Microsoft Azure Quick Start Guide

Haivision Gateway 3.3 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. For the default credentials, refer to the *Important Notice* document (shipped with the appliance or available on the Haivision Support Portal).

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 + Create a Resource.

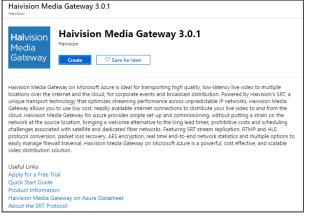
🕕 Note

3.

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.

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🔇 App Services	NAME	PUBLISHER	CATEGORY		
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😹 Azure Cosmos DB					-
Virtual machines	Haivision Media Gateway 1.5	Haivision	Compute		_
Click Create					

4. Click Create.



Setting Up Your Server

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

Basics



^{1.} **1. Note**

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

^{2.} **1** 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 PuTTYgen 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/ssh-from-windows and https://docs.microsoft.com/en-us/azure/virtual-machines/linux/ssh-from-windows and 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.

- 3. Copy and paste your public SSH key into the SSH public key field. Never share the private key.
- 4. For Subscription, specify a subscription plan.
- 5. For Resource Group, type a name for it in the corresponding field. (To select an existing resource group, click **Select existing**, and then click the arrow to reveal existing resource groups.) 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 (_).

- Select a Location, corresponding to the geographical region 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.
- 7. When you are satisfied with your settings, click **OK**.

Infrastructure Settings

 In the Infrastructure Settings section, choose from the recommended pricing tiers (D2, D3, A2 Standard, etc.) and click Select. For details see: http://azure.microsoft.com/en-us/pricing/details/ virtual-machines/

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*	A2	Standard	General purpo 2	3.5	4	4x500		HDD			
*	D3	Standard	General purpo 4	14	16	8×500	200 GB	HDD		3	

🕕 Note

Currently, we only recommend pricing tiers D2 and D3. Using tiers with lower CPU resources may result in poor performance.

- 2. If desired, choose a Public IP address.
- 3. Enter a Domain Name Label prefix. If specified, a DNS record is created for the public IP, using this prefix plus the cluster location's FQDN.
- 4. When you are satisfied with the settings, click **OK**.

Summary

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

Buy

- 1. In the Buy section, review and accept the terms and conditions, then click **Create** to proceed.
- 2. The Azure portal Dashboard page reappears, adding the following item to the dashboard.



3. Creating your server instance can take several minutes. Click **Notifications** to see the status. Once the instance is reporting "Running", you can sign in.

Signing in to Your Server

Accessing the Web Interface

- 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, in the dashboard under All Resources, click on the Media Gateway/ SRT Gateway virtual machine resource. Find and copy the server's Public IP Address.

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	🗣 Connect 🕨 Start 🧟 🗧	Stop 🛅 Delete
Search (Ctrl+/)	Essentials A	
Q Overview	Resource group (change) mediagatewayresourcegroup	Computer name mediagatewaydemoabc
Activity log	Status Running	Operating system Linux
Access control (IAM)	Location East US 2	Size Standard D2 (2 cores, 7 GB memory)
Tags	Subscription name (change) Free Trial	Public IP address/DIUS name label 52.167.118.152/mediagatewaydemoabc.ea
X Diagnose and solve problems	Subscription ID 69fc9fd0-c064-4617-8148-01be0900ccbe	Virtual network/subnet mediagatewaydemoabc-vnet/Subnet-1

- 3. In a new browser tab, paste the Public IP Address into the URL 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.
- 4. 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.

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	Essentials A		
Q Overview	Resource group (change) mediagatewayresourcegroup	Computer name mediagatewaydemoabc	
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5.

🕑 Tip

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

Hai∨	vision Gateway
Usernan	ne
Passwor	d
	Sign In

6. Click the **Sign In** button. The Browse Routes screen appears.

Accessing the Console UI

🕕 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>

For instructions on specifying a private 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 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.

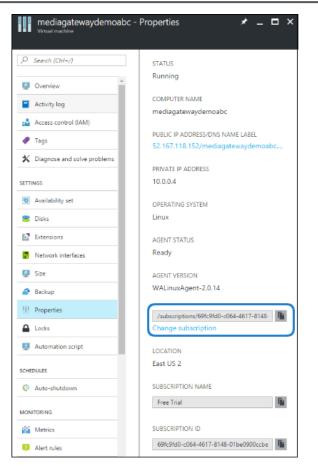
Licensing Your Server

🕕 Note

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

To obtain a license:

- 1. On the Azure portal dashboard under All Resources, click on the virtual machine resource.
- 2. Under Settings, click Properties.
- 3. Copy the Resource ID.



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

- 5. After you receive your license, sign in to your 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**.
- 6. Copy and paste the license for your server into the License field.
- 7. Click Add.

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 Microsoft Azure portal dashboard, click on the Media Gateway/SRT Gateway network security group. The name is of the form <given name of your instance>-security.
- 2. Under Settings, click Inbound Security Rules.
- 3. Click +Add to add a new security rule for incoming UDP traffic for SRT listener.

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· · · · · · · · · · · · · · · · · · ·	🕇 Add 🗞	Default rules					
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Overview	PRIORITY	NAME	SOURCE	DESTINATION	SERVICE	ACTION	
	1100	ssh	Any	Any	SSH (TCP/22)	Allow	
Activity log	1200	http	Any	Any	HTTP (TCP/80)	Allow	
Access control (IAM)	1300	https	Any	Any	HTTPS (TCP/443)	Allow	
X Diagnose and solve problems							
SETTINGS							
🚔 Inbound security rules							
Outbound security rules							

4. Click Advanced.

Add inbound security rule _
* Name SRT1
* Priority
Source CIDR block Tag
Protocol Any TCP UDP
* Source port range
* Destination ®
Destination port range
* Action Deny Allow
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- 5. Enter a new Name for the inbound security rule (e.g. SRT1).
- 6. Enter a Priority for handling rule execution on incoming network packets. The default value is usually acceptable.
- 7. Under Source, click Any.
- 8. Under Protocol, click UDP.
- 9. Enter "*" in the Source Port Range field.
- 10. Under Destination, click **Any**.
- 11. Specify a Destination port range corresponding to the ports you wish to use for SRT streaming.
- 12. Under Action, click Allow.
- 13. Click **OK** to activate this rule.

\rm 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**.

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Search (Ctrl+/)	Essentials ^	
Q Overview	Resource group (change) mediagatewayresourcegroup	Computer name mediagatewaydemoabc
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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