

Deploy the Firewall Management Center Virtual on Alibaba Cloud

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Overview

Management center virtual Requires 28 GB RAM for Upgrade (6.6.0+)

The Firewall Management Center Virtual platform has introduced a new memory check during upgrade. If you allocate less than 28 GB RAM to the virtual appliance, then the Firewall Management Center Virtual upgrades to Version 6.6.0+ fails.

As a result of this memory check, we may not be able to support lower memory instances on supported platforms.

Note The Management Center Virtual on Alibaba Cloud is supported on Secure Firewall version 7.2 and later releases.

Alibaba Cloud Supported Instance Types

Management Center Virtual on Alibaba Cloud can use the instance types mentioned in the following table:

Configuration	No of vCPUs	Memory (GB)	Maximum Interfaces Supported	Supported version
ecs.r6.xlarge	4	32	4	7.2 or later
ecs.r8i.xlarge	4	32	4	7.2 or later
ecs.g8i.2xlarge	8	32	4	7.2 or later

Configuration	No of vCPUs	Memory (GB)	Maximum Interfaces Supported	Supported version
ecs.r9i.xlarge	4	32	4	7.2 or later
ecs.g9i.2xlarge	8	32	4	7.2 or later
ecs.r8i.2xlarge	8	64	4	10.1.0 or above
ecs.g9i.2xlarge	8	32	4	10.1.0 or above
ecs.r9i.2xlarge	8	64	4	10.1.0 or above



Note Management center virtual needs a minimum of one interface (ENI) to support the instance.

Network Requirement

- Create one VPC with a minimum of one Vswitch (Subnet) for basic management center virtual support.
- You must create a Vswitch, if the Vswitch is not available in the same zone in which instance is being deployed.

Related Documentation

For more information on instance types and their configurations, see Alibaba Cloud

Guidelines and Limitations

Supported Features

- QCOW2 Image package
- Basic Product Bringup
- Day-0 Configuration
- SSH using Public Key or Password.
- Alibaba Cloud UI Stop/Restart
- Instance Type Supported: ecs.r6.xlarge.
- BYOL License Support

Unsupported Features

- FDM
- High Availability

- Auto scaling
- IPv6
- SR-IOV

Limitations

- Transparent, inline, and passive modes are not supported in Alibaba Cloud.
- East-West Traffic is not supported in Alibaba Cloud.
- Jumbo Frames is not supported as its availability is limited to a few instance types from Alibaba Cloud. For more information, see Alibaba Cloud

Prerequisites

- An Alibaba Cloud account. You can create one at https://www.alibaba.com/.
- An SSH client (for example, PuTTY on Windows or Terminal on Macintosh) is required to access the Management Center Virtual console.
- Download the Management Center Virtual QCOW2 file from Cisco.com.
- https://software.cisco.com/download/navigator.html



Note A Cisco.com login and Cisco service contract are required.

- A Cisco Smart Account. You can create one at Cisco Software Central. https://software.cisco.com/
- Configure all license entitlements for the security services from the Firewall Management Center.
- See "Licenses" in the Secure Firewall Management Center Administration Guide for more information on how to manage licenses.

Deploy the Firewall Management Center Virtual

You must ensure that the image of the management center virtual that you plan to deploy appears on the **Image Configuration**.

Procedure

Step 1 Log into https://www.alibabacloud.com/ and choose your region.

Note Alibaba Cloud is divided into multiple regions that are isolated from each other. The region is displayed in the upper right corner of your window. Resources in one region do not appear in another region. Check periodically to make sure you are in the intended region.

Step 2 **Create Custom Virtualized Image.**

Alibaba Cloud supports a QCOW2 image only.

a) Go to Object Storage Service (OSS), then create a bucket that contains the QCOW2 image and do the following:

Bucket names must be globally unique within your Alibaba Cloud project.

1. Upload QCOW2 image from local directory to the Alibaba Cloud bucket.
2. From the left navigation pane, click **Buckets** > **management center virtualbucket** > **Upload**
3. Choose **Private** as ACL and copy the OSS Object address mentioned in the object details after the upload is completed successfully.
4. Paste the OSS object address of custom image from the bucket.
5. Choose **Linux** as OS and **Others Linux** as variant type.
6. Choose **x86_64** as System Architecture.
7. Choose Image format as **QCOW2.**
8. Choose license type as BYOL.

b) Create an instance from the para-virtualized image from the previous step.

1. From the left navigation pane, click **Images** > **Custom Image** > **Actions** > **Create Instance**

Step 3 **Create Instance from Custom Virtualized Image.**

a) Go to the **Elastic Compute Service** > **Create Instance** and select the following:

1. **Billing Method**: Pay-As-You-Go
2. **Region**: As per requirement.
3. **Instance Type**: ecs.r6.xlarge
4. **Quantity**: As required
5. **Image**: Custom image you created in the previous section.
6. **System Disk**: 250GB (or Default) as the minimum value.

b) To proceed further, do the following:

1. **VPC**: VPC in which management center virtual will be deployed.
2. **Vswitch**: Subnet of the Primary Interface.
3. **Assign Public IPv4 Address:** It is required to connect using SSH (If not selected, then the management center virtual can only be accessed via Console connection of Alibaba Cloud from the UI).

4. **Security Group**: Choose the appropriate Security Group.
5. **Interfaces**: Primary interface belongs to the subnet chosen in step 2. Management center virtual requires one interface only.

c) Move to the next section and do the following.

1. **Key-Pair**: For key-based login, generate a key-pair if not done already. You can also access the instance with a password.



Note You can select an existing key pair or create a new key pair. The key pair consists of a public key that Alibaba Cloud stores and a private key file that the user stores. Together, they allow you to connect to your instance securely. Be sure to save the key pair to a known location, as it may required to connect to the instance.

2. **Instance-name**: Name of instance as suitable.
3. **Day-0 (User Data)**: Provide the Day-0 configuration as per the requirement (Do not choose **64-base** encoded).

Sample Day-0 Configuration to manage management center virtual using the Management Center:

```
#FMC
{
"AdminPassword": "<enter_your_password>",
"Hostname": "<Hostname-vFMC>"
}
```



Note In case the user does not provide any password in the day-0 configuration, the default password will be the instance ID of the FMCv as seen on Alibaba Cloud console or CLI.

d) Accept the Terms of Service and Create the Instance.

Step 4 Click **Review and Launch**.

Step 5 Click **Launch**.

Step 6 Select an existing key pair or create a new key pair.

Step 7 Click **Launch Instances**.

Step 8 Click **View Launch** and follow the prompts.

Step 9 Go to **Instance** > **More** > **Operations and Troubleshooting** > **Get Instance System Logs**.