

# Microsoft Azure Quick Start Guide

## Haivision Gateway 3.6 on Microsoft Azure



This quick start guide describes how to create and configure a virtual Media Gateway/SRT Gateway server on Microsoft Azure. For detailed configuration and operation information, please refer to the [User's Guide](#).

## About Microsoft Azure

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

<http://azure.microsoft.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 Microsoft Azure account to sign in to Azure Portal. For evaluation purposes you can subscribe to Azure for a trial period. For more information, please visit: <http://azure.microsoft.com/en-us/pricing/free-trial/>

With Microsoft Azure, you must "bring your own license" (BYOL) for the Haivision Media Gateway/SRT Gateway. You can choose from different licensing options. Please contact your Haivision representative to discuss your options. See [Licensing Your Server](#) for details.

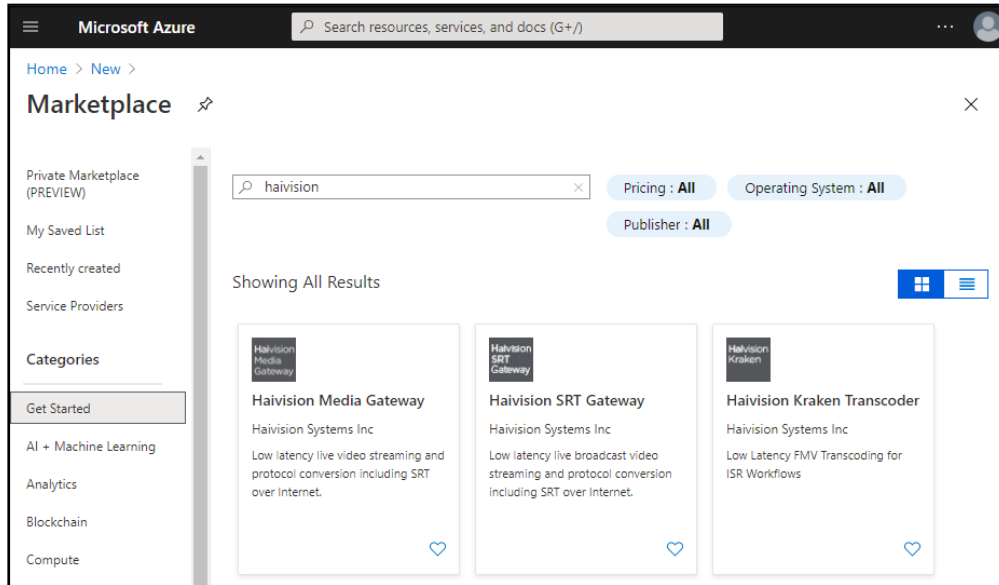
## Creating a Virtual Server

1. Sign in to your Azure account: <https://portal.azure.com>
2. After you have successfully signed in to the Azure portal, click the  icon and click **+ Create a Resource**.

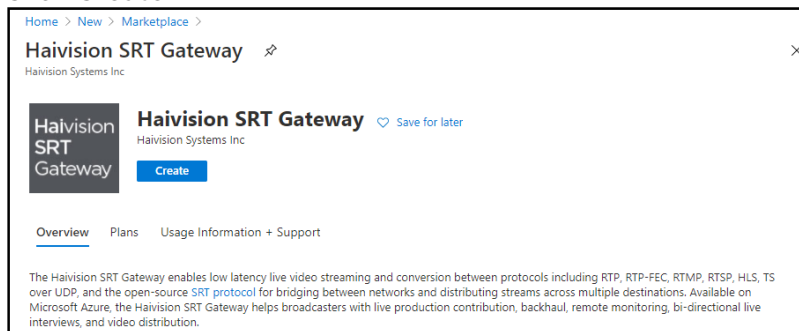
3.

**Note**

Multiple versions may be available in the Azure Marketplace. We recommend using the latest version, unless interoperating with Haivision Media Platform where the version is dependent on the HMP version.



4. Click **Create**.



## Setting Up Your Server

To set up your virtual server, complete each of the sub-sections as described below.

### Basics

Home > New > Marketplace > Haivision SRT Gateway >

## Create a virtual machine

Basics | Disks | Networking | Management | Advanced | Tags | Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

**Project details**  
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*

Resource group \*   
[Create new](#)

**Instance details**

Virtual machine name \*

Region \*

Availability options

Image \*   
[Browse all public and private images](#)

Azure Spot instance  Yes  No

Size \*   
[Select size](#)

**Administrator account**

Authentication type  SSH public key  Password

**Username** \*  ✓

SSH public key source

Key pair name \*

[Review + create](#) | [< Previous](#) | [Next : Disks >](#)

1. In the Basics section, specify a subscription plan.
2. For Resource Group, select an existing resource group. Click Create New to create a resource group, if necessary. For more information on resources, visit: <https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-portal>

**Note**

The resource group must be composed of the characters A-Z, a-z, 0-9, period(.), hyphen (-), and/or underscore (\_).

3. Enter a name for your virtual machine instance.

**Note**

The name must be composed of the characters a-z and/or 0-9.

4. Select a region, corresponding to the geographical location closest to the ingest source and/or egress source of your virtual server. This ensures the lowest latency for your Media Gateway/SRT Gateway traffic.
5. In Size, select from the recommended pricing tiers. For details see: <http://azure.microsoft.com/en-us/pricing/details/virtual-machines/>

**Note**

Currently, we only recommend Compute Optimized F-Series v2 (e.g. F4s\_v2, F8s\_v2, etc). Using tiers with lower CPU resources may result in poor performance.

6. Set up the administrator account by choosing **SSH public key** for the Authentication type and entering **hvroot** for the Username.
7. Generate a SSH public/private key pair for admin access to your virtual server. Typically, this is done on the computer that you will use to manage the server.

**Note**

SSH access to the Gateway's Console UI is only allowed via SSH public key. After deploying the virtual server, you can use this console to enable access for other administrators by uploading their public keys.

You can generate an OpenSSH public key with tools like ssh-keygen on Linux and OS X, or PowerShell on Windows. For details, see <https://docs.microsoft.com/en-us/azure/virtual-machines/linux/ssh-from-windows> and <https://docs.microsoft.com/en-us/azure/virtual-machines/linux/mac-create-ssh-keys>.

8. Select Use existing public key, and copy/paste your public SSH key into the SSH public key field. Never share the private key.
9. When you are satisfied with your settings, click **Next: Disks**.

## Disks

1. Select the OS disk and Encryption types. Disk size should be based on the considerations of performance, space, and pricing.
2. When you are satisfied with your settings, click **Next: Networking**.

## Networking

1. For Public IP address, if a static IP is desired, click **Create New** and select the desired options.
2. For Configure network security group, click **Create New** and add inbound/outbound rules for each necessary port. See [Modifying Network Security Rules](#) for more details.
3. When you are satisfied with the settings, click **Next: Management**.

## Management

1. Select the desired management/protection settings.
2. When you are satisfied with the settings, click **Next: Advanced**.

## Advanced

1. Select any additional advanced configuration options.
2. When you are satisfied with the settings, click **Next: Tags**.

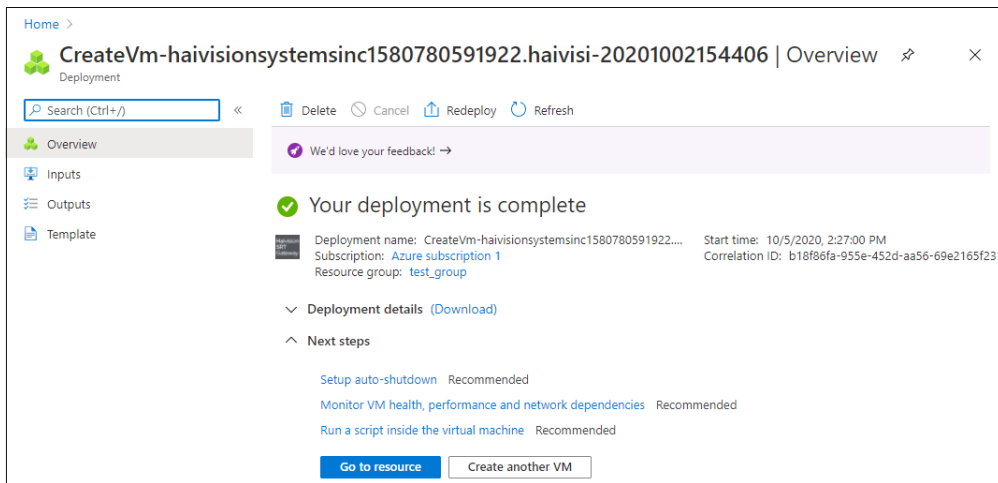
Tags

1. Create any desired tags.
2. When you are satisfied with the settings, click **Next: Review + Create**.

Review + Create

1. Review your settings. You can go back to previous sections to make any necessary changes or corrections.
2. When you are satisfied with the summary, click **Create**.

Creating your server instance can take several minutes. After the deployment completes, you can sign in.




## Signing in to Your Server

### Accessing the Web Interface

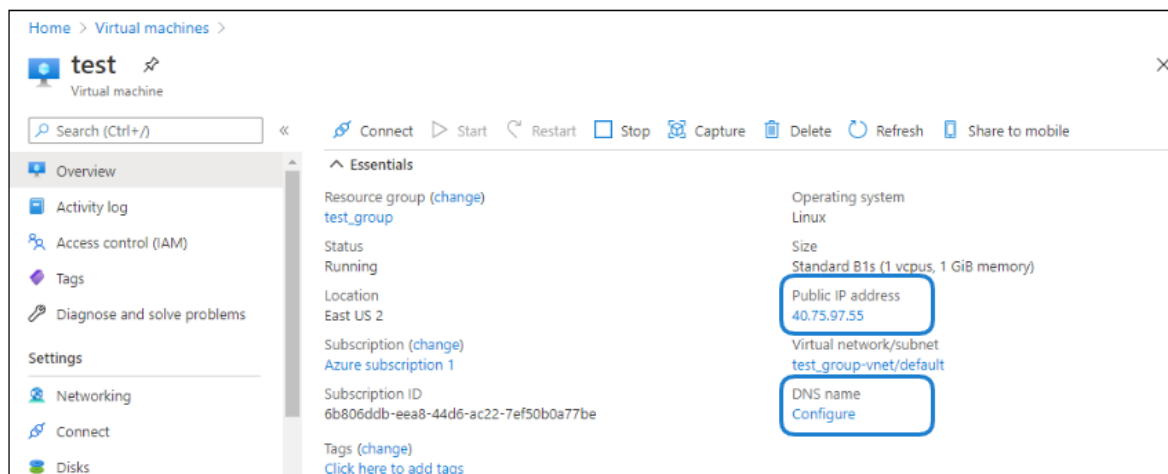
**Note**

Internet Explorer is no longer supported. We recommend using Microsoft Edge or Google Chrome.

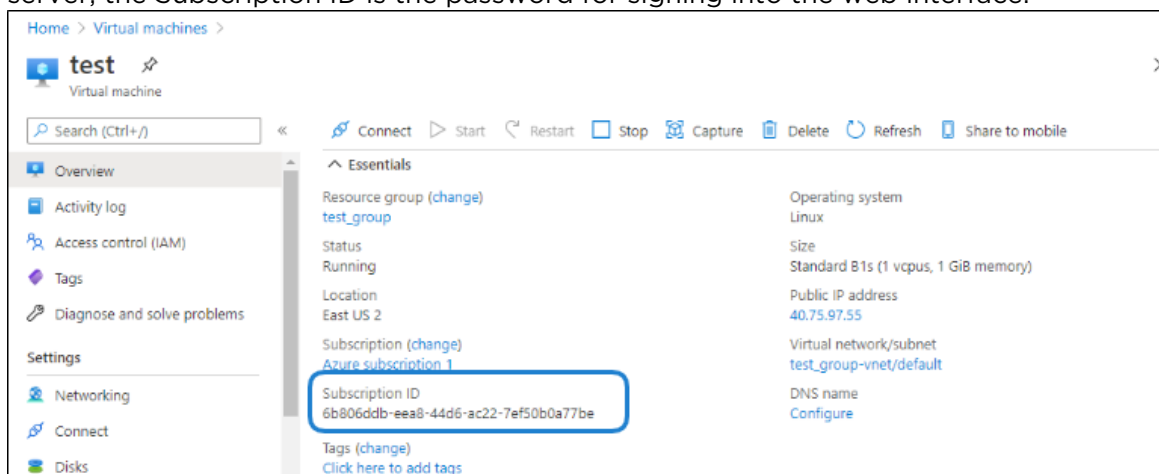
1. You need certain information from the Azure portal page to sign in to your server. We suggest opening a separate tab in your browser.
2. In the Azure portal browser tab, click the  icon and click **Home**.
3. Click **Virtual Machines**.
4. Click on the Media Gateway/SRT Gateway virtual machine resource. Find and copy the server's Public IP address.

**Tip**

You may also configure a DNS name for your server. Click **Configure** under DNS name.



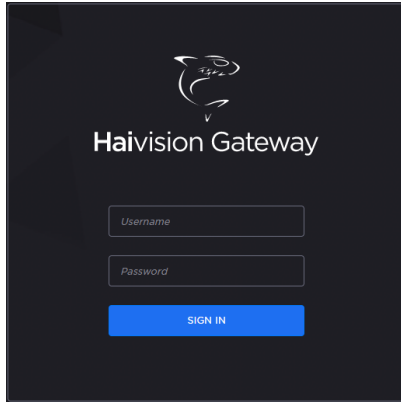
5. In a new browser tab, paste the IP address (or if you configured one, the DNS name) into the URL address bar. A message may appear warning that the connection to the server is untrusted. This is normal, and you can safely continue. The sign-in screen of your server appears.
6. In the Azure portal browser tab, find and copy the server's Subscription ID. On first start up of your server, the Subscription ID is the password for signing into the web interface.



7. In the Gateway browser tab, enter haiadmin as the User Name, and paste the Subscription ID in the Password field.

**Tip**

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



8. Click the **Sign In** button. A License Required modal appears. See [Licensing Your Server](#) to obtain a license.

## 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).

### **Note**

You must have a private RSA key corresponding to the public key with which the virtual server was configured. See the "Basics" heading in [Setting Up Your Server](#).

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

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

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 Microsoft Azure. 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

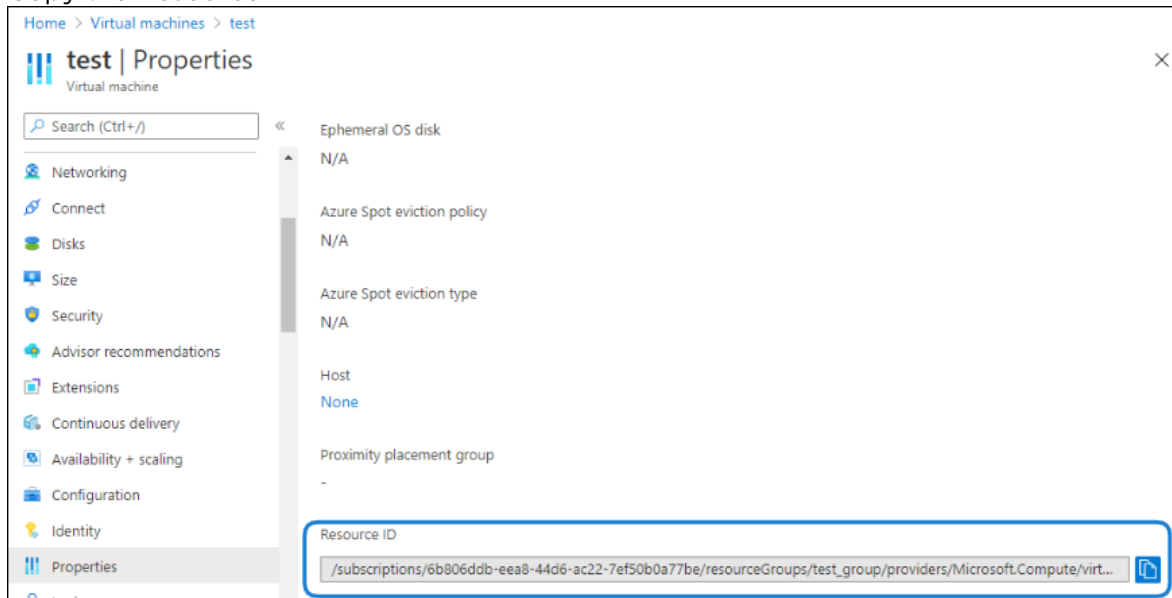
Before creating routes in your virtual server, you must obtain a license from Haivision by providing your server's Resource ID.

### **Note**

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

To obtain a license:

1. On the left pane of the Virtual Machine, scroll down under Settings and click **Properties**.
2. Copy the Resource ID.



3. 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 Media Gateway/SRT Gateway instance corresponding to the Resource ID you submit.

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

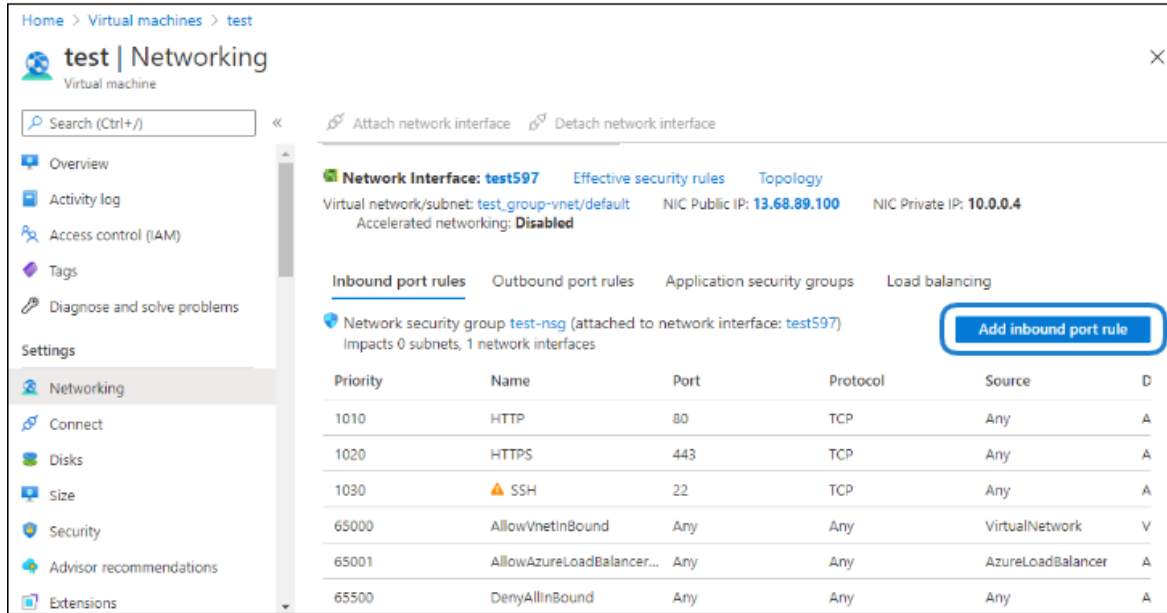
Your virtual server is now licensed and available. For more information on licensing, please refer to the [User's Guide](#).

## Modifying Network Security Rules

Your virtual server can 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.

1. In the left pane of your Virtual Machine, under Settings click **Networking**.
2. Click **Add inbound port rule** to add a new security rule for incoming UDP traffic for SRT listener.





- In the dialog that opens:
  - Under Source, click **Any**.
  - Enter "\*" in the Source Port Range field.
  - Under Destination, click **Any**.
  - Specify a Destination port range corresponding to the ports you wish to use for SRT streaming.
  - Under Protocol, click **UDP**.
  - Under Action, click **Allow**.
  - Enter a Priority for handling rule execution on incoming network packets. The default value is usually acceptable.
  - Enter a Name for the inbound security rule (e.g. SRT1).

The screenshot shows a configuration window for an inbound security rule. The fields are as follows:

- Source:** Any
- Source port ranges:** \*
- Destination:** Any
- Destination port ranges:** 8080
- Protocol:** Any (selected), TCP, UDP, ICMP
- Action:** Allow (selected), Deny
- Priority:** 1040
- Name:** Port\_8080
- Description:** (empty text area)

An **Add** button is located at the bottom left of the dialog.

4. Click **Add** to activate this rule.

It takes a few moments to deploy the rule for your instance. Once done, you can configure your server to send and receive SRT streams (on the UDP ports in the Destination range specified in Step #3) using Listener mode.

**Note**

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

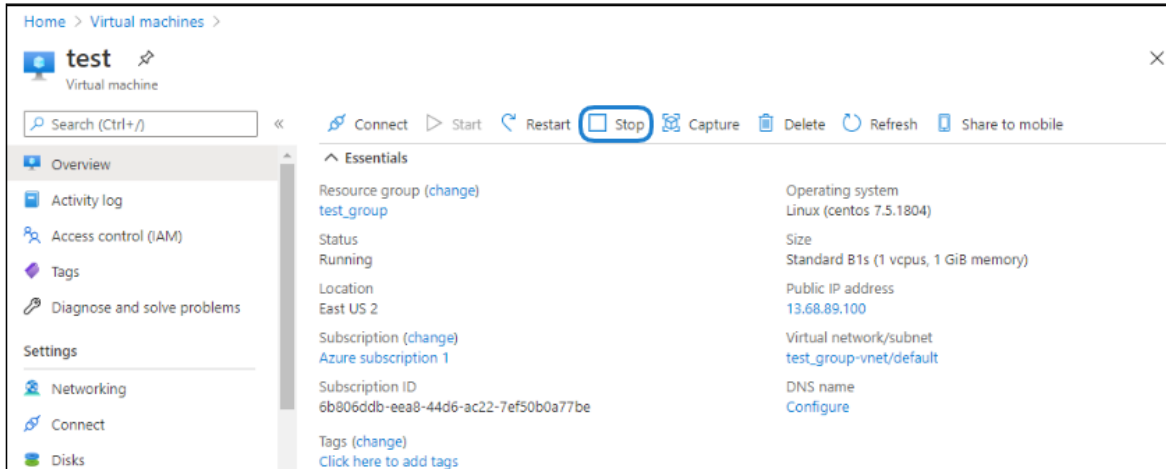
## Stopping the Instance

**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 virtual machine.

**To stop your server instance:**

1. Navigate to Virtual machines in the Azure portal.
2. Find and click on your Media Gateway/SRT Gateway virtual machine, then click **Stop**.



## 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>