



FortiAuthenticator - OCI Deployment Guide

Version 6.0.0



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About FortiAuthenticator on OCI

Overview

FortiAuthenticator is designed specifically to provide authentication services for firewalls, SSL and IPsec VPNs, wireless access points, switches, routers, and servers. FortiAuthenticator includes Remote Authentication Dial-In User Service (RADIUS) and Lightweight Directory Access Protocol (LDAPv3) server authentication methods, and Security Assertion Markup Language (SAML), which is used for exchanging authentication and authorization data between an Identity Provider (IdP) and a Service Provider (SP). Authentication servers are an important part of an enterprise network, controlling access to protected network assets, and tracking user activity to comply with security policies.

FortiAuthenticator is not a firewall; it requires either a FortiGate-VM "virtual" or FortiGate "hardware" appliance to provide firewall-related services. Multiple FortiGate appliances can use a single FortiAuthenticator appliance for Fortinet Single Sign-On (FSSO) and other types of remote authentication, two-factor authentication, and FortiToken device management. This centralizes authentication and FortiToken maintenance.

FortiAuthenticator provides an easy-to-configure remote authentication option for FortiGate users. Additionally, it can replace the Fortinet Single Sign-On (FSSO) Agent on a Windows Active Directory (AD) network.

OCI instance type support

FortiAuthenticator-VM supports the following OCI compute shapes. For up-to-date information on each instance type, see OCI Compute Shapes.

When selecting an instance type for your deployment, consider your use case for FortiAuthenticator and the requirements to support it.

Compute shape	ОСРИ	Max VNIC	FortiAuthenticator-VM license
VM.Standard2.1	1	2	FAC-VM-100-UG
VM.Standard2.2	2	2	FAC-VM-100-UG or FAC-VM-1000-UG
VM.Standard2.4	4	4	FAC-VM-100-UG, FAC-VM-1000-UG or FAC-VM-10000-UG
VM.Standard2.8	8	8	FAC-VM-10000-UG or FAC-VM-100000- UG
VM.Standard2.16	16	16	FAC-VM-100000-UG
VM.Standard2.24	24	24	FAC-VM-100000-UG
VM.Standard1.1	1	2	FAC-VM-100-UG
VM.Standard1.2	2	2	FAC-VM-100-UG or FAC-VM-1000-UG

Compute shape	ОСРИ	Max VNIC	FortiAuthenticator-VM license
VM.Standard1.4	4	4	FAC-VM-100-UG, FAC-VM-1000-UG or FAC-VM-10000-UG
VM.Standard1.8	8	8	FAC-VM-10000-UG or FAC-VM-100000- UG
VM.Standard1.16	16	16	FAC-VM-100000-UG

Licensing

FortiAuthenticator for OCI supports the bring your own license (BYOL) model.

Licenses can be obtained through any Fortinet partner. If you don't have a reseller partner, you can find a local Fortinet reseller partner by visiting the Find a Partner portal and performing a search in the following regions:

- · Asia Pacific, Australia, and New Zealand
- EMEA (Europe, Middle East, and Africa)
- Latin America and Caribbean
- North America
- North America: US Federal

This license model is stackable, allowing you to expand your VM solution as your environment expands. For additional information on the FortiAuthenticator stackable license model, see the FortiAuthenticator datasheet.

Deploying FortiAuthenticator on OCI

This guide provides step-by-step instructions for successful deployment and initial configuration of FortiAuthenticator for OCI:

- Preparing for a deployment on page 6
- Creating an instance by importing an image on page 6
- Connecting to FortiAuthenticator-VM on page 15

Preparing for a deployment

The deployment section in this guide assumes that you have already created a Virtual Cloud Network (VCN) and relevant network resources, such as route tables and subnets. You must also configure a Security List so that you can access FortiAuthenticator over the Internet while closing unnecessary ports. At a minimum, you must open TCP port 443 and 22 to allow incoming access to the FortiAuthenticator management GUI and SSH console for initial configuration. See the *Ports and Protocols* document on the Fortinet Document Library.

You can obtain the deployment image, import the file into the OCI portal, and then launch the FortiAuthenticator-VM instance. See Creating an instance by importing an image on page 6.

Creating an instance by importing an image

This guide provides step-by-step instructions for successful deployment and initial configuration of FortiAuthenticator for OCI:

- Obtaining the deployment image and placing it in your bucket on page 6
- Importing the image on page 9
- Connecting to FortiAuthenticator-VM on page 15

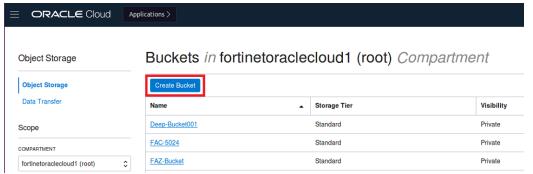
Obtaining the deployment image and placing it in your bucket

- 1. Go to https://support.fortinet.com.
- 2. In the top menu, navigate to Download > Firmware Images.
- 3. From the Select Product dropdown list, select FortiAuthenticator, then click the Download tab.
- 4. Navigate to the desired firmware release.
- **5.** Download the FAC_VM_OPCVX-buildXXXX-FORTINET.out.opc.zipfile.

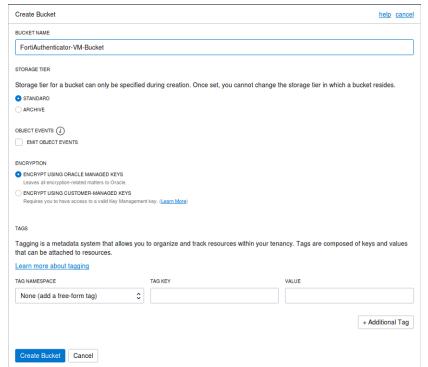


- XXX is the build number.
- Ensure the file name includes the OPC.

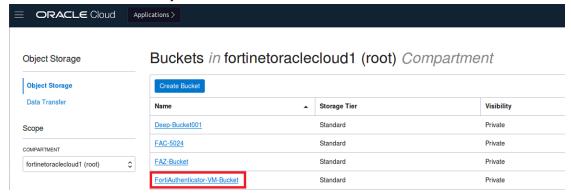
- **6.** After you extract the zip the file, locate the *fackvm.qcow2* file. You will need this file to deploy FortiAuthenticator on OCI.
- 7. In OCI, go to Core Infrastructure > Object Storage > Object Storage.
- 8. Click Create Bucket to create a standard storage bucket.



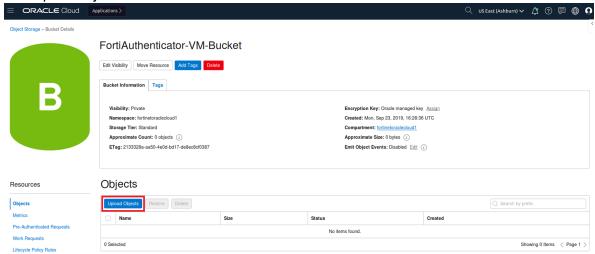
9. In the Bucket Name field, name the bucket, then click Create Bucket.



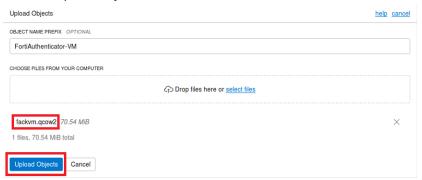
10. Click the name of the bucket you created to edit it.



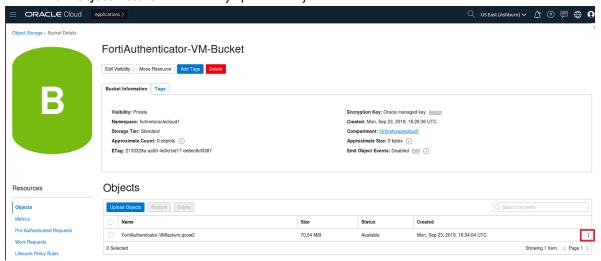
11. Click Upload Objects.



- 12. Upload the objects:
 - a. (Optional) Edit the Object Name Prefix.
 - **b.** Upload the deployment image *fackvm.qcow2* file that you downloaded.
 - c. Click Upload Objects.



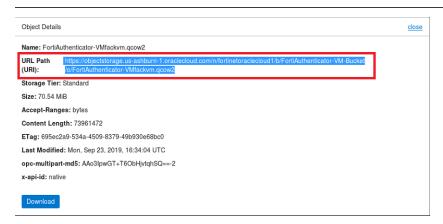
13. Select View Object Details for the newly uploaded object.



14. Save the URI of the object.

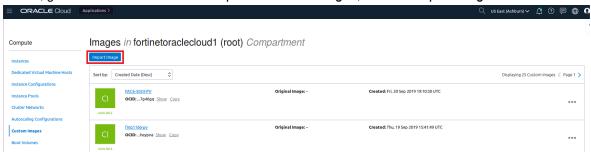


This file is required in a subsequent step.

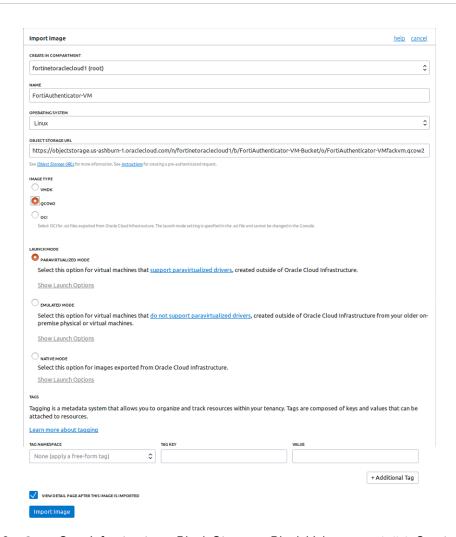


Importing the image

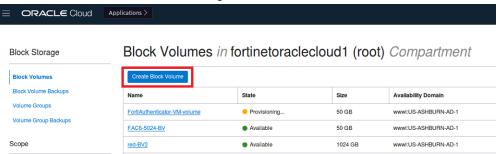
1. In OCI, go to Core Infrastructure > Compute > Custom Images, and click Import Image.



- 2. On the Import Image page:
 - a. Name the image.
 - **b.** Set the *Image Type* to QCOW2.
 - c. Set the Launch Mode to Paravirtualized Mode.
 - d. Click Import Image and wait for the image status to become Available.



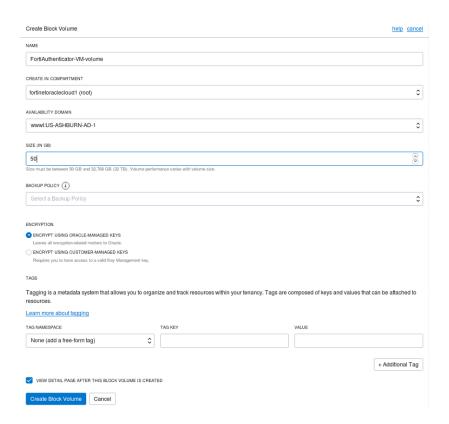
3. Go to Core Infrastructure > Block Storage > Block Volumes, and click Create Block Volume.



- 4. On the Create Block Volume page:
 - a. Name the volume.
 - **b.** Set the block volume Size (in GB).

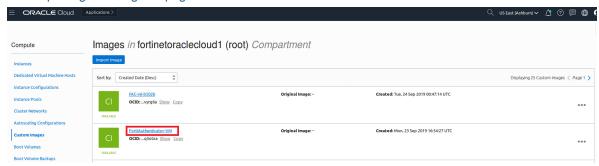
The FortiAuthenticator-VM is able to run using the minimum 50 GB size, but a larger storage size may be desirable depending on how long of a log history must be preserved and how much activity the VM instance will be subject to.

c. Click Create Block Volume.

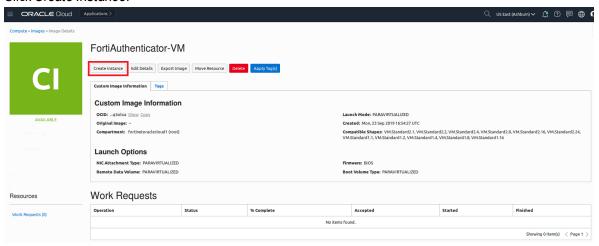


Launching the FortiAuthenticator-VM instance

1. In OCI go to *Core Infrastructure > Compute > Custom Images*, and click the previously imported image. See Importing the image on page 9.



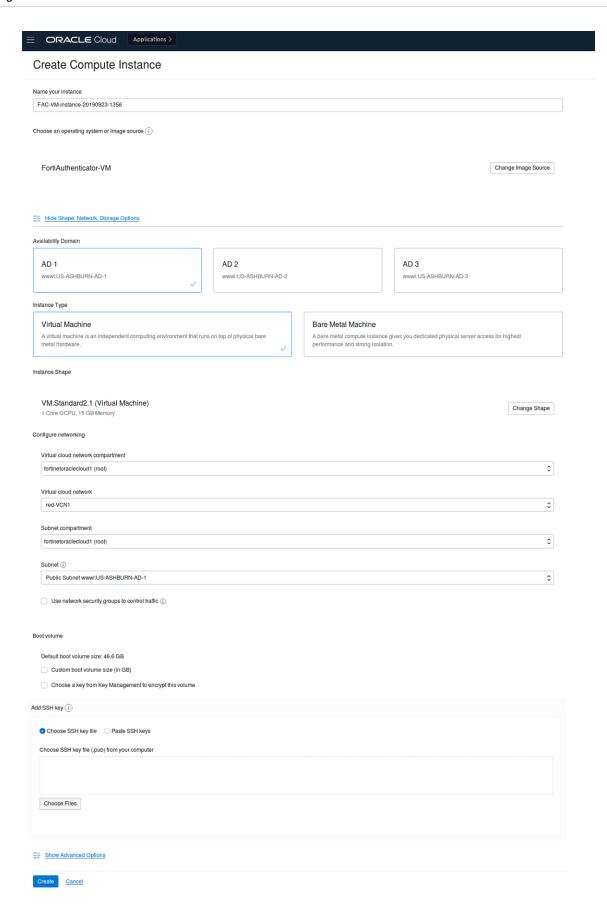
2. Click Create Instance.



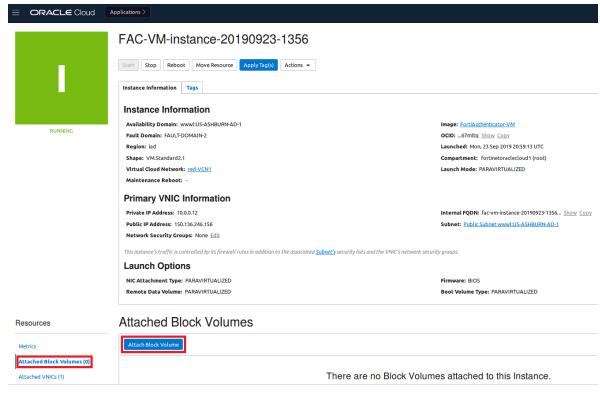
- 3. On the Create Compute Instance page:
 - a. In the Name your instance field, name the instance.
 - **b.** In the *Configure networking* section, configure the network.



The *Subnet* must be a public network reachable using an SSH client and web browser.



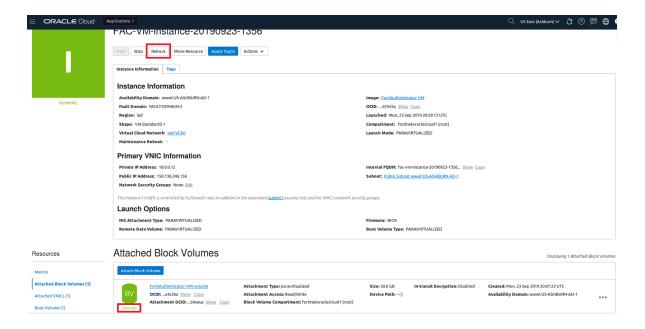
- **4.** Once the instance is *Running*:
 - a. From the side-menu, select Attached Block Volumes (0).
 - b. Click Attach Block.



- **5.** On the *Attach Block Volume* page, select the following options, and click *Attach*:
 - PARAVIRTUALIZED
 - READ/WRITE
 - The previously created BLOCK VOLUME



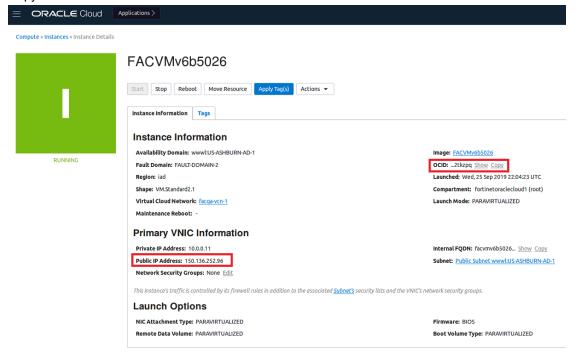
6. Wait for the block volume to reach the *Attached* state, then click *Reboot* to restart the FortiAuthenticator-VM.



Connecting to FortiAuthenticator-VM

To access the GUI console of the FortiAuthenticator-VM, log in to its CLI console via SSH, and then connect the public IP address assigned to the instance.

- **1.** On OCI, go to *Core Infrastructure > Compute > Instances*, and click the name of the FortiAuthenticator-VM instance that is running.
- 2. Copy the Public IP Address and OCID.



- 3. Connect to the public IP address using an SSH client.
 - a. Log in with admin as the username and the OCID as the password.
 - **b.** Using the CLI, add the public IP address to the allowed-hosts. For example:

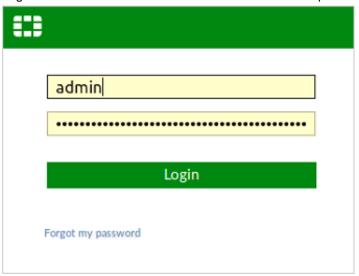
```
> config system global
(global): set allowed-hosts 150.136.252.96
(global): end
>
```

4. In a browser, go to https://<Public IP Address>.

The browser will display a certificate error message, because the default FortiAuthenticator certificate is self-signed and not recognized by browsers.

You can proceed past this message.

5. Log in with *admin* as the username and the *OCID* as the password.



- **6.** Go to System > Administration > Licensing.
- 7. Click Browse, and select your purchased FortiAuthenticator-VM license file.



8. Click OK.

The FortiAuthenticator-VM instance is ready to use after the automatic reboot.





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