



NSFOCUS vNTA

Installation and Deployment Guide



Version: V4.5R90F06 (2024-12-26)

Confidentiality: RESTRICTED

© 2024 NSFOCUS

■ Copyright © 2024 NSFOCUS Technologies, Inc. All rights reserved.

Unless otherwise stated, **NSFOCUS Technologies, Inc.** holds the copyright for the content of this document, including but not limited to the layout, figures, photos, methods, and procedures, which are protected under the intellectual property and copyright laws. No part of this publication may be reproduced or quoted, in any form or by any means, without prior written permission of **NSFOCUS Technologies, Inc.**

■ Statement

The purchased products, services, or features are stipulated in the contract made between NSFOCUS and the customer. Part of products, services, and features described in this document may not be within the purchased scope or the usage scope.

All information in this document is provided "AS-IS" without guarantees of any kind, express or implied. The information in this document is subject to change without notice. It may slightly differ from the actual product due to version upgrade or other reasons.

■ Disclaimer

Please read the disclaimer carefully before using the product. Once you use the product, you acknowledge and agree to all the contents of this disclaimer. NSFOCUS shall not assume any responsibility for any loss or damage in the following circumstances:

- Data loss and system availability reduction caused by the negligence or misconduct of the system O&M or management personnel, for example, they do not handle alerts that affect system stability and availability in a timely manner.
 - Data loss and system availability reduction caused by the fact that the traffic exceeds the planned hardware capacity.
 - Data loss and system availability reduction or unavailability caused by natural disasters (including but not limited to floods, fires, and earthquakes) or environmental factors (including but not limited to network disconnection and power outage).
-

Contents

Preface	1
1 Configuration Requirements.....	3
1.1 Configuration Requirements of VMware ESXi	3
1.1.1 Version Requirement.....	3
1.1.2 Configuration Requirements	3
1.2 Configuration Requirements of QEMU KVM	4
1.2.1 Version Requirement.....	4
1.2.2 Configuration Requirements	4
2 Deployment on VMware ESXi	5
2.1 Importing the Virtual Template of vNTA	5
2.2 Configuring vNTA	9
2.2.1 Login via the Console	9
2.2.2 Network Configuration	10
2.2.3 Login via the Web	11
2.2.4 License Import	14
3 Deployment on QEMU KVM	20
3.1 Preparations for vNTA Installation.....	20
3.1.1 Enabling Virtualization	20
3.1.2 Installing KVM	25
3.1.3 Configuring the Network Bridge Connection	25
3.1.4 Modifying the Configuration File	27
3.2 vNTA Installation	27
3.2.1 Importing the vNTA Image	27
3.2.2 Enabling vNTA	28
3.2.3 Login via the Console	28
3.2.4 Network Configuration	29
A Default Parameters	30
A.1 Default Network Settings	30
A.1.1 Local Interfaces.....	30
A.1.2 Default Gateway	30
A.2 Default Accounts	30
A.3 Console Communication Parameters.....	30

B FAQ	31
--------------------	-----------

Preface

This document briefly describes virtual NSFOCUS Network Traffic Analyzer (vNTA) and details how to deploy and install it.

This document is provided for reference only. It may slightly differ from the actual product due to version upgrade of the virtual platform or other reasons.

Organization





Chapter	Description
1 Configuration Requirements	Describes configuration requirements of VMware ESXi and QEMU KVM.
2 Deployment on VMware ESXi	Describes how to import and configure vNTA on the VMware ESXi platform.
3 Deployment on QEMU KVM	Describes how to import and configure vNTA on the QEMU KVM platform.
A Default Parameters	Describes factory defaults of vNTA.
B FAQ	Describes questions frequently asked during product installation and answers to these questions.

Change History

Version	Description
V4.5R90F06	Updated the document template.
V4.5R90F03	Added deployment on QEMU KVM.
V4.5R89F01	First issue.

Conventions

Convention	Description
Bold font	Keywords, names of screen elements like buttons, drop-down lists or fields, and user-entered text appear in bold font.
<i>Italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in italic font.

Convention	Description
 Note	Reminds users to take note.
 Tip	Indicates a tip to make your operations easier.
 Caution	Indicates a situation in which you might perform an action that could result in equipment damage or loss of data.
 Warning	Indicates a situation in which you might perform an action that could result in bodily injury.
A > B	Indicates selection of menu options.

Technical Support

Hardware and Software Support

Email: support@nsfocusglobal.com

Cloud Mitigation Support

Email: cloud-support@nsfocusglobal.com

Phone:

- USA: +1-844-673-6287 or +1-844-NSFOCUS
- UK: +44 808 164 0673 or +44 808 164 0NSF
- Australia: +61 2 8599 0673 or +61 2 8599 0NSF
- Netherlands: +31 85 208 2673 or +31 85 208 2NSF
- Brazil: +55 13 4042 1673 or +55 13 4042 1NSF
- Japan: +81 3-4510-8673 or +81 3-4510-8NSF
- Singapore: +65 3158 3757
- Hong Kong +852 5803 2673 or +852 5803 2NSF
- Middle East: +973 1619 7607

Documentation Feedback

For any query regarding the usage of the documentation, you can contact us:

Email: info-support@nsfocus.com

1 Configuration Requirements

This chapter describes configuration requirements of VMware ESXi and QEMU KVM.

1.1 Configuration Requirements of VMware ESXi

This chapter describes configuration requirements of the VMware ESXi platform.

1.1.1 Version Requirement

Currently, NTA-VM supports only VMware ESXi 5.5 and 6.0. For other virtualization platforms, you need to use appropriate software to convert them to a platform that is compatible with vNTA.

1.1.2 Configuration Requirements

Make sure that VMware ESXi at least meets configuration requirements listed in [Table 1-1](#).

Table 1-1 Reference configuration of VMware ESXi

Item	Reference Configuration
CPU	Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz 24 threads
Memory	32 GB
Hard disk drive	≥ 2 TB
NIC	2



If the resources assigned to VMware ESXi cannot meet configuration requirements, the system will possibly work improperly.

1.2 Configuration Requirements of QEMU KVM

This chapter describes configuration requirements of the QEMU KVM platform.

1.2.1 Version Requirement

QEMU KVM 1.5.3 or later versions are required.

1.2.2 Configuration Requirements

Make sure that vNTA at least meets configuration requirements listed in [Table 1-2](#).

Table 1-2 Reference configuration of QEMU KVM

Item	Reference Configuration
CPU	Intel(R) Xeon(R) CPU E5-2670 @ 2.60GHz 24 threads
Memory	32 GB
Hard disk drive	≥ 2 TB
NIC	2



Note

If the resources assigned to VMware ESXi cannot meet configuration requirements, the system will possibly work improperly.

2

Deployment on VMware ESXi

This chapter describes how to import the virtual template of vNTA to the VMware ESXi platform and configure vNTA on the platform.

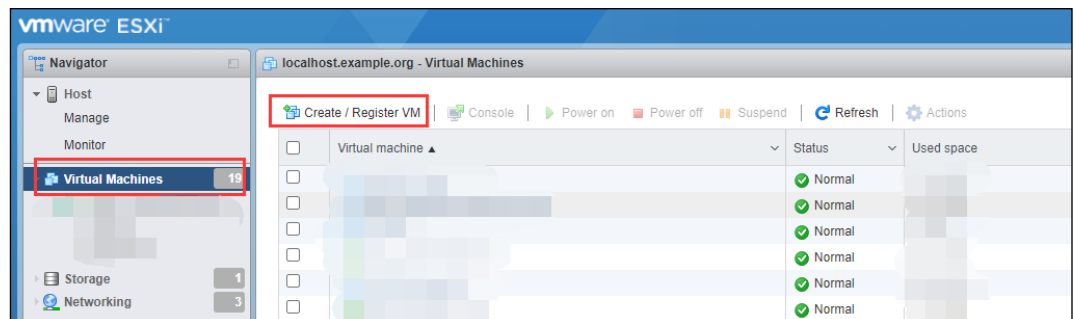
2.1 Importing the Virtual Template of vNTA

Before importing the virtual template of vNTA to the platform, you need to obtain the virtual template (.ova), such as **nta-r90f04.ova**.

To import the virtual template, follow these steps:

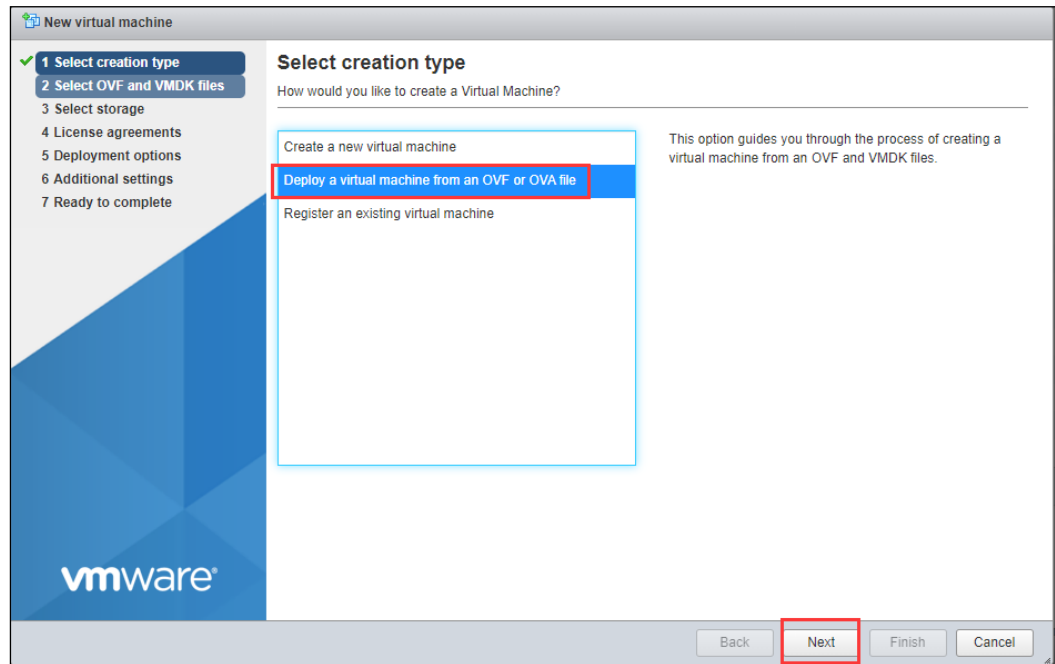
Step 1 Open VMware ESXi web and then choose **Virtual Machines > Create / Register VM**.

Figure 2-1 Creating/Registering VM



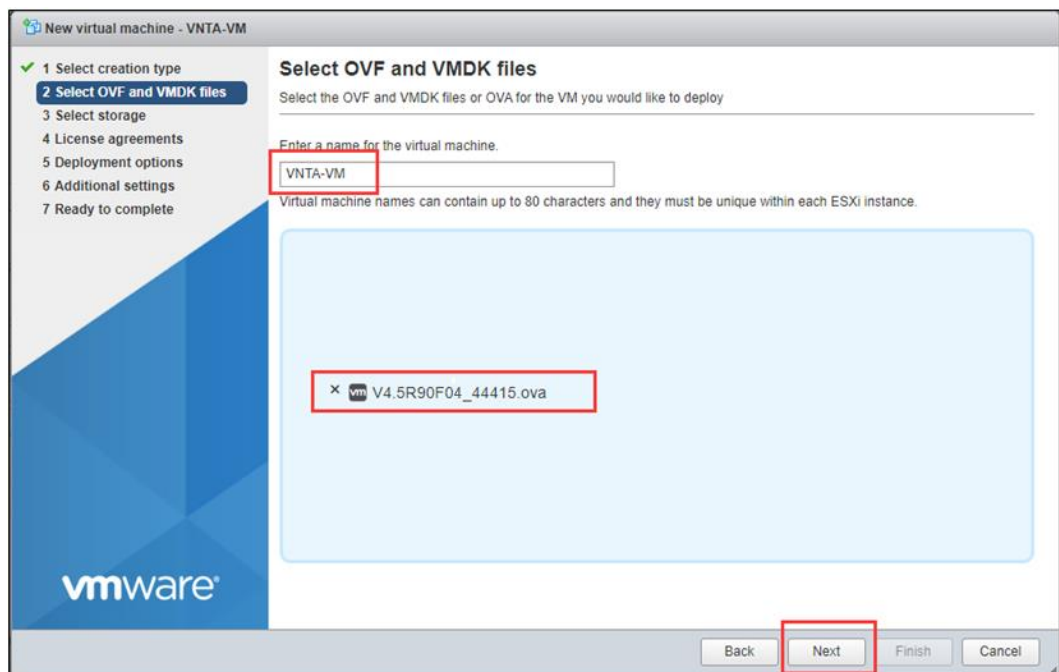
Step 2 Select **Deploy a virtual machine from an OVF or OVA file** and click **Next**.

Figure 2-2 Selecting a creation type



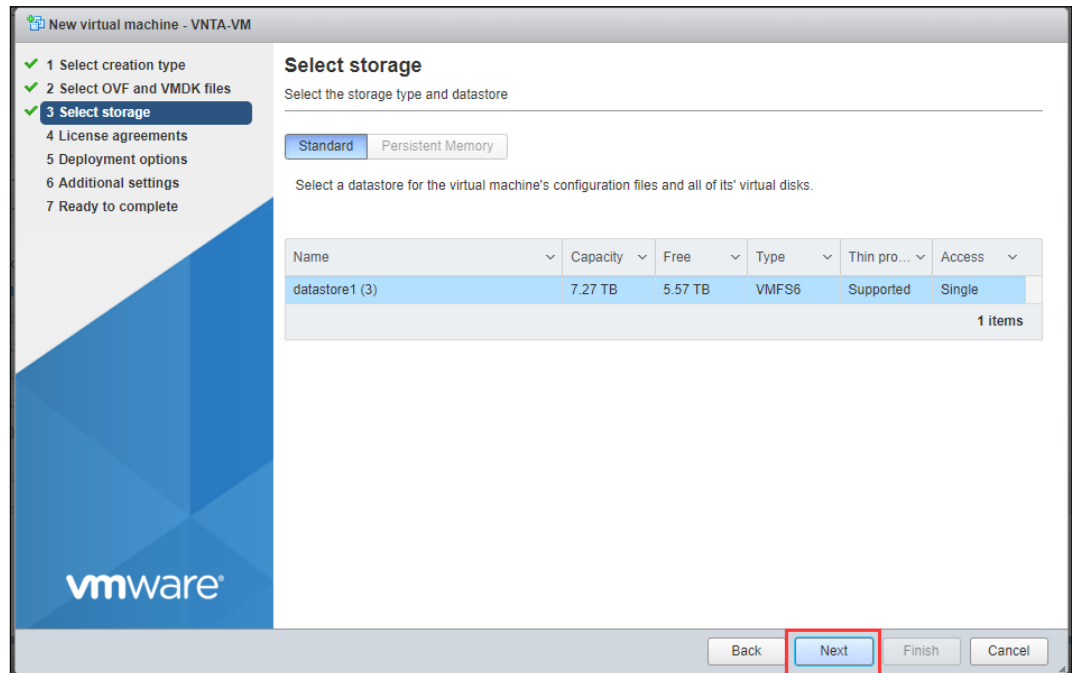
Step 3 Type the VM name, drag the template to the blue area, and click **Next**.

Figure 2-3 Configuring the VM name



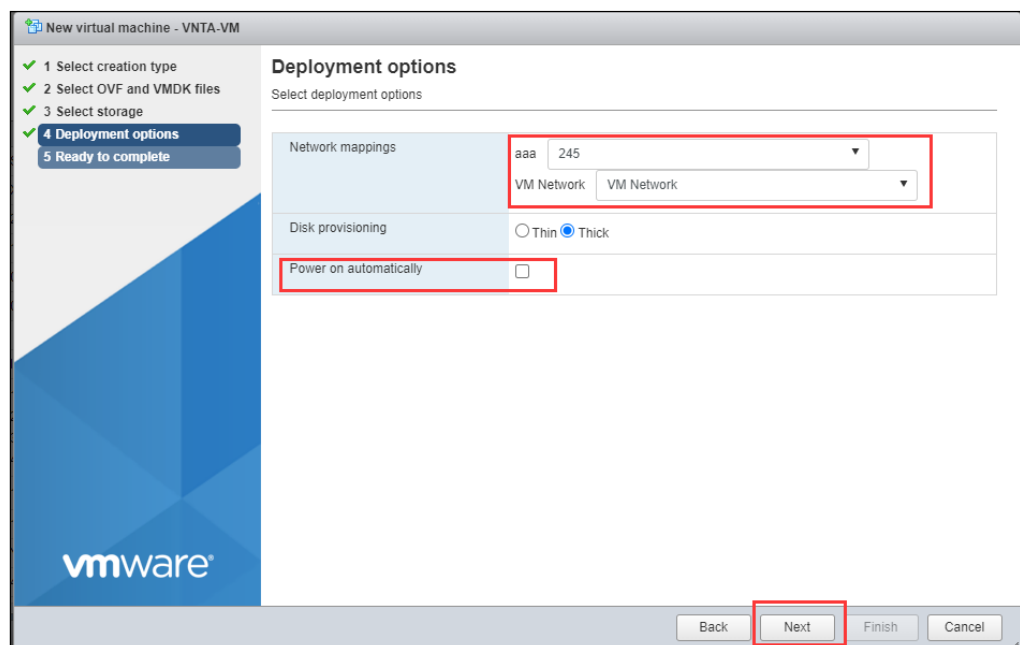
Step 4 Select a storage type and a datastore in which you want to store the VM configuration file and click **Next**..

Figure 2-4 Selecting a datastore



Step 5 Select a network and cancel the selection of **Power on automatically**.

Figure 2-5 Selecting a network

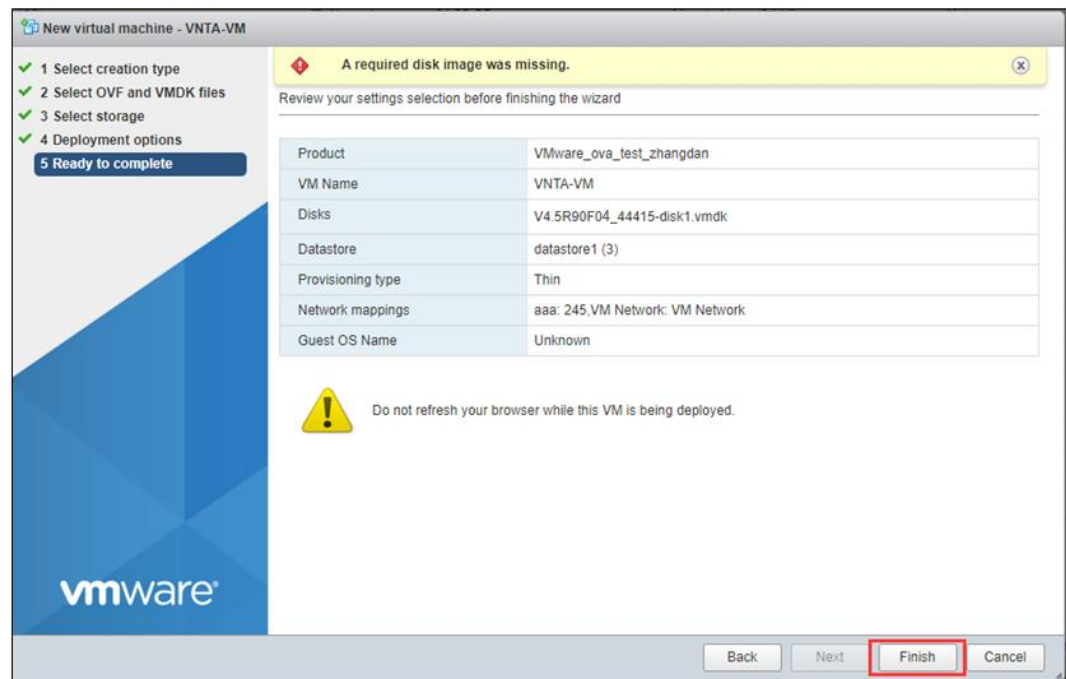




You are advised to select **Thick** for **Disk provisioning** for the fastest disk read and write speed.

Step 6 Confirm the configuration and then click **Finish**.

Figure 2-6 Confirming configuration

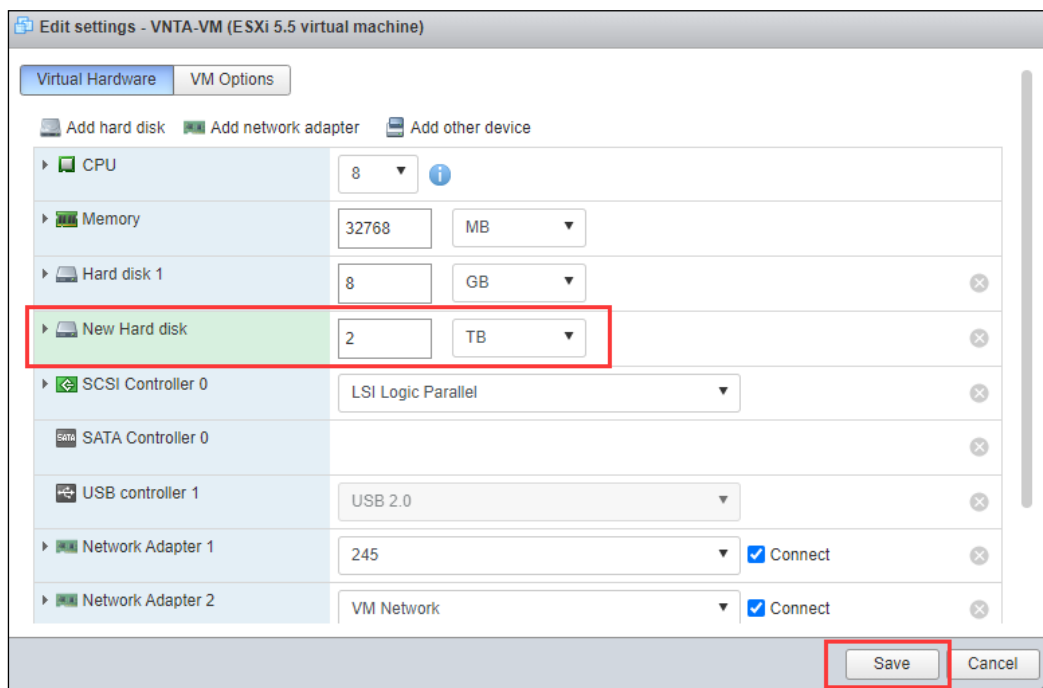


Step 7 Edit the VM by adding a hard disk with the minimum size of 2 TB.



For the proper running of vNTA, you must add a hard disk before powering on vNTA.

Figure 2-7 Configuring a hard disk



Step 8 Click **Save** to commit the changes and then power on the VM.

----End

2.2 Configuring vNTA

After importing the virtual template of vNTA to the VMware ESXi platform, you need to power on the virtual machine and then perform initial configuration via the console.

2.2.1 Login via the Console

Log in to the console with the default user name and password.

For information about default accounts, see appendix [A Default Parameters](#).

Figure 2-8 Login window

```
login: admin
Password:
account use default password, Strongly recommended to change the password
Change it?(Y/N)n
NTA> en
NTA#
date          Display or set system date and time
disable       Disable privileged command
engine        Manage NTA engine
exit          Exit and logout
help          Description of the interactive help system
net           Network setting and diagnosis
passwd        Change login password
poweroff      Poweroff honeygate system
reboot        Reboot honeygate system
show          Display system information
ssh           Manage ssh service
sys           show this help
top           Display system tasks
web           Manage web server
NTA# _
```

2.2.2 Network Configuration

After logging in, configure network settings by reference to the description of console-based management in the *NSFOCUS NTA User Guide*.

Configure parameters.

1. Type **en** to enter the privileged mode.
2. Type **net** for network configuration.
3. Type **2** to add an IP address.
 - Type **1** to configure an IPv4 address.
 - Type **1** to select the eth0 network adapter.
 - Type a correct IP address and netmask.
4. Type **4** for gateway configuration.
 - Type **1** to configure an IPv4 address.
 - Type the confirmed default gateway IP address.

Figure 2-9 shows the window in which network settings have been configured.

Figure 2-9 Configuring network settings

```

NTA# net

Please select an operation:
 1) Display network settings
 2) Add an address
 3) Delete an address
 4) Setup default gateway
 5) Add a route
 6) Delete a route
 7) Setup domain name server
 8) Set to Default
 0) Escape
> 2
Please select network family:
 1) inet
 2) inet6
 0) Escape
> 1
Network adapters:
 1) eth0
 2) eth1
 0) Escape
> 1
Please input ip address
> 10.66.250.155
Please input netmask
> 255.255.255.0
Operation success.

> 4
Please select network family:
 1) inet
 2) inet6
 0) Escape
> 1
Please input default gateway address
> 10.66.250.254
Operation success.

```

2.2.3 Login via the Web



Note

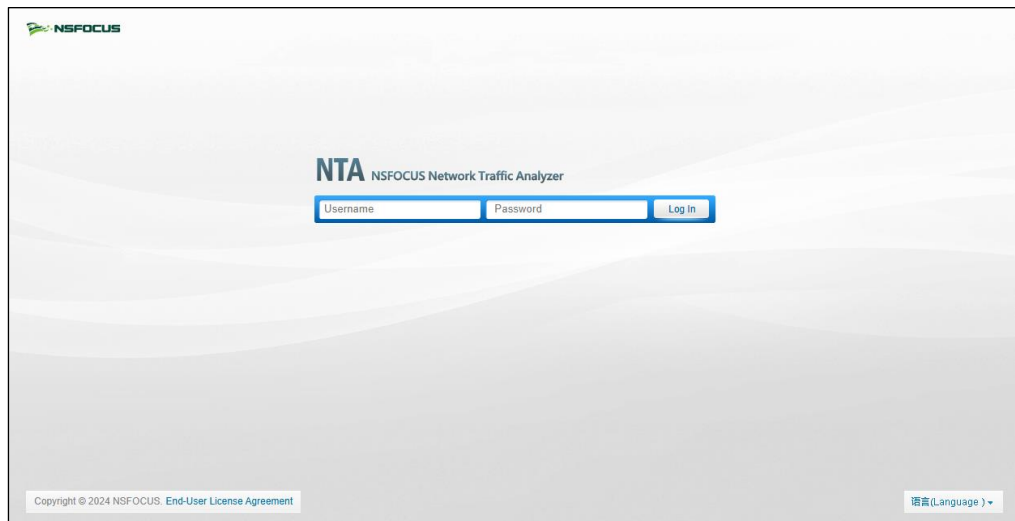
- Before login, check whether **Block pop-ups** is selected or JavaScript is disabled in the browser in the browser. If yes, deselect it.
- You are advised to use the latest Firefox or Chrome browser and set the browser resolution to 1024x768 or higher.

To log in to the web-based manager of vNTA, perform the following steps (Chrome is used as an example):

- Step 1** Make sure that the client communicates properly with vNTA (open port 443 if the traffic needs to go through a firewall).
- Step 2** Open the Chrome browser and connect to the management IP address of vNTA over HTTPS, for example, enter **https://10.30.2.204** in the address bar.
- A security alert appears.
- Step 3** Click **Proceed to 10.30.2.204 (unsafe)** to accept the channel secured by the NTA certificate.

The NTA login page appears, as shown in [Figure 2-10](#).

Figure 2-10 Login page



Step 4 Type the initial user name and password (both are **admin**), and then click **Log In**.

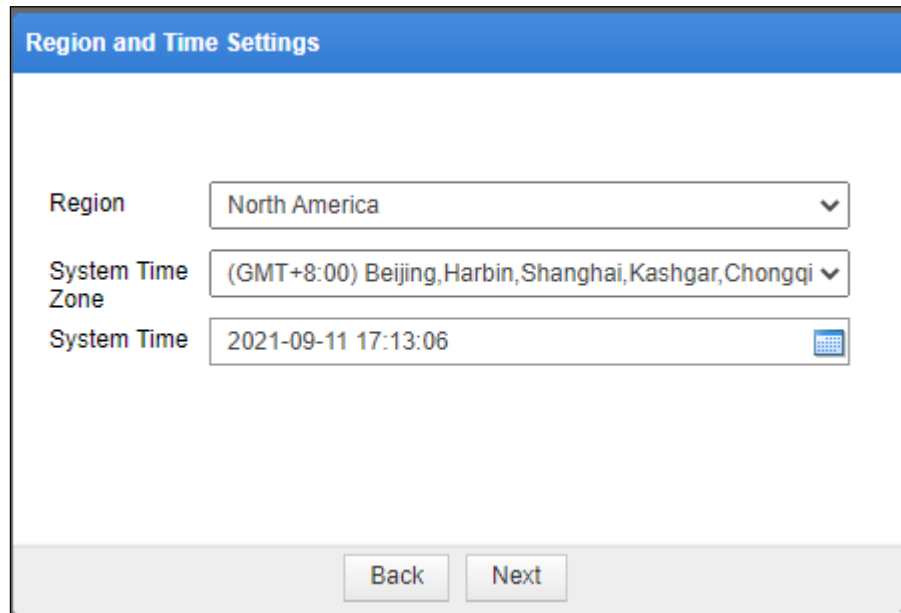
A dialog box shown in [Figure 2-11](#) appears, prompting you to select a UI language.

Figure 2-11 Setting the UI language



Step 5 Select a language. After the system directs you to the page shown in [Figure 2-12](#), set the locality of the device, time zone, and system time.

Figure 2-12 Setting the time zone and system time



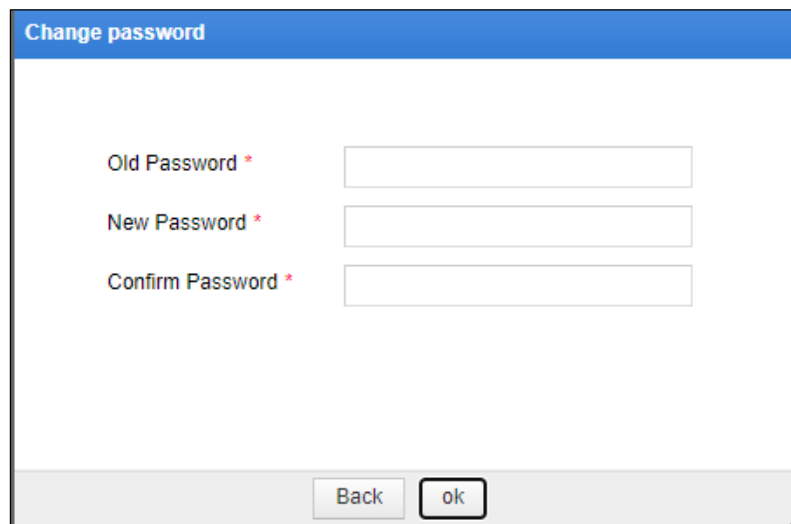
The screenshot shows a window titled "Region and Time Settings". It contains three configuration fields: "Region" with a dropdown menu showing "North America", "System Time Zone" with a dropdown menu showing "(GMT+8:00) Beijing, Harbin, Shanghai, Kashgar, Chongqi", and "System Time" with a text field showing "2021-09-11 17:13:06" and a calendar icon. At the bottom, there are "Back" and "Next" buttons.

Step 6 Click **Next**.

The page for changing the initial password appears, as shown in [Figure 2-13](#).

The new password must be a string of no less than eight characters and contain at least two of the following character types: English letters, digits, and special characters.

Figure 2-13 Changing the initial password



The screenshot shows a window titled "Change password". It contains three input fields: "Old Password *", "New Password *", and "Confirm Password *". At the bottom, there are "Back" and "ok" buttons.

Step 7 After changing the initial password, click **OK** to make the settings take effect.

Then you successfully log in to the web-based manager.

----End

2.2.4 License Import

You can import vNTA after obtaining the license. Without such a license, vNTA cannot work properly.

Note that you must configure the authorization mode when importing the license. vNTA can work properly only after being authorized locally or on the cloud side.

You can import a license for vNTA using either of the following methods:

- Cloud-based authorization
If this mode of authorization is adopted, vNTA will regularly instruct the cloud center to verify the validity of the license.
- Local authorization
For this mode of authorization, vNTA obtains authorization from ADS M.

2.2.4.1 Cloud-based Authorization

To import the license with cloud-based authorization, follow these steps:

- Step 1** On the web-based manager of vNTA, choose **Administration > License** and select **Cloud Authorization** as the authorization mode.

Figure 2-14 Selecting the authorization mode

Set Authorization Mode

You are using a virtual device. Please choose the authorization mode:

Hardware ID: CAC7-7CE4-F57B-A8E1

Authorization: ☒ Cloud Authorization ☐ Local

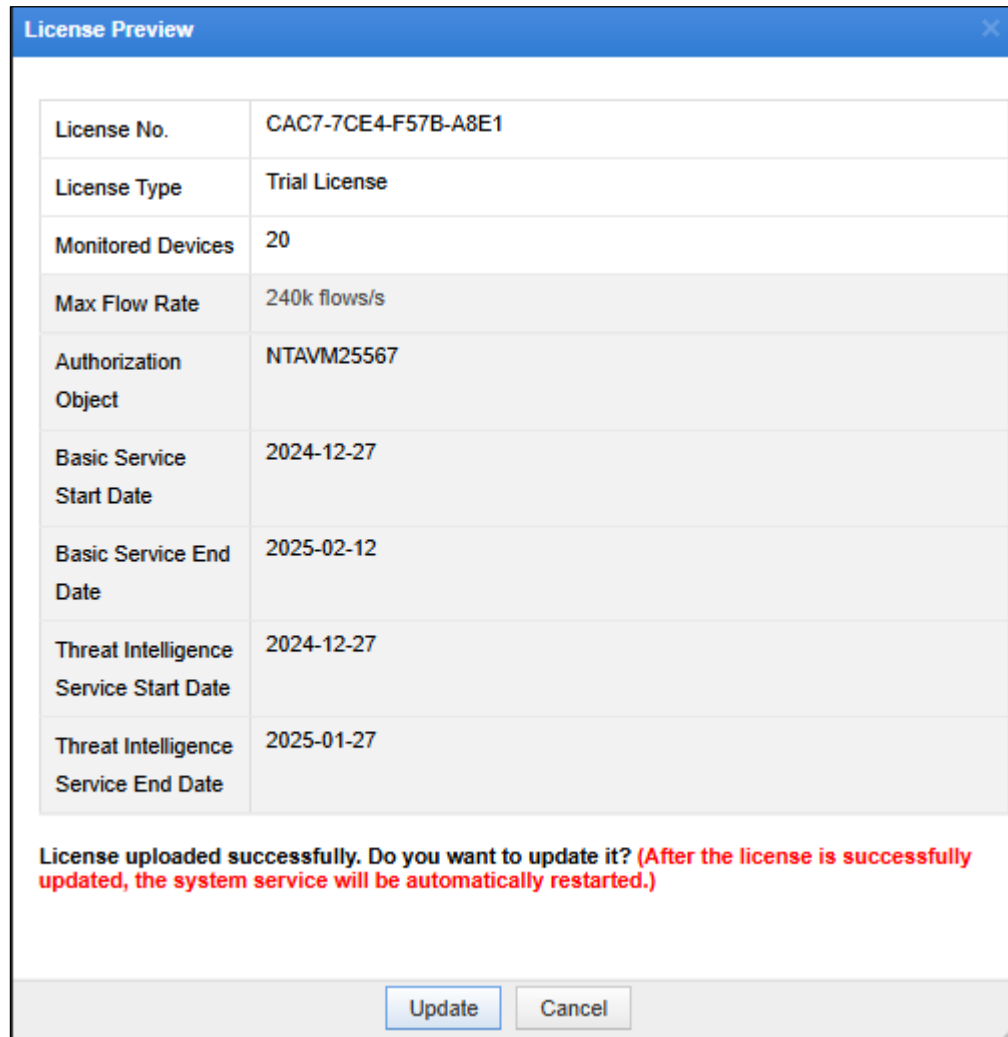
Address of Authorization Center:

License:

- Step 2** Browse to the license file stored in a local hard disk drive and upload it.

After the license is successfully uploaded, a license preview dialog box appears, as shown in [Figure 2-15](#).

Figure 2-15 License preview



The image shows a 'License Preview' dialog box with a blue title bar and a close button. It contains a table with the following information:

License No.	CAC7-7CE4-F57B-A8E1
License Type	Trial License
Monitored Devices	20
Max Flow Rate	240k flows/s
Authorization Object	NTAVM25567
Basic Service Start Date	2024-12-27
Basic Service End Date	2025-02-12
Threat Intelligence Service Start Date	2024-12-27
Threat Intelligence Service End Date	2025-01-27

Below the table, a red message states: 'License uploaded successfully. Do you want to update it? (After the license is successfully updated, the system service will be automatically restarted.)' At the bottom right, there are 'Update' and 'Cancel' buttons.

Step 3 Click **Update** to import the license to the system.

Figure 2-16 shows the **License** page with the license successfully imported.

Figure 2-16 License successfully imported

Administration / License

License Registration Information ^

License Status	Normal
License Type ?	Trial License
License No.	CAC7-7CE4-F57B-A8E1
Monitored Devices	20
Traffic Limiting	240k flows/s
Authorization Object	NTAVM25567
Authorization Module	IPv6
Basic Service Start Date	2024-12-27
Basic Service End Date	2025-02-12
Threat Intelligence Service Start Date	2024-12-27
Threat Intelligence Service End Date	2025-01-27

Reminder: Basic Service 47 days , Threat Intelligence Service 31 days . If you want the service continue, please contact "NSFOCUS" technical support. Tel:400-818-6868

License Update

License Download

License Expiration Warning ^

License Expiration Warning

License Expiration Warning Frequency

License Expiration Reminder Object

One email address per line. Up to 5 email addresses are allowed.

Authorization ^

Authorization Mode

Authorization Status

Address of Authorization Center

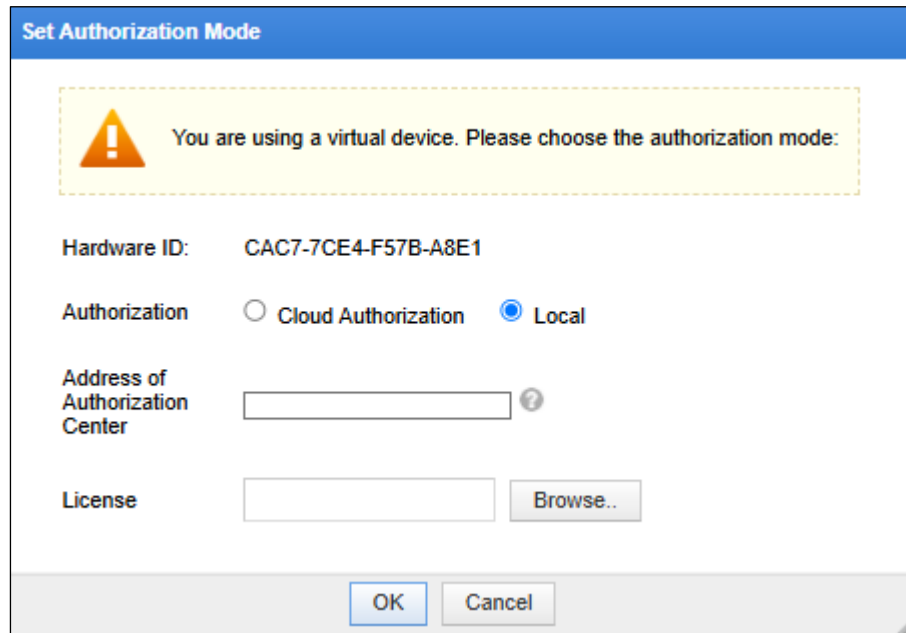
----End

2.2.4.2 Local Authorization

To import the license with local authorization, follow these steps:

- Step 1** On the web-based manager of vNTA, choose **Administration** > **License** and select **Local** as the authorization mode.

Figure 2-17 Selecting the authorization mode



The dialog box titled "Set Authorization Mode" features a blue header bar. Below the header, a yellow dashed border contains a warning icon and the text: "You are using a virtual device. Please choose the authorization mode:". The main area of the dialog includes the following fields and controls:

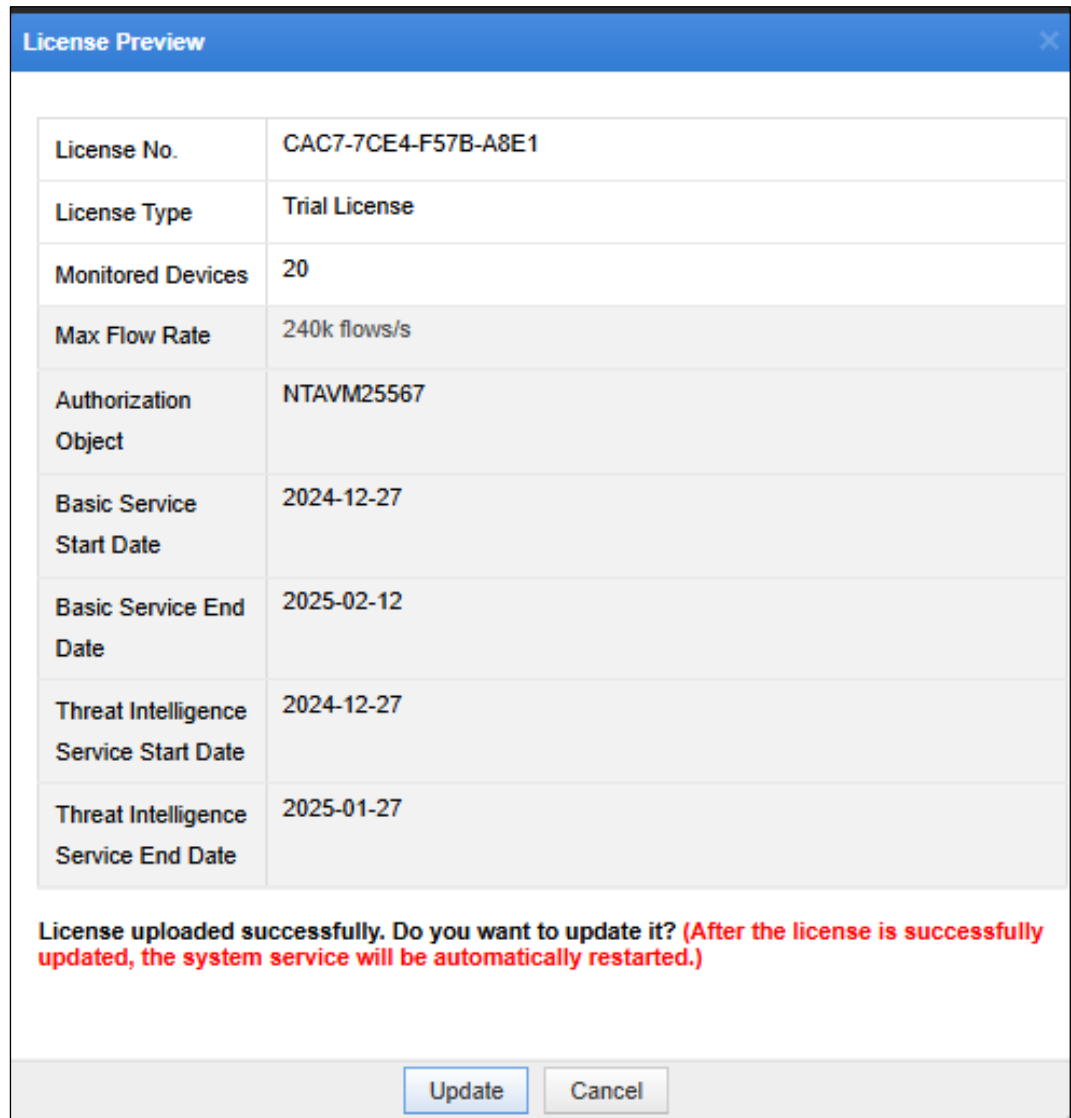
- Hardware ID:** CAC7-7CE4-F57B-A8E1
- Authorization:** Two radio buttons are present: "Cloud Authorization" (unselected) and "Local" (selected).
- Address of Authorization Center:** An empty text input field followed by a help icon (?)
- License:** An empty text input field followed by a "Browse.." button.

At the bottom of the dialog, there are "OK" and "Cancel" buttons.

Step 2 Browse to the license file stored in a local hard disk drive and upload it.

After the license is successfully uploaded, a license preview dialog box appears, as shown in [Figure 2-18](#).

Figure 2-18 License preview



The image shows a 'License Preview' dialog box with a blue header bar containing the title and a close button. Below the header is a table with license details. At the bottom of the table is a red text message: 'License uploaded successfully. Do you want to update it? (After the license is successfully updated, the system service will be automatically restarted.)'. Below the message are two buttons: 'Update' and 'Cancel'.

License No.	CAC7-7CE4-F57B-A8E1
License Type	Trial License
Monitored Devices	20
Max Flow Rate	240k flows/s
Authorization Object	NTAVM25567
Basic Service Start Date	2024-12-27
Basic Service End Date	2025-02-12
Threat Intelligence Service Start Date	2024-12-27
Threat Intelligence Service End Date	2025-01-27

License uploaded successfully. Do you want to update it? (After the license is successfully updated, the system service will be automatically restarted.)

Update Cancel

Step 3 Click **Update** to import the license to the system.

Figure 2-19 shows the **License** page with the license successfully imported.

Figure 2-19 License successfully imported

Administration / License

License Registration Information ^

License Status	Normal
License Type ?	Trial License
License No.	CAC7-7CE4-F57B-A8E1
Monitored Devices	20
Traffic Limiting	240k flows/s
Authorization Object	NTAVM25567
Authorization Module	IPv6
Basic Service Start Date	2024-12-27
Basic Service End Date	2025-02-12
Threat Intelligence Service Start Date	2024-12-27
Threat Intelligence Service End Date	2025-01-27

Reminder: Basic Service 44 days , Threat Intelligence Service 28 days . If you want the service continue, please contact "NSFOCUS" technical support. Tel:400-818-6868

License Update Browse... OK

License Download

License Expiration Warning ^

License Expiration Warning ☒ On ☐ Off


License Expiration Warning Frequency

License Expiration Reminder Object +

One email address per line. Up to 5 email addresses are allowed.

OK

Authorization ^

Authorization Mode	Local
Authorization Status	Authorized
UKey Hash	9702-053E-D016-2E4A
Address of Authorization Center	10.66.253.55:57960 

CPU: 35 % , MEM: 16 % , DISK: 1 % | Authorization Status: Authorized

----End

3

Deployment on QEMU KVM

This chapter describes how to import the virtual template of vNTA to the QEMU KVM platform and configure vNTA on the platform.

3.1 Preparations for vNTA Installation

Before installing vNTA locally, you must make preparations listed in [Table 3-1](#).

Table 3-1 List of items to be prepared for installing vNTA locally

Item		Description
Host	IP address	Make sure that the host can properly connect to the network.
	Account	This account must have privileges of a system administrator.
	Network interface	At least one 100M interface available
	Operating system (OS)	CentOS 7 recommended
	Virtual support	QEMU KVM 1.5.3 required
vNTA	vNTA image file	nta_r90f04.qcow2
	IP address	IP address of the management interface of vNTA

3.1.1 Enabling Virtualization

This section describes the virtualization procedure and provides an example to illustrate the procedure.

Procedure

To enable virtualization, follow these steps:

Step 1 Reboot the computer and open the system's BIOS menu.

You can open the BIOS menu by pressing **Delete**, **F1**, or **Alt+F4** during the reboot, depending on the operating system you use.

Step 2 Enable virtualization extensions in BIOS.

a. Open the **Processor** submenu.

The processor settings menu may be hidden in the **Chipset**, **Advanced CPU Configuration**, or **North Bridge** tab.

b. Enable **Intel Virtualization Technology** (also known as Intel VT-X).

The virtualization extensions may be labeled **Virtualization Extensions**, **Vanderpool**, or various other names, depending on the OEM and system BIOS.

AMD-V extensions cannot be disabled in the BIOS and should already be enabled.

- c. Enable **Intel VTd** or **AMD IOMMU**, if these options are available.

They are used for PCI device assignment.

- d. Select **Save & Exit**.



The preceding configurations may vary with your motherboard, processor type, chipset, and OEM. For how to correctly configure your system, see your system's accompanying documentation.

Step 3 Restart the computer.

Step 4 Check whether virtualization is enabled.

Run the following command to check whether CPU virtualization extensions are available. If there is no command output, virtualization extensions are not enabled. In this case, you need to check and modify BIOS settings accordingly.

```
grep -E "vmx|svm" /proc/cpuinfo
```

Run the following command to check whether virtualization extensions are available. If there is no command output, virtualization extensions are not enabled and device assignment cannot be done.

```
ls /sys/kernel/iommu_groups/
```

----End

Example

The following is an example of enabling virtualization:

Step 1 Enable CPU virtualization (Intel Virtualization).

Figure 3-1 Enabling CPU virtualization (substep 1)

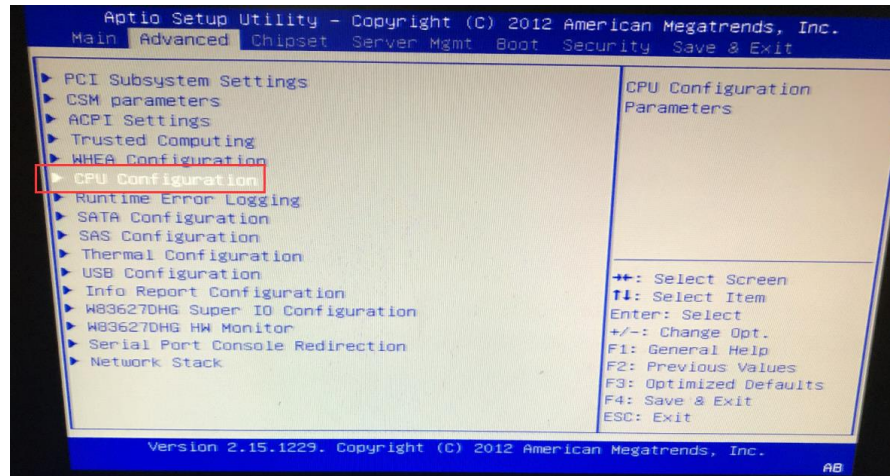
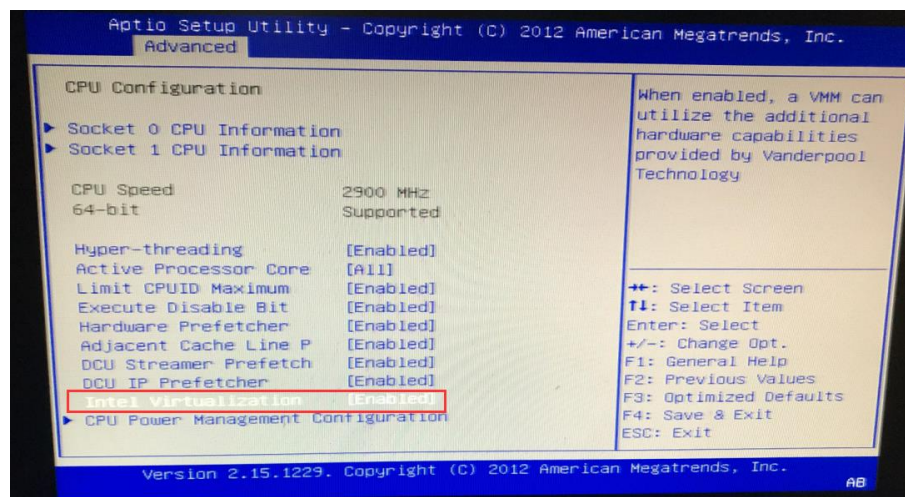


Figure 3-2 Enabling CPU virtualization (substep 2)



Step 2 Enable IOMMU support (Intel(R) VT-d) in the BIOS.

Figure 3-3 Enabling IOMMU support (Intel(R) VT-d) in the BIOS (substep 1)

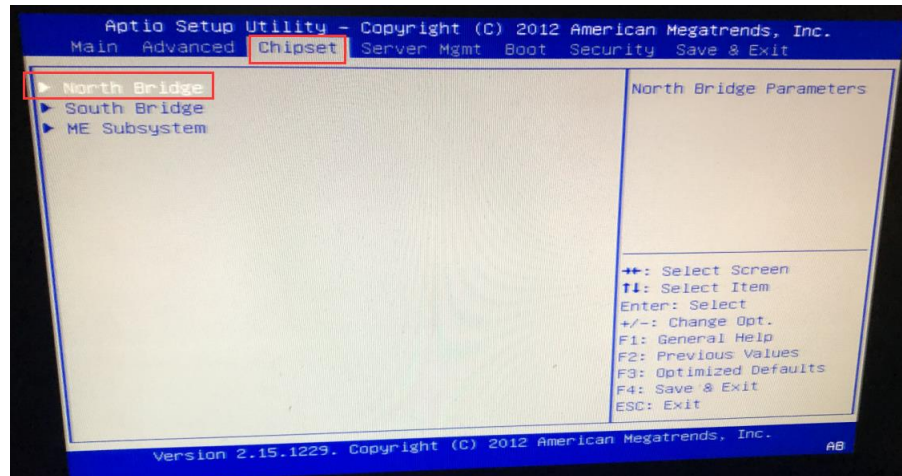


Figure 3-4 Enabling IOMMU support (Intel(R) VT-d) in the BIOS (substep 2)

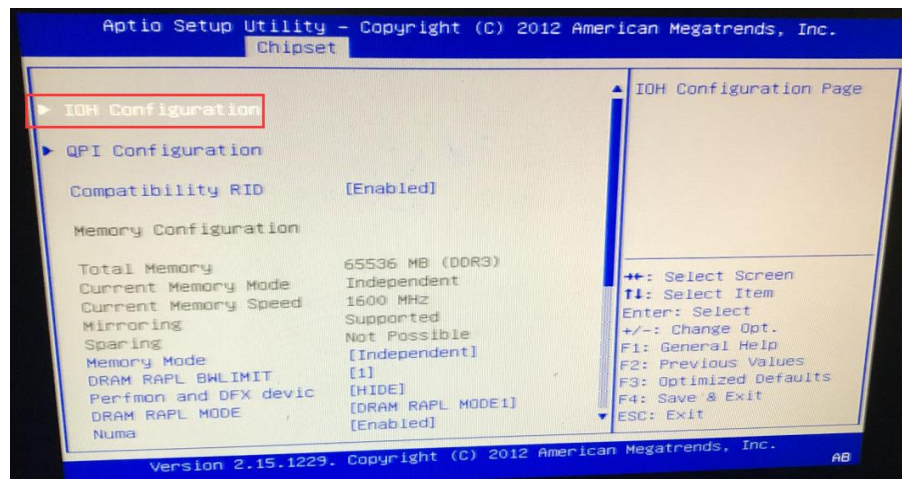


Figure 3-5 Enabling IOMMU support (Intel(R) VT-d) in the BIOS (substep 3)

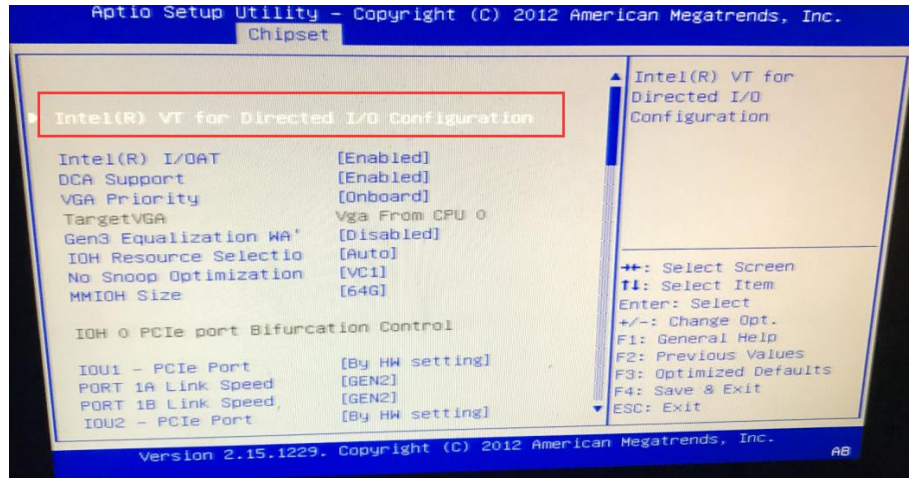
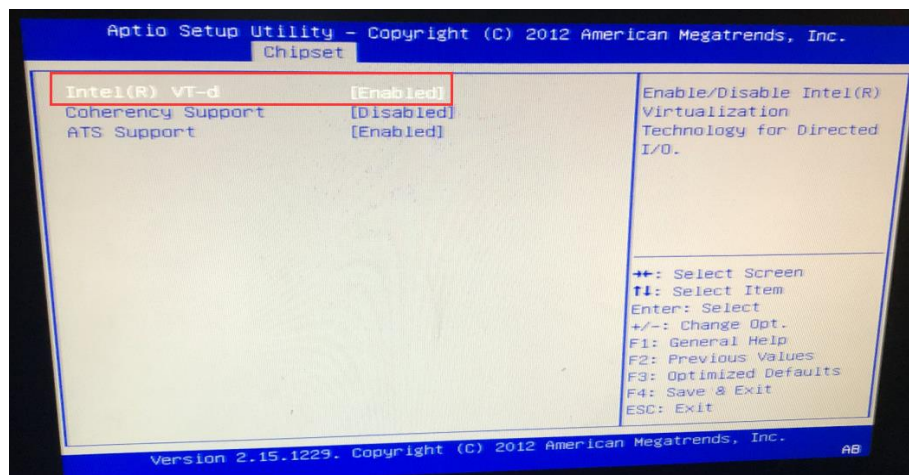
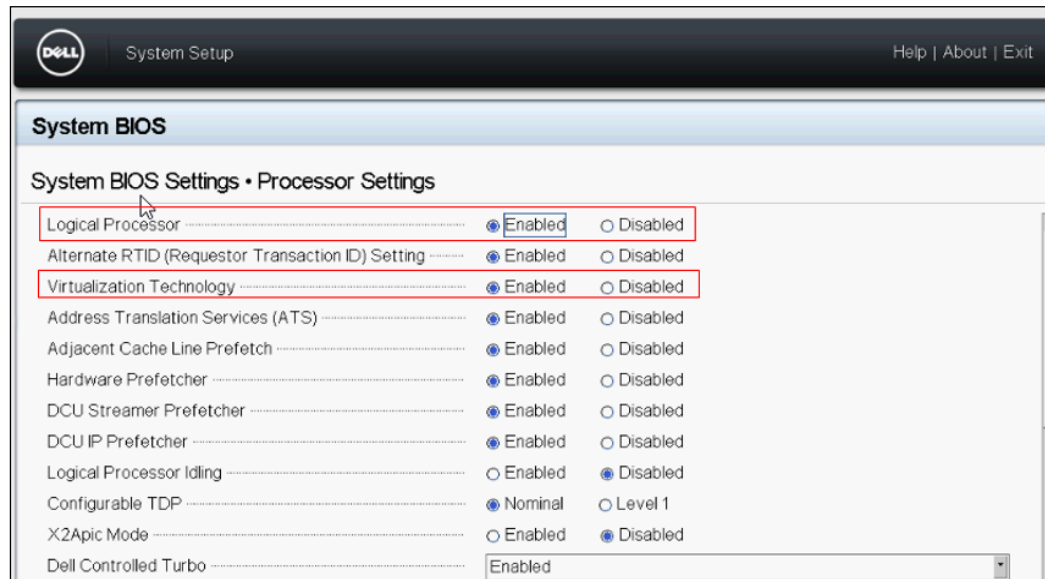


Figure 3-6 Enabling IOMMU support (Intel(R) VT-d) in the BIOS (substep 4)



Step 3 Choose **Bios > Processor Settings > Virtualization Technology** and set Dell R730 BIOS parameters.

Figure 3-7 Setting Dell R730 BIOS parameters



----End

3.1.2 Installing KVM

To install KVM, follow these steps:

Step 1 Install KVM as **root** from the network.

```
yum install kvm virt-viewer virt-manager libvirt libvirt-python python-virtinst
libvirt-client qemu-kvm qemu-img bridge-utils libguestfs-tools -y
```

Step 2 Start KVM.

```
systemctl start libvirtd #starts KVM
systemctl enable libvirtd #configures KVM to start upon system boot
```

----End

3.1.3 Configuring the Network Bridge Connection

This section describes network bridge configuration requirements and provides an example to illustrate the configuration procedure.

Configuration Requirements

Create bridge interfaces. vNTA needs at least two bridge interfaces, with one as the management interface and the other as the service interface.

- By default, vNTA's management interface uses the bridge NIC virbr0.
- By default, vNTA's service interface uses the bridge NIC virbr1.

For details about configuration commands and parameters, visit the following link:

https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/7/html/networking_guide/sec-network_bridging_using_the_command_line_interface

Configuration Example

Create a bridge interface virbr0 on the Ethernet interface eno1 and set the IP address of this bridge interface.

Create a bridge interface virbr1 on the Ethernet interface eno3 and set the IP address of this bridge interface.

Step 1 Perform network configurations.

In `/etc/sysconfig/network-scripts/ifcfg-eno1`, configure parameters as follows:

```
DEVICE="eno1"
ONBOOT=yes
BRIDGE="virbr0"
```

In `/etc/sysconfig/network-scripts/ifcfg-virbr0`, configure parameters as follows:

```
IPADDR="192.168.1.100"
NETMASK="255.255.255.0"
GATEWAY="192.168.1.254"
DEVICE="virbr0"
ONBOOT="yes"
BOOTPROTO="none"
STP="on"
DELAY="0"
TYPE="Bridge"
```

In `/etc/sysconfig/network-scripts/ifcfg-eno3`, configure parameters as follows:

```
DEVICE="eno3"
ONBOOT=yes
BRIDGE="virbr1"
```

In `/etc/sysconfig/network-scripts/ifcfg-virbr1`, configure parameters as follows:

```
IPADDR="192.168.88.100"
NETMASK="255.255.255.0"
GATEWAY="192.168.88.254"
DEVICE="virbr1"
ONBOOT="yes"
BOOTPROTO="none"
STP="on"
DELAY="0"
TYPE="Bridge"
```



- The interface em3 should be changed to the actual interface of the server.
- The host information, including IPADDR, NETMASK, and GATEWAY, should be configured according to the actual network deployment scenario.

Step 2 Restart the network.

```
systemctl restart network
```

Step 3 Verify that the bridge interfaces are successfully configured.

```
brctl show
#-----The command output is as follows:-----
bridge name      bridge id            STP enabled      interfaces
virbr0           8000.002590f4355e    yes              eno1
virbr1           8000.002590f43561    yes              eno3
```

----End

3.1.4 Modifying the Configuration File

Edit the configuration file `/etc/libvirt/qemu.conf` as follows:

```
# name.
#
# Some examples of valid values are:
#
5 #
1 #   user = "qemu"   # A user named "qemu"
1 #   user = "+0"    # Super user (uid=0)
1 #   user = "100"   # A user named "100" or a user with uid=100
1 #
1 # user = "root"
2
1 # The group for QEMU processes run by the system instance. It can be
1 # specified in a similar way to user.
2 # group = "root"
1
# Whether libvirt should dynamically change file ownership
# to match the configured user/group above. Defaults to 1.
# Set to 0 to disable file ownership changes.
#dynamic_ownership = 1
```

3.2 vNTA Installation



The following operations, namely command executions and file edits, are all done on a Linux host.

3.2.1 Importing the vNTA Image

Before importing the vNTA image, you need to obtain `nta_r90f04.qcow2`.

To import the vNTA image, follow these steps:

Step 1 Log in to the host and create the `/home/NTA` directory.

```
mkdir -p /home/NTA
```

Step 2 Put the vNTA image file in the `/home/NTA` directory.

Step 3 Create a hard disk for vNTA's use with a minimum size of 2 TB, and view hard disk information.

```
qemu-img create -f qcow2 nta_disk.qcow2 2T
[root@localhost NTA]# qemu-img info nta_disk.qcow2
image: nta_disk.qcow2
file format: qcow2
```

```
virtual size: 2.0T (2199023255552 bytes)
disk size: 224K
cluster_size: 65536
Format specific information:
  compat: 1.1
  lazy refcounts: false
```

Step 4 Run the following command to import vNTA:

```
virt-install --name=vNTA --ram 32768 --vcpus=24 --disk
bus=virtio,path=./nta_r90f04.qcow2 --disk bus=virtio,path=./nta_disk.qcow2 --
network bridge=virbr0,model=e1000 --network bridge=virbr1,model=e1000 --
noautoconsole --boot hd --nographics
```



Note

The blue part of the above command needs to be specified by the user:

- ✧ **vNTA** specifies the name of the virtual machine.
- ✧ **virbr0** specifies the name of the network bridge used by the management interface.
- ✧ **virbr1** specifies the name of the network bridge used by the service interface.
- ✧ **--network** sets NICs. If there are multiple service interfaces, please add them by yourself.

----End

3.2.2 Enabling vNTA

To enable vNTA, follow these steps:

Step 1 Start vNTA.

```
virsh start vNTA
```

Step 2 Several minutes later, set the IP address of the management interface, subnet mask, and gateway of vNTA.

Step 3 Run the following command on the host to connect to the console of vNTA:

```
virsh console vNTA --force
```

----End

3.2.3 Login via the Console

Log in to the console with the default user name and password.

For information about default accounts, see appendix [A Default Parameters](#).

Figure 3-8 Login window

```
login: admin
Password:
account use default password, Strongly recommended to change the password
Change it?(Y/N)n
NTA> en
NTA#
date          Display or set system date and time
disable       Disable privileged command
engine        Manage NTA engine
exit          Exit and logout
help          Description of the interactive help system
net           Network setting and diagnosis
passwd        Change login password
poweroff      Poweroff honeygate system
reboot        Reboot honeygate system
show          Display system information
ssh           Manage ssh service
sys           show this help
top           Display system tasks
web           Manage web server
NTA# _
```

3.2.4 Network Configuration

The network configuration method is similar to that for configuration on the VMware ESXi platform. For details, see section [2.2.2 Network Configuration](#).

A Default Parameters

A.1 Default Network Settings

A.1.1 Local Interfaces

eth0 (interface M)	192.168.1.100/255.255.255.0
Other Interfaces	None

A.1.2 Default Gateway

IPv4 Gateway	192.168.1.1
IPv6 Gateway	None

A.2 Default Accounts

Role	User Name	Password	SSH Port
Web administrator	admin	admin	/
Console administrator	admin	admin	/
SSH administrator	conadmin	k@eT!23i	50022

A.3 Console Communication Parameters

Baud Rate	115200
Data Bits	8

B

FAQ

After the KVM platform is installed, it may fail to start, as shown in Figure B-1. This is just an issue about the starting sequence, with no impact on the proper functioning of the system.

Figure B-1 Starting the installation file

```
-----product_update over-----
Can't find log folde
[FAILED] Failed to start Create Volatile Files and Directories.
See 'systemctl status systemd-tmpfiles-setup.service' for details.
[ OK ] Started Rebuild Journal Catalog.
Starting Update is Completed...
Starting Update UTMP about System Boot/Shutdown...
[ OK ] Started Update is Completed.
[ OK ] Found device /dev/ttyS0.
[ OK ] Started Update UTMP about System Boot/Shutdown.
[ OK ] Reached target System Initialization.
[ OK ] Listening on D-Bus System Message Bus Socket.
[ OK ] Reached target Sockets.
[ OK ] Reached target Basic System.
Starting cneos start service...
Starting Permit User Sessions...
Starting Login Service...
Starting Task scheduler daemon...
[ OK ] Started D-Bus System Message Bus.
[ OK ] Started cneos start service.
[ OK ] Started Permit User Sessions.
[ OK ] Started Task scheduler daemon.
[ OK ] Started Getty on tty0.
[ OK ] Started Serial Getty on ttyS0.
[ OK ] Reached target Network.
Starting Statistics collection and monitoring daemon...
Starting Network Time Service...
Starting Network Name Resolution...
[ OK ] Started Login Service.
[FAILED] Failed to start Statistics collection and monitoring daemon.
See 'systemctl status collectd.service' for details.
[ OK ] Started Network Time Service.
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.
[ OK ] Stopped Network Name Resolution.
Starting Network Name Resolution...
-----product start begin-----
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.
[ OK ] Stopped Network Name Resolution.
Starting Network Name Resolution...
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.
[ OK ] Stopped Network Name Resolution.
Starting Network Name Resolution...
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.
[ OK ] Stopped Network Name Resolution.
Starting Network Name Resolution...
First reboot File system init,it will take 5 minitues or later....
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.File system is initializing Please wait....
[ OK ] Stopped Network Name Resolution.
[FAILED] Failed to start Network Name Resolution.
See 'systemctl status systemd-resolved.service' for details.
```