#### Hot cloning in VMware

**Hot cloning** means the virtual machine or physical server keeps running when the system or data is being cloned. Without shutting down any running applications or programs, it allows you to get a duplicate of Windows system or disk data easily.

On the one hand, hot cloning is performed under a running server and makes your workflow not disrupted, so you don't need to stop your current tasks to wait for its success, which means you can save a lot of time. This seems productive both for employees and managers.

On the other hand, keeping using your computer during the process means new data will be generated after the disk has been transferred but before the whole copy has been completed. So the last copy won't include the entire system data.

#### Cold cloning in VMware

Cold cloning means you have to make your computer offline when the system or data is being cloned. What you can do is just wait until the cloning process completes. Besides, to make sure the cold clone process is safe and will succeed ultimately, you will be required to get into a boot CD or Windows PE mode.

The only merit of cold cloning is that all of your systems will be migrated to the destination drive since you are forbidden to use your computer during the process so it won't add any changes to your system data.

I To sum up, hot clone is better than cold clone out of the time cost and productivity. But how to perform hot cloning on VM ware? Scroll down to read the step-by-step tutorial.

#### How to perform hot cloning on VMware?

A professional disk cloning tool can help you get twice the result with half the effort and also keep your system and data always safe. **AOMEI Partition Assistant**  **Standard** is one of the most popular and powerful software in cloning, helping you clone one hard drive to another without interrupting any workflow with the help of the "hot clone" feature.

Besides, AOMEI software enables you to clone only used space of a hard drive to the new disk, that is to say, you can clone a large disk to a smaller one. Apart from disk cloning, it enables you to clone only a specific partition or just **migrate OS to HDD/SSD**.

★ The standard edition only supports cloning data from MBR disk to MBR disk, so you don't need to worry about data loss or boot failure. If you want to clone the system disk from MBR/GPT to GPT/MBR, you can **upgrade to the Professional version**.

The next content is about how to run hot cloning on VMware via AOMEI Partition Assistant standard. If you are a Server user, there is the **Server edition** for you.

Step 1. Install and Run AOMEI software, click "Clone" in the main interface, and select "Clone Disk".

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C: NTFS 10	0. Clone Disk Clone entire disk to another including system boot files.	Disk 0
D: NTFS 10	Clone Partition Clone a partition to another disk.	Properties & Health
Disk 1 Basic M 40	0.00	Cone Disk
F: NTFS 20	0.29 95.99MB Primary None 4K	
* Unalloca 19	9.71 0.00KB Logical None	Quick Partition
		€ Rebuild MBR
		Delete All Partitions
		Wipe Hard Drive
		🖏 Dynamic Disk Manager
Disk 0 C : Syste	m D:Data	Disk Defrag
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Step 2. Choose the hard disk that you need to clone as the source disk and click "Next".

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D: NTFS 100.	Clone Partition Clone a partition to another disk.	Properties & Health
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D :	NTFS 100. Cone Partition Clone a partition to another disk.		Properties & Health	
Disk 1	Basic M 400.00			
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			Wipe Hard Drive	
			🖏 Dynamic Disk Manager	
Disk 0 200.00GB Basic MBR	C: System 100.00GB(83% free) NTFS,Active,System,Primary D: Data 100.00GB(96% free NTFS,Primary	2)	Disk Defrag	
Disk 1 400.00GB Basic MBR	F: •:   200.29GB(99% free) 199.71GB(100% free)   NTFS, Primary Unallocated	:e)		

Step 3. Select another drive as the destination disk, and then click "Next".

Step 4. Then, you can check the source and destination disk in the next window or change to "Sector to Sector clone", and click the "Confirm" button to continue if there is no

# problem.

6 AOMEI Partition A	Assistant		☆ � ≡ _ □ ×
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Disk 1 400.00GB Basic MBR	F : 200.29GB(99% free) NTFS,Primary	•: 199.71GB(100% free) Unallocated	

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					🕂 Rebuild I	MBR		
					Delete A	All Partitions		
					🖉 Wipe Ha	ard Drive		
	_				🖏 Dynamic	c Disk Manager	r	
Disk 0 200.00GB Basic MBR	C : System 100.00GB(8 NTFS,Active	13% free) 1,System,Primary	D : Data 100.00GB(96% free) NTFS,Primary		Disk Defi	frag		
Disk 1 400.00GB Basic MBR	F: 200.29GB(9 NTFS,Primar	19% free) Y	•: 199.71GB(100% free) Unallocated					

Here, you can also click the "Settings" button to adjust the partition size on the destination disk or tick "**4k alignment**" to improve the reading and writing speed of the SSD.

Step 5. After returning to the main interface, check the pending operation and click "Apply" and "Proceed" to commit the operation.

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Disk 1	Basic M 400.0	JU				Disk		
F:	NTFS 200.2	29 95.99MB Prima	ry None	4K				
-	Unalloca 199.7	71 0.00KB Logica	al None		57 Quick	Partition		
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Disk 0 200.00GB Basic MBR	C : System 100.00GB(8 NTFS,Active	13% free) 1,System,Primary	<b>D : Data</b> 100.00GB(96% free) NTFS,Primary		Disk D	efrag		
Disk 1 400.00GB Basic MBR	F: 200.29GB(9 NTFS,Primar	19% free) Y	•: 199.71GB(100% free) Unallocated					

During the process, you are allowed to exit the software to execute operations on your computer and the clone process won't stop and still keep cloning on the background, which is the essence of hot clone.

If you clone a disk including boot files, please check if it's bootable when the disk clone is finished.

1. Reboot your physical computer and press some keys like **F2**, **F12**, or **Del** to access BIOS Setup menu.

2. Click the Boot tab and set the cloned drive as the first boot option in the list.

3. Save the changes and exit. Wait patiently and see if it can start successfully.

In VMware, OVF (Open Virtualization Format) is a standard for packaging and distributing virtual machines and their applications. It's used to create and deploy virtual appliances, which are pre-configured virtual machines including the OS and applications. The VMware OVF Tool is a command-line utility that helps import and export OVF packages.

### OVF?

### **Industry Standard:**

OVF is an open-source, XML-based standard used to describe metadata about virtual machine images.

#### **Packaging and Distribution:**

It's designed to package and distribute virtual machines, making it easier to move them between different virtualization platforms.

#### **Virtual Appliances:**

OVF is often used to create and deploy virtual appliances, which are pre-configured virtual machines that include the operating system and necessary applications.

### Metadata:

OVF files contain metadata about the virtual machine, including configuration, network settings, and disk images.

### **Platform Independence:**

OVF allows for the portability and deployment of VMs across different virtualization environments.

### OVF Tool in VMware

#### **Command-Line Utility:**

The VMware OVF Tool is a command-line utility that can be used to import and export OVF packages.

### vSphere Integration:

OVF import and export are also built into VMware vSphere Client and vSphere Web Client.

### **Distribution and Import:**

The OVF Tool is used for distributing and importing virtual machines and vApps (collections of virtual machines).

# **Backward Compatibility:**

The OVF Tool is designed to be compatible with older OVF versions and different VMware products.

# Signing and Verification:

OVF packages can be signed to ensure their integrity and authenticity.

# Benefits of Using OVF in VMware:

# **Ease of Deployment:**

OVF simplifies the process of deploying virtual machines, especially for preconfigured applications.

# **Portability:**

OVF allows for the easy transfer of virtual machines between different environments and platforms.

# **Distribution:**

OVF facilitates the distribution of virtual appliances and virtual machines.

# Security:

OVF packages can be signed to ensure their integrity and prevent tampering.