

How to Launch:

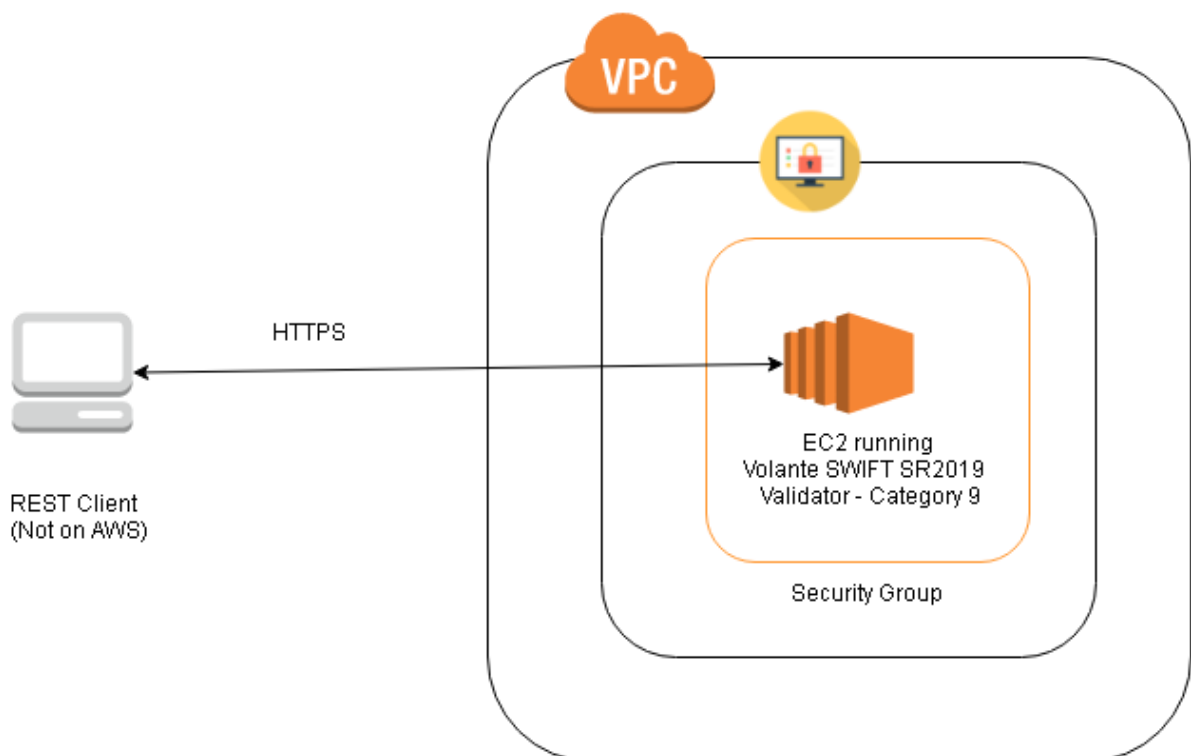
Volante SWIFT SR2019 Validator - Category 9

1. About Volante SWIFT SR2019 Validator - Category 9 Guide

This is a user guide for a customer's personal deployment of Volante SWIFT SR2019 Validator - Category 9. This guide is intended to be used with an AWS account.

The major services used by this offering are Amazon VPC (Virtual Private Cloud) and Amazon EC2 (Elastic Compute Cloud), along with sub-services like network security.

The following diagram illustrates the architecture of a sample deployment.



2. Deployment steps

1. Set up a Virtual Private Cloud on your AWS account and create a subnet with internet access.

At the very least the NACL (Network Access Control List) and the Security Group should allow inbound and outbound traffic on Port: 8443, if the https protocol is used.

For more information on creating VPCs, subnets, internet gateways and NACL's and to launch the application through EC2 , refer to the section Implementing Scenario 1- https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario1.html#Configuration.

Note that while creating the EC2 instance described in the above documentation, you must use the Volante SWIFT SR2019 Validator - Category 9. Use the default Security Group recommended in seller settings for the AMI. Refer to the instance sizing guide for selecting instance type.

SWIFT SR2019 Validator - Category 9 REST Services can be deployed in two ways-

- ❖ Marketplace. Please refer the section – 4.1.1 - Launching Volante SWIFT SR2019 Validator - Category 9 from AWS Marketplace
- ❖ EC2 instance. Please refer the section – 4.1.2. Launching Volante SWIFT SR2019 Validator - Category 9 as EC2 Instance

2. Once the instance is started up, you are ready to use using https protocol.
A quick way to test whether the application is up, and running is to perform a GET on the URL
<https://<ec2-public-ip>:8443/volanteapis-swift-category9/messaging/v1/client/registered>
3. If the link above returns 200 with a json object containing information about whether the user is registered or not, the user can begin using the API. Refer to the REST Services User Guide document for information on using the API.

2.1. Security Considerations

The application only requires inbound and outbound traffic to be enabled on port :8443. In order to avoid potential security threats, the user is advised to refrain from opening any other ports for external access. Apart from instance level security, there is embedded logic within the API for application level security – only registered clients will be able to use the API.

2.2. Instance Sizing and Cost considerations

Instance Type	SWIFT SR 2019 Validator Category 9 – Validation Benchmark
T2.small (minimum) 2 GB RAM/1vCPUs	100 validations per second
T2.medium 4 GB RAM/2vCPUs	200 validations per second
T2.large 8 GB RAM/2vCPUs	200 validations per second
T2.xlarge 16 GB RAM/4vCPUs	300 validations per second
T2.2xlarge 32 GB RAM/8vCPUs	400 validations per second

Note: Volanté validated MT900 Messages to prepare Validation Benchmark. The performance (no. of validations per second) of Volanté SWIFT SR2019 Validator - Category 9 may vary based on different Message types.

3. What is an EC2 instance? What is an AMI?

Volanté SWIFT SR2019 Validator - Category 9 is provided to you through an Amazon AMI on the Amazon Marketplace.

An Amazon Machine Image (AMI) is a template that enables you to launch an EC2 instance pre-installed with Volanté SWIFT SR2019 Validator - Category 9 for AWS.

An EC2 instance is a virtual server hosted in Amazon's Elastic Compute Cloud (EC2) infrastructure.

4. Managing Volanté SWIFT SR2019 Validator - Category 9 instance

- You need to have created and logged into an AWS account to launch the [Volanté SWIFT SR2019 Validator - Category 9](#) for AWS product as it will consume AWS resources (EC2 instance and EBS volume).
- You need the proper privileges to be able to instantiate those resources.

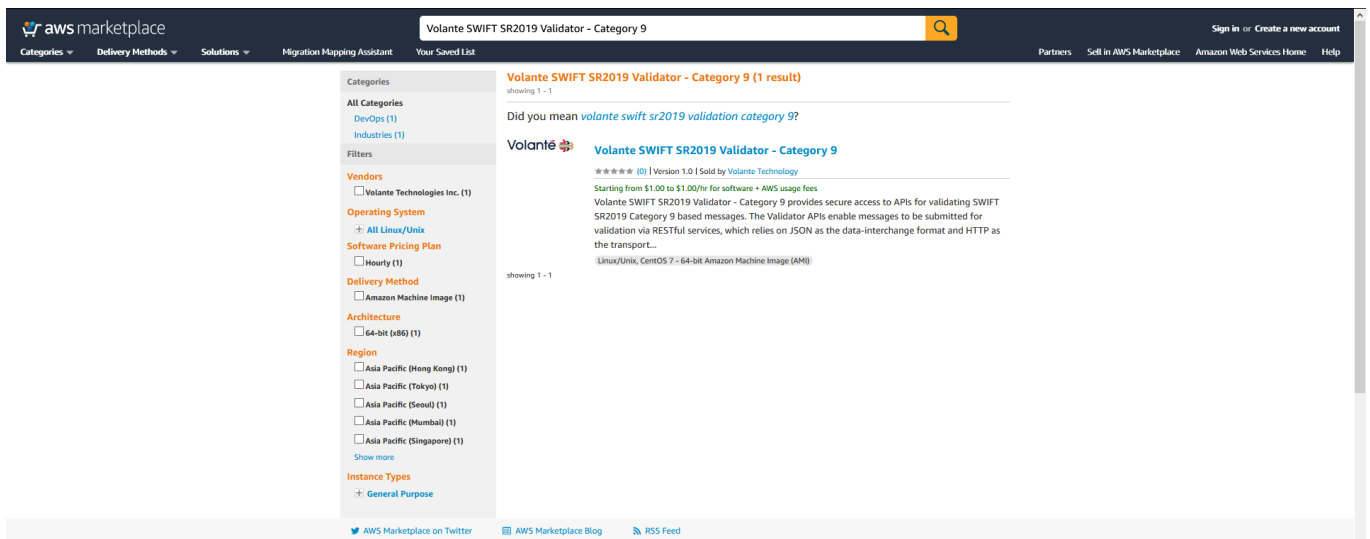
There are two ways of launching Volanté SWIFT SR2019 Validator - Category 9-

1. From Marketplace
2. Through EC2 instance

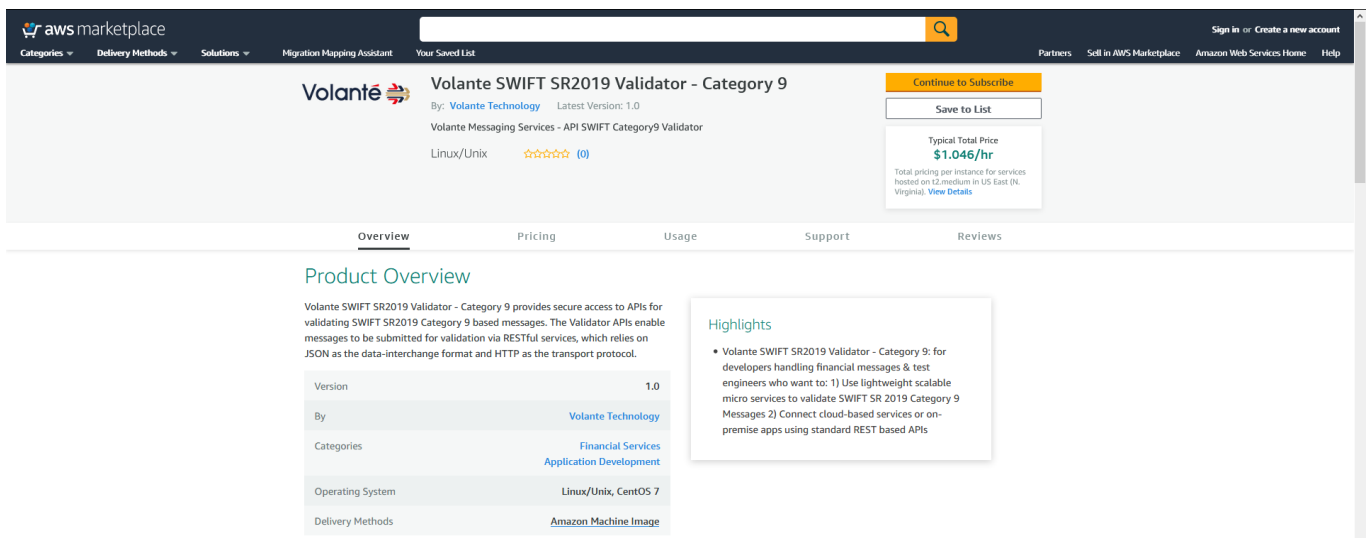
4.1.1. Launching Volanté SWIFT SR2019 Validator - Category 9 from AWS Marketplace

To Launch the product from marketplace, proceed with the following steps-

1. Go to [the Amazon AWS Marketplace](#).
2. Search for “Volanté SWIFT SR2019 Validator - Category 9”.



3. On the search result page, select the corresponding AMI.
4. On the Volanté SWIFT SR2019 Validator - Category 9 for AWS product page, check the recommended EC2 instance type, **t2.medium**, then click Continue to Subscribe.



5. To launch the instance, depending on your Amazon account, the following options will be available:
 - o The Configuration/**Launch from Website** option

- o The **Launch with 1-click** option
6. Click on the Continue to Configuration button.
 7. Select the region of your choice in the list to select the Continue to launch button.
 8. In the Choose Action list, select Launch from Website.
 9. In the EC2 Instance Type list, select t2.medium.

While **t2.medium** is the preferred type of EC2 instance, **t2.small** can also be used.

10. In the VPC Settings list, select your VPC.

If you do not have one associated with your account that is ready to be used, you can create a VPC by going to the **Your VPCs** page of your [VPC Dashboard](#). For more information, see [the Amazon documentation](#).

11. Select a subnet from the Subnet settings list.

If you do not have one associated with your account that is ready to be used, you can create a subnet by going to the **Subnets** page of your [VPC Dashboard](#). For more information, see [the Amazon documentation](#).

12. In the Security Group Settings, click Create New Based on Seller Settings to create a security group.

For more information, see the Amazon documentation.

By default, TCP ports 22 and 8443 for access in Volante SWIFT SR2019 Validator - Category 9

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: Create a new security group Select an existing security group

Security group name:

Description:

Type	Protocol	Port Range	Source	Description
Custom TCP F	TCP	8443	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Note: By default, the security group allows all IP addresses to access your instance (the **Source (IP or Group)** is set to **Anywhere**). The best practice is to reduce this access to a limited range of known IP addresses that will need to access the instance. For more information about security groups, [see the Amazon documentation](#).

13. In the Key Pair Settings, create a new key pair or select an already existing key pair.

If you do not have one associated with your account that is ready to be used, you can create a key pair. For more information, please refer the URL - <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-key-pairs.html>

14. Click the Launch Instance button and EC2 instance with Volante SWIFT SR2019 Validator - Category 9 will be created.

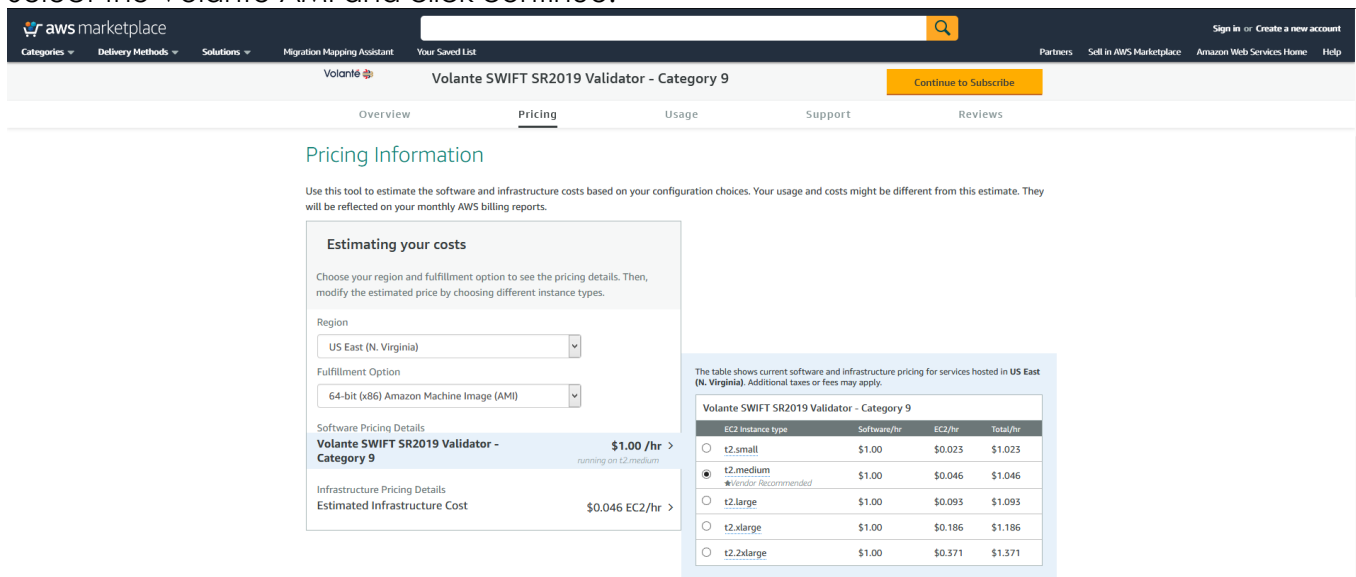
15. Go to your Amazon EC2 console to verify that the new Volante SWIFT SR2019 Validator - Category 9 virtual machine is booting up.

16. Find the instance that has been launched recently and rename it according to your needs.

4.1.2. Launching Volante SWIFT SR2019 Validator - Category 9 as EC2 Instance

Volante SWIFT SR2019 Validator - Category 9 can be launched as EC2 instance as follows-

1. Go to [Amazon EC2](#)
2. Select "Launch Instance" under create instance.
3. To choose AMI, select AWS Marketplace in the navigation bar and search for Volante SWIFT SR2019 Validator - Category 9.
4. Select the Volante AMI and click continue.



Estimating your costs

Choose your region and fulfillment option to see the pricing details. Then, modify the estimated price by choosing different instance types.

Region: US East (N. Virginia)

Fulfillment Option: 64-bit (x86) Amazon Machine Image (AMI)

Software Pricing Details
Volante SWIFT SR2019 Validator - Category 9 **\$1.00 /hr** >
running on t2.medium

Infrastructure Pricing Details
Estimated Infrastructure Cost **\$0.046 EC2/hr** >

The table shows current software and infrastructure pricing for services hosted in US East (N. Virginia). Additional taxes or fees may apply.

EC2 Instance type	Software/hr	EC2/hr	Total/hr
<input type="radio"/> t2.small	\$1.00	\$0.023	\$1.023
<input checked="" type="radio"/> t2.medium <small>*Vendor Recommended</small>	\$1.00	\$0.046	\$1.046
<input type="radio"/> t2.large	\$1.00	\$0.093	\$1.093
<input type="radio"/> t2.xlarge	\$1.00	\$0.186	\$1.186
<input type="radio"/> t2.2xlarge	\$1.00	\$0.371	\$1.371

5. Select instance type and click Next: Configure Instance Details.

Note: The vendor recommends using a t2.medium instance (or larger) for the best experience with this product.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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: t2.medium (Variable ECUs, 2 vCPUs, 2.3 GHz, Intel Broadwell E5-2686v4, 4 GiB memory, EBS only)
 Note: The vendor recommends using a t2.medium instance (or larger) for the best experience with this product.

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GiB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="radio"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input type="radio"/>	General purpose	t2.micro	1	1	EBS only	-	Low to Moderate	Yes
<input type="radio"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input checked="" type="radio"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="radio"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="radio"/>	General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="radio"/>	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="radio"/>	General purpose	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="radio"/>	General purpose	t3.micro	2	1	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="radio"/>	General purpose	t3.small	2	2	EBS only	Yes	Up to 5 Gigabit	Yes

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

6. In Configure Instance Details tab, set the number of instances required, preferred VPC network and subnets. Click Next: Add Storage to continue.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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-e99ea687 (default) [Create new VPC](#)

Subnet: No preference (default subnet in any Availability Zone) [Create new subnet](#)

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

Placement group: Add instance to placement group

Capacity Reservation: Open [Create new Capacity Reservation](#)

IAM role: None [Create new IAM role](#)

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.

T2/T3 Unlimited: Enable
 Additional charges may apply

Cancel Previous **Review and Launch** Next: Add Storage

7. In Add storage tab, the storage can be configured based on the requirement of the user. New Volumes can also be added. Click Next: Add Tags to continue.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

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/xvda	snap-050239672c0f9f59a	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

Cancel Previous **Review and Launch** Next: Add Tags

8. User can Add tags in this section if needed, click Next: Configure Security Groups to proceed further.
9. In configure Security Group section, new security group can be created, or an existing security group can be selected. Click on Review and launch.

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

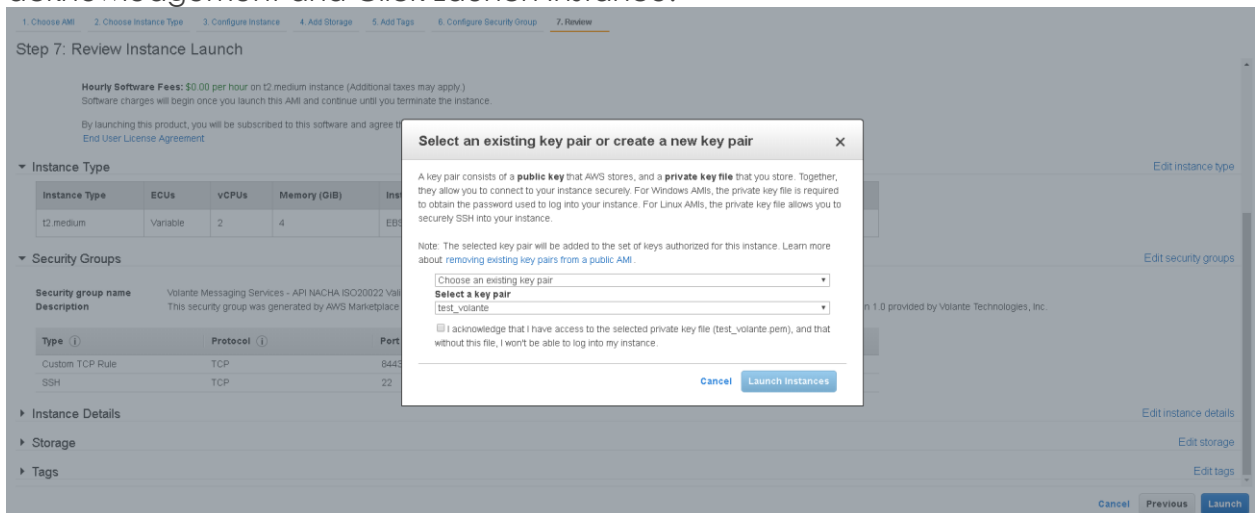
Assign a security group: Create a new security group Select an existing security group

Security group name:

Description:

Type	Protocol	Port Range	Source	Description
Custom TCP I	TCP	8443	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

10. Verify the details and click Launch. A popup window will appear asking for key pair. User can create a key pair or select an already existing key pair. Accept the acknowledgement and Click Launch Instance.



Step 7: Review Instance Launch

Hourly Software Fees: \$0.00 per hour on t2.medium instance (Additional taxes may apply.)
Software charges will begin once you launch this AMI and continue until you terminate the instance.

By launching this product, you will be subscribed to this software and agree to the [End User License Agreement](#).

Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Ins
t2.medium	Variable	2	4	EB

Security Groups

Security group name: Volanté Messaging Services - API NACHA ISO20022 Vali
Description: This security group was generated by AWS Marketplace

Type	Protocol	Port
Custom TCP Rule	TCP	8443
SSH	TCP	22

Popup: Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair:

Select a key pair:

I acknowledge that I have access to the selected private key file (test_volanté.pem), and that without this file, I won't be able to log into my instance.

11. Click on View Instance. This will display all the instances in EC2.

4.1.3. Getting the public DNS of the EC2 instance

Once your instance is started, you need to retrieve the Public DNS that will be used to connect to the Volanté SWIFT SR2019 Validator - Category 9 for AWS application.

You have previously [subscribed to the Volanté SWIFT SR2019 Validator - Category 9 for AWS product in the Amazon Marketplace](#) and launched the corresponding instance.

- In your [Amazon EC2 console](#), go to the **Instances** page and select the running Volanté SWIFT SR2019 Validator - Category 9 instance.
- From the **Description** tab, copy the **Public DNS (IPv4)** value to your clipboard.



- Paste it on another tab of your web browser.

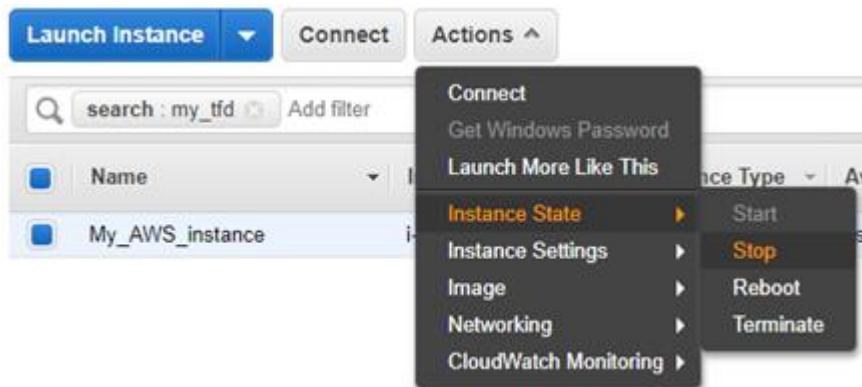
- o **Note:** You will need to go back to the **Instances** page of your EC2 console in the next procedure.
- Alternative: If the application fails to load, it is likely due to port 8443 is not opened. Please check the Security Group setting whether port 8443 is opened.

4.1.4. Stopping and/or restarting the EC2 instance

When you launch the Volante SWIFT SR2019 Validator - Category 9 instance, no payment is made to Volante however you will receive the AWS infrastructure bill. In order to reduce this cost, you may want to start and stop the instance according to your needs.

You have launched the Volante SWIFT SR2019 Validator - Category 9 instance in your EC2 console.

1. In your Amazon EC2 console, go to the **Instances** page and select the running Volante SWIFT SR2019 Validator - Category 9 instance.
2. Click **Actions > Instance State** then select either **Stop** or **Start** according to your needs, then confirm your choice.



For more information,

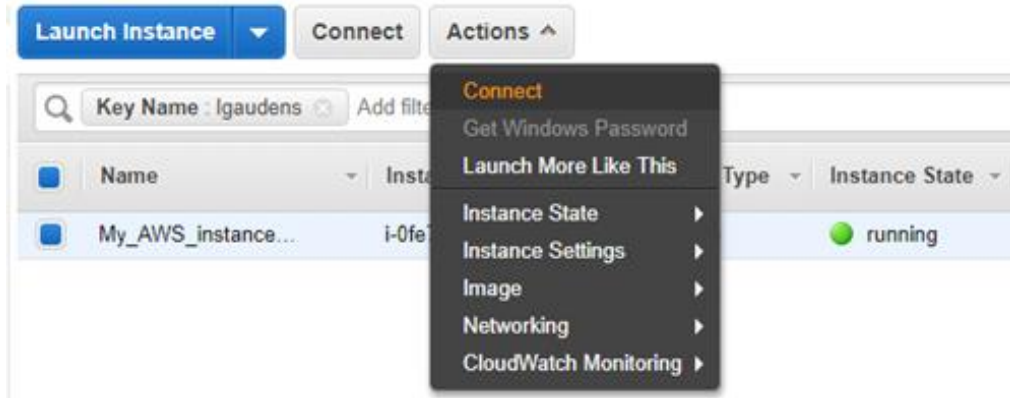
see [the Amazon AWS documentation](#).

4.1.5. Connecting to the EC2 instance using SSH or PuTTY

Volante SWIFT SR2019 Validator - Category 9 for AWS is hosted in a Linux EC2 instance. Depending on the Operating System you are using, you will need to use either SSH or PuTTY to connect to the Amazon AWS instance.

You have launched the Volante SWIFT SR2019 Validator - Category 9 instance in your EC2 console.

1. In your [Amazon EC2 console](#), go to the **Instances** page and select the running Volante SWIFT SR2019 Validator - Category 9 instance.
2. Click **Actions** then select **Connect** in the menu.



3. Depending on your Operating System:
 - a. On Unix systems, use SSH to connect to the instance as described in [the Amazon AWS documentation](#).
 - b. On Windows systems, use PuTTY to connect to the instance as described in [the Amazon AWS documentation](#).

5. Health checks and Disaster Recovery

The API call - GET /volanteapis-swift-category9/messaging/v1/client/registered acts as the primary means of ensuring that the service is up and running. This call does not require any authorization and returns a result stating whether any user is registered to the service.

Disaster recovery is not supported with this product at this time. The quickest way to resume the application is to reboot the machine, and – if that fails – spin up a new instance with the same AMI.

6. Support

For assistance with deployment or in case of emergencies, please contact the Volante Support team at support@volantetech.com.