

# NSFOCUS vUTS (VMware) Deployment Guide



**Version:** V2.0R001B05 (2023-09-25)

**Confidentiality:** RESTRICTED

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# Preface

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This document describes the installation and deployment of NSFOCUS Unified Threat Sensor (UTS for short) on VMware.

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

## Organization





Chapter	Description
1 Deployment Scenarios and Requirements	Describes vUTS deployment scenarios and VMware environment requirements as well as hardware requirements.
2 Obtaining the Image File	Describes how to obtain the image file.
3 Creating vUTS and Importing the Image File	Describes how to create vUTS on VMware and import the image file.
4 Adding a Working Interface (NIC Passthrough Mode)	Describes how to add a working interface using an NIC in passthrough mode.
5 Adding a Working Interface (NIC Bridge Mode)	Describes how to add a working interface using an NIC in bridge mode.

## Change History

Version	Description
V2.0R00IB05	Initial release.

## Conventions

Convention	Description
<b>Bold font</b>	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

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

## Customer Support

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## Documentation Feedback

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

Email: [support@nsfocusglobal.com](mailto:support@nsfocusglobal.com)

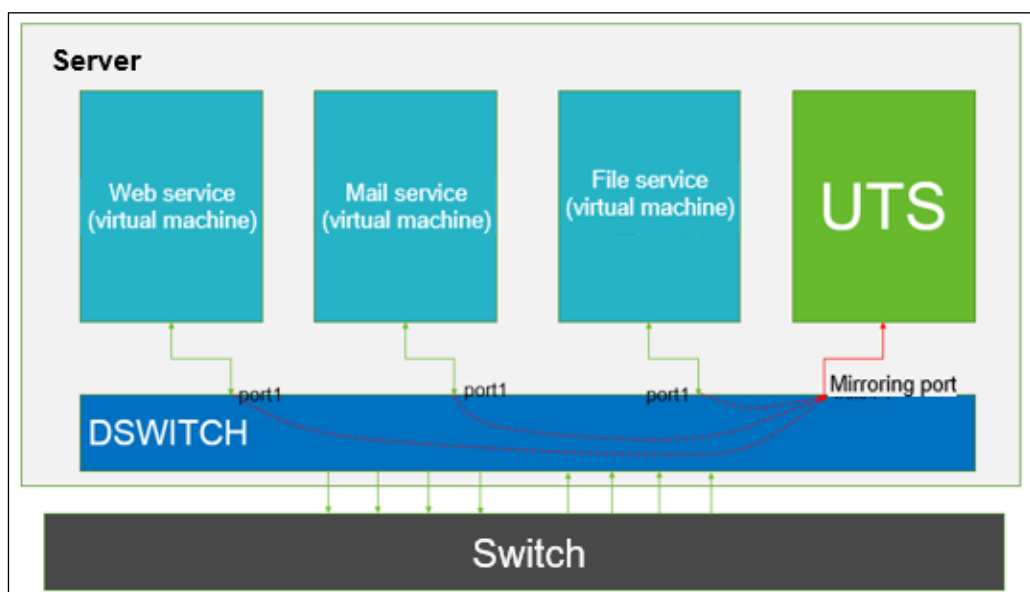
# 1 Deployment Scenarios and Requirements

There are two vUTS deployment scenarios.

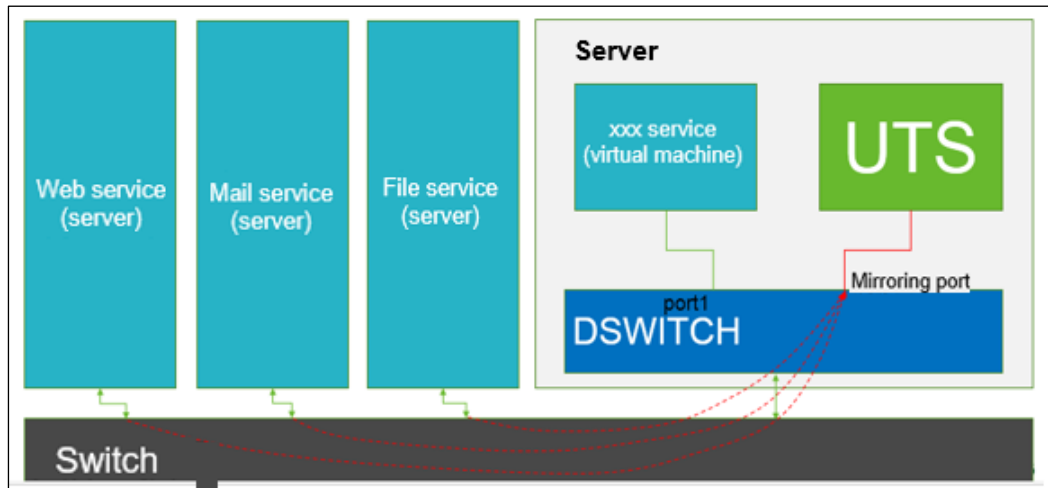
## 1.1 Deployment Scenarios

The two deployment scenarios are as follows:

- Scenario 1: monitoring traffic of internal virtual machine assets (including internal lateral attack traffic).



- Scenario 2: monitoring traffic of external assets (same as the deployment on KVM)

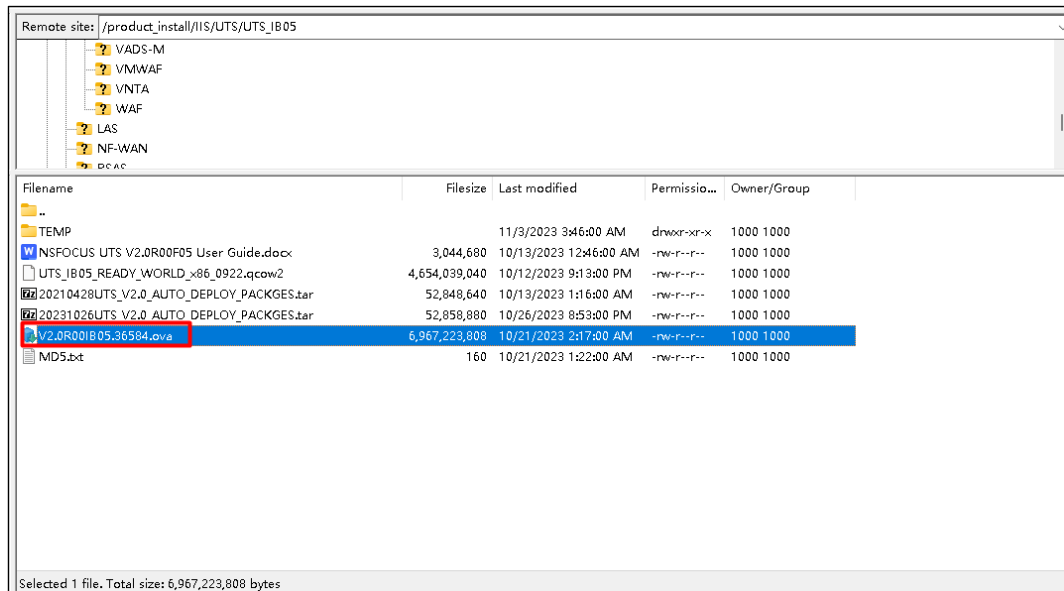


## 1.2 Environment and Hardware Requirements

Item	Description
Environment requirements	WMware ESXi 6.0 and later
Hardware requirements	> 8 CPUs, > 16 GB memory

# 2 Obtaining the Image File

The image file **V2.0R00IB05.36584.ova** for installing vUTS on VMware is stored on the FTP server of NSFOCUS Engineering Team. Please contact NSFOCUS technical support to obtain the image file.



Remote site: /product\_install/ITS/UTS/UTS\_IB05

Filename	Filesize	Last modified	Permissio...	Owner/Group
..				
TEMP		11/3/2023 3:46:00 AM	drwxr-xr-x	1000 1000
NSFOCUS UTS V2.0R00F05 User Guide.docx	3,044,680	10/13/2023 12:46:00 AM	-rw-r--r--	1000 1000
UTS_IB05_READY_WORLD_x86_0922.qcow2	4,654,039,040	10/12/2023 9:13:00 PM	-rw-r--r--	1000 1000
20210428UTS_V2.0_AUTO_DEPLOY_PACKGES.tar	52,848,640	10/13/2023 1:16:00 AM	-rw-r--r--	1000 1000
20231026UTS_V2.0_AUTO_DEPLOY_PACKGES.tar	52,858,880	10/26/2023 8:53:00 PM	-rw-r--r--	1000 1000
<b>V2.0R00IB05.36584.ova</b>	<b>6,967,223,808</b>	<b>10/21/2023 2:17:00 AM</b>	<b>-rw-r--r--</b>	<b>1000 1000</b>
MD5.txt	160	10/21/2023 1:22:00 AM	-rw-r--r--	1000 1000

Selected 1 file. Total size: 6,967,223,808 bytes

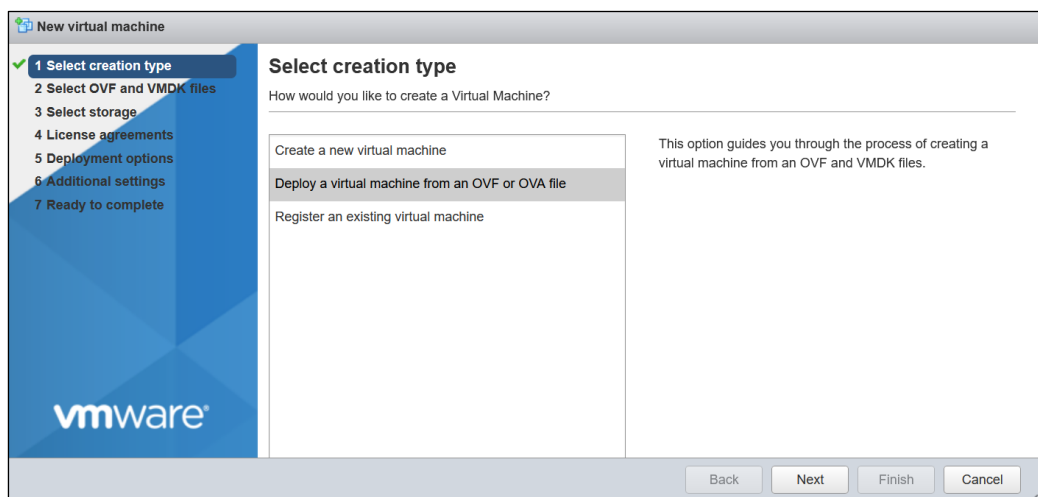


# 3 Creating vUTS and Importing the Image File

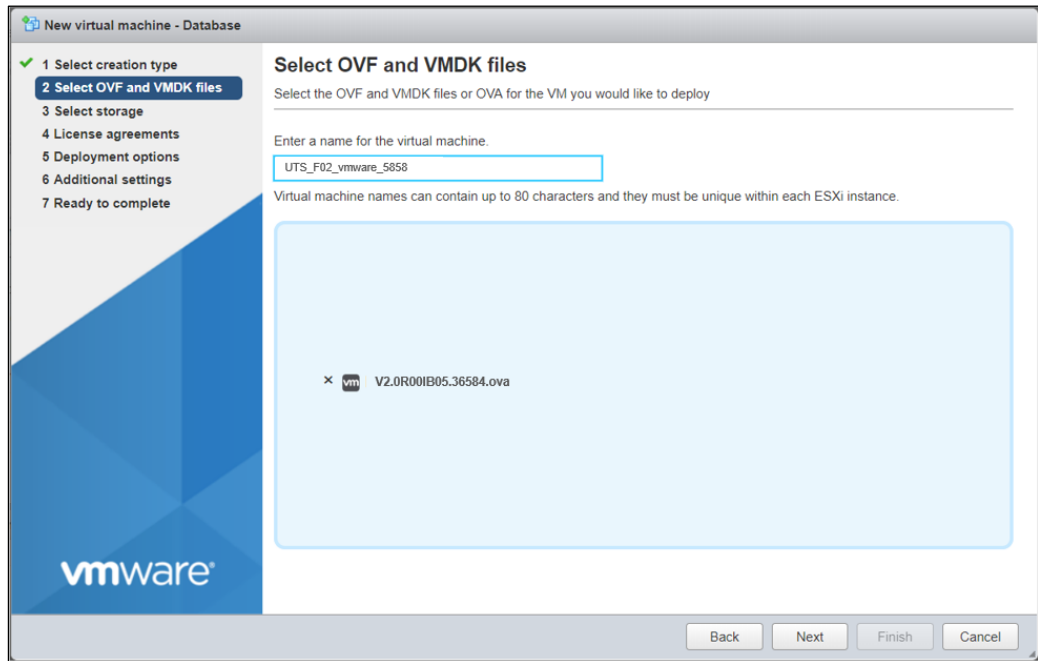
To create vUTS and import the image file, follow these steps:

**Step 1** Select **Create/Register VM**.

**Step 2** On the **Select creation type** page, select **Deploy a virtual machine from an OVF or OVA file** and click **Next**.



**Step 3** On the **Select OVF and VMDK files** page, type a unique name for vUTS. Select the image file and import it.



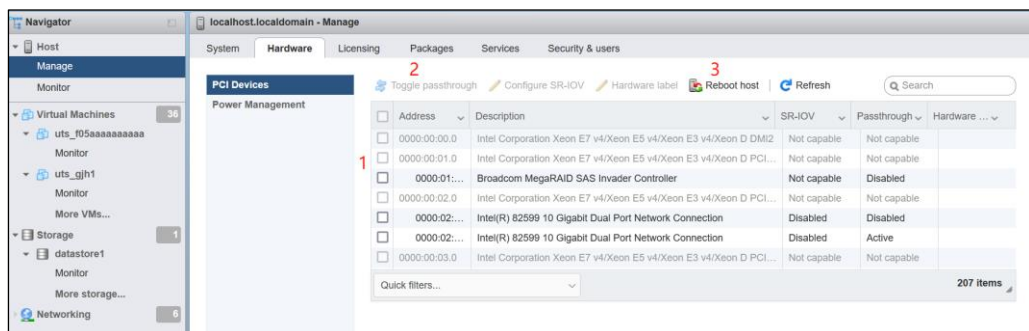
**Step 4** Leave all options at their default values.

----End

# 4 Adding a Working Interface (NIC Passthrough Mode)

## 4.1 Setting NIC Passthrough for the Working Interface

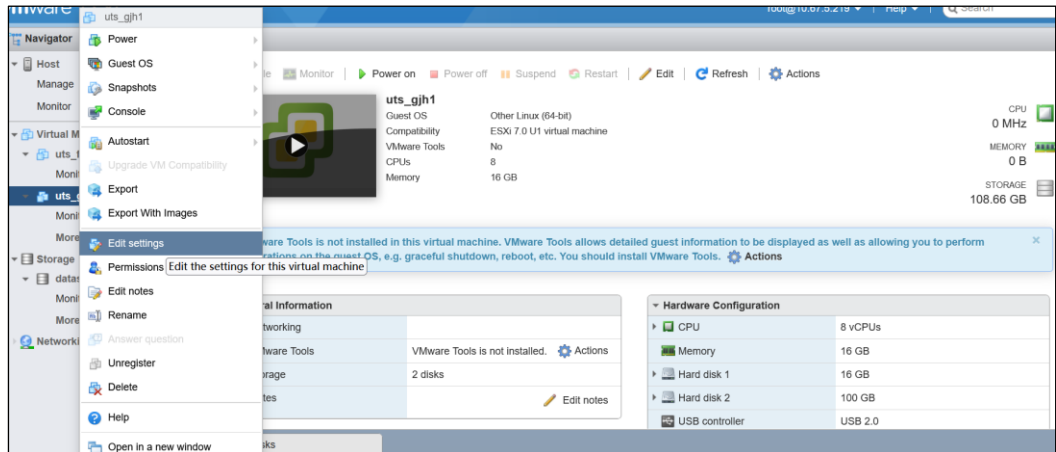
Choose **Manage > Hardware > PCI Devices**. Select an unused NIC and click **Toggle passthrough** to enable passthrough mode. Then restart the host to make the settings take effect.



## 4.2 Modifying vUTS Configuration

### 4.2.1 Editing vUTS

Select vUTS and right-click it to select **Edit Settings**. You can modify vUTS settings.



## 4.2.2 Adding a Hard Disk

You can expand Hard Disk Drive 2 (which is 20 GB by default) or add more hard disks according to the on-site requirements.

To edit a hard disk, follow these steps:

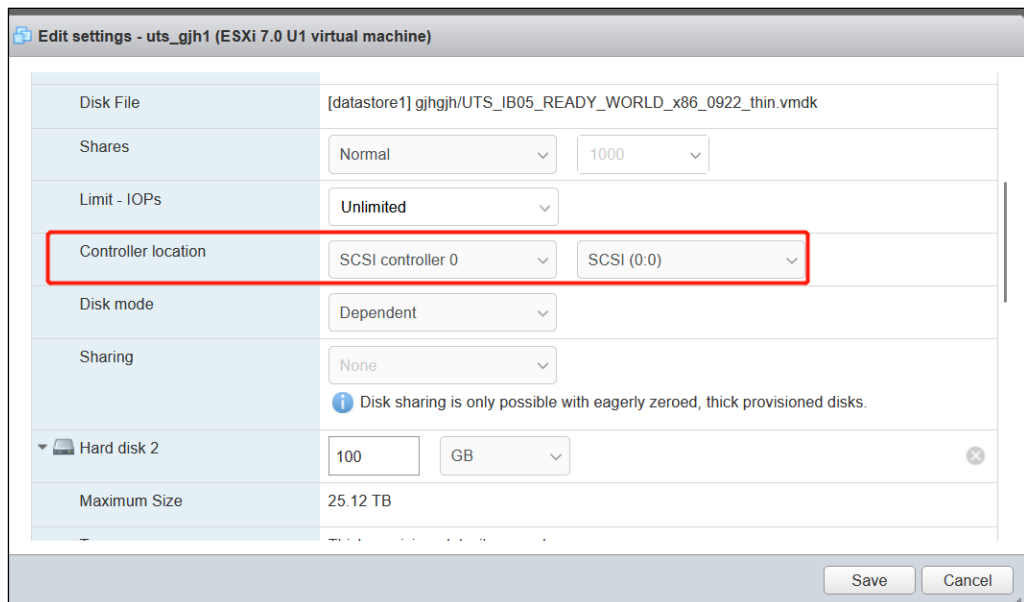
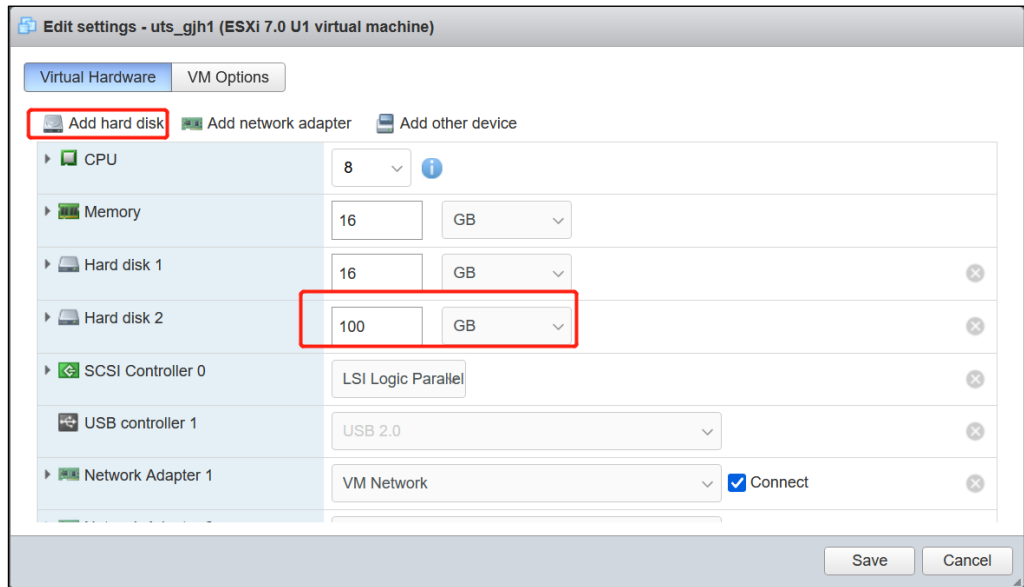
**Step 1** Select vUTS and right-click it to select **Edit Settings**.

**Step 2** Click **Add hard disk** and configure the new hard disk.

Note that you should set the **Bus type** for the hard disk to **IDE**.



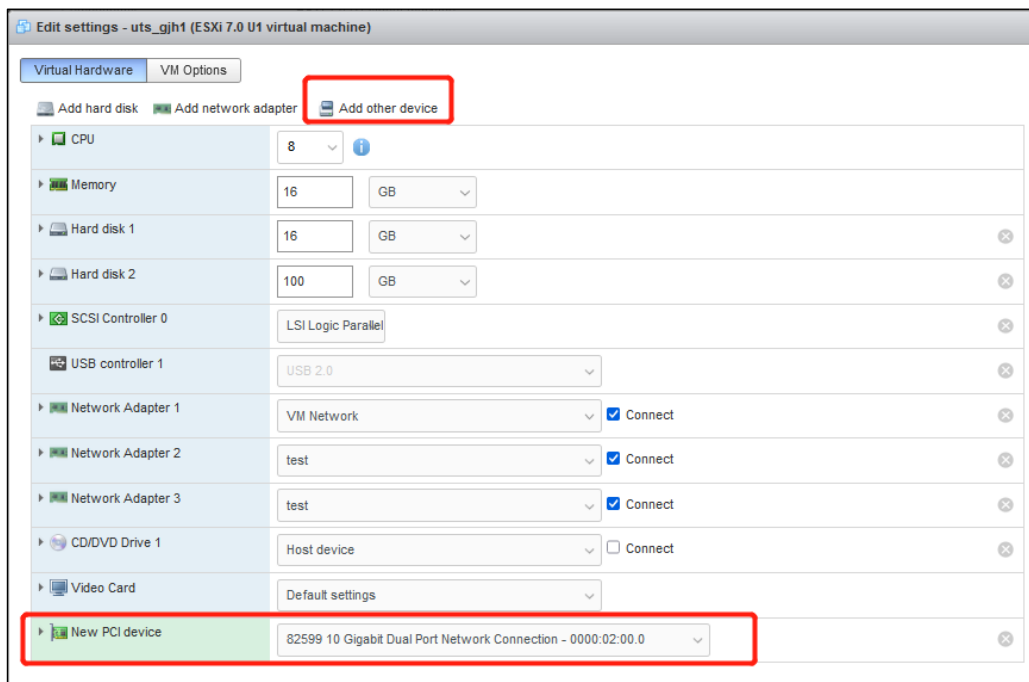
Ensure that the controller positions of multiple hard disks remain consistent, and make sure that the SCSI ID of the newly added data disk is higher than that of the system disk.



## 4.4. Adding/Deleting an NIC

You can add or delete network interface cards (NICs) according to the on-site requirements. A minimum of three NICs are required, with the first two serving as management interfaces.

For working interfaces, click **Add other device** to add a new PCI device. Then configure NIC passthrough. For details, see [Setting NIC Passthrough for the Working Interface](#).



During deployment, at least three physical NICs are required.

## 4.5. Starting vUTS

After the deployment is complete, start vUTS.

Note that VMware may take some time to load on this page during the initial start-up process. Please be patient and wait.

```
GRUB Loading stage1.5.

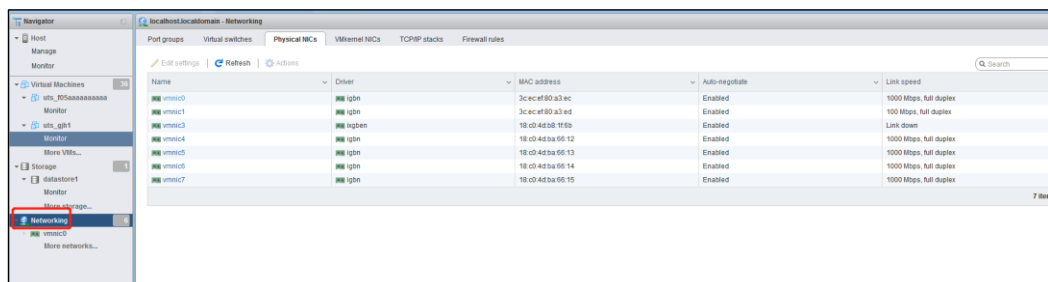
Bootloader loading, please wait...
Press any key to continue.
Press any key to continue.
Press any key to continue.
Press any key to continue.
Press any key to continue.
—
```

# 5 Adding a Working Interface (NIC Bridge Mode)

Ensure that at least one physical NIC is not set to passthrough mode.

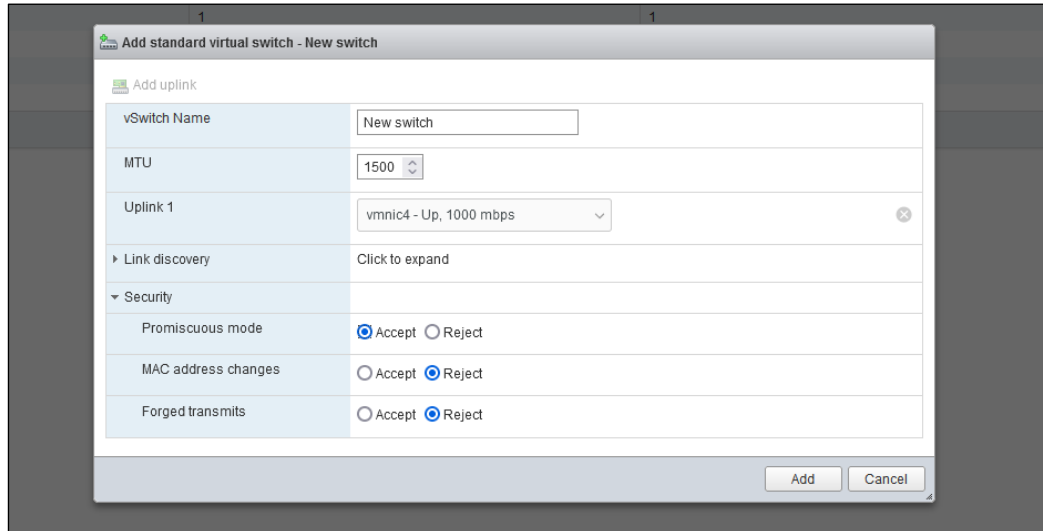
## 5.1 Viewing Physical NICs

Choose **Networking > Physical NICs** to view physical NICs available.



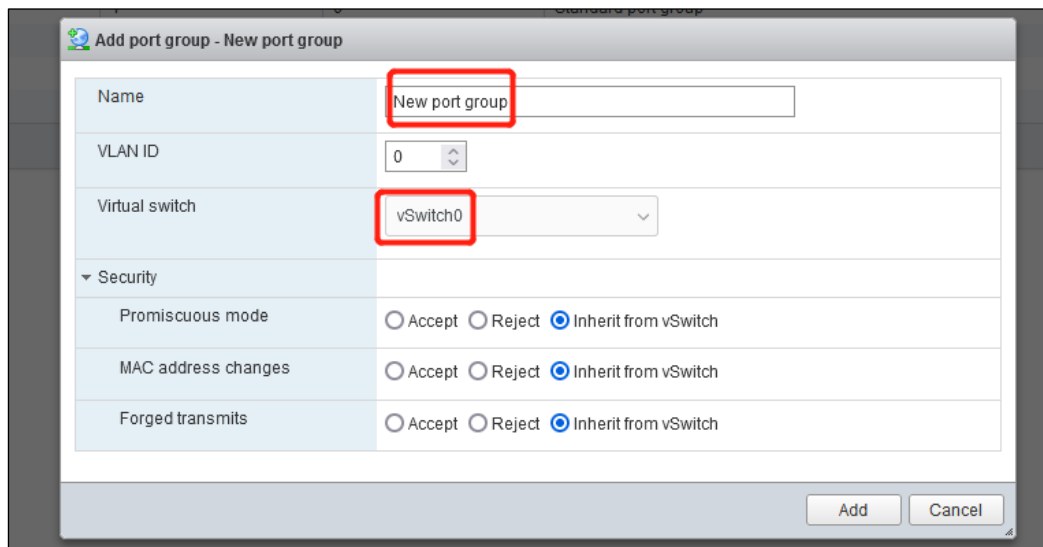
## 5.2 Adding a Standard Virtual Switch

Choose **Networking > Virtual Switches**. Type a vSwitch name. Select the physical NIC for the **Uplink** field and select **Accept** for the **Promiscuous Mode** field.



### 5.3. Adding an Interface Group

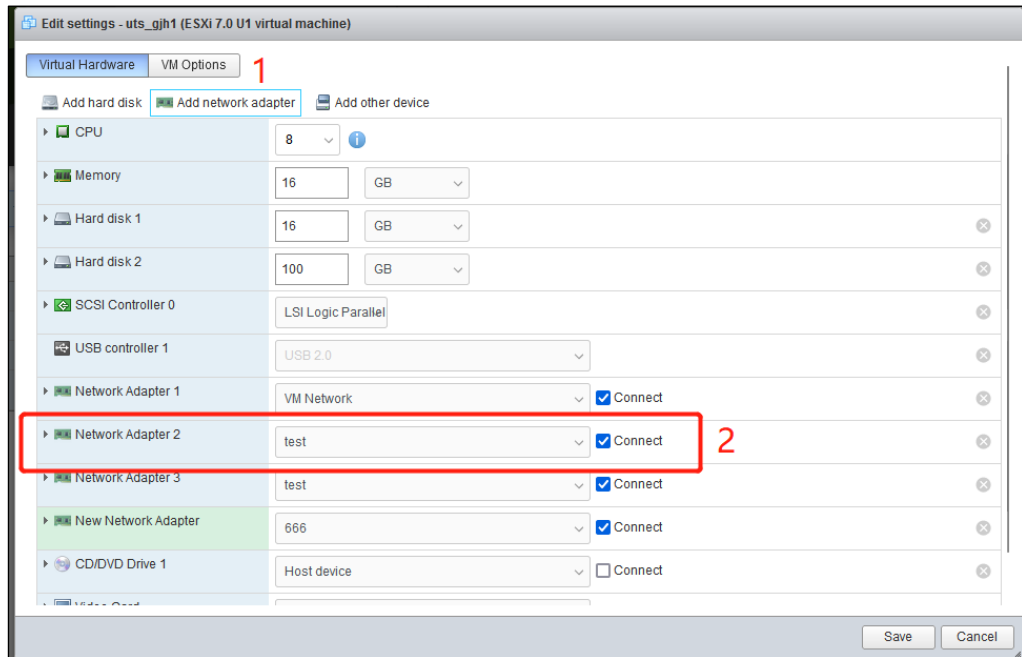
Choose **Networking > Virtual Switches**. Type an interface group name and select the newly created standard virtual switch.



### 5.4. Configuring vUTS and Adding a NIC

Select vUTS and right-click it to select **Edit Settings**. Click **Add network adapter**, and select E1000 as the NIC adapter.





## 5.5 Starting vUTS

After the deployment is complete, start vUTS.

