

JoinVDI Virtualization Manager

Installation Guide

Standalone server version

REV12: 21.08.30

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1. Prerequisites

1.1 Hardware requirements

Hardware	Description
A Server	Install and run the JoinVDI Configuration requirements: CPU: At least a quad core x86_64 Memory: At least 16GB Storage: At least 50GB Network Interface: At least 1 Gbps NIC
A U disk	A bootable U disk to install the JoinVDI
A Windows computer	Assist in installation and manage the JoinVDI

1.2 Windows softwares

Software	Description
Quick Installation Tool	Auxiliary the installation of JoinVDI
virt-viewer	Access the VM console to manage
Rufus	Write the ISO disk image to a U disk
Hash	Verify MD5 code of ISO file
Chrome browser	Access the JoinVDI platform

- Please install the softwares on the Windows computer in advance.

1.3 Installers

Installer	Description
JoinVDI.iso	JoinVDI Virtualization Manger Installation ISO
MD5.txt	MD5 code for verifying the JoinVDI.iso
JoinVDI guest tools.zip	The functional plug-in installed in the VMs.
Virspire.exe	The desktop agent installed in the VMs
Windows ISO	The system image of the VMs(example: Windows 10 X64 LTSC)

1.4 Server network environment

- Prepare a local area network, it is recommended to use DHCP to assign IP.
- The server and the Windows computer are connected to the same network segment.
- Divide 2~3 available IPs in advance, and confirm the IP assigned to the server. The server IP is long-term exclusive.

1.5 Configure BIOS settings on the server

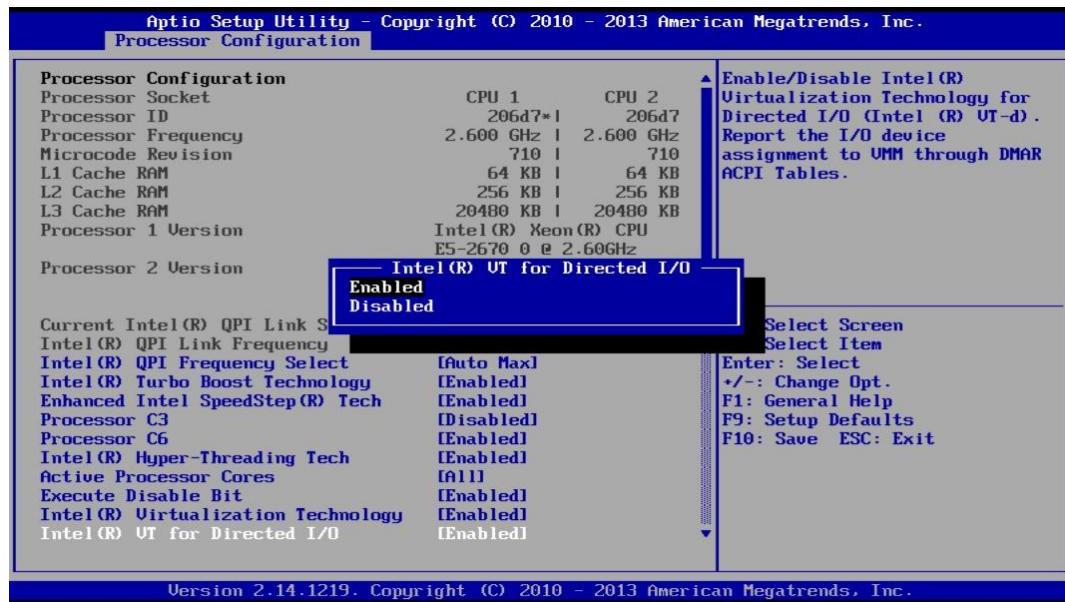
- All CPUs must have support for the Intel® 64 or AMD64 CPU extensions, and the Intel VT® or AMD-V™ hardware virtualization extensions enabled.

Setting example of Intel platform:

1) Enabled Intel(R) Virtualization Technology



2) Enabled Intel(R) VT for Directed I/O



3) Verifying BIOS system time

4) Disabled Power Savings

Disable Processor C3

Disable Processor C6

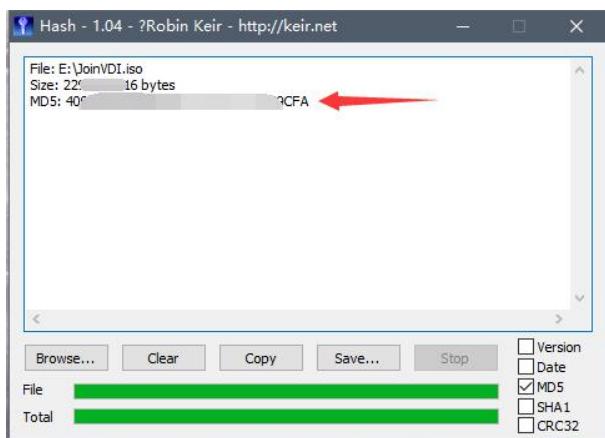
2. Install JoinVDI system on the Server

- JoinVDI needs to be installed on the physical machine. Installing it in a virtual machine may be abnormal during the installation process or when using the platform!

2.1 Verify the JoinVDI image

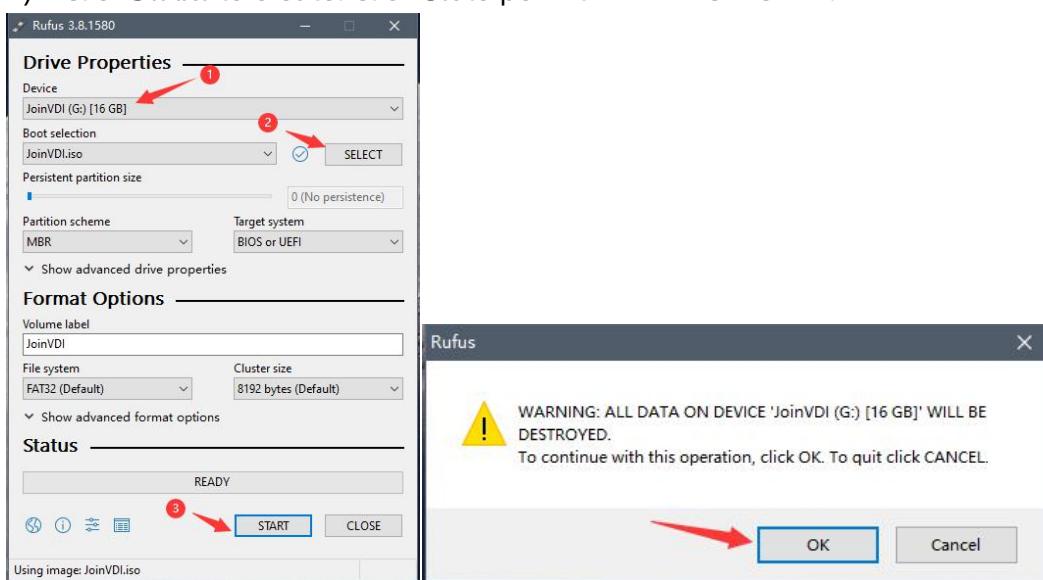
Run the Hash on the Windows computer, drag the JoinVDI image file into the Hash box, and calculate the MD5 value of the JoinVDI image files.

- If the calculated MD5 value is not the same as the MD5 value we provide, it means that the file has been damaged. Please obtain the image file again.



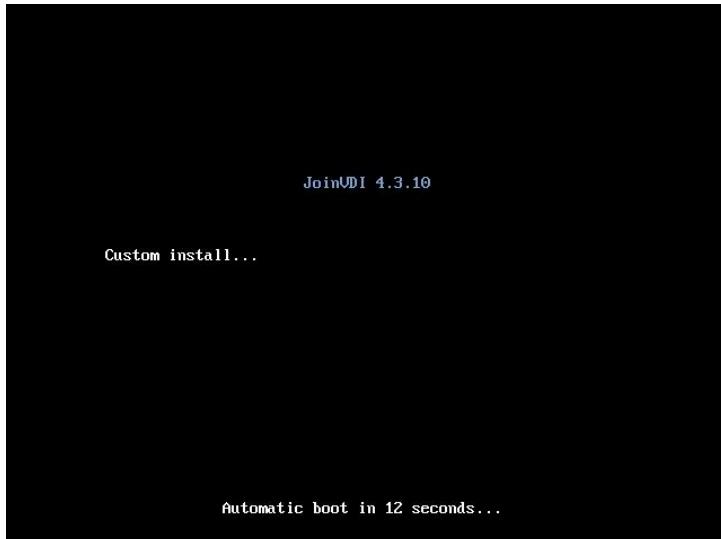
2.2 Create a startup USB Flash Drive

- The example is the step of burning with the Rufus-3.8
- Run the **Rufus-3.8** after Attach the U disk to the Windows computer
 - Select the U disk
 - Select the JoinVDI image file
 - Click **START** to create. Click **OK** to permit DATA DESTROYED.



2.3 Install JoinVDI system

- 1) Attach the U disk to the server. Start the server and booting from the bootable U disk. From the boot menu, select **Custom install...** and Press **Enter**.

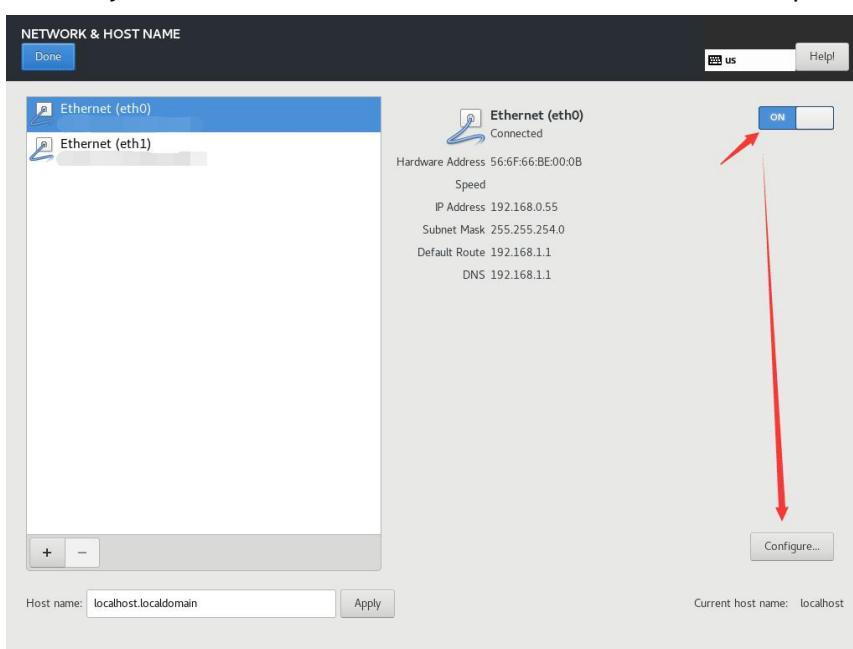


- 2) Configure NETWORK & HOSTNAME

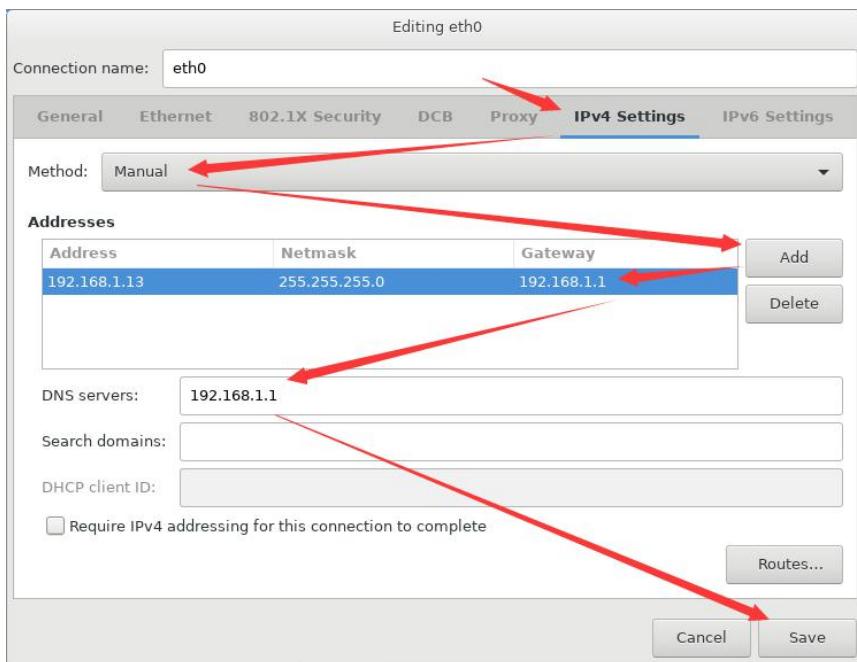


- 3) Configure Network

- Only one of them can be enabled When there are multiple networks.

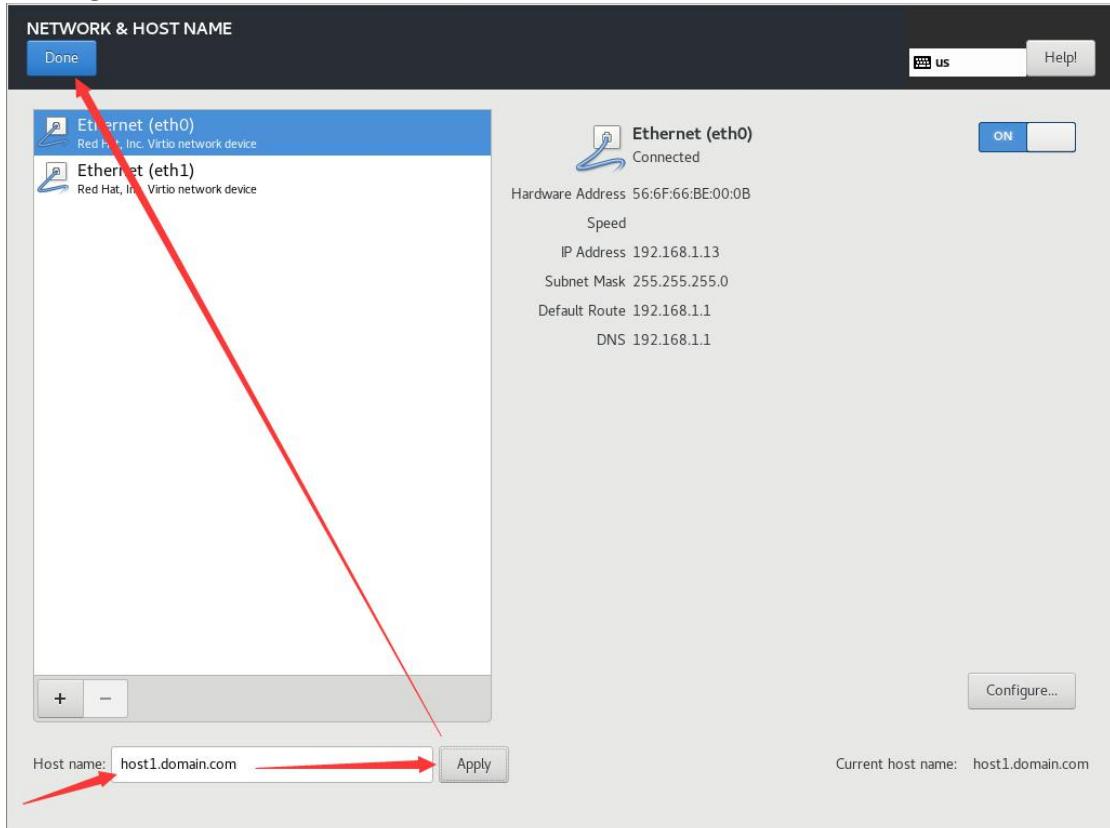


- Set a static IP as the server IP.



4) Configure Host name

- It is recommended to follow the naming rules: aaa.bbb.com
e.g.: host1.domain.com



5) Configure DATE & TIME

LOCALIZATION



DATE & TIME
Nothing selected



KEYBOARD
English (US)

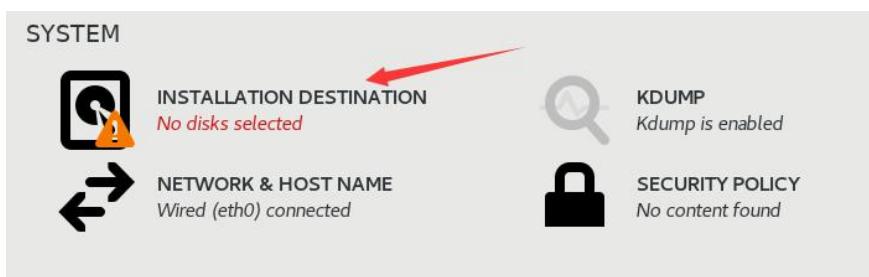


LANGUAGE SUPPORT
English (United States)

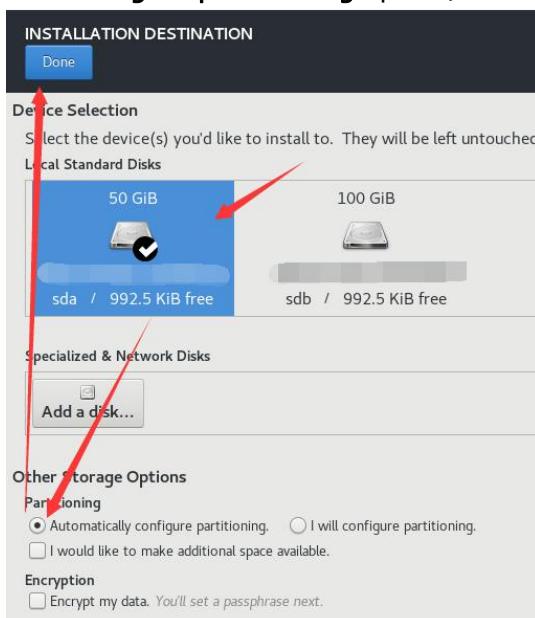
- Select a time zone according to where the server is used
e.g. Americas/New York
- Incorrect time zone setting may cause abnormal during the installation process or when using the platform. Check again the time zone before click **Begin installation**



6) Configure INSTALLATION DESTINATION



- Select the device on which to install JoinVDI and use the **Automatically configure partitioning** option, click **Done**



- If there is data in the selected disk, click **Reclaim space**, **Delete all** and **Reclaim space**

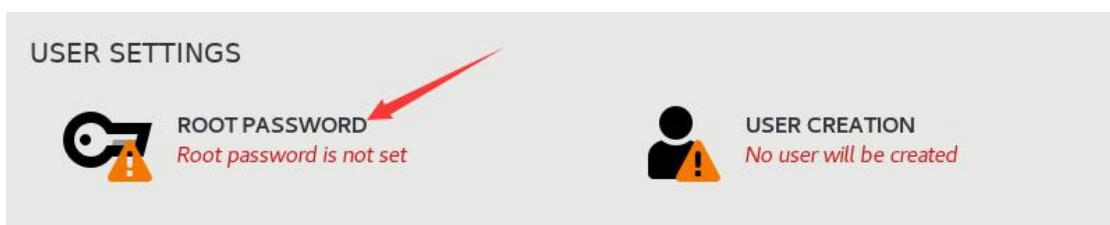


7) Click **Begin Installation**



8) Configure ROOT PASSWORD

- The root password can be set to **admin@jvvm**



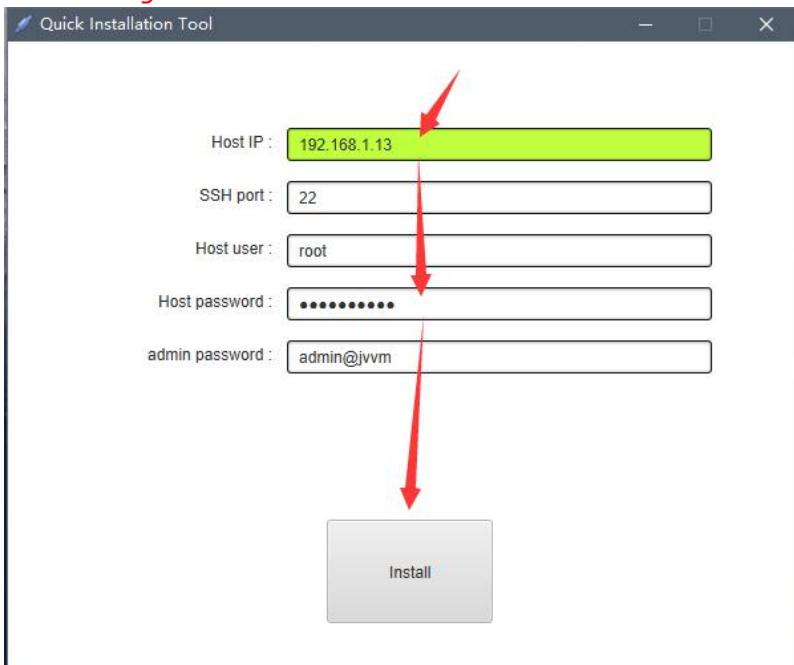
9) After the installation is completed, reboot the server

- Disconnected the U disk before **Reboot** to avoid rebooting to the U disk.

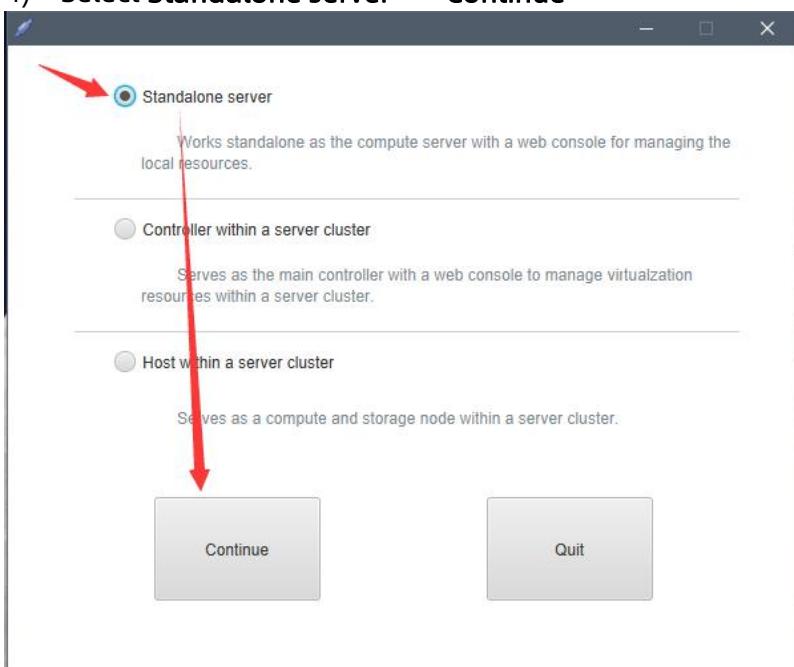


3. Install JoinVDI Node

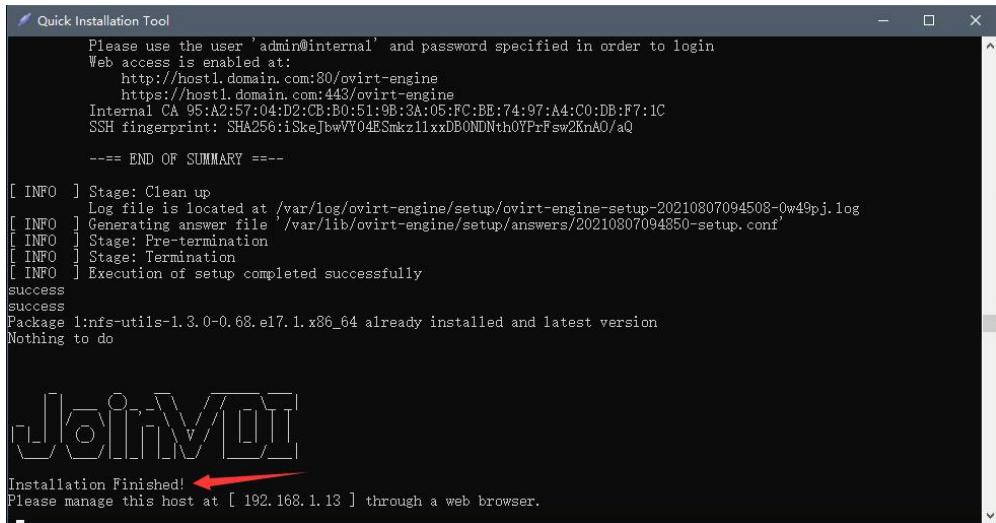
- 1) Windows computer and server connect to the same network
 - 2) Run the **Quick Installation Tool**
 - 3) Enter the Host IP (Server IP) and Host password (root password), Click **Install** to start installation.
- **The lastest admin password is the default password of JoinVDI admin manager.**



- 4) Select **Standalone server** → **Continue**



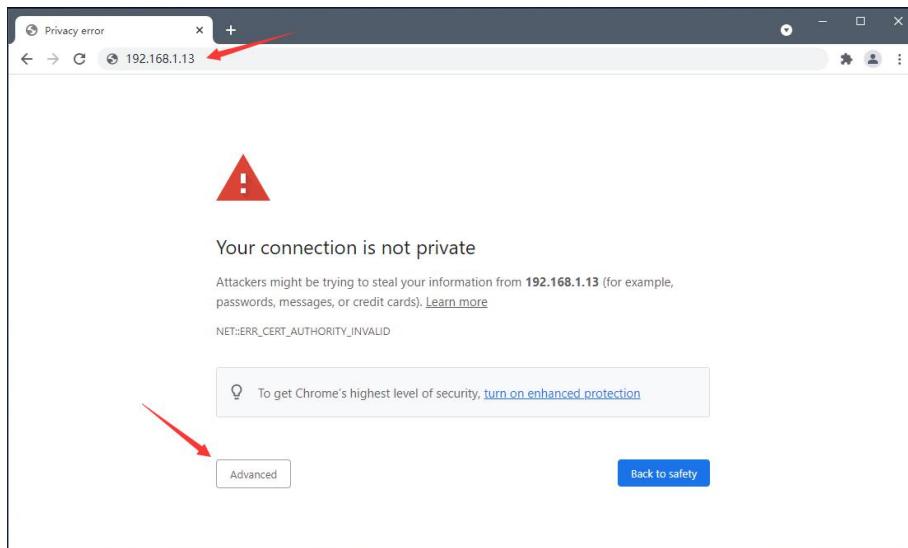
- 5) When prompt **Installation Finished!** in the Quick Installation Tool window, the installation is complete.



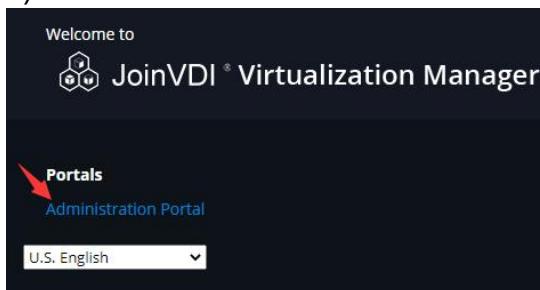
4. Configure JoinVDI Platform

4.1 Connecting to the Administration Portal

- 1) Run the Chrome in Windows computer and navigate to <https://server IP>. Click **Advanced** and **Proceed to the site**



- This server could not prove that it is **192.168.1.13**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.
- [Proceed to 192.168.1.13 \(unsafe\)](#)
- 2) Click **Administration Portal**

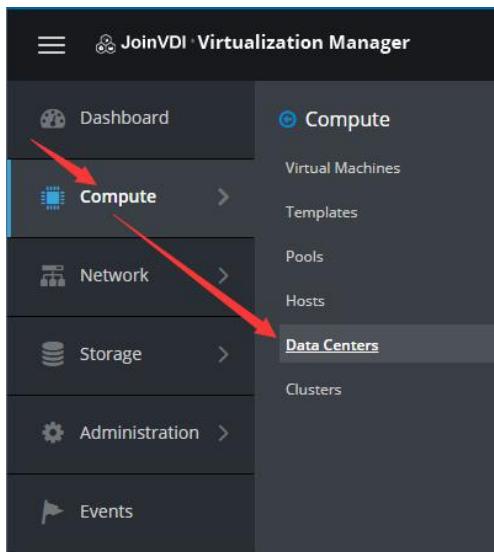


- 3) Use the user name **admin** along with the password **admin@jvvm**, click **Log In**

The screenshot shows the 'JoinVDI Virtualization Manager' login form. It features a logo and the text 'JoinVDI Virtualization Manager'. There are three input fields: 'Username' (containing 'admin'), 'Password' (containing 'admin'), and 'Profile' (set to 'internal'). A red arrow points to the 'Username' field, and another red arrow points to the 'Password' field. At the bottom is a 'Log In' button.

4.2 Configure the data center

- 1) Click Compute → Data Centers on the left



- 2) Click Edit

Name	Comment	Storage Type	Status	Compatibility Version	Description
Default		Local	Uninitialized	4.3	The default Data Cen

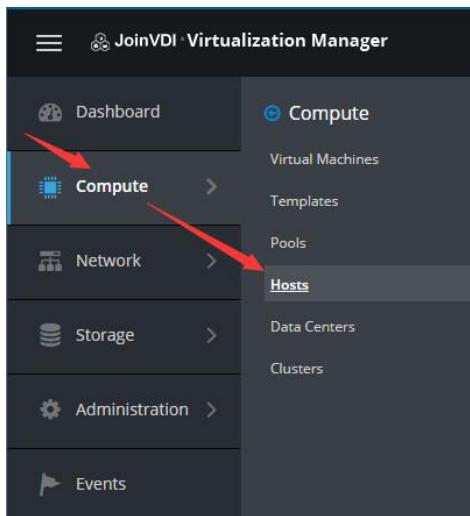
- 3) Change storage type to Local, and click OK

Name	Default
Description	The default Data Center
Storage Type	Local
Compatibility Version	4.3
Quota Mode	Disabled
Comment	

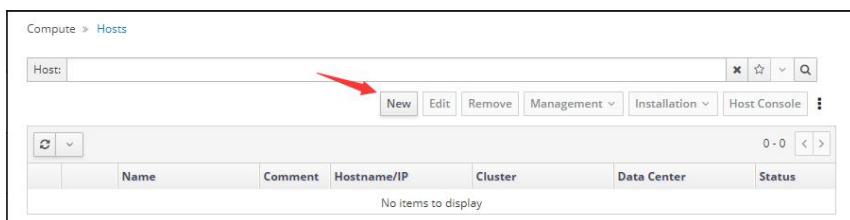
OK Cancel

4.3 Add a host

- 1) Click **Compute** → **Hosts** on the left



- 2) Click **New**

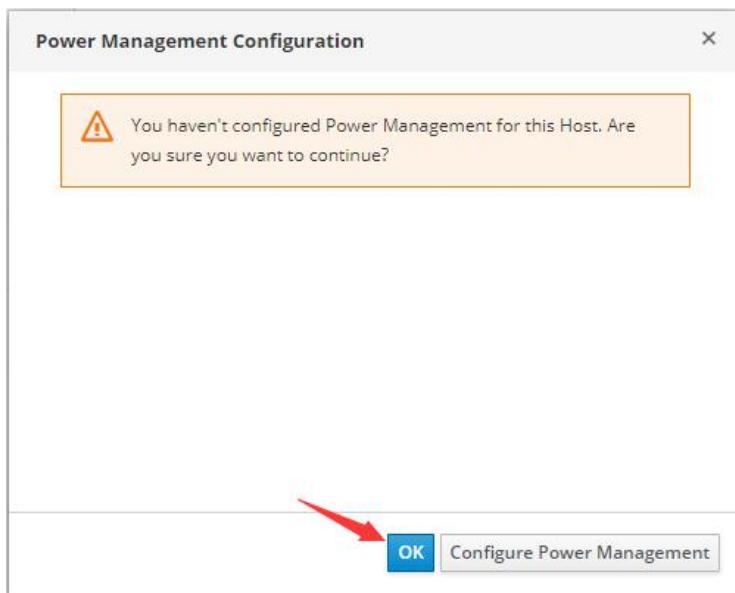


- 3) Enter a host name in the **Name** field, [Host Name](#) set when installing system in the **Hostname** field, and root password in the **Password** field, click **OK**

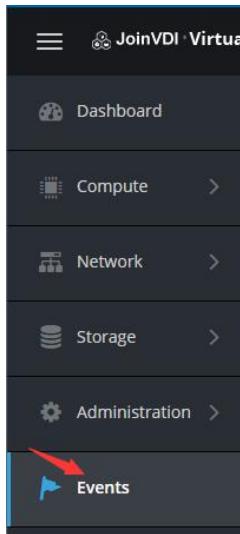
The 'New Host' dialog box shows the following configuration:

- General:** Host Cluster: Default (Data Center: Default)
- Power Management:** Use Foreman/Satellite (unchecked)
- SPM:** (empty)
- Console and GPU:** (empty)
- Network Provider:** (empty)
- Kernel:** Activate host after install (checked)
- Affinity Labels:** (empty)
- Authentication:** User Name: root, Password: (redacted)

- 4) Ignore the power management configuration prompt and click **OK** to start installation.



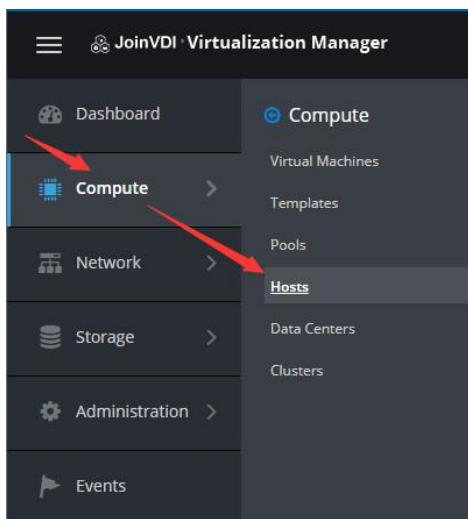
- 5) View the progress of the installation in the **Events**



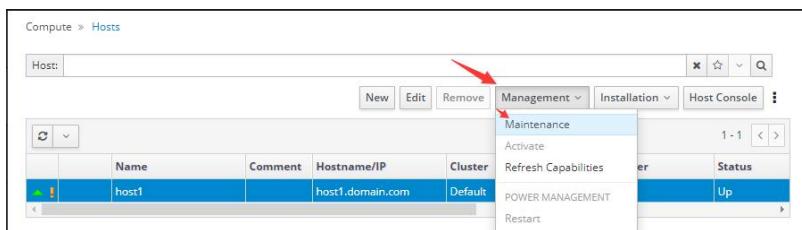
- 6) The installation is successful if there are no any errors except the notification of Power Management configuration and prompt **Host xxx installed**

✓	Host host1 was added by admin@internal-authz.
✗	Failed to verify Power Management configuration for Host host1.
✓	Data Center Default was updated by admin@internal-authz
✓	Status of host host1 was set to Up.
✓	Host cluster Default was updated by system
✓	Host host1 installed ←
✓	Network changes were saved on host host1

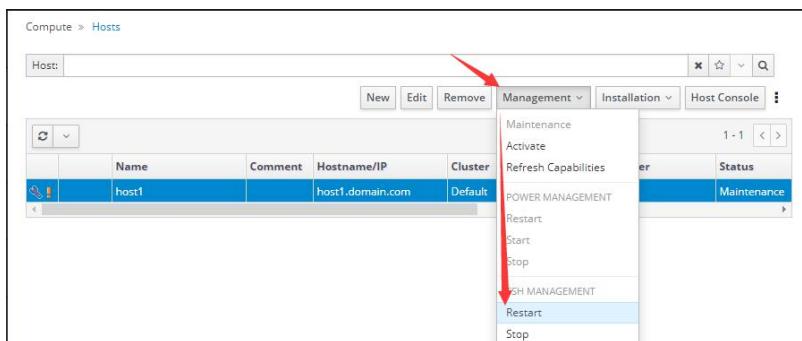
7) Click **Compute → Hosts**



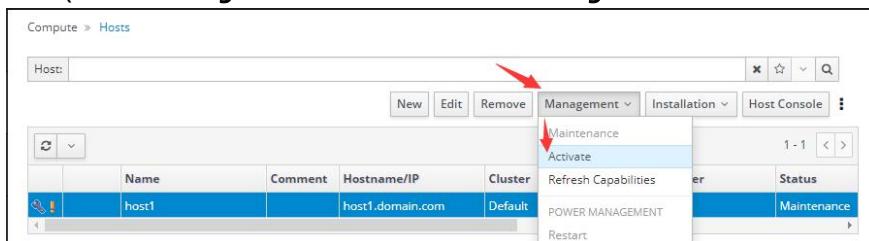
8) Click **Management → Maintenance**, the host turn to maintenance mode



9) Click **Management → Restart → OK** to restart the host

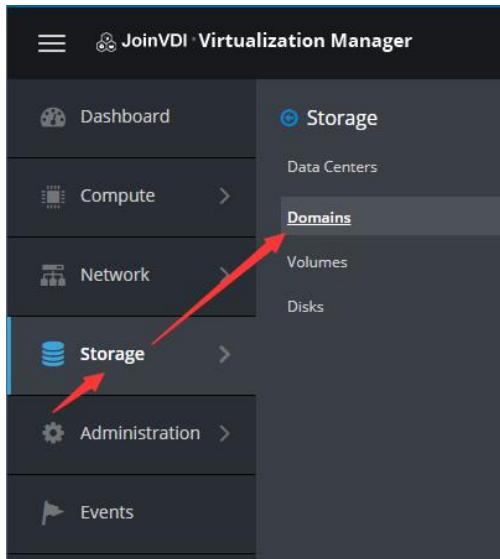


10) Log into the administration portal after reboot, to active the host
(Click **Management → Activate / Management → Maintenance → Activate**)



4.4 Add the storage domain

- 1) Click Storage → Domains on the left



- 2) Click New Domain

Status	Domain Name	Comment	Domain Type	Storage Type	Format	Cross Data Ce
	ovirt-image-repository		Image	OpenStack Glance	V1	Unattached

- 3) Change the Domain Function to Data, Change the Storage Type to Local on Host, enter the Path to be used for the storage domain (/home/storage/local/data), enter a name, e.g. data_domain → OK

New Domain

Data Center	Default (Local)	Name	data_domain
Domain Function	Data	Description	
Storage Type	Local on Host	Comment	
Host	host1		
Path	/home/storage/local/data		
<input type="checkbox"/> Advanced Parameters			

- 4) Click **New Domain** again after the first storage domain turn into green.

Status	Domain Name	Comment	Domain Type	Storage Type	Format	Cross Data Ce
▲	data_domain		Data (Master)	Local on Host	V5	Active
■	ovirt-image-repository		Image	OpenStack Glance	V1	Unattached

- 5) Change the **Domain Function** to ISO, Change the **Storage Type** to Local on Host, enter the **Path** to be used for the storage domain (/home/storage/local/iso), enter a name, e.g. **iso_domain** → OK.

New Domain

Data Center	Default (Local)	Name
Domain Function	ISO	Description
Storage Type	Local on Host	Comment
Host	host1	
Path	/home/storage/local/iso	
<input type="checkbox"/> Advanced Parameters		

- 6) The **Status** of **data_domain** and **iso_domain** in the list are both green, means the basic storage domain is created completely.

Status	Domain Name	Comment	Domain Type	Storage Type	Format	Cross Data Ce
▲	data_domain		Data (Master)	Local on Host	V5	Active
▲	iso_domain		ISO	Local on Host	V1	Active
■	ovirt-image-repository		Image	OpenStack Glance	V1	Unattached

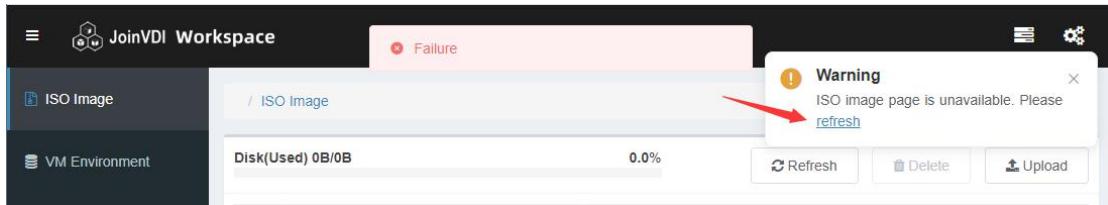
- /home/storage/local/data and /home/storage/local/iso are the preset path, and the path must be entered correctly.
- If you need to add a new hard disk as storage domain, please refer to [Appendices 6.2 Add a hard disk to server](#).

5. Create Virtual Machines

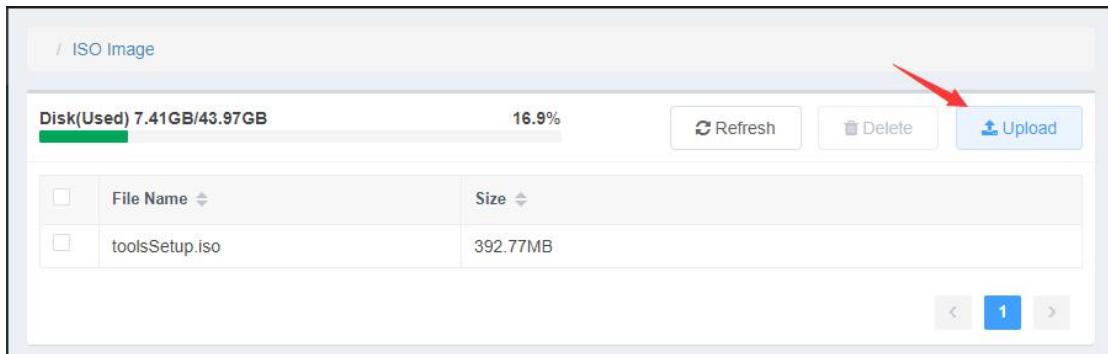
5.1 Create virtual machines

5.1.1 Upload Windows system ISO image

- 1) Navigate to [https://\[Host IP\]:8080](https://[Host IP]:8080), e.g. <https://192.168.1.13:8080>
- 2) The first time to visit it, ISO image page need to be refreshed.



- 3) Click **Upload**. Upload the Windows system ISO. Please upload the Microsoft original image.

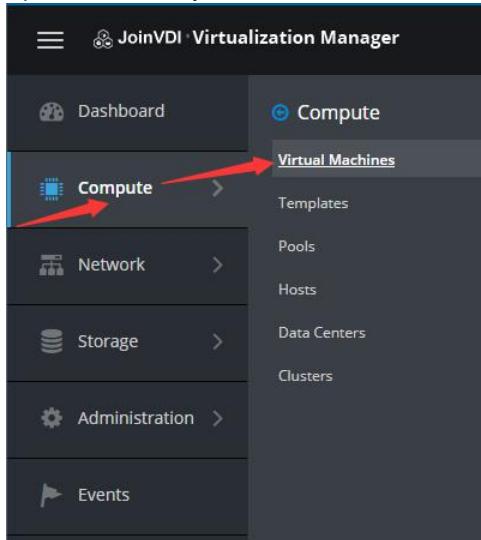


- 4) Wait for upload completed.



5.1.2 Create a virtual machine

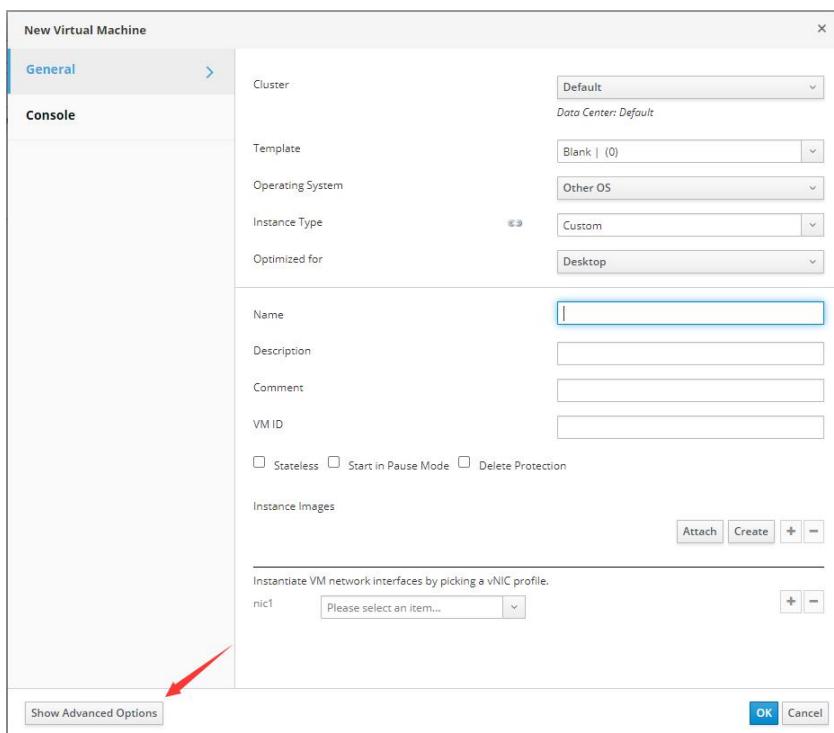
1) Click Compute → Virtual Machines



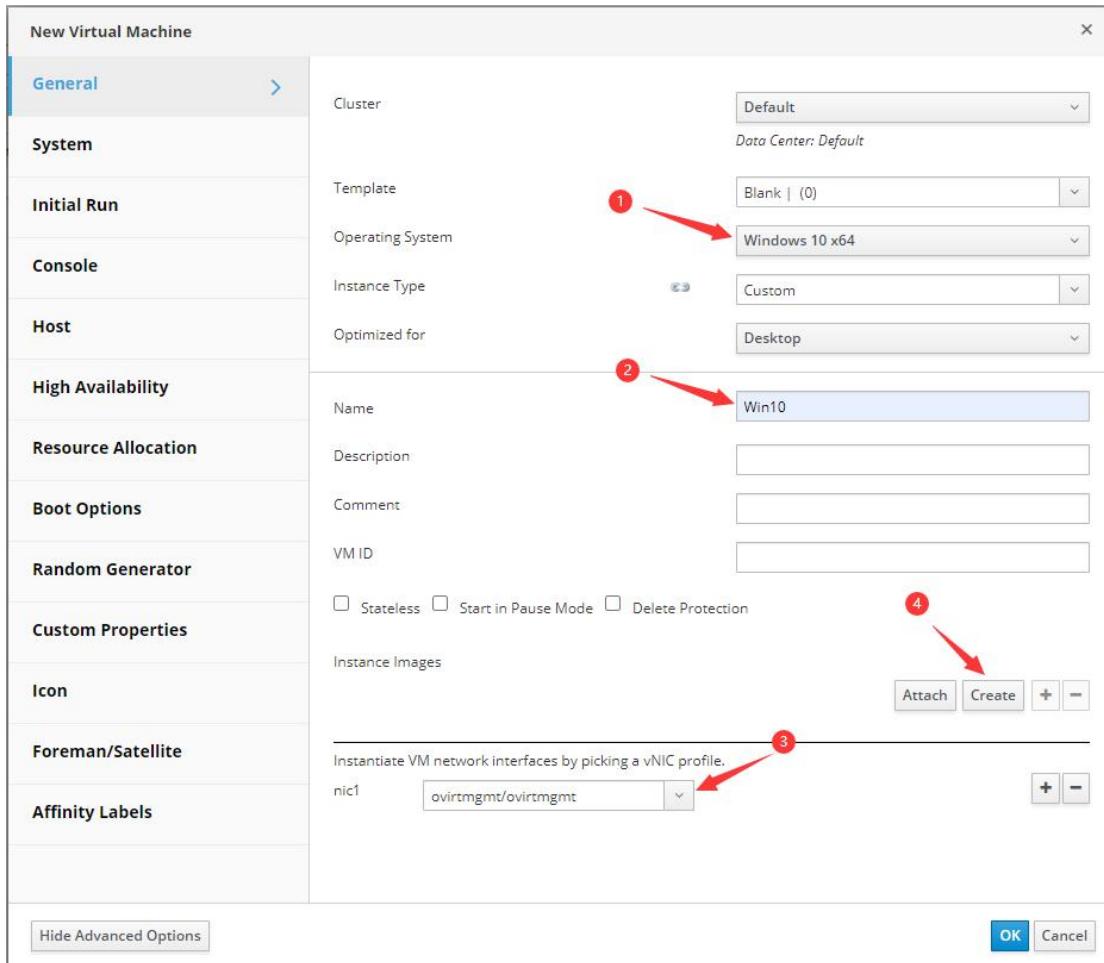
2) Click New. This opens the New Virtual Machine window



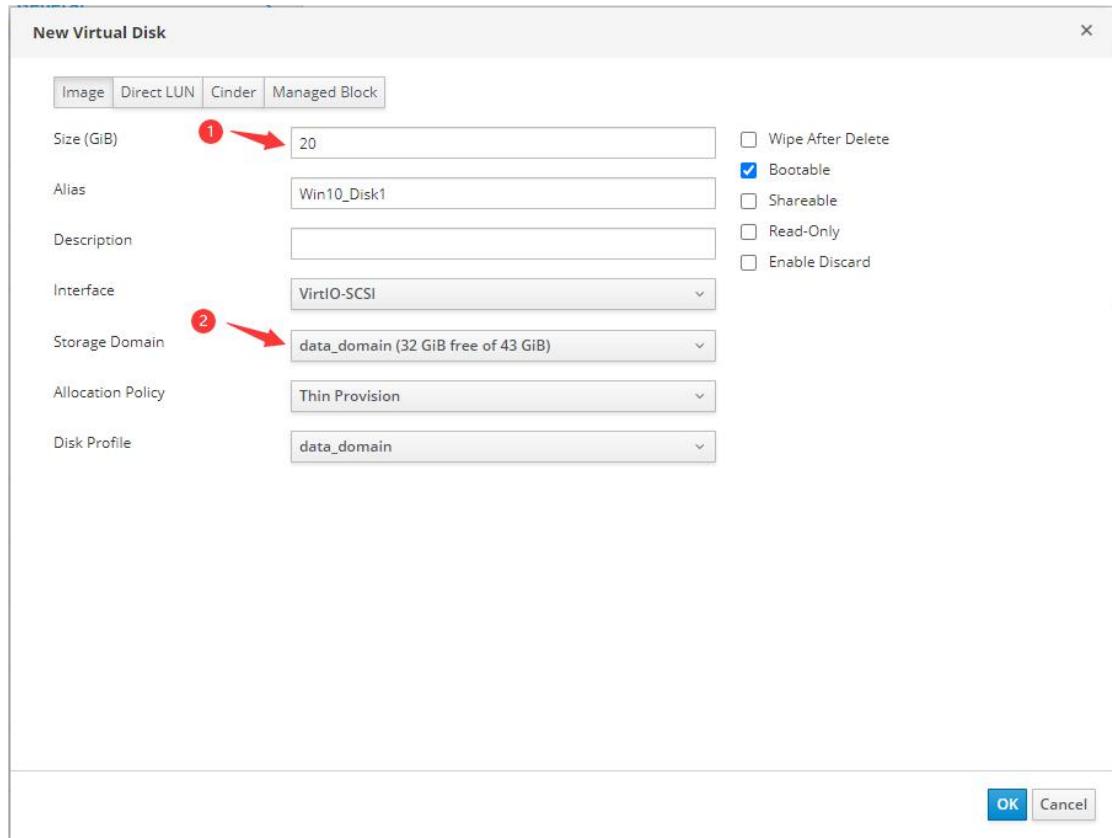
3) Click "Show Advanced Options".



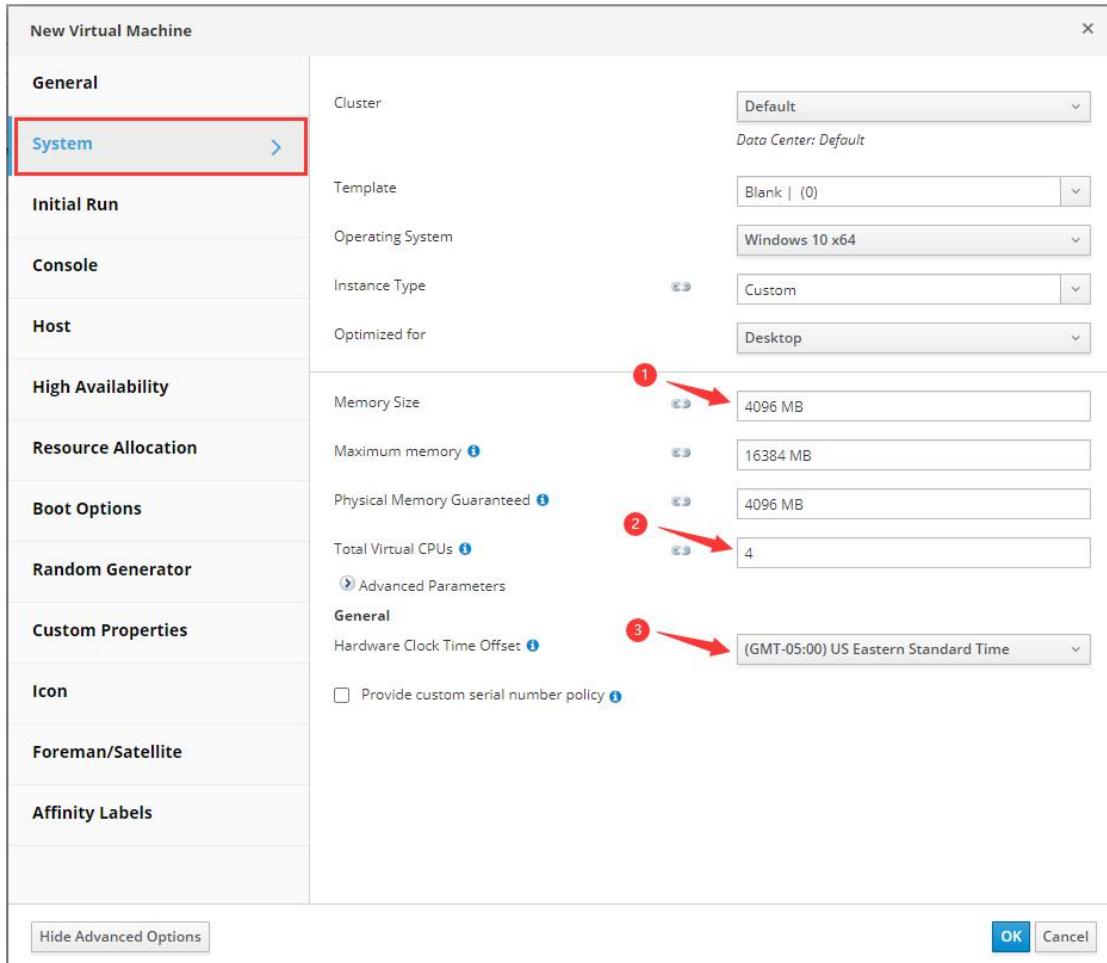
- 4) Select an **Operating System** from the drop-down list, e.g. **Windows 10 x64**
Enter a **Name** for the virtual machine, e.g., **Win10**
Add a network interface from the **nic1** drop-down list;
Create a virtual disk.



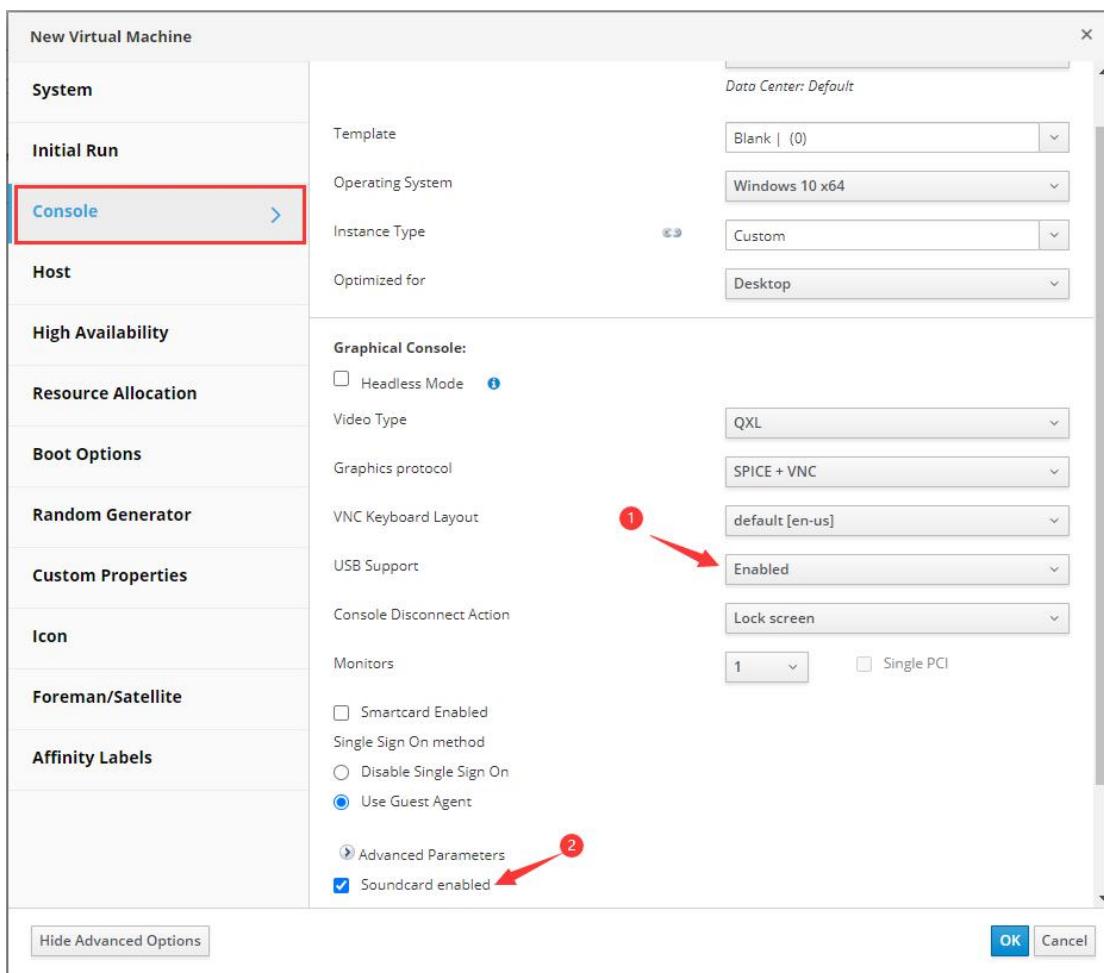
- 5) Create the first disk as a **Bootable** disk. Enter a **Size(GB)** according to actual needs. E.g. **20 GB**. Select the **storage domain** in which the virtual disk will be stored, click **OK**



- 6) Click **System**, specify the virtual machine's **Memory Size**, e.g. 4096 MB
Specify the virtual machine's **Total Virtual vCPUs**, e.g., 4.
Select your local time zone in **Hardware Clock Time Offset**, e.g. **(GMT-05:00) US Eastern Standard Time**



7) Click **Console**, Enabled the USB Support, check **Soundcard enabled**



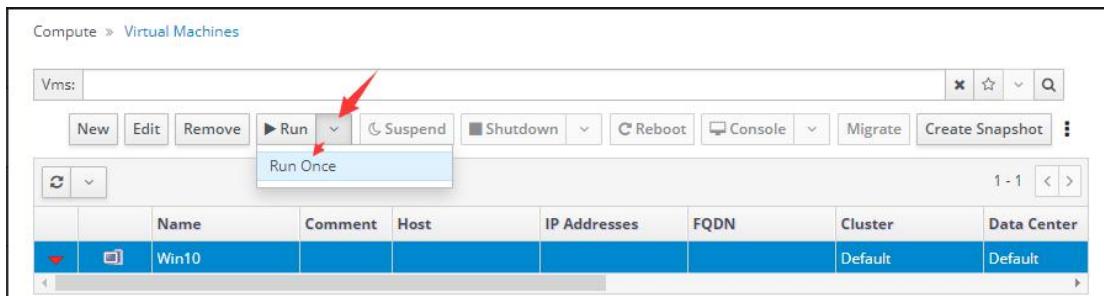
8) Click **OK** to create a new virtual machine



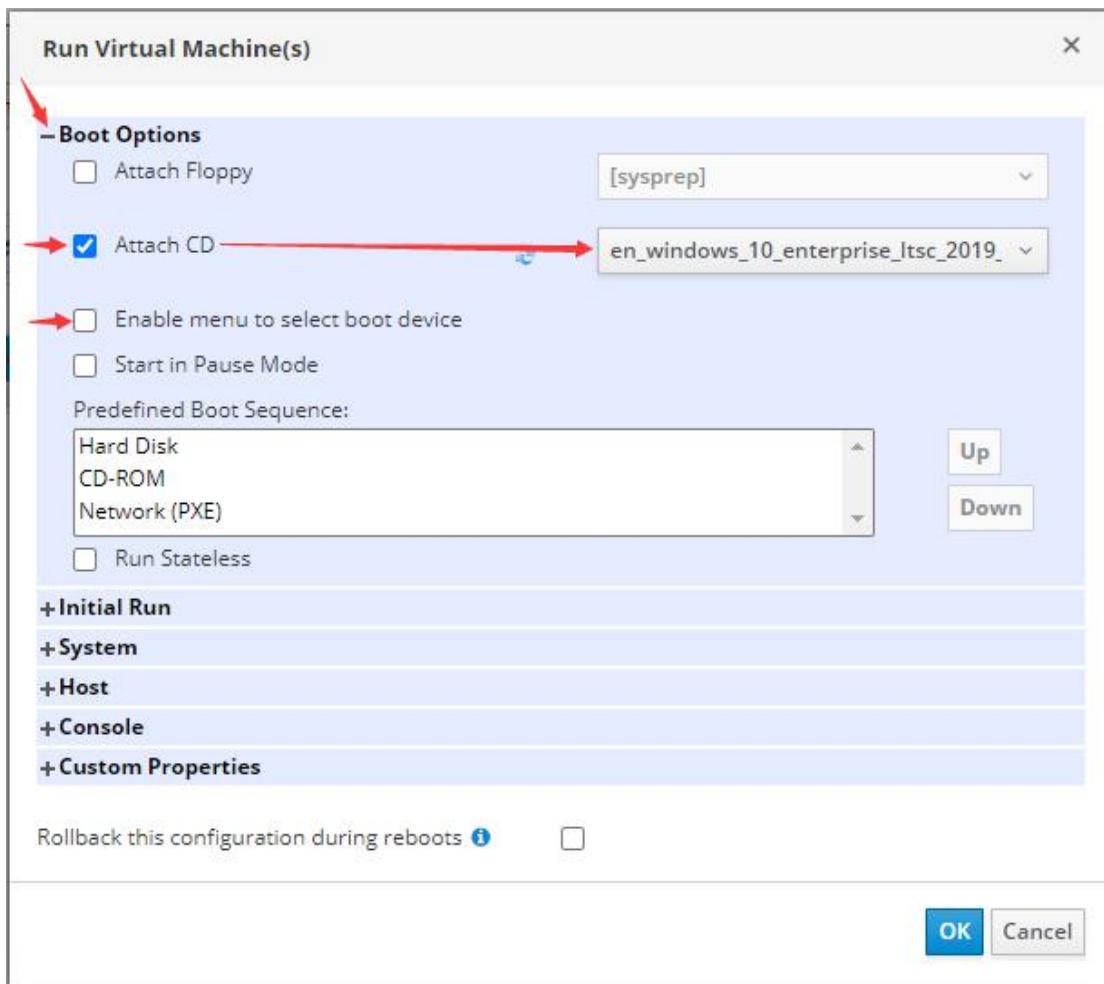
Compute > Virtual Machines								
Vms:		Name	Comment	Host	IP Addresses	FQDN	Cluster	Data Center
		Win10					Default	Default

5.1.3 Install OS

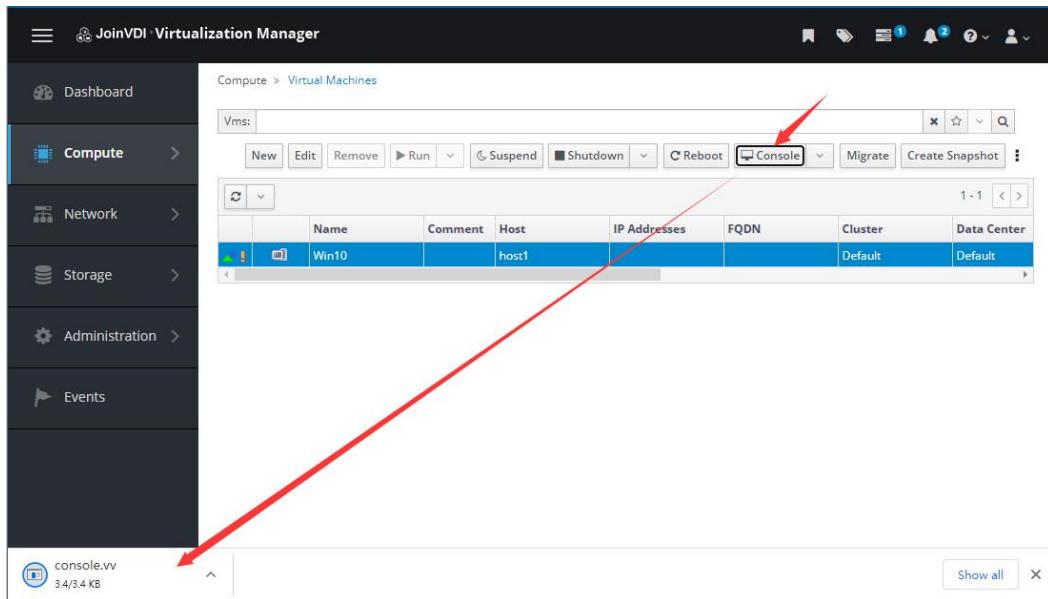
- 1) Select the virtual machine, click **Run** → **Run once**



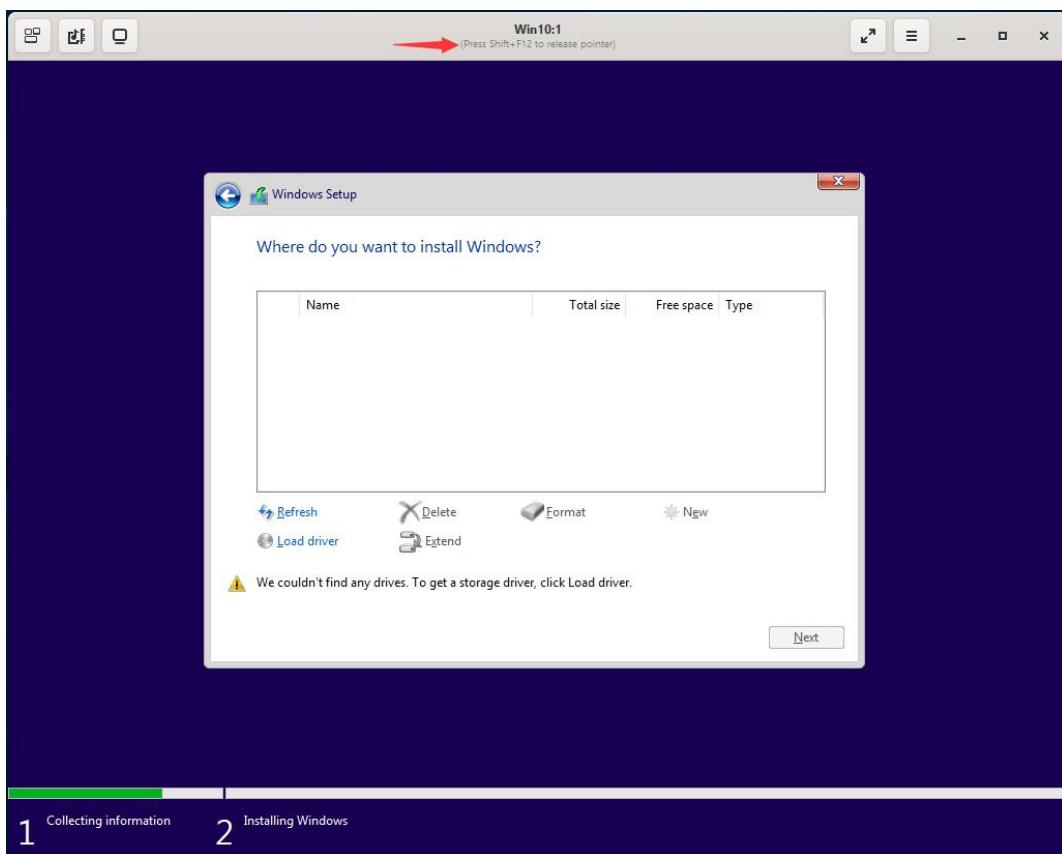
- 2) Expand the **Boot Options** menu, select the **Attach CD** check box, and select a Windows ISO from the drop-down list → uncheck **Enable menu to select boot device** → Click **OK**, the virtual machine will boot up immediately.



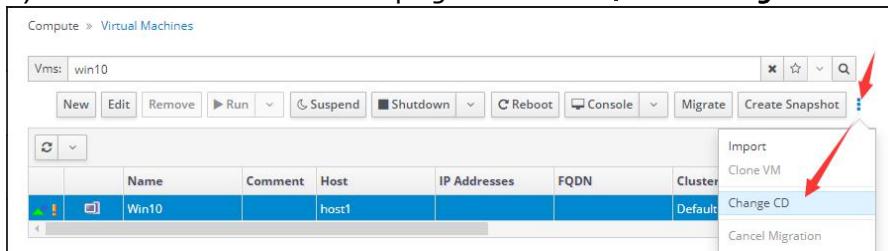
- 3) Select the virtual machine, click the **Console**, and a file name **console.vv** will be downloaded. Click to open the screen of the virtual machine console
- Windows computer need to install **virt-viewer** in advance.



- 4) Please follow the common installation process of Windows system to install virtual machines. When prompted to select a drive onto which you want to install Windows. **Press Shift+F12 to release pointer.**



5) Back to **Virtual Machines** page and click → **Change CD**



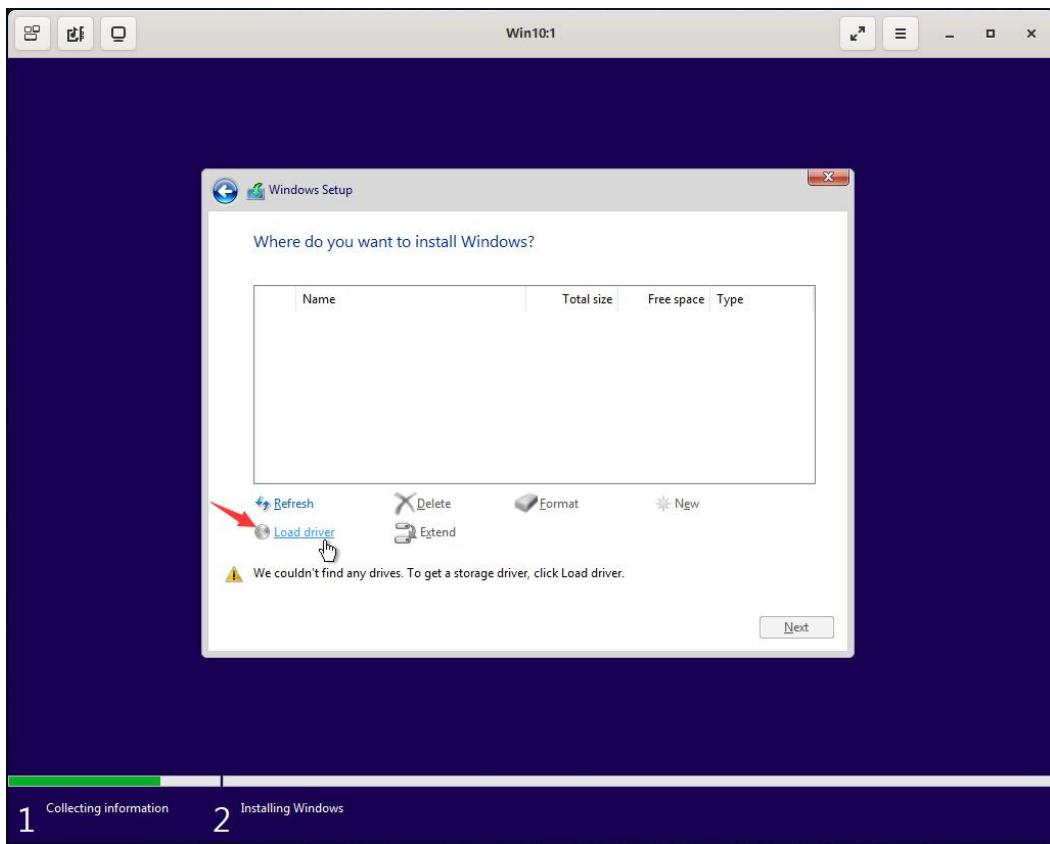
6) Change CD to **toolSetup.iso** → **OK**



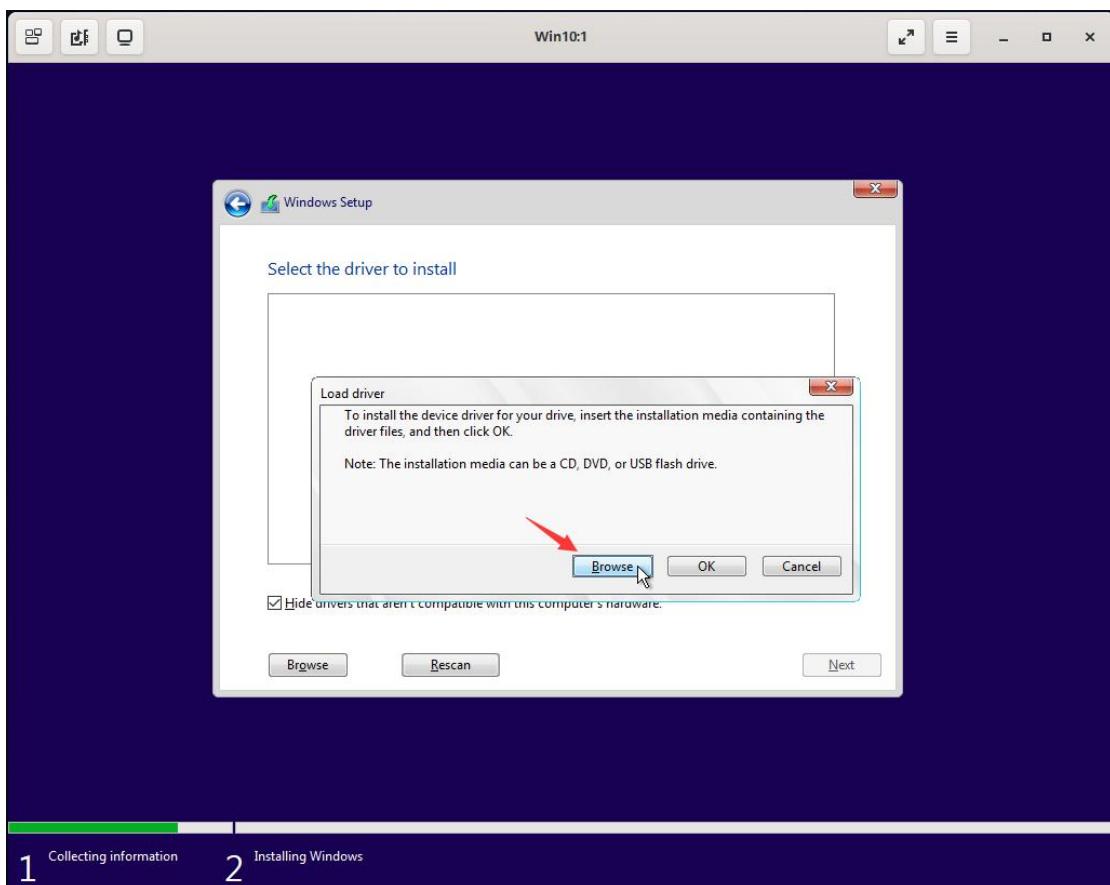
7) Click the console icon to return to the console.



8) Click **Load driver**

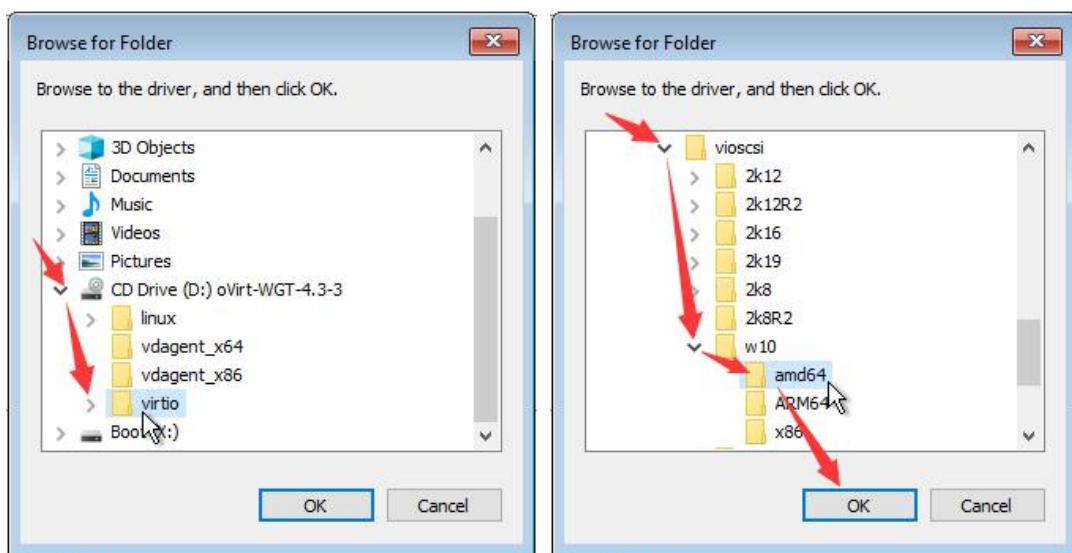


9) Click **Browse**

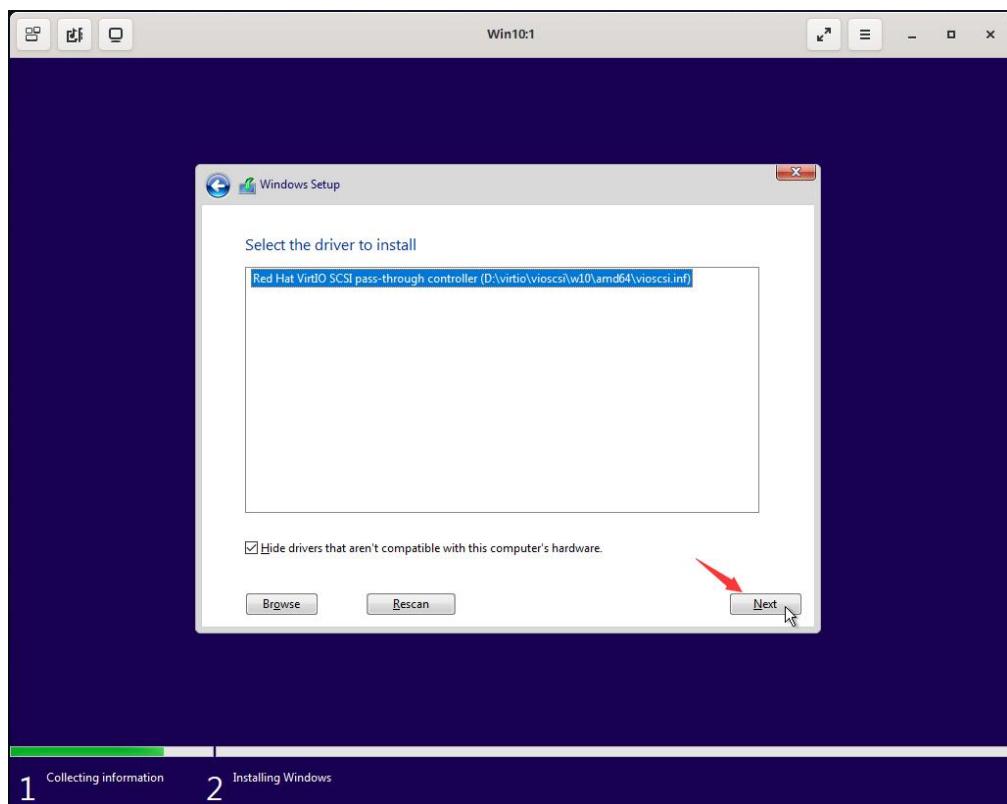


10) Unfold **CD Drive(D:)** → "virtio → vioscsi → select the driver of the current virtual machine system (e.g., win10 x64)

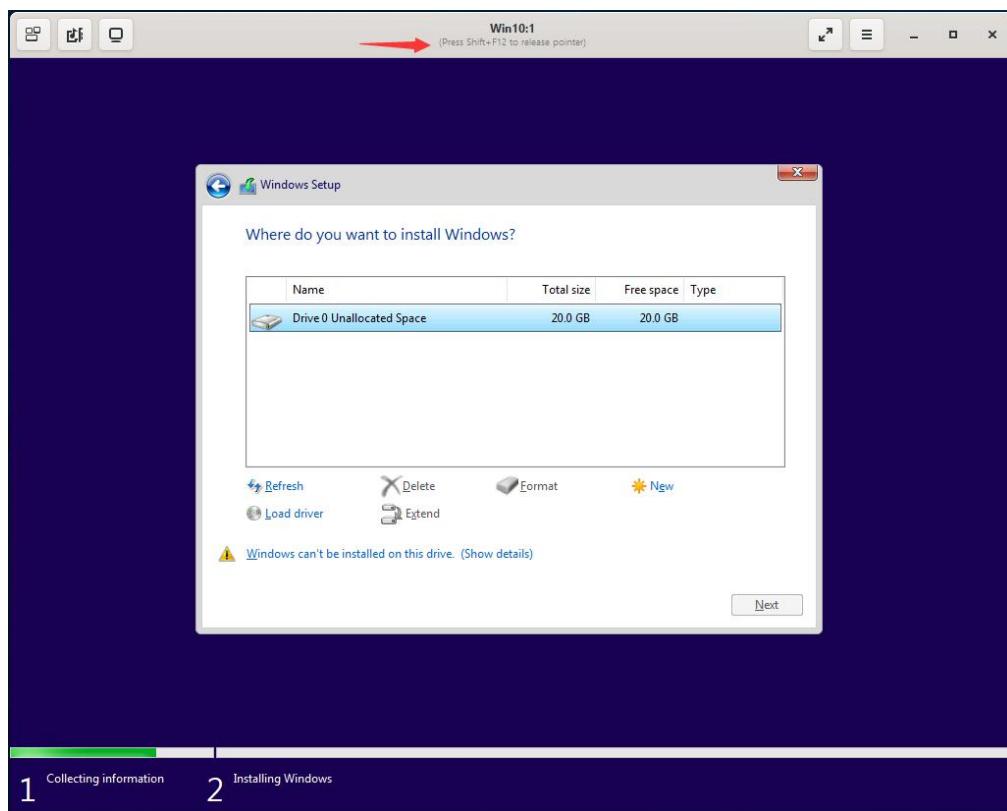
- The x86 folder for the 32-bit system, and amd64 folder for 64-bit system.



11) Click **Next** to begin install disk driver



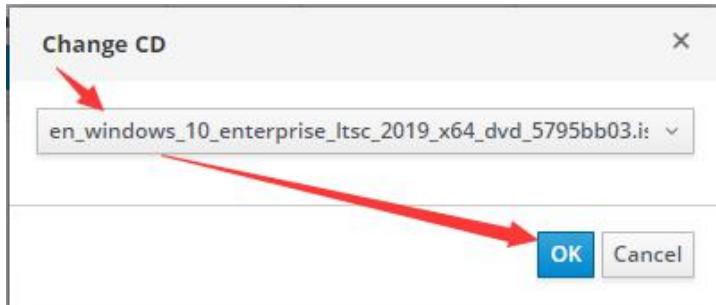
12) After the installation is completed, you can see the drive in the list. Press **Shift+F12** to release pointer



13) Back to **Virtual Machines** page and click the → **Change CD**



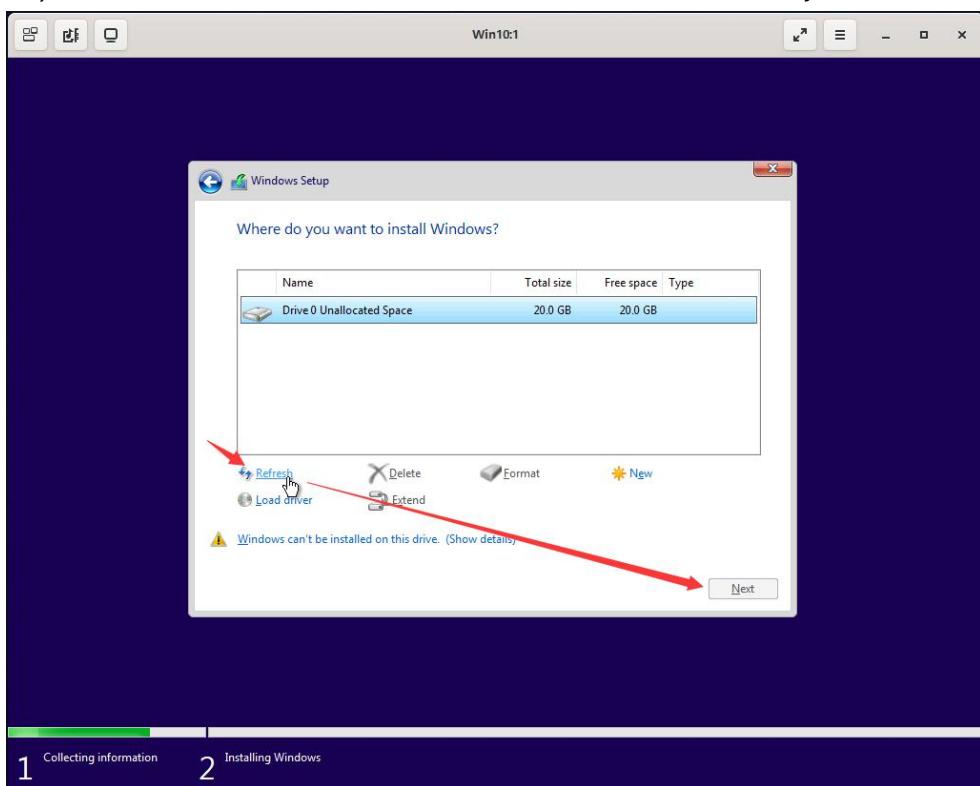
14) Change CD to Windows system ISO image → **OK**



15) Click the console icon to return to the console.

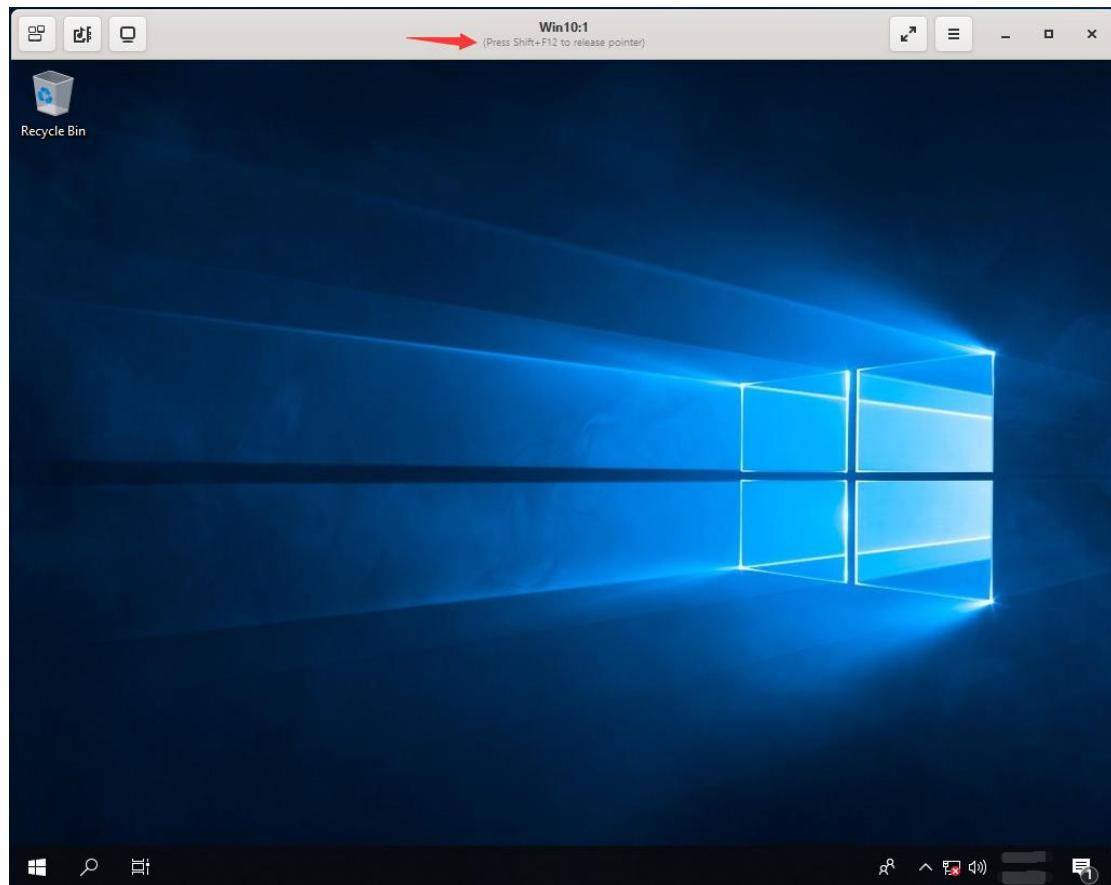


16) Click **Refresh** → Click **Next**, and then continue to install system

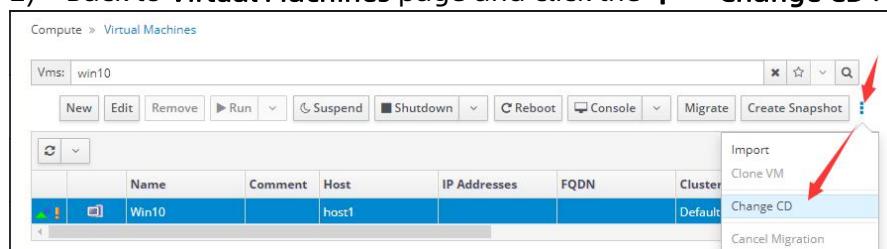


5.1.4 Completing system driver

- 1) After the installation is completed, it will automatically enter the system. Press Shift+F12 to release pointer



- 2) Back to Virtual Machines page and click the : → Change CD .



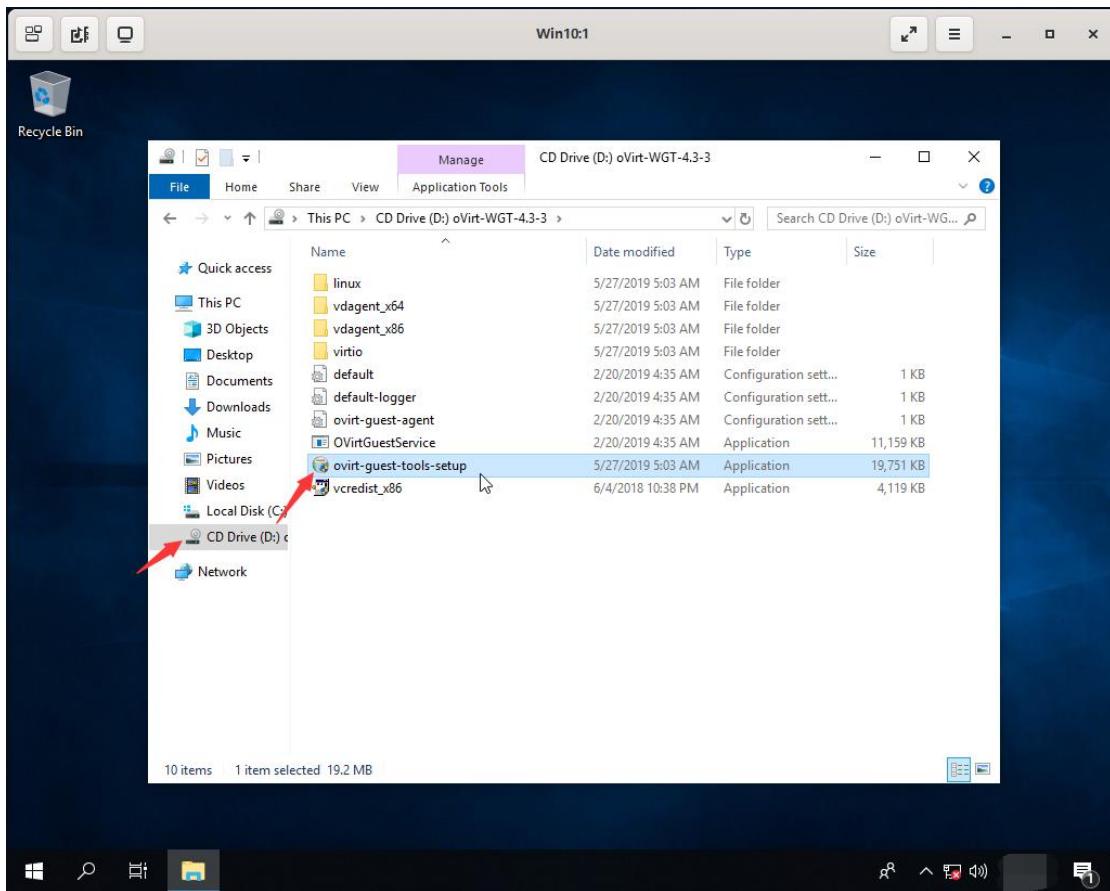
- 3) Change CD to toolsSetup.iso → OK



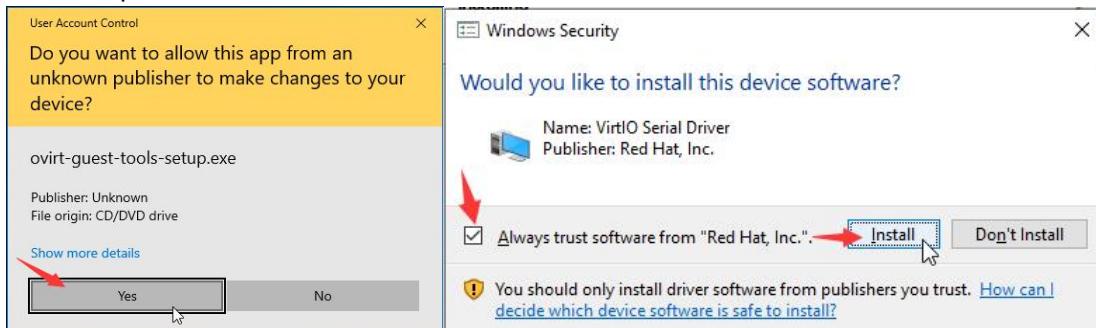
- 4) Click the console icon to return to the console.



- 5) Open CD drive (D:), run **ovirt-guest-tools-setup.exe**, install the system drivers

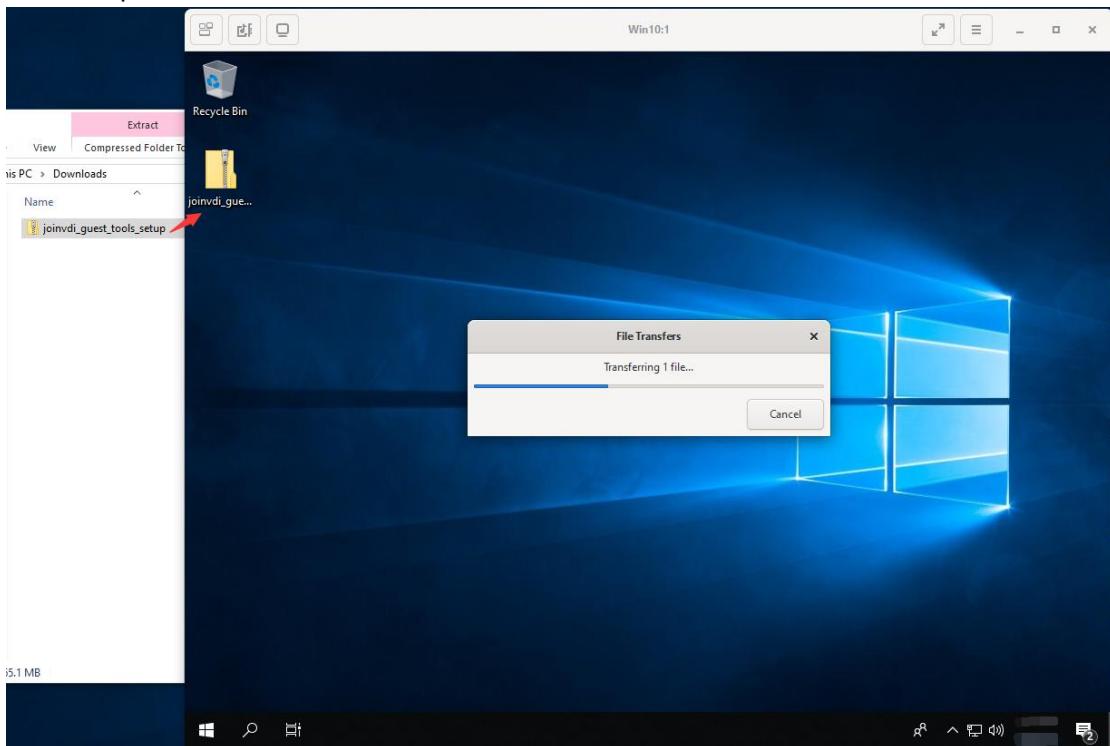


- 6) Click **Yes/Install** by default during the installation process, finally click **Finish** to complete the installation.

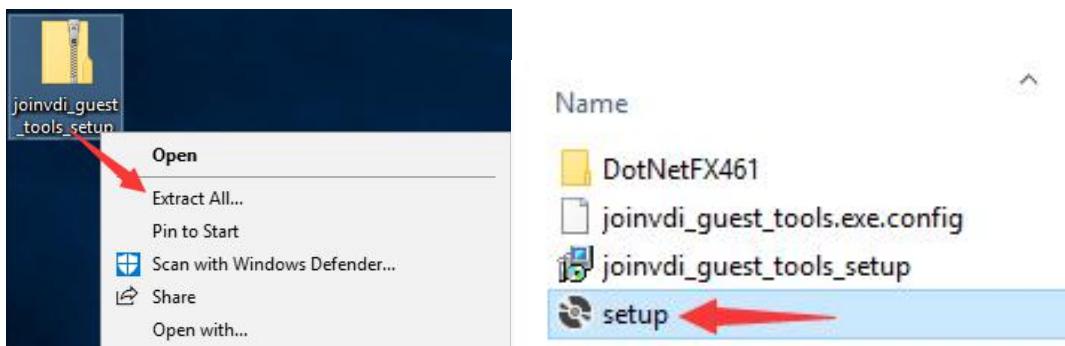


5.1.5 Install JoinVDI guest tools plug-in

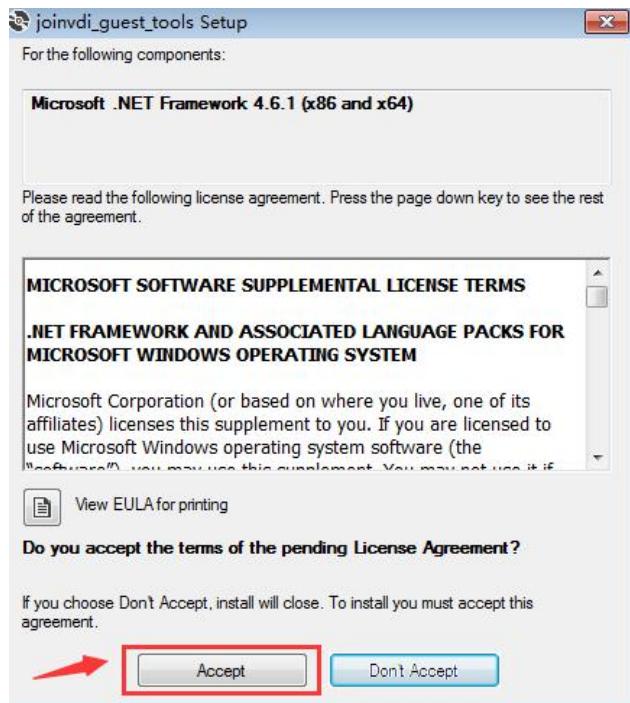
- 1) Drag the file **Joinvdi_guest_tools_setup.zip** to the console from Windows computer



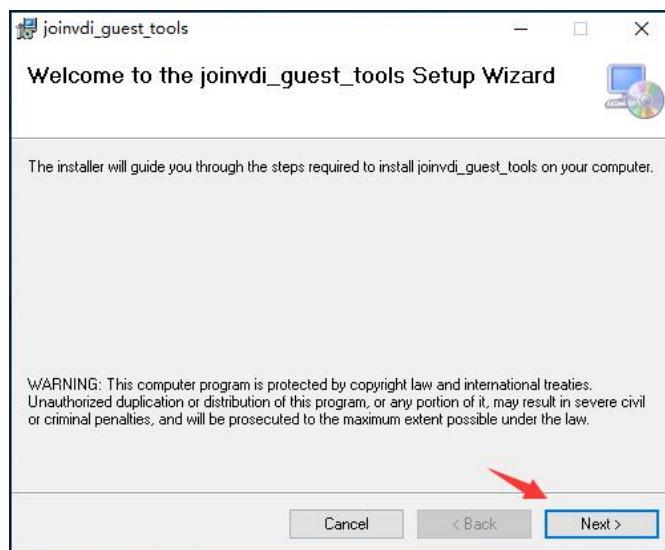
- 2) Unzip the file **Joinvdi_guest_tools_setup.zip**, open the folder and run the program **setup.exe**



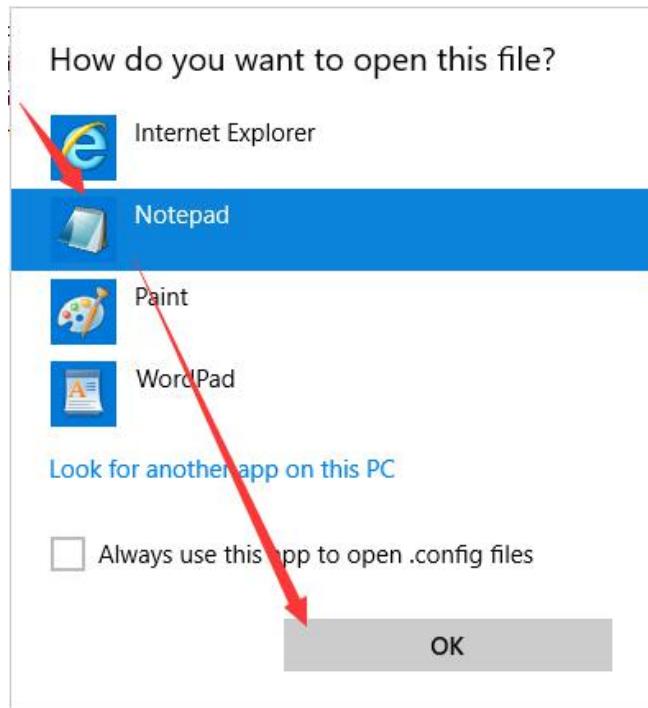
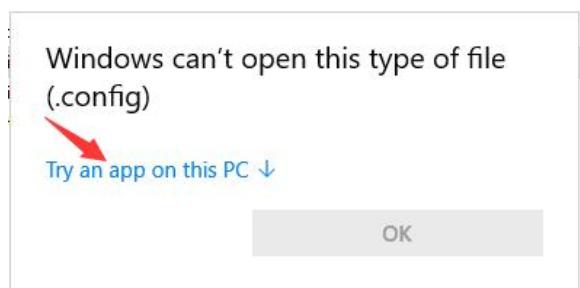
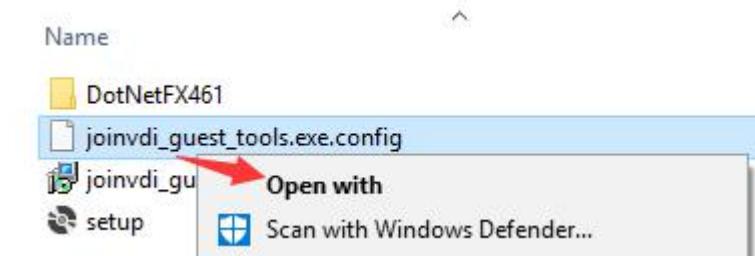
- 3) If you are running the **setup.exe** on a Windows 7, .NET4.6.1 need to be installed first.



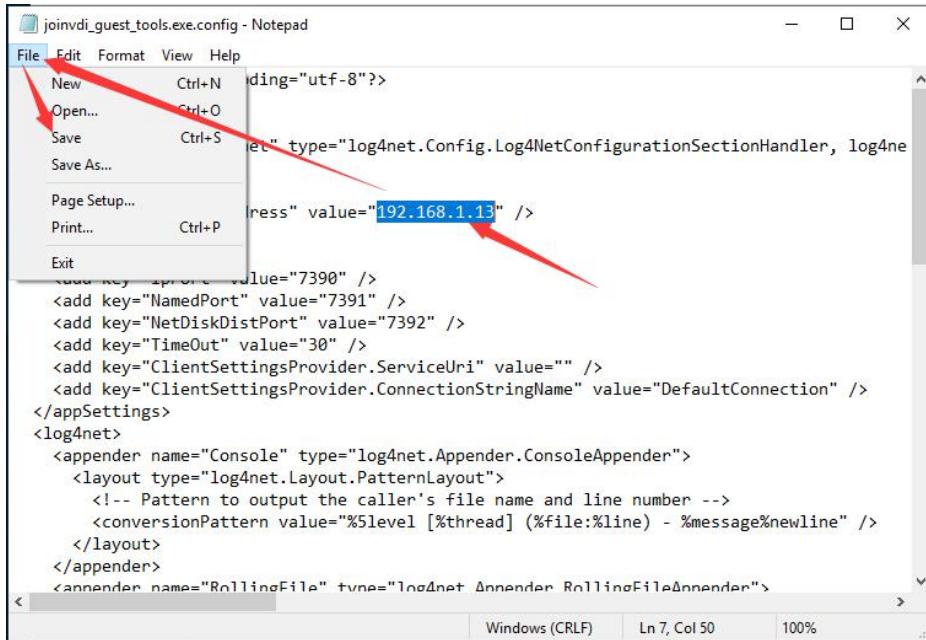
- 4) If you have already installed NET4.6.1, you can install **joinvdi_guest_tools** directly. Click **Next** by default until installation is complete.



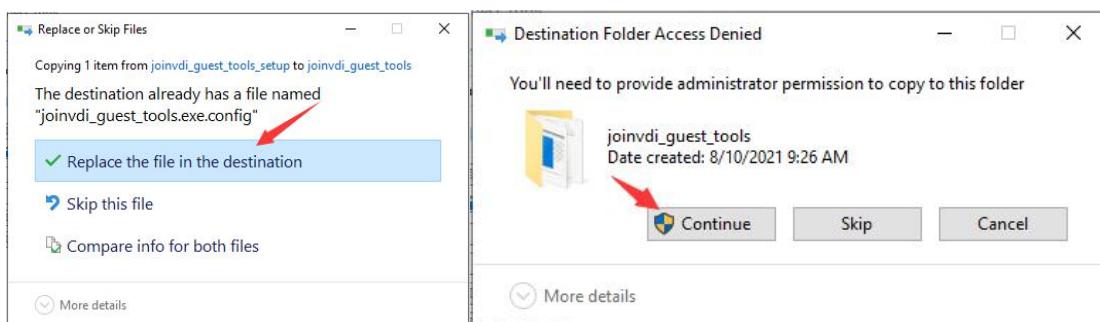
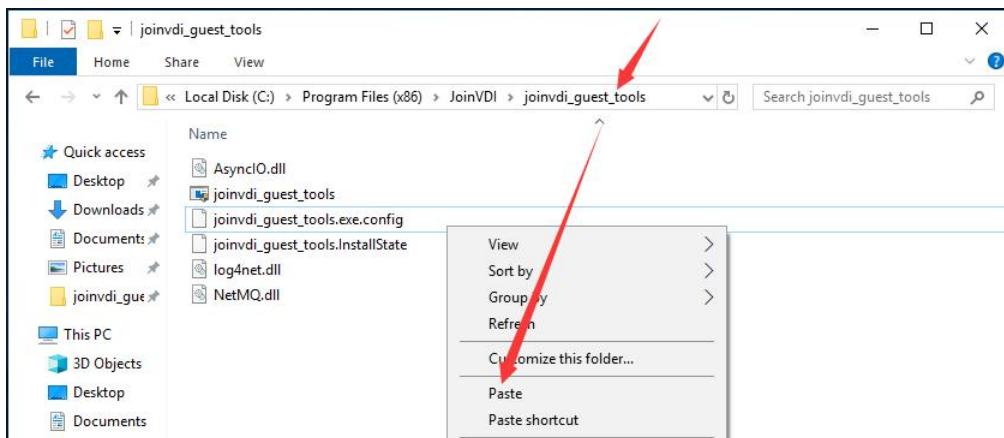
- 5) Open the **joinvdi_guest_tools.exe.config** file by Notepad.



- 6) Modify the value of the IP address in the text to the IP address of the server → Save.

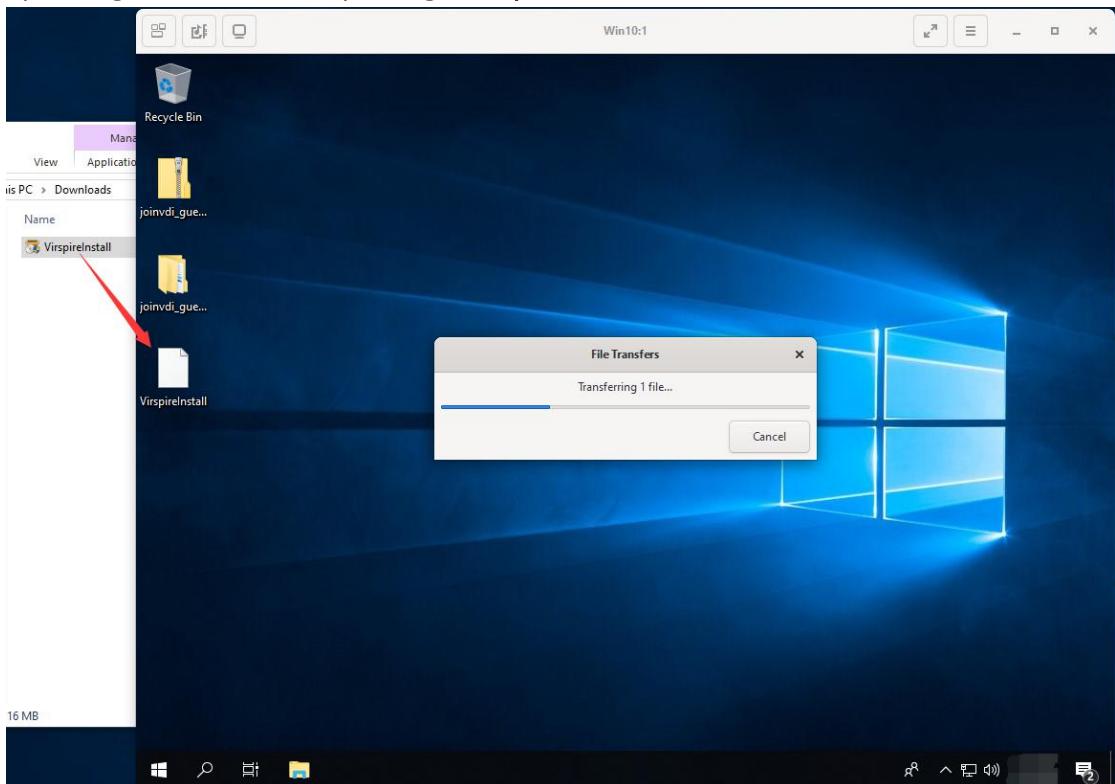


- 7) Copy the modified file **joinvdi_guest_tools.exe.config** to **C:\Program Files (x86)\JoinVDI\joinvdi_guest_tools** → select **Replace the file in the destination** → **Continue**.
- For 32-bit systems, please copy to **C:\Program Files\JoinVDI\joinvdi_guest_tools**

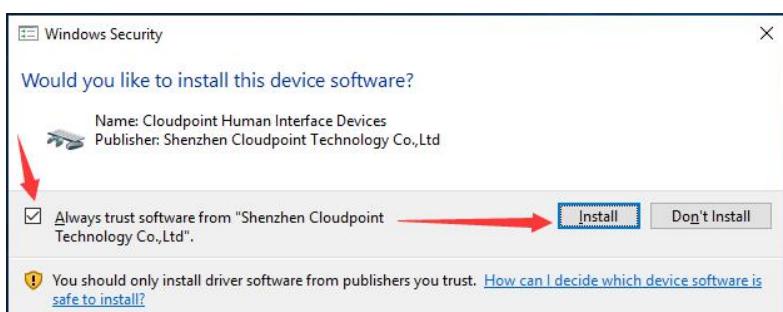
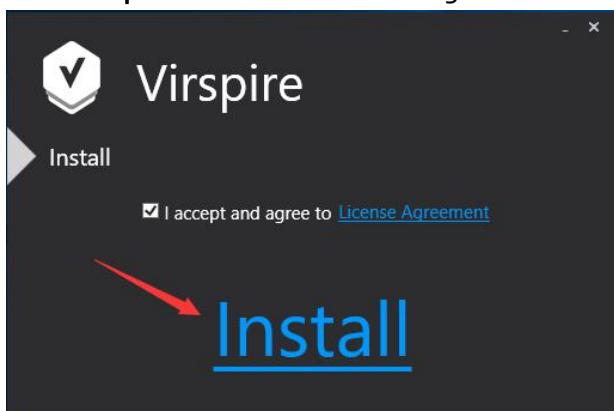


5.1.6 Install Virspire Desktop Agent

- 1) Drag the installation package **VirspireInstall.exe** into console.



- 2) Run the **VirspireInstall.exe** and click **Install**. Click **Install** when prompt **Windows Security** during installation. After the installation is complete, click **Install Completed** to enter the configuration wizard of Virspire.



- 3) Keep the default **13389** in **Connection Port**, click **Next**.

Connection Port:

13389 (0 - 65535)

- 4) Keep the default **Off** in **LAN broadcast**, click **Next**.

LAN broadcast:

Off

Hosts that turn off LAN broadcasts need to be manually added to the list of hosts.

- 5) Select the operation mode as **Connect to Desktop Controller; Desktop Controller manages desktop connections**, and enter the **Server Address**, e.g. 192.168.1.13, and click **Next**

Select the operation mode:

Work standalone with Desktop Agent; Connect with Windows accounts.

Connect to Desktop Controller; Desktop Controller manages desktop connections.

Server Address: 192.168.1.13

Address format: 192.168.1.123:15000 or example.com:15000, if the port is not defined, 15000 will be used as default port.

- 6) Keep the default **Off** in **Auto shutdown the terminal after the terminal user logs out**. Click **Next**

Auto shutdown the terminal after the terminal user logs out:

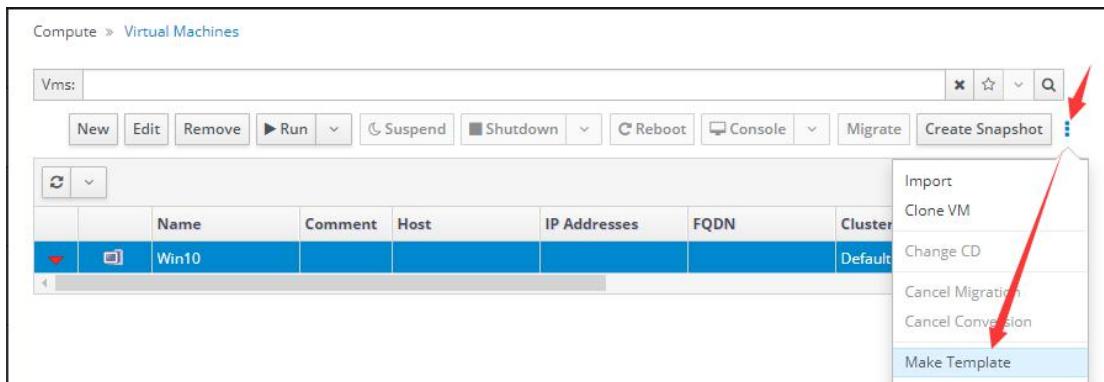
Off

- 7) Reboot the virtual machine as prompted, and then shut down the virtual machine.

- 8) The installation of the new virtual machine is complete.

5.2 Create a template

- 1) Ensure the virtual machine is powered down and select it, click **More Actions (:)**, then click **Make Template**



- 2) Enter a **Name** for the template, e.g. **Win10_template**, select the storage domain on which to store the disk from the Target drop-down. By default, these are the same as those of the source virtual machine. Click **OK**.

New Template

1

Name	Win10_template
Description	
Comment	
Cluster	Default/Default
CPU Profile	Default
<input type="checkbox"/> Create as a Template Sub-Version	

2

Disk Allocation:

Alias	Virtual Size	Format	Target	Disk Profile
Win10_Disk1	20 GiB	Raw	data_domain (32 G)	data_domain

Allow all users to access this Template
 Copy VM permissions
 Seal Template (Linux only)

OK Cancel

- 3) The virtual machine displays a status of **Image Locked** while the template is being created. When complete, the virtual machine status will return to Down after completion.

The screenshot shows the 'Compute > Virtual Machines' page. At the top, there's a toolbar with buttons for New, Edit, Remove, Run, Suspend, Shutdown, Reboot, Console, Migrate, Create Snapshot, and more. Below the toolbar is a table header with columns: Name, Comment, Host, IP Addresses, FQDN, Cluster, and Data Center. A single row is visible, showing 'Win10' in the Name column. Above the table, the status 'Image Locked' is displayed. A red arrow points to the 'Image Locked' status.

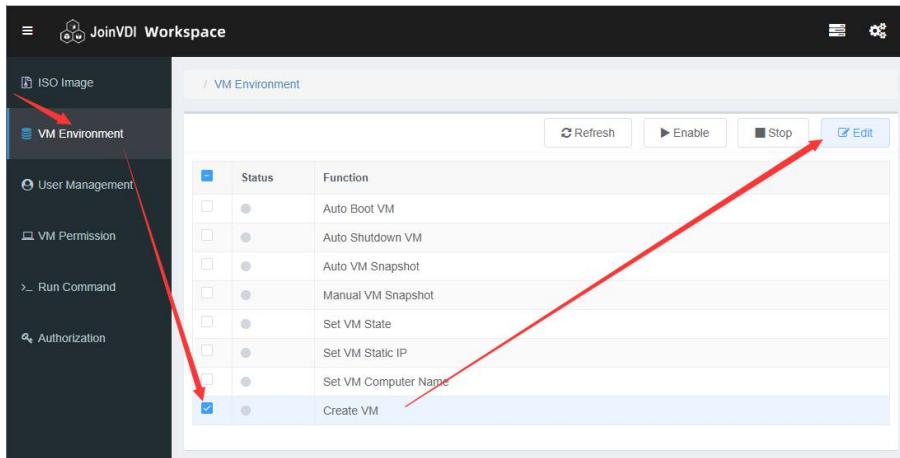
- 4) Click **Compute** → **Template** to check the created template.

The screenshot shows the main navigation menu. On the left, there are links for Dashboard, Network, Storage, Administration, and Events. On the right, under the 'Compute' heading, there are links for Virtual Machines, Templates, Pools, Hosts, Data Centers, and Clusters. A red arrow points from the 'Compute' link in the main menu to the 'Templates' link under the Compute section.

The screenshot shows the 'Compute > Templates' page. At the top, there's a search bar labeled 'Template:' and a toolbar with buttons for Import, Edit, Remove, Export, and New VM. Below the toolbar is a table header with columns: Name, Version, Comment, Creation Date, Status, Cluster, and Data Center. Two rows are visible: 'Blank' and 'Win10_template'. The 'Win10_template' row has 'OK' in the Status column and 'Default' in the Cluster and Data Center columns. A red arrow points to the 'Win10_template' entry.

5.3 Batch create virtual machines

- 1) Navigate to [https://\[Host IP\]:8080](https://[Host IP]:8080) in Chrome browser, e.g. <https://192.168.1.13:8080>. Click **VM Entertainment**, check **Create VM** and click **Edit**



- 2) Check **Select VM** or **Select Template** to create virtual machines. The entered **VM Name** or **Template Name** must be completely correct. You can customize the numbering of the **New VM Name** with **??** as a placeholder. e.g. **Win10-??**, **Win10-??-test**.

The dialog box is titled 'Batch Create VM'. It has three radio button options: 'Pattern' (disabled), 'Select VM' (disabled), and 'Select Template' (selected, indicated by a blue circle). Below the radio buttons are input fields: 'Template Name' (Win10_template), 'New VM Name' (Win10-??), and 'Count' (50). A note at the bottom says 'From Win10-01 to Win10-50'. At the bottom is a blue 'Run' button.

The screenshot shows the 'Compute > Virtual Machines' list. The table has columns: Name, Comment, Host, IP Addresses, FQDN, Cluster, and Data Center. There are 51 entries, all named 'Win10' followed by a number from 01 to 51. The first few rows are expanded to show more details.

	Name	Comment	Host	IP Addresses	FQDN	Cluster	Data Center
▼	Win10					Default	Default
▼	Win10-01					Default	Default
▼	Win10-02					Default	Default
▼	Win10-03					Default	Default
▼	Win10-04					Default	Default
▼	Win10-05					Default	Default
▼	Win10-06					Default	Default
▼	Win10-07					Default	Default
▼	Win10-08					Default	Default
▼	Win10-09					Default	Default
▼	Win10-10					Default	Default
▼	Win10-11					Default	Default
▼	Win10-12					Default	Default

5.4 Create users

- 1) Navigate to [https://\[Host IP\]:8080](https://[Host IP]:8080) in Chrome browser. Click **User Management**, click **Create User**

The screenshot shows the 'JoinVDI Workspace' interface. On the left, there's a sidebar with links: ISO Image, VM Environment, **User Management** (highlighted with a red arrow), VM Permission, and Run Command. The main content area is titled '/ User Management'. It has tabs for 'User' and 'Group', buttons for 'Refresh', 'Delete', '+ Create Group', and '+ Create User' (highlighted with a red arrow). Below these are columns for Username, Display Name, Description, and Group. A message 'No Data' is shown. At the bottom, there are pagination controls: 'Total 0', '100/page', and 'Go to 1'.

- 2) Choose **Create Single** or **Create Multiple** to create users, there are no password strength requirement.

The screenshot shows the 'Create User' dialog. It has two tabs: 'Create Single' (selected, highlighted with a red arrow) and 'Create Multiple'. The 'Create Single' tab contains fields: 'Username' (user), 'Password', 'Confirm Password', and 'Group' (Select ...). At the bottom are 'Confirm' and 'Cancel' buttons.

The screenshot shows the 'Create User' dialog with the 'Create Multiple' tab selected (highlighted with a red arrow). It includes fields: 'Username' (user), 'Count' (50), 'Digit' (2), 'Start' (1), 'Group' (Select ...), 'Password Category' (Unified Password selected), 'Password', and 'Confirm Password'. A note at the bottom says '从 user01 至 user50'. At the bottom are 'Confirm' and 'Cancel' buttons.

5.5 Assign virtual machines to users

- 1) Click **VM Permission**, click **+Create**, bind users and virtual machines

The screenshot shows the 'JoinVDI Workspace' interface. On the left, there's a sidebar with options: ISO Image, VM Environment, User Management, VM Permission (which is highlighted with a red arrow), and Run Command. The main content area is titled '/ VM Permission'. It has tabs for 'User' and 'Group'. There are buttons for Refresh, Delete, and '+ Create'. Below these are two tables: 'VM' and 'VM Pool'. The 'VM' table lists ten virtual machines named Win10-01 through Win10-10, each with a checkbox. The 'VM Pool' table lists ten users named user01 through user10, also with checkboxes. At the bottom, it says 'Selected 50' under both sections. There are 'Confirm' and 'Cancel' buttons at the bottom right.

This is a detailed view of the 'VM Permission' dialog box. It contains two tables: 'VM' and 'VM Pool'.
The 'VM' table has the following data:

VM	Name
<input checked="" type="checkbox"/>	Win10-01
<input checked="" type="checkbox"/>	Win10-02
<input checked="" type="checkbox"/>	Win10-03
<input checked="" type="checkbox"/>	Win10-04
<input checked="" type="checkbox"/>	Win10-05
<input checked="" type="checkbox"/>	Win10-06
<input checked="" type="checkbox"/>	Win10-07
<input checked="" type="checkbox"/>	Win10-08
<input checked="" type="checkbox"/>	Win10-09
<input checked="" type="checkbox"/>	Win10-10

The 'VM Pool' table has the following data:

User	Username	Display Name
<input checked="" type="checkbox"/>	user01	
<input checked="" type="checkbox"/>	user02	
<input checked="" type="checkbox"/>	user03	
<input checked="" type="checkbox"/>	user04	
<input checked="" type="checkbox"/>	user05	
<input checked="" type="checkbox"/>	user06	
<input checked="" type="checkbox"/>	user07	
<input checked="" type="checkbox"/>	user08	
<input checked="" type="checkbox"/>	user09	
<input checked="" type="checkbox"/>	user10	

At the bottom, it says 'Selected 50' under both sections. There are 'Confirm' and 'Cancel' buttons at the bottom right.

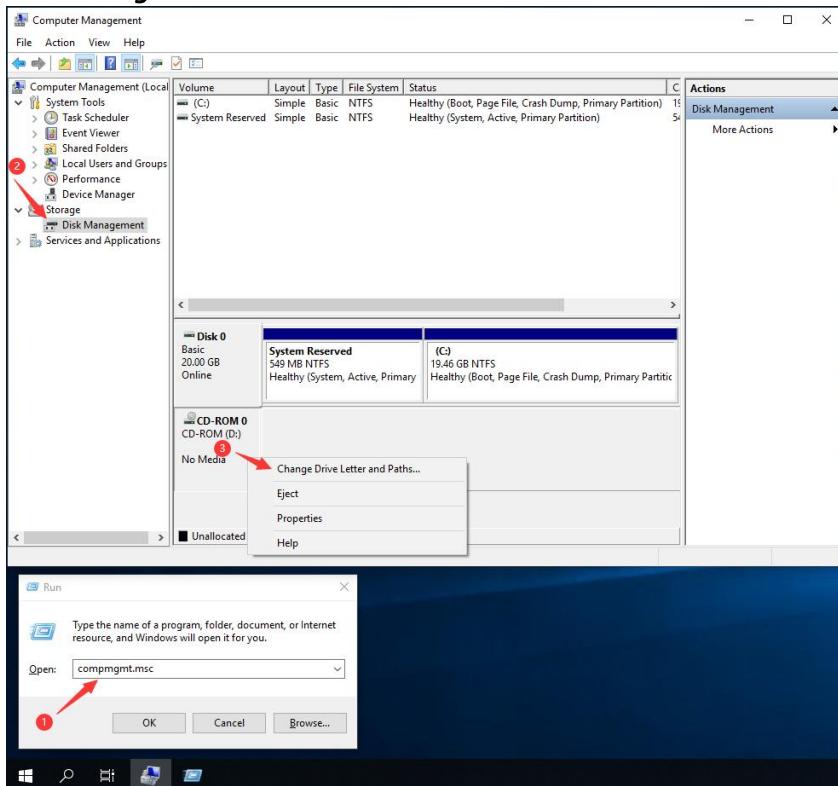
5.6 Connect the zero client to virtual machine

- 1) Power on the zero client, you can set **Language**, **Resolution**, **Network** at the top of the login interface.
 - 2) After the network is connected, the **Connection Broker** will automatic searched in the host list.
 - 3) Chose the **Connection Broker**, enter the user name and password, login to get the virtual machines.
 - 4) Chose a virtual machine, click **login** to boot the virtual machine and display the screen.
- If the **Connection Broker** not automatic searched in the host list. Please manually add the server IP.
 - Confirm that the terminal is updated to the latest firmware, you can contact the solution provider for details.
 - It's not recommended access the virtual machine by console  after the zero client, login the virtual machine, so as to avoid the service exception caused by the resolution conflict.

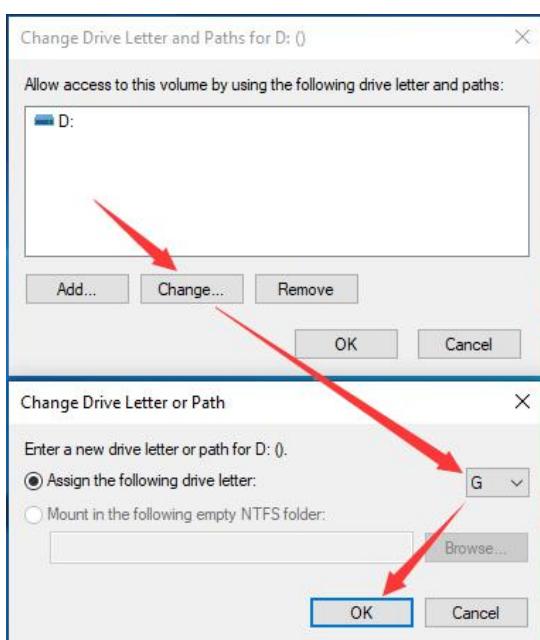
6. Appendixes:

6.1 Change Drive Letter of Windows Virtual Machine

- 1) Press **Win+R** in virtual machine, enter **compmgmt.msc**, then **Enter** to open **Computer Management**. Click **Disk Management**. Right-click **CD-ROM** → **Change Drive Letter and Paths...**



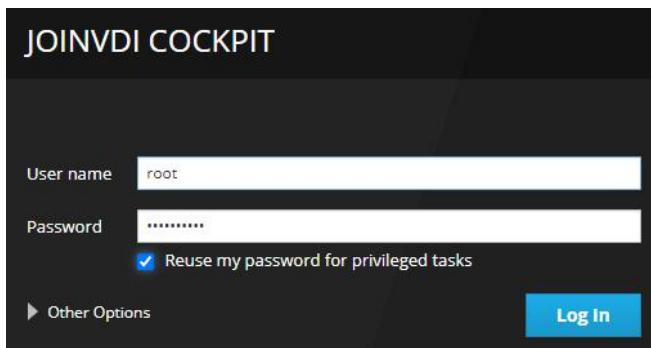
- 2) Change Drive Letter D to others. E.g., Drive Letter G.



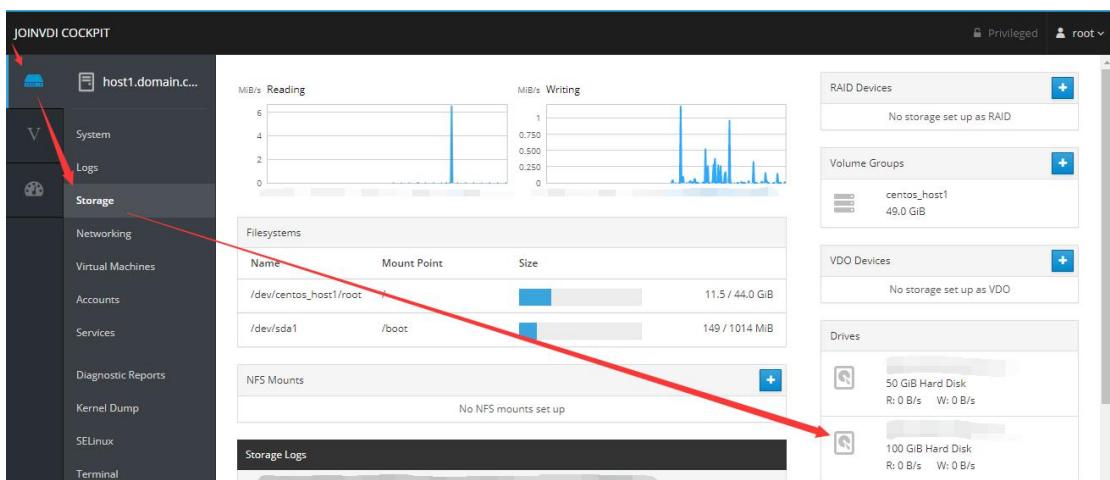
6.2 Add a hard disk to server

6.2.1 Mount a hard disk to the system

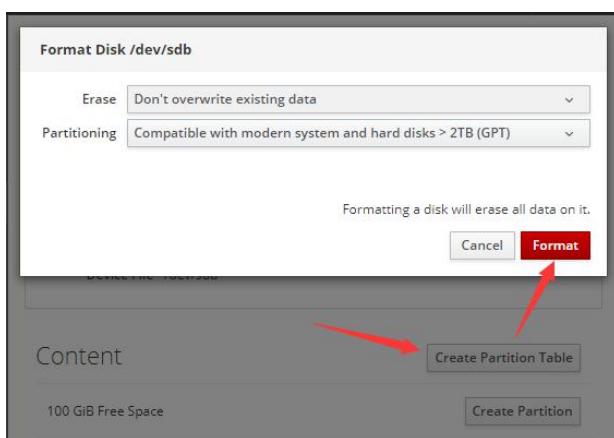
- 1) Navigate to [https://\[Host IP\]:9090](https://[Host IP]:9090), e.g. <https://192.168.1.13:9090>, enter **root** in **User name**, enter root password in **Password**, and click **Log In**.



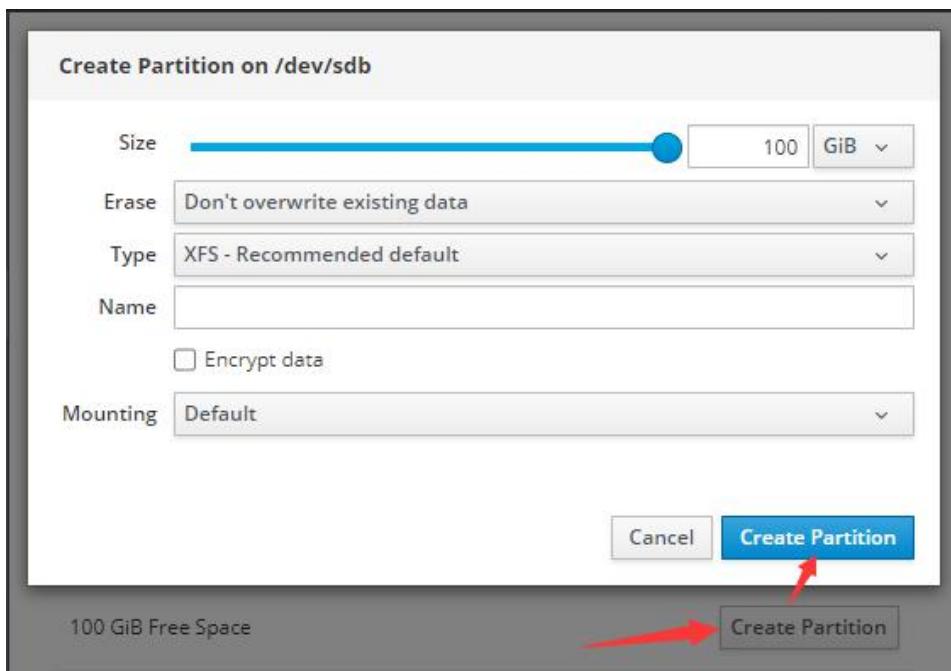
- 2) Click **localhost** → **Storage**, select the new hard disk.



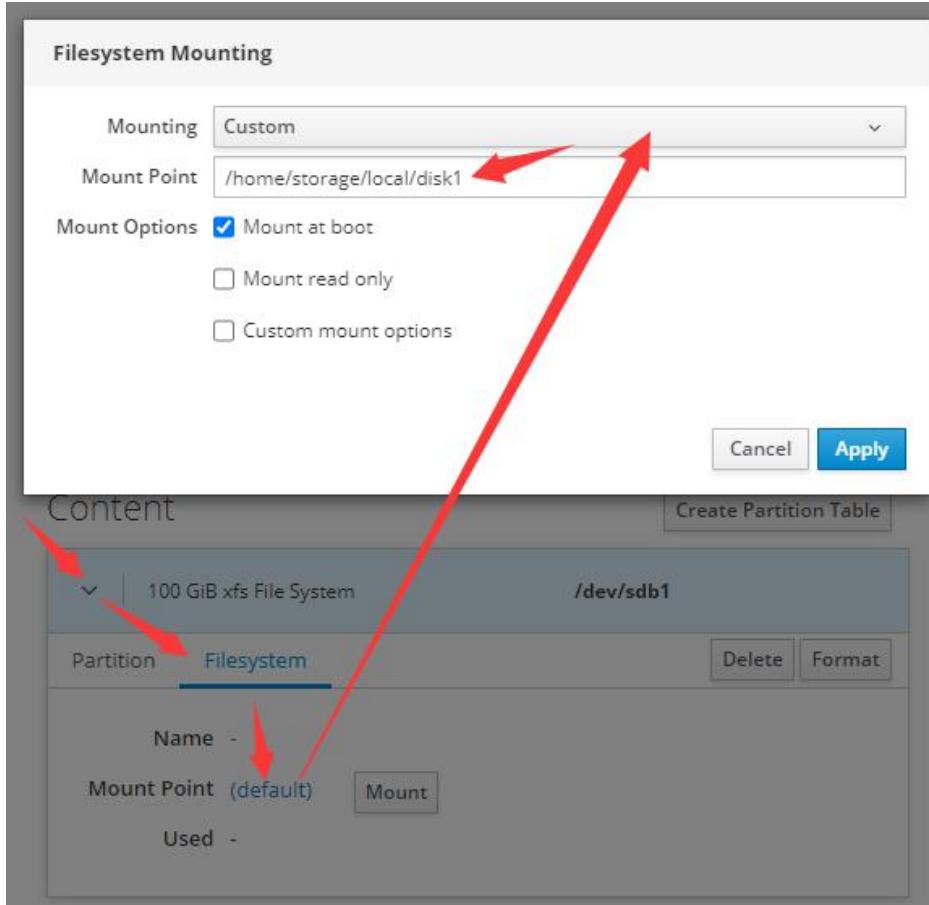
- 3) Click **Create Partition Table**. In the pop-up window, keep the default option and click **Format**.



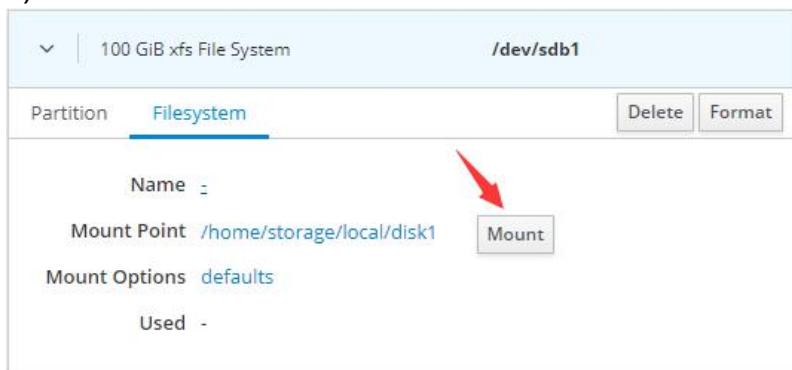
4) Click **Create Partition**.



5) Unfold the content, chose **Filesystem**, click **(default)** to set **Mount Point**, select **custom** in Mounting, enter the path **/home/storage/local/disk1** in Mount Point, and click **Apply**.

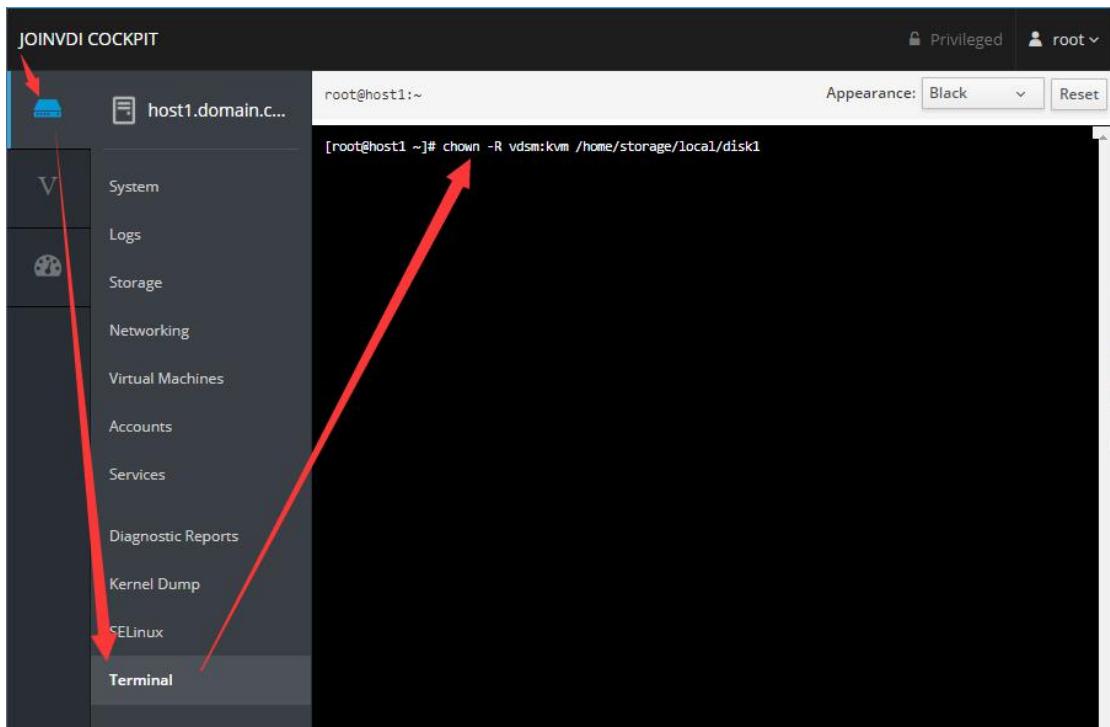


6) Click **Mount**.



7) Click **terminal**, copy the command **chown -R vdsd:kvm**

/home/storage/local/disk1 and paste here, press **Enter** to change the path permission.



- Below are the default paths, can be used directly when adding a hard disk in the future.

[/home/storage/local/disk2](#)

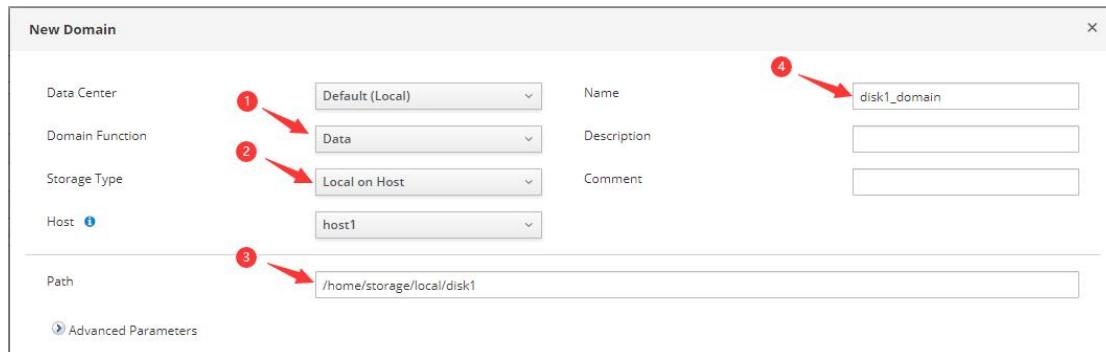
[/home/storage/local/disk3](#)

[/home/storage/local/disk4](#)

[/home/storage/local/disk5](#)

6.2.2 Add a hard disk to the storage domain

Navigate to <https://Host IP>, Click **Storage** → **Domains** → **New Domain** to add a new storage domain.



6.3 Add a new virtual disk to the virtual machine

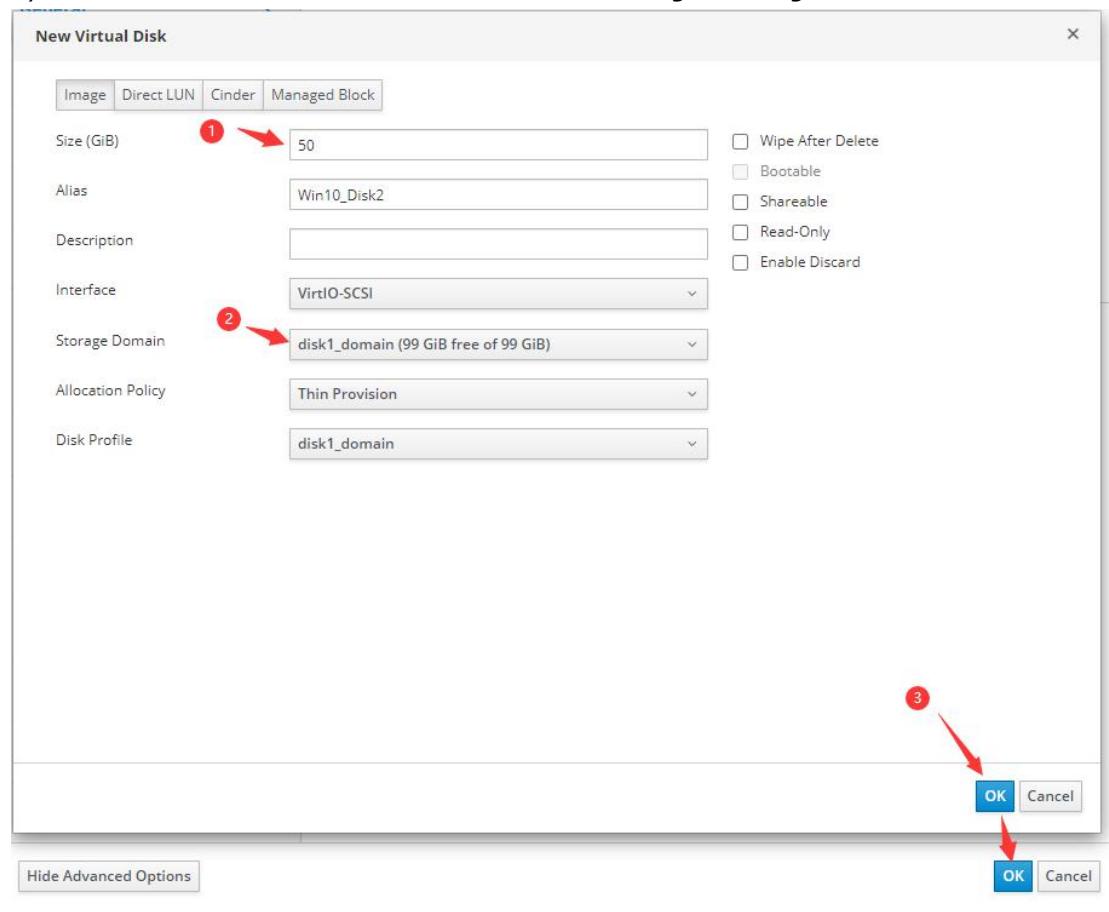
- Select the virtual machine and click **Edit**.

The screenshot shows the 'Virtual Machines' section of the JoinVDI Virtualization Manager. At the top, there's a toolbar with buttons for 'New', 'Edit', 'Remove', and others. Below the toolbar is a table listing a single VM named 'Win10'. A red arrow points to the 'Edit' button in the toolbar.

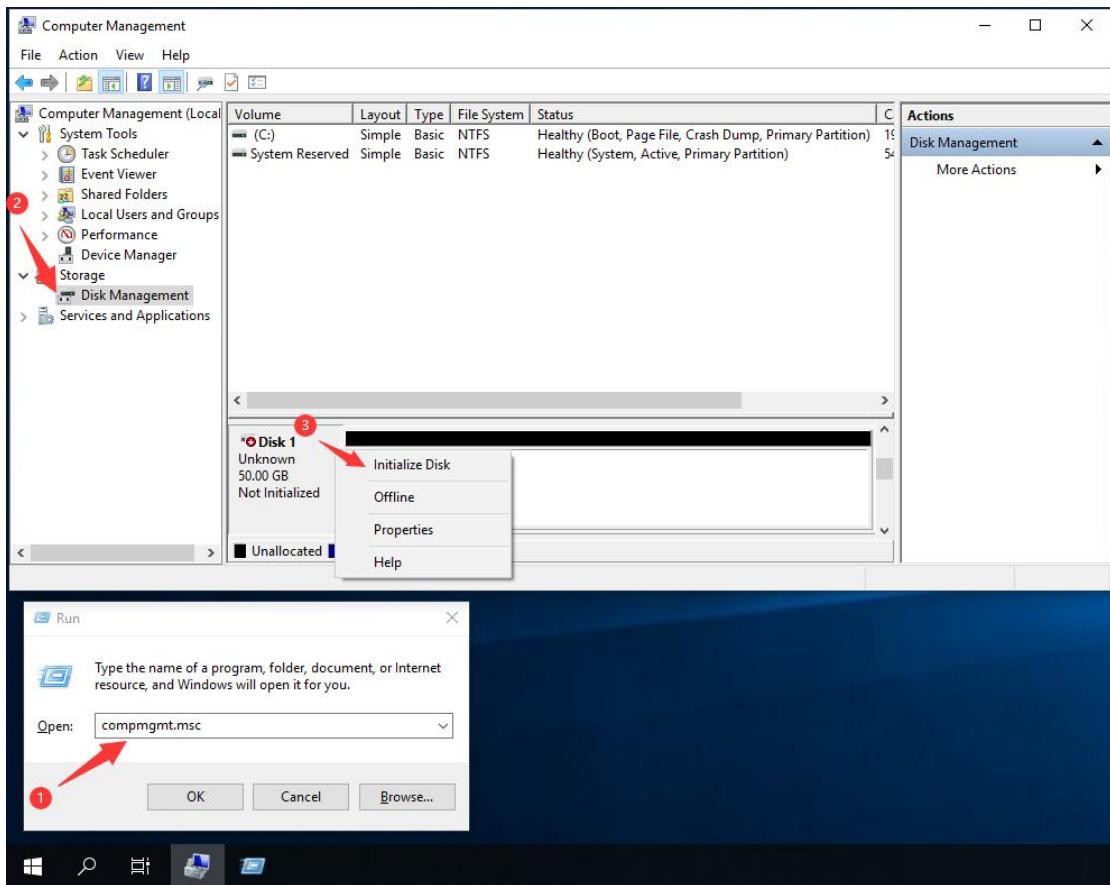
- Click **+** → **Create**.

The screenshot shows the 'Edit Virtual Machine' dialog box. On the right side, there's a section for managing disks. It shows one disk entry: 'Win10_Disk1: (20 GB) existing (boot)'. To the right of this entry are three buttons: 'Edit', '+', and '-'. A red arrow points to the '+' button. At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

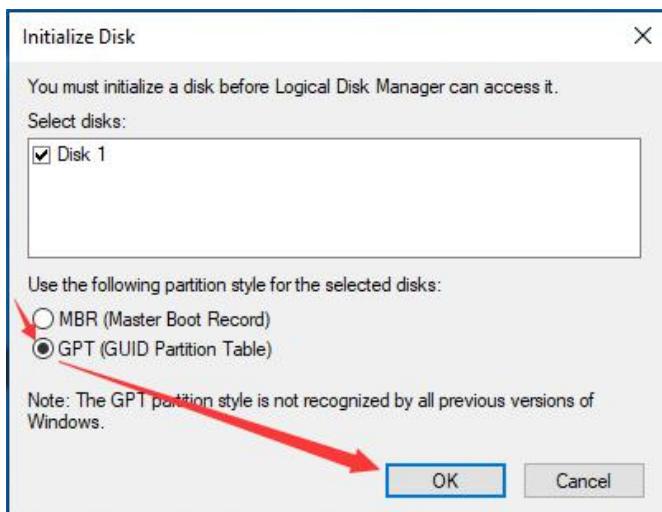
3) Enter the size of the virtual disk, select the target storage domain. And click **OK**.



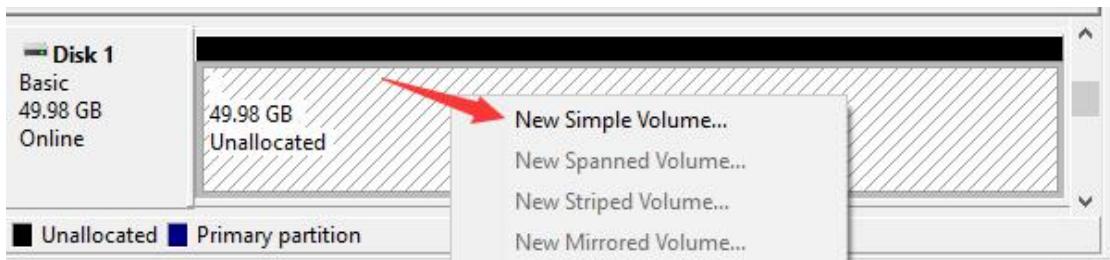
- 4) Press **Win+R** in virtual machine to open the Run dialog box, enter **compmgmt.msc**, press **Enter** to open **Computer Management**.
Click **Disk Management**. Right-click the new disk, and click **Initialize Disk**.



- 5) Choose **GPT** → **OK**.



- 6) Right-click, and then click **New Simple Volume**.



- 7) Click **Next** according to the wizard, and then finish to create a new simple volume.

