Qualys Gateway Service

OpenStack Deployment Guide

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About This Guide

This deployment guide contains information on deploying, interacting, and configuring the Qualys Gateway Service (QGS) in the OpenStack environment.

About Qualys

Qualys, Inc. (NASDAQ: QLYS) is a pioneer and leading providerof cloud-based security and compliance solutions. The Qualys Cloud Platform and its integrated apps help businesses simplify security operations and lower the cost of compliance by delivering critical security intelligence on demand and automating the full spectrum of auditing, compliance and protection for IT systems and web applications. Founded in 1999, Qualys has established strategic partnerships with leading managed service providers and consulting organizations including Accenture, BT, Cognizant Technology Solutions, Deutsche Telekom, Fujitsu, HCL, HP Enterprise, IBM, Infosys, NTT, Optiv, SecureWorks, Tata Communications, Verizon and Wipro. The company is also a founding member of the Cloud Security Alliance (CSA). For more information, please visit www.qualys.com.

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Overview

Qualys Gateway Service (QGS) is a packaged virtual appliance developed by Qualys that provides proxy services for Qualys Cloud Agent deployments requiring proxy connectivity to connect with the Qualys Cloud Platform. This document outlines the steps required to set up a Centralized Appliance Management Service (CAMS) Qualys Gateway Service (QGS) appliance for OpenStack. This process includes the installation of the VHD file in the OpenStack environment.

To learn more about the QGS application and its features, refer to the Qualys Gateway Service User Guide.

Pre-requisites

- To get the latest version of QGS image, you need access to Qualys Cloud Platform.
- Ensure to cover the minimum system requirements recommended in the Qualys Gateway Service User Guide.

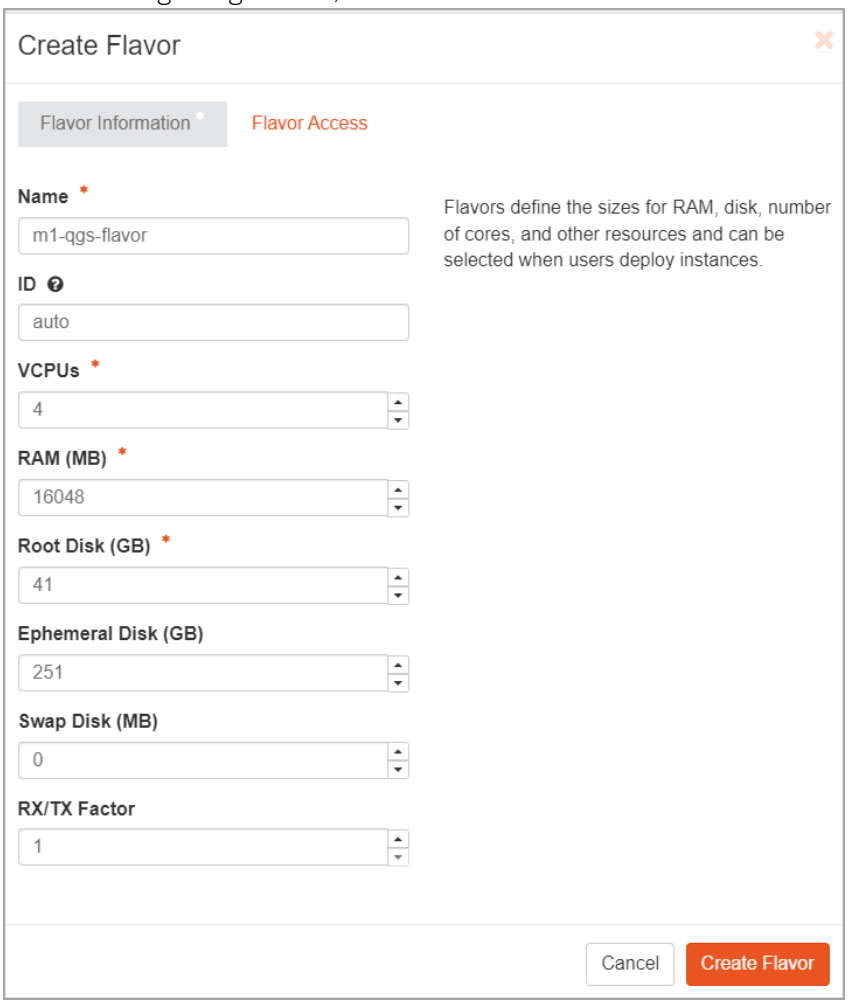
Deploy the QGS Appliance in OpenStack Environment

Before initiating the QGS deployment, refer to the **QGS User Guide** to review the system requirements and other necessary configurations for customer environments. These requirements are essential to proceed with the deployment.

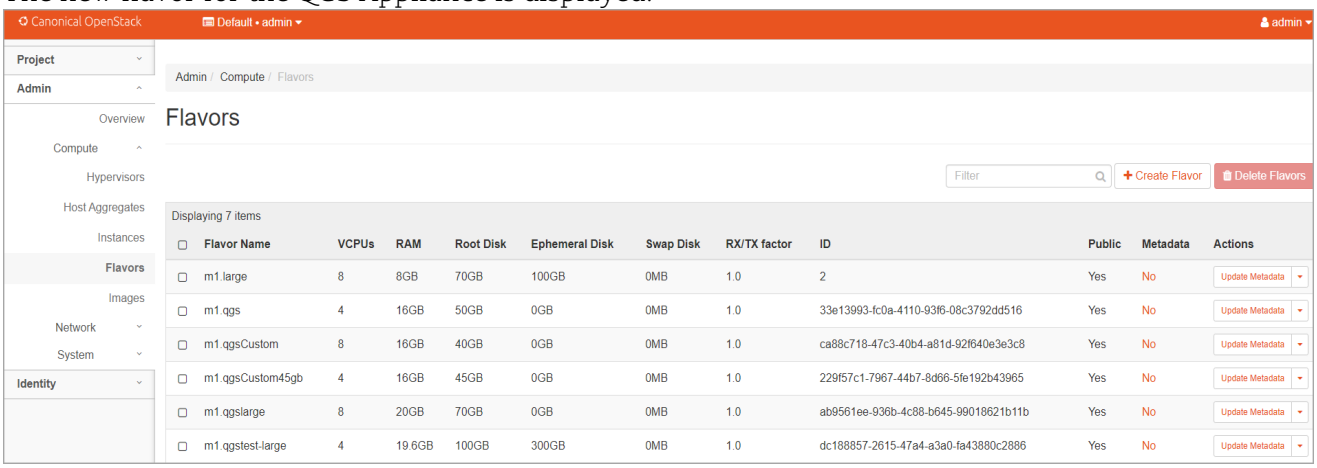
OpenStack Configuration

Follow the steps below to deploy the QGS Appliance Text User Interface from your OpenStack Console.

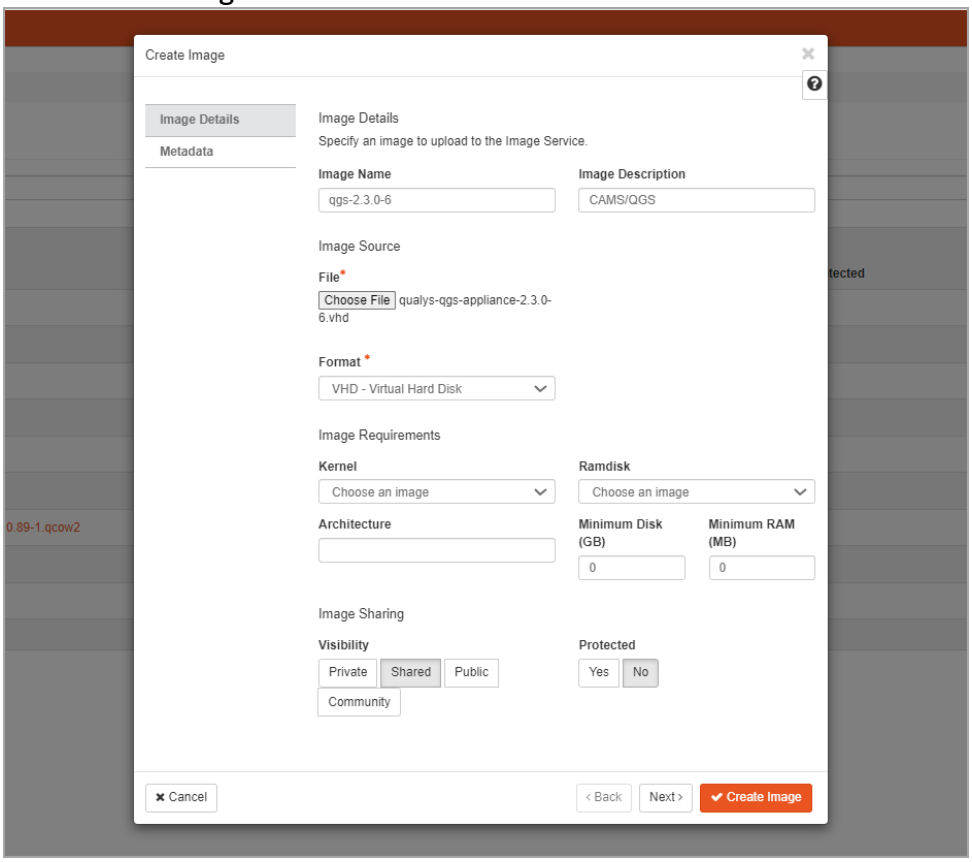
1. Login to your OpenStack console.
2. Navigate to **Admin** > **Compute** > **Flavor** and create the flavor by providing the values in the following image. Next, click **Create Flavor**



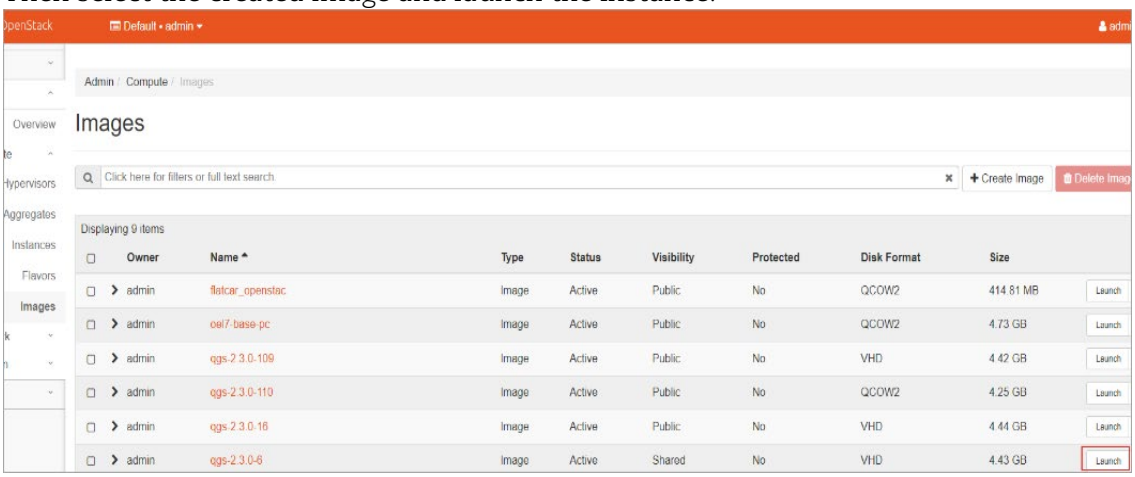
3. The new flavor for the QGS Appliance is displayed.



4. Navigate to **Admin** > **Compute** > **Image** and create the new image by uploading the latest QGS VHD image.
    i. Provide the Image Name
    ii. Choose the QGS VHD Image file from location
    iii. Select the file format as VHD
    iv. Click **Create Image.**

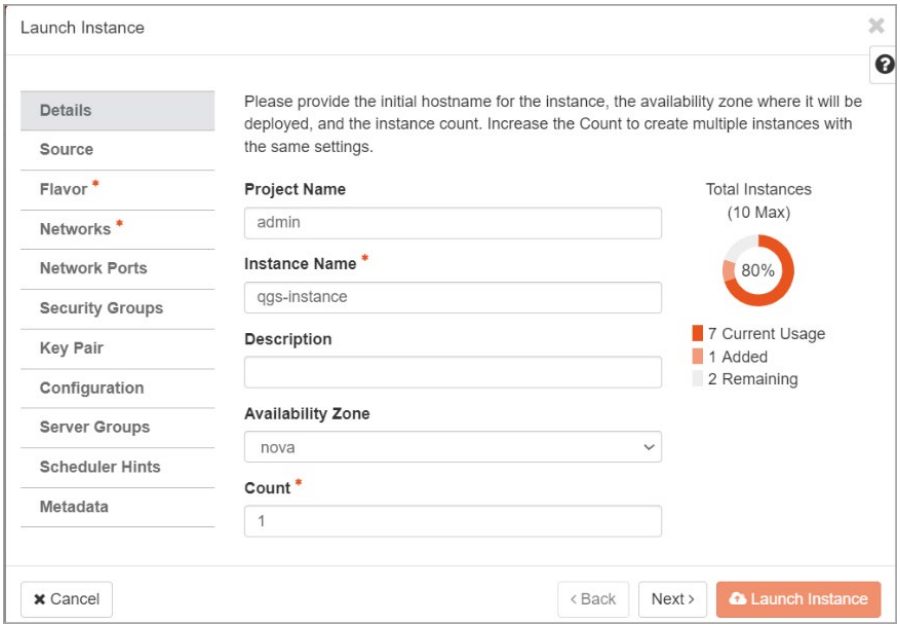


5. Then select the created Image and launch the instance.

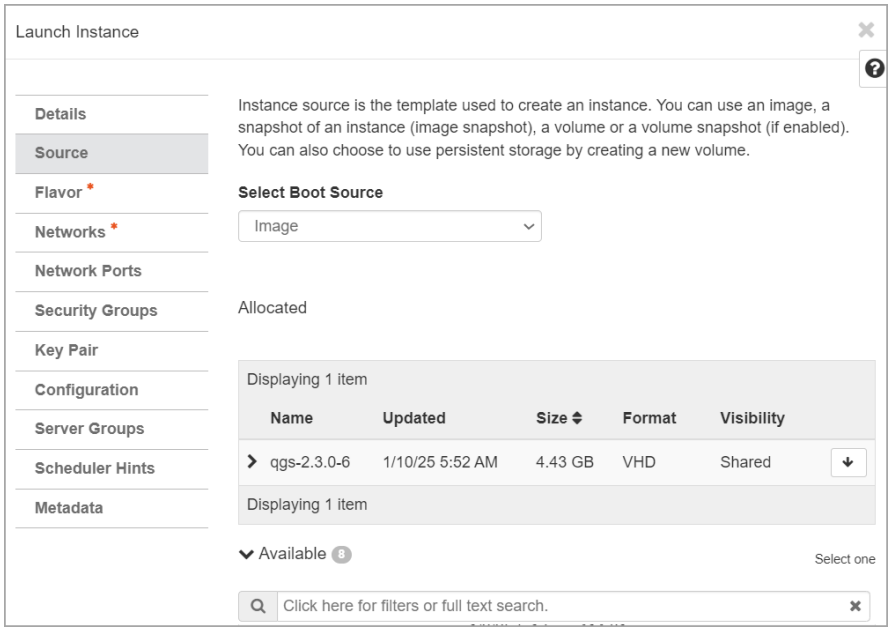


You must configure the following sections from the Launch Instance window. Start with providing values in the **Details** page.

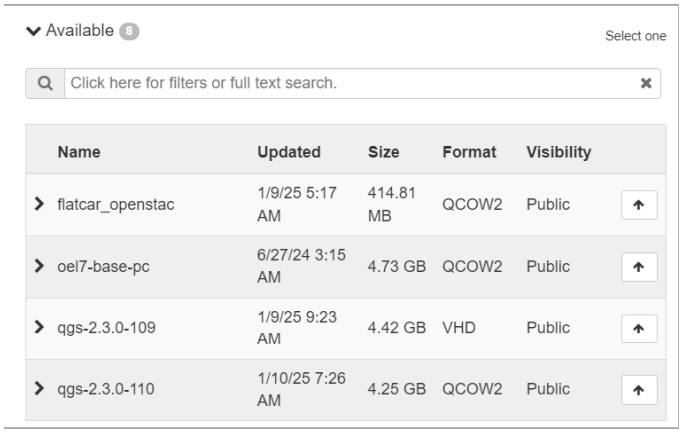
a. In the **Details** page, provide the instance name and description (optional). Click **Next**.



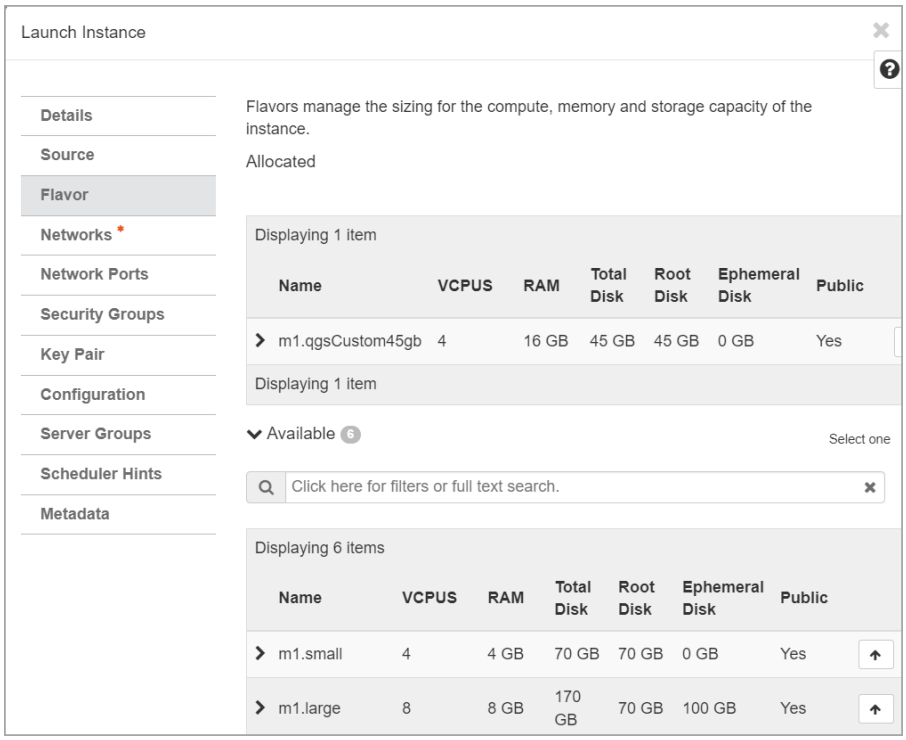
b. In the **Source** page, select the boot source as **Image** and the **QGS Image** should be listed under the **Allocated** section. Click **Next**.



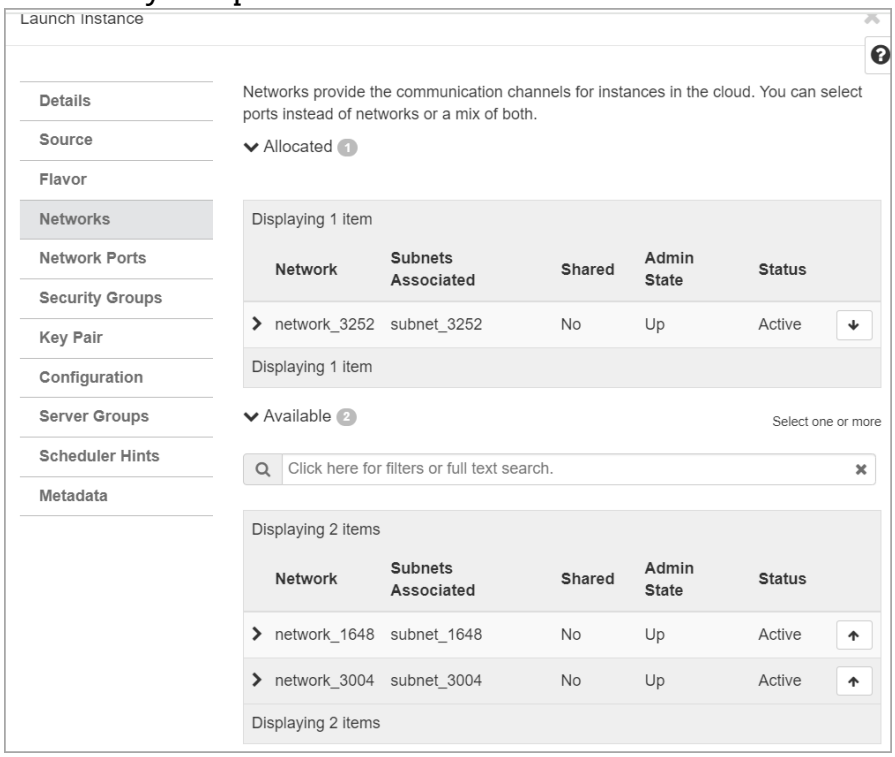
If you are unable to find your image listed under the **Allocated** section, then scroll down to the **Available** section and select or search the list.



c. In the **Flavor** page, the Flavor created according to the system requirements of the QGS should be listed under the **Allocated** section. If not, select or search for the Flavor from the **Available** section. Click **Next**.



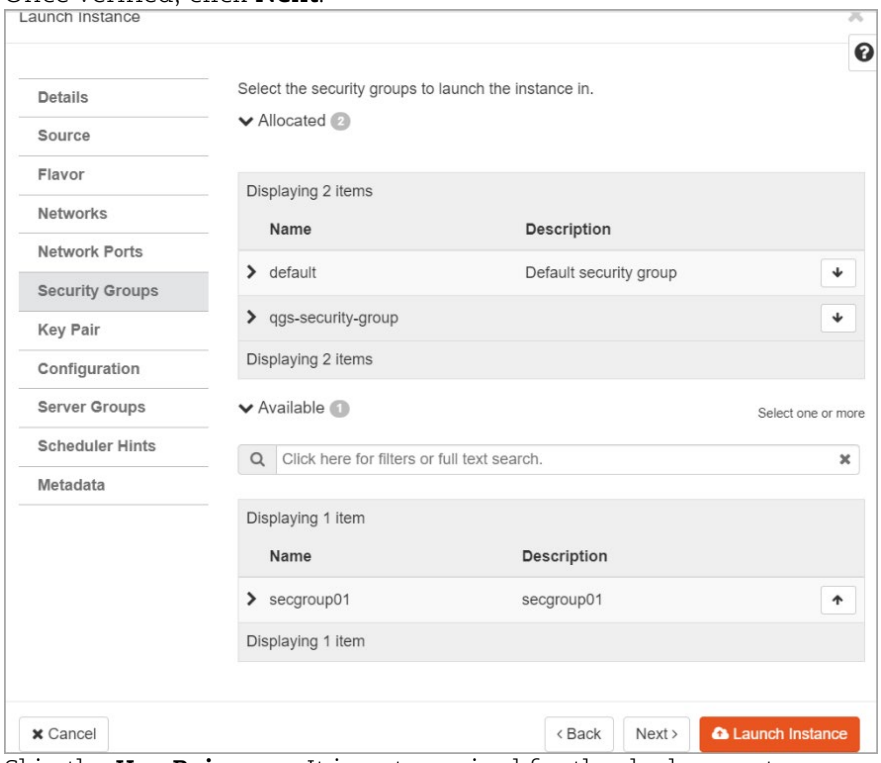
d. In the **Networks** section, select the network and click **Next.** You can proceed to the **Security Groups** section.



e. In the **Security Groups** section, select the security group and ensure it allows the following ports:
   - 1080 (default QGS Tunnel port)
   - 8080 (default QGS Cache port)
   - 22 (for SSH access)

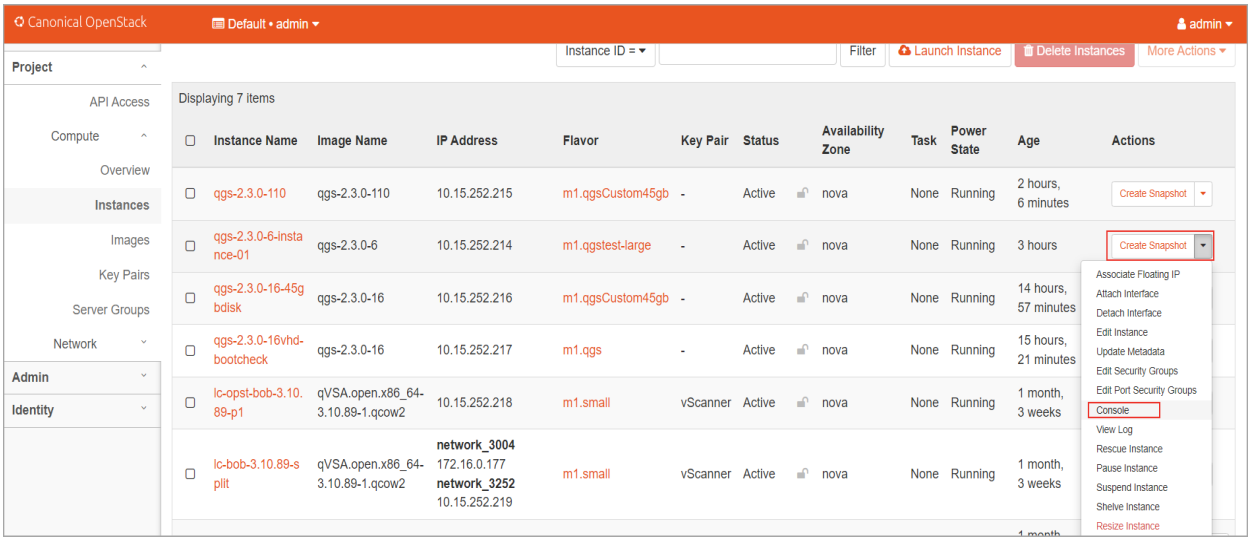
   (refer the "**QGS Appliance Cache and Patch Mode Configuration**" section of the QGS User Guide for more information on the required ports)

   Once verified, click **Next**.



f. Skip the **Key Pair** page. It is not required for the deployment process.
g. Click **Launch Instance**. The instance is created in some time.

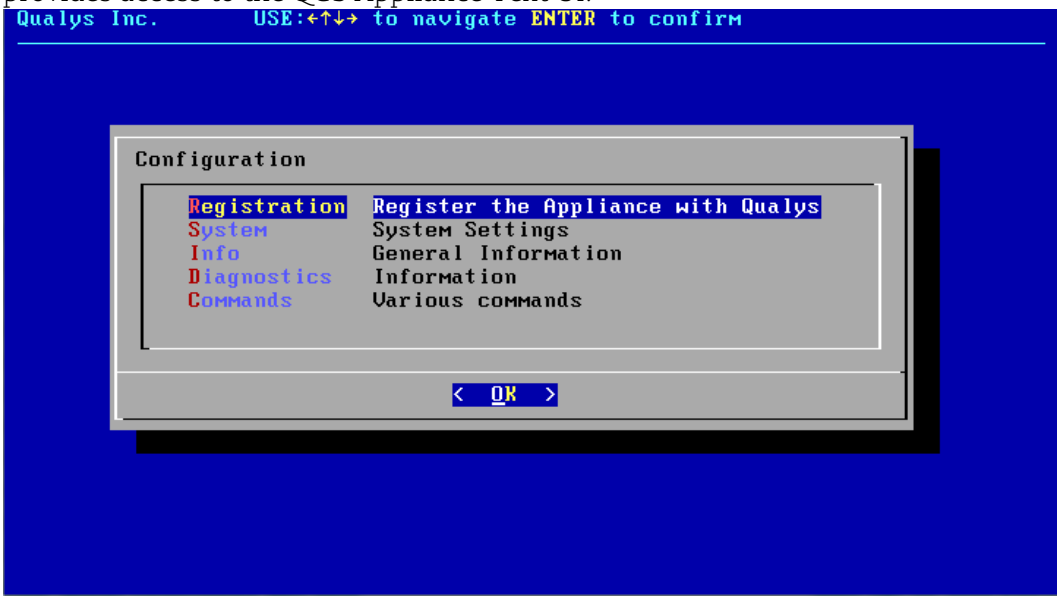
6. Now, navigate to **Project** > **Compute > Instances.**
7. Select the instance and access the console.



8. Another method to access the QGS Appliance Console is via the command line. Run the following commands.

```
.root@saqa-openstack01 ~(keystone)#
root@saqa-openstack01 ~(keystone)# openstack console url show qgs-2.3.0-6-instance-01
--insecure
+----------+-------------------------------------------------------------------------------------------------------
---------------+
| Field    | Value                                                                                                 |
+----------+-------------------------------------------------------------------------------------------------------
---------------+
| protocol | vnc                                                                                                   |
| type     | novnc                                                                                                 |
| url      | https://saqa-
openstack01.eng.qualys.com:6080/vnc_auto.html?path=%3Ftoken%3D66494fc6-31ae-
46a0-9dc5-be1a5efbfe95 |
+----------+-------------------------------------------------------------------------------------------------------
---------------+
root@saqa-openstack01 ~(keystone)#
```

9. Copy the highlighted URL from the above output and open it in a web browser. This provides access to the QGS Appliance Text UI.



Once the QGS Text UI is successfully loaded, you can then configure the network and pod details by following the steps in the "**Virtual Appliance Local Configuration**" section of the Qualys Gateway Appliance User Guide. The images and steps mentioned in the user guide are applicable to the OpenStack configuration. You can follow them exactly as mentioned to successfully configure the appliance.