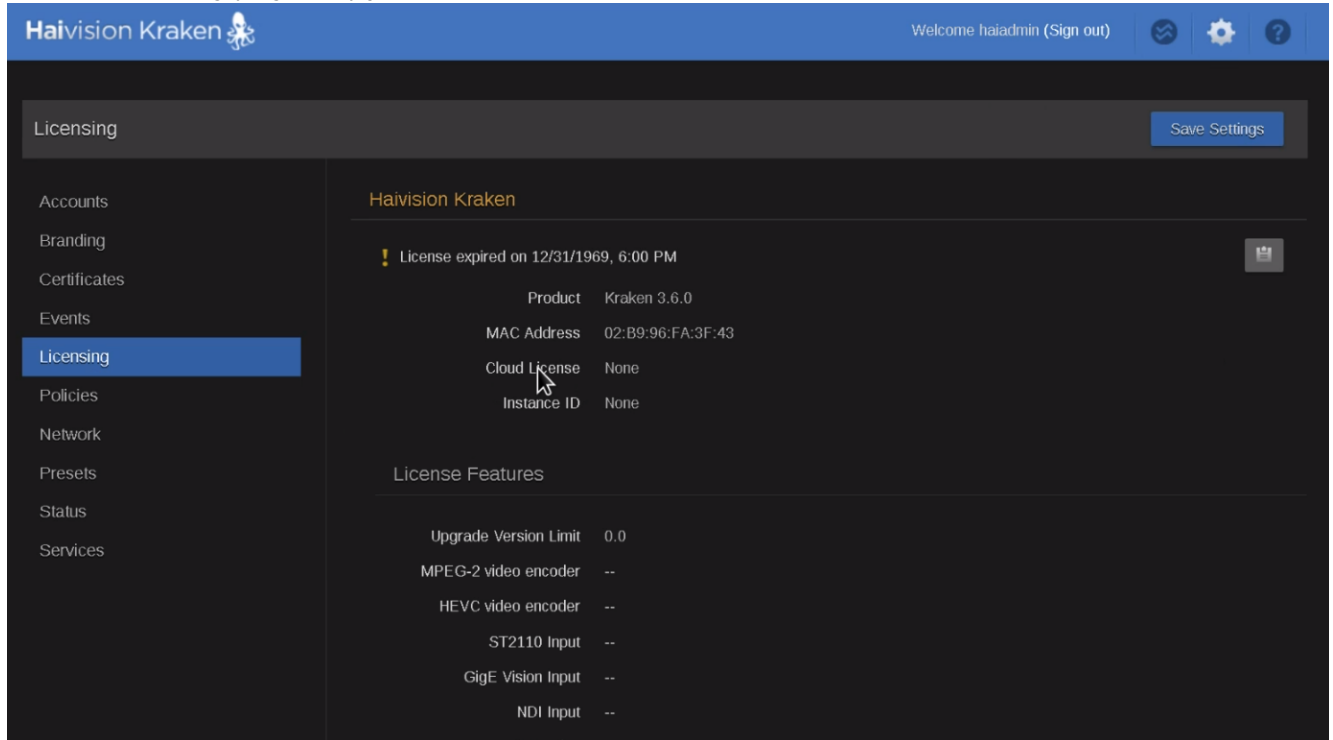
For **BYOL** instances, before creating routes in your virtual server, you must obtain a license from Haivision.

**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, 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.
4. Copy and paste the new license string into the text box.
5. Click **Save Settings** to load the license.

Your virtual server is now licensed and available. For more information on licensing, please refer to [Licensing Your Kraken](#) in the [User's Guide](#).

## SRT Access

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 Kraken Server](#) when setting up your AWS resource.

**Note**

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

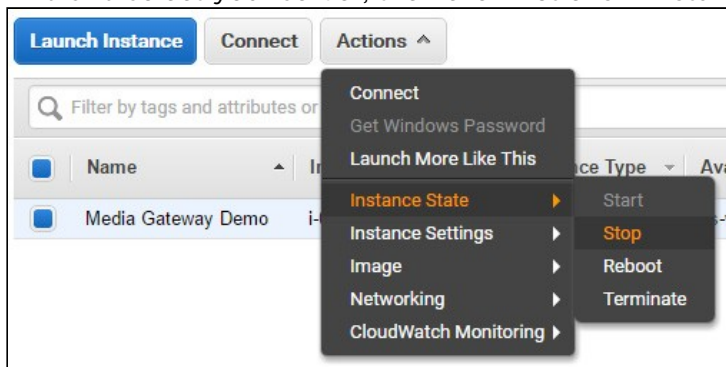
## Stopping the Instance

**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

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

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