

IBM Cloud Object Storage System™
Version 3.15.3

*Administration Guide for Virtual
Appliances*



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Document information

Intended purpose and audience

This guide describes how to deploy and configure Virtual Machine versions of the IBM Cloud Object Storage Accesser[®], and IBM Cloud Object Storage Manager[™] appliances as part of a IBM Cloud Object Storage System[™] deployment. The audience is individuals responsible for data storage administration or virtual machine host administration. The information in this guide is specific to deploying and configuring IBM Cloud Object Storage System[™] vAccesser, and vManager and appliances only. This guide assumes a thorough understanding of virtual machine concepts, procedures, and terminology.

Specific virtual machine host administration and tuning is not covered in this guide outside of minimum virtual appliance requirements.

Use this guide in conjunction with the *Manager Administration Guide*.

Chapter 1. IBM Cloud Object Storage System™ virtual appliances

Using virtual appliances

IBM Cloud Object Storage System™ virtual appliances (vAppliances) are bundled as Open Virtual Appliance (OVA) images to be deployed to virtual machine hosts running VMware vSphere. Each vAppliance provides similar functionality to the physical appliance.

Virtual appliance types

Table 1. Available vAppliances types		
vAppliance Type	Purpose	High availability option
vAccesser	Provides API access to object data.	Put two vAccesser appliances on a virtual Switch.
vManager	Configures, monitors, and administers an IBM Cloud Object Storage System™.	Consult the <i>IBM Cloud Object Storage System™ Manager High Availability Configuration Guide</i> .

Chapter 2. Configuring the appliance environment

Checking prerequisites

IBM Cloud Object Storage System™ vAppliances require VMware vSphere Hypervisor ESXi 5.5 or later.

The VMware vSphere Client must:

1. Be installed on the computer that manages the vAccesser and vSlicestor Appliances.
2. Be the same version as the ESXi server.

Note: Refer to the [vSphere 5.x Installation and Setup Guide](#).

vSphere Notes

All vAppliances support vMotion if the target server has adequate physical resources to accommodate the migrating guest.

Set virtual machine hardware properties

After the IBM Cloud Object Storage System™ vAppliance is deployed on the host system, you can modify its hardware properties on the IBM Cloud Object Storage System™ vManager Appliance and the IBM Cloud Object Storage System™ vAccesser Appliance.

The table summarizes the minimum settings for all vAppliances. These settings suffice for a demonstration or a lightly loaded production IBM Cloud Object Storage System™. For systems with higher performance expectations, provision more resources.

Note: Contact IBM Cloud Object Storage System™ Customer Support for recommended settings for a particular use case.

Table 2. Minimum recommended virtual machine hardware properties for virtual appliances		
Component	vAccesser	vManager
RAM (GB)	16	16
CPU	2	4
Video card	Video Card	Video Card
VMCI	Restricted	Restricted
SCSI Controller 0	Paravirtual	Paravirtual
SCSI Controller 1	N/A	N/A
SCSI Controller 2	N/A	N/A
SCSI Controller 3	N/A	N/A
Hard disk 1 (GB) OS	Virtual Drive (128)	Virtual Drive (128)
Network adapter 1	VM Network	VM Network

Note: On vAccesser appliances, associate the OS drive with SCSI controller 0.



Warning: Machine configuration changes (CPU, Memory, Disk, and NIC) are not supported at runtime and must be performed while the VM is powered down.

Consult with IBM sales engineering to determine the appropriate performance requirements.

Start the vAppliance for the first time

Go to the **Console** after powering on the vAppliance. The initial IBM settings appear.

Note: Refer to the *Appliance Configuration Guide* to complete the appliance setup.

Configure the IBM Cloud Object Storage System™ Manager node before any other nodes.

Chapter 3. Differences in vAppliance information in the Manager Web Interface

vAppliance representation

The appliance model that is listed in the IBM Cloud Object Storage System™ Manager Web Interface is **Virtual Appliance**.

Graphs

The IBM Cloud Object Storage System™ Manager Web Interface reports on a number of physical appliance characteristics not available for vAppliances in the **Other** section on the **Monitor** page.

Graphs for temperatures (CPU, hard disk drive) and fan speed are not displayed. CPU usage information is reported in the **General** section.

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