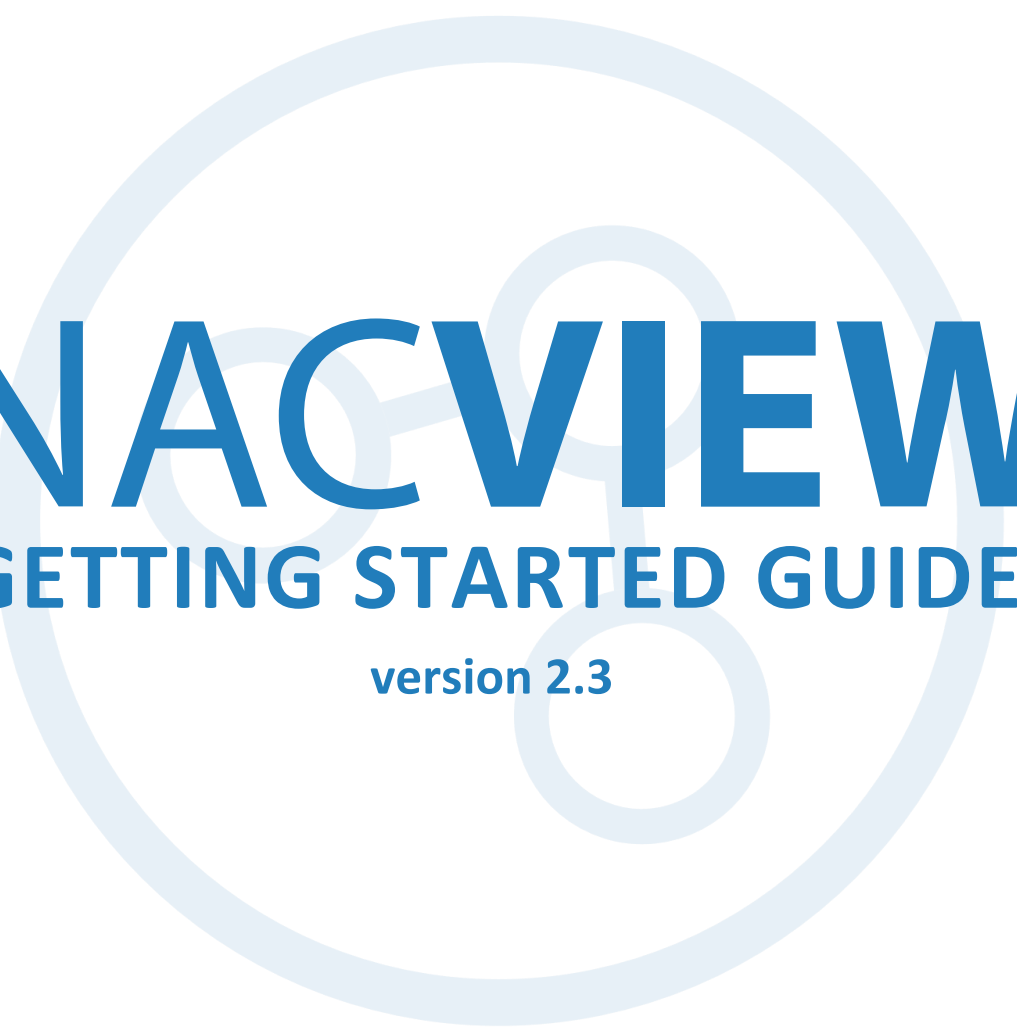




NACVIEW

GETTING STARTED GUIDE

version 2.3

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1. System requirements

This document presents the available NACVIEW system platforms and the minimum system requirements recommended for the correct installation of the system and its subsequent work.

1.1. NACVIEW system platforms

The NACVIEW system is available in the software version to be installed on a virtual machine (VM) and in the form of a ready device with the applied system (Hardware Appliance).

The NACVIEW system is licensed for a number of unique daytime authorizations. Depending on the number of authorizations, the platform is available in several sizes shown in Table 1.

Table 1. Available platforms of the NACVIEW system.

PN	Description	Number of end devices
NV-100-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 100 end devices (MAC addresses) simultaneously connected to the network.	100
NV-250-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 250 end devices (MAC addresses) simultaneously connected to the network.	250
NV-500-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 500 end devices (MAC addresses) simultaneously connected to the network.	500
NV-1000-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 1'000 end devices (MAC addresses) simultaneously connected to the network.	1000
NV-1500-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 1'500 end devices (MAC addresses) simultaneously connected to the network.	1'500
NV-2500-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 2'500 end devices (MAC addresses) simultaneously connected to the network.	2'500
NV-5K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 5,000 end devices (MAC addresses) simultaneously connected to the network.	5'000
NV-10K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 10'000 end devices (MAC addresses) simultaneously connected to the network.	10'000
NV-15K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 15'000 end devices (MAC addresses) simultaneously connected to the network.	15'000

NV-20K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 20'000 end devices (MAC addresses) simultaneously connected to the network.	20'000
NV-25K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 25'000 end devices (MAC addresses) simultaneously connected to the network.	25'000
NV-50K-VM	NACVIEW (VM) license for a network access management system that allows authorization of up to 50'000 end devices (MAC addresses) simultaneously connected to the network.	50'000
NV-unlim-VM	NACVIEW License (VM) for network access management. License allows for authorization of unlimited endpoint devices (MAC addresses) simultaneously connected to the network.	unlimited

1.2. NACVIEW installation methods

The NACVIEW system can be installed on the following machines:

- VMware,
- Windows Hyper-V,
- Synology,
- Installation on a physical server (Hardware Appliance).

1.3. Hardware requirements for NACVIEW installation on virtual machines

The table below lists the minimum recommended parameters for virtual machines (VM):

Table 2. The minimum technical parameters of virtual machines.

System	Memory	Processor	Storage
NV-100-VM	Min.12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-250-VM	Min. 12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-500-VM	Min. 12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-1000-VM	Min. 12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB

NV-1500-VM	Min. 12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-2500-VM	Min. 12 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-5K-VM	Min. 16 GB RAM	Processor: min. 4 cores Recommended processor at the minimum level 3000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 500 GB
NV-10K-VM	Min. 24 GB RAM	Processor: min. 8 cores Recommended processor at the minimum level 7000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 2 TB
NV-15K-VM	Min. 24 GB RAM	Processor: min. 8 cores Recommended processor at the minimum level 7000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 2 TB
NV-20K-VM	Min. 32 GB RAM	Processor: min. 8 cores Recommended processor at the minimum level 7000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 2 TB
NV-25K-VM	Min. 32 GB RAM	Processor: min. 8 cores Recommended processor at the minimum level 7000 points Passmark	System requirements: min. 200 GB Requirements for the database and logs: min. 2 TB

1.4. Physical servers parameters (Hardware Appliance)

The table below presents the minimum recommended parameters for physical machines:

Table3. Minimal requirements for physical machines.

System	Server parameters
NV-100-HW	Server size 1U RACK. Silent cooled passively. Intel processor at the minimum level 7000 points in Passmark tests. Discs: 2 equipped with SSD hard drives with a capacity of 1 TB. Expandable to support 4 disks. RAM memory: 12 GB min. Hardware RAID controller: 0, 1. Two network ports. Dual redundant power supply.
NV-250-HW	
NV-500-HW	
NV-1000-HW	
NV-1500-HW	
NV-2500-HW	
NV-5K-HW	
NV-10K-HW	Server size 1U RACK.
NV-15K-HW	Two Intel Xeon processors at the minimum level 8,000 points in Passmark tests.

NV-20K-HW	Discs: 4 equipped with SSD hard drives with a capacity of 1 TB. Expandable to support 4 disks.
NV-25K-HW	RAM memory: 32 GB min.
NV-50K-HW	Hardware RAID controller: 0, 1, 5, 6, 10, 50, 60. Four network ports. A double redundant fan. Dual redundant power supply.

1.5. Installation files of the NACVIEW system (VM)

Installation files are available for download on the website <https://nacview.com/download>.

2. Installation on virtual machines

2.1. Installation on the VMware vSphere vCenter platform

This section describes the installation of the NACVIEW system on the VMware vSphere vCenter virtualization platform. The first step is to log in to the vCenter platform.

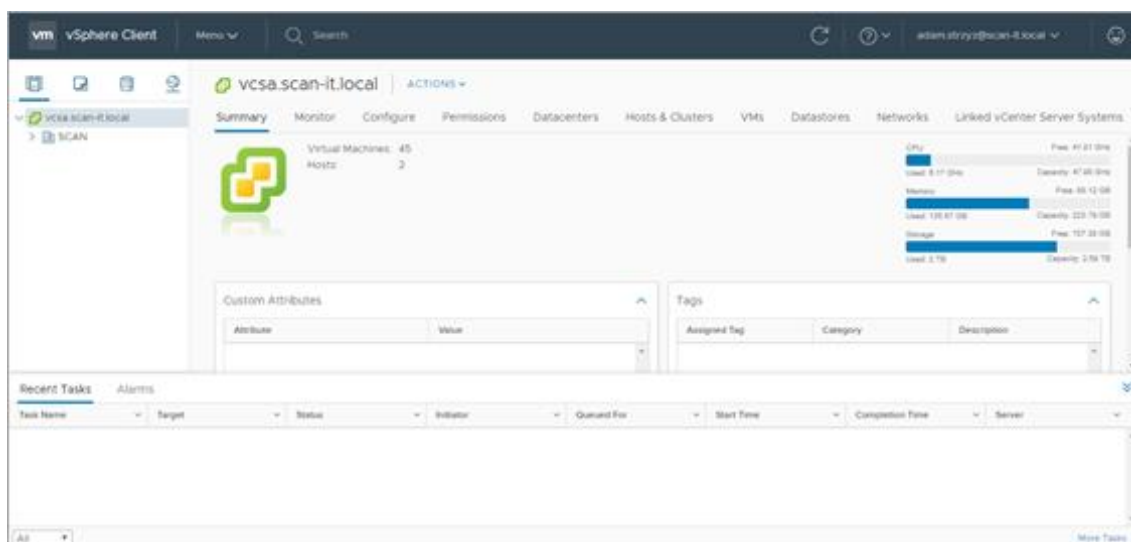


Fig. 1. VMware vCenter management console.

In the window on the left, select the instance to install the NACVIEW system. Then right-click on the instance and choose the **Deploy OVF Template** option.

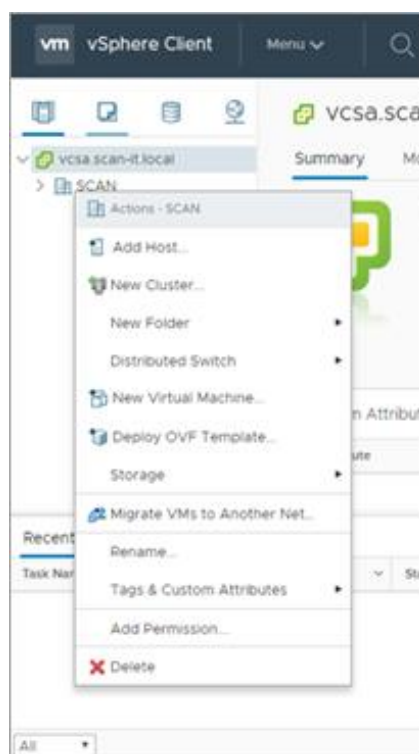
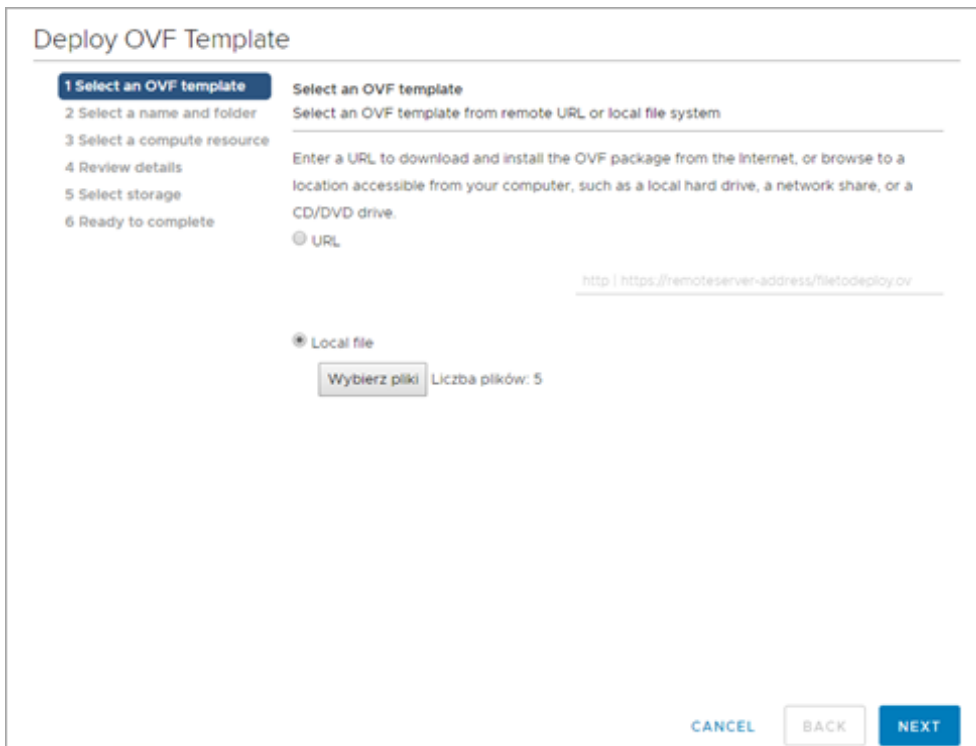


Fig. 2. VMware installation - the Deploy OVF Template option.

The configurator window will open, in which you should select the Local file option and specify the path to the file with the system image.



Deploy OVF Template

1 Select an OVF template
2 Select a name and folder
3 Select a compute resource
4 Review details
5 Select storage
6 Ready to complete

Select an OVF template
Select an OVF template from remote URL or local file system

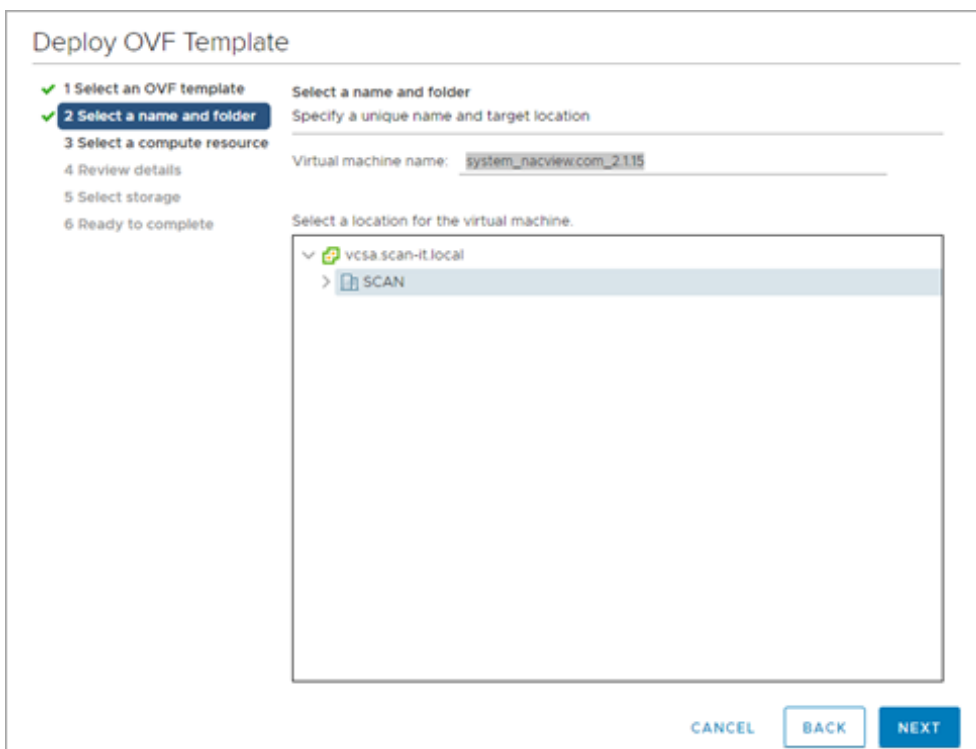
Enter a URL to download and install the OVF package from the Internet, or browse to a location accessible from your computer, such as a local hard drive, a network share, or a CD/DVD drive.

☐ URL
☐ Local file

Liczba plików: 5

Fig. 3. VMware installation - selecting the file with the system image.

The next step is to specify the name of the machine in the field Virtual machine name and select the final location.



Deploy OVF Template

✓ 1 Select an OVF template
✓ 2 Select a name and folder
3 Select a compute resource
4 Review details
5 Select storage
6 Ready to complete

Select a name and folder
Specify a unique name and target location

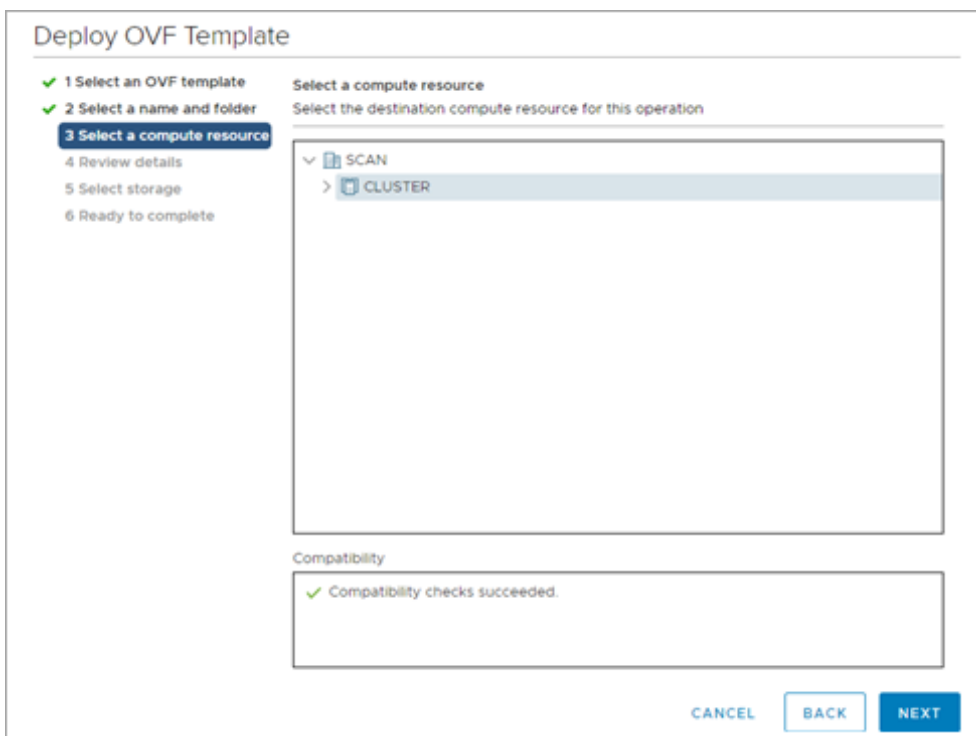
Virtual machine name:

Select a location for the virtual machine.

☐ vcsa.scan-it.local
 > ☐ SCAN

Fig. 4. Installing VMware – virtual machine name and folder installation.

Then select the resource, where the NACVIEW instance will be installed.



Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- 3 Select a compute resource**
- 4 Review details
- 5 Select storage
- 6 Ready to complete

Select a compute resource
Select the destination compute resource for this operation

▼ SCAN

> CLUSTER

Compatibility

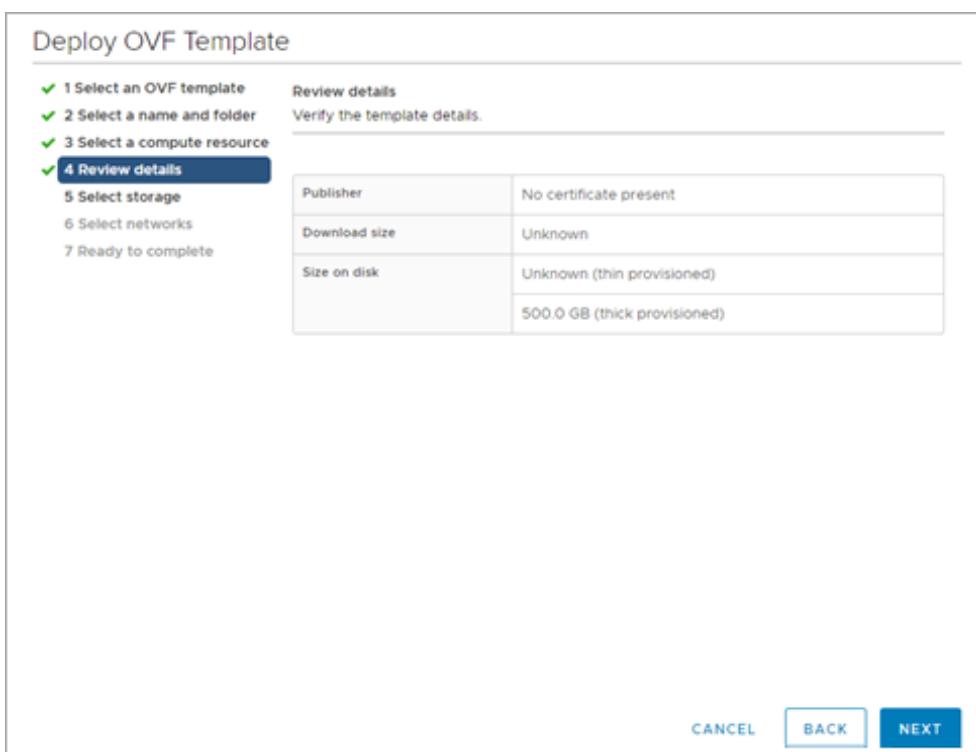
✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Fig. 5. VMware installation - a selection of the compute resource.

Pressing the Next button takes you to the summary window. This window displays information about:

- the issuer of the OVF file (if such information was provided in the certificate attached to the file, such information was given),
- the size of the OVF file,
- disk size after installing the OVF file.



Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- 4 Review details**
- 5 Select storage
- 6 Select networks
- 7 Ready to complete

Review details
Verify the template details.

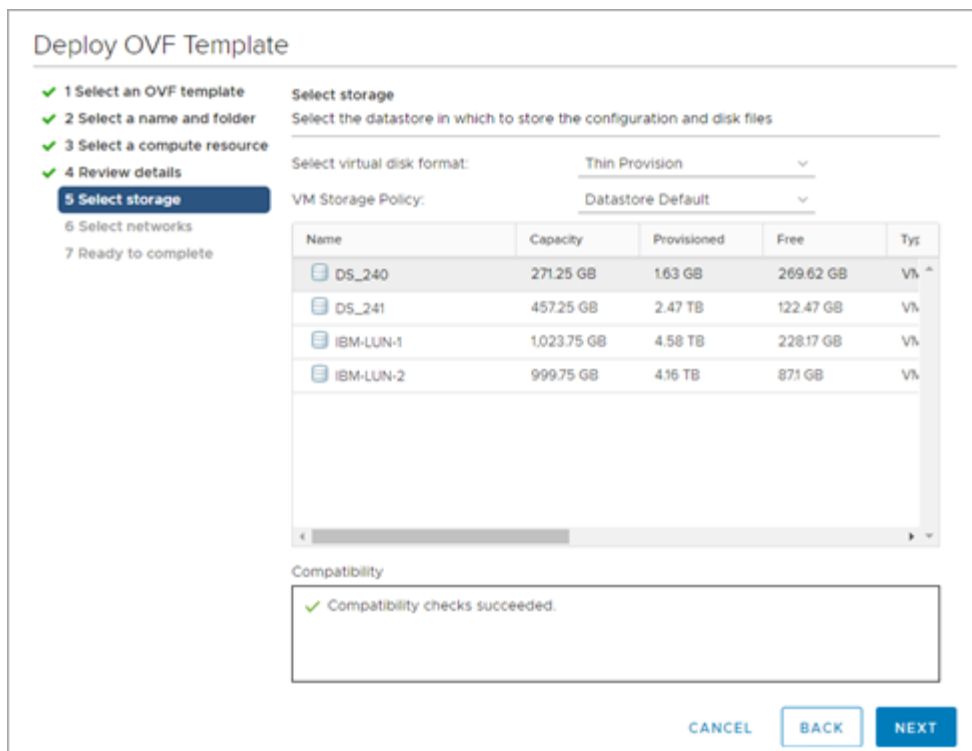
Publisher	No certificate present
Download size	Unknown
Size on disk	Unknown (thin provisioned)
	500.0 GB (thick provisioned)

CANCEL BACK NEXT

Fig. 6. VMware installation – installation summary.

After clicking the Next button, appears a window with option to select disk resources where the NACVIEW system will be installed. Choose the storage disk and its format.

For NACVIEW installation it is recommended to choose **Thin Provision** format.



Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- 5 Select storage**
- 6 Select networks
- 7 Ready to complete

Select storage
Select the datastore in which to store the configuration and disk files

Select virtual disk format: Thin Provision

VM Storage Policy: Datastore Default

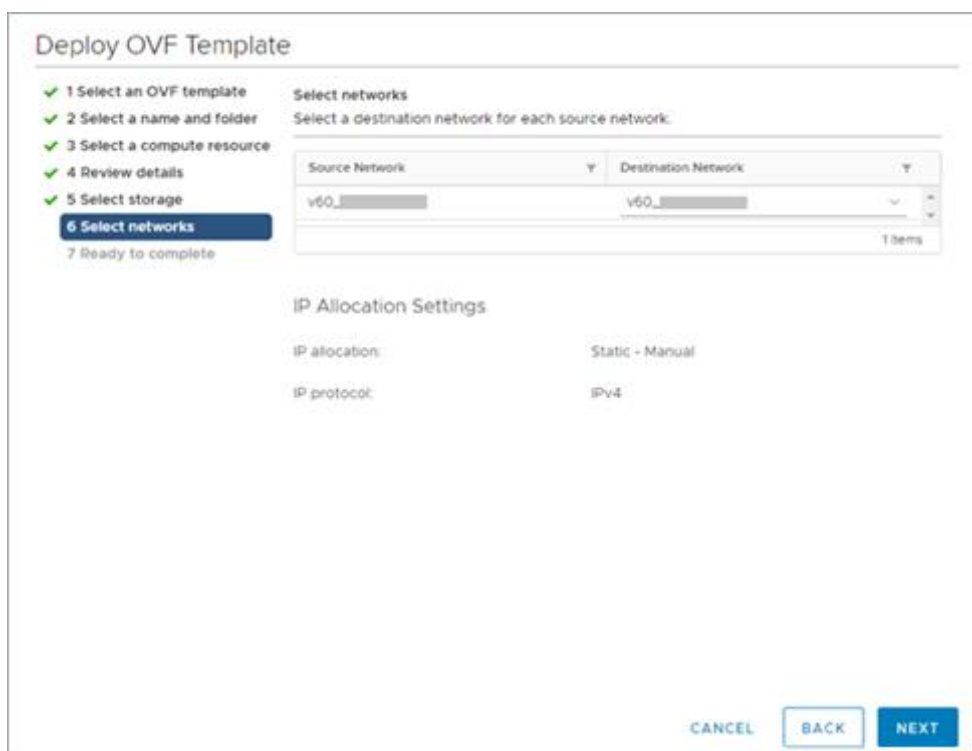
Name	Capacity	Provisioned	Free	Type
DS_240	271.25 GB	1.63 GB	269.62 GB	VM
DS_241	457.25 GB	2.47 TB	122.47 GB	VM
IBM-LUN-1	1,023.75 GB	4.58 TB	228.17 GB	VM
IBM-LUN-2	999.75 GB	4.16 TB	87.1 GB	VM

Compatibility
✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Fig. 7. VMware installation – select the virtual disk and format.

Next window specifies a network mapping for defined subnets.



Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 Select storage
- 6 Select networks**
- 7 Ready to complete

Select networks
Select a destination network for each source network.

Source Network	Destination Network
v60_	v60_

Items

IP Allocation Settings

IP allocation: Static - Manual

IP protocol: IPv4

CANCEL BACK NEXT

Fig. 8. VMware installation - definition of network mappings.

The last window displays a OVF template summary. If the parameters are correct, click the **Finish** button. At this point, the NACVIEW system will be deployed on the virtual machine.

Deploy OVF Template

✓ 1 Select an OVF template

✓ 2 Select a name and folder

✓ 3 Select a compute resource

✓ 4 Review details

✓ 5 Select storage

✓ 6 Select networks

7 Ready to complete

Ready to complete

Click Finish to start creation.

Provisioning type	Deploy from template
Name	system_nacview.com_2.1.15
Template name	system_nacview.com_2.1.15
Download size	Unknown
Size on disk	500.0 GB
Folder	SCAN
Resource	CLUSTER
Location	IBM-LUN-1
Storage mapping	1
All disks	Datastore: IBM-LUN-1; Format: Thick Provision Lazy Zeroed
Network mapping	1
v60_	v60_
IP allocation settings	
IP protocol	IPv4
IP allocation	Static - Manual

CANCEL

BACK

FINISH

Fig. 9. VMware installation – OVF template summary.

When the deployment is finished, the NACVIEW system appears on the list of virtual machines.

2.2. Installation on the Windows Hyper-V platform

This section describes the NACVIEW system installation on the Hyper-V virtualization platform.

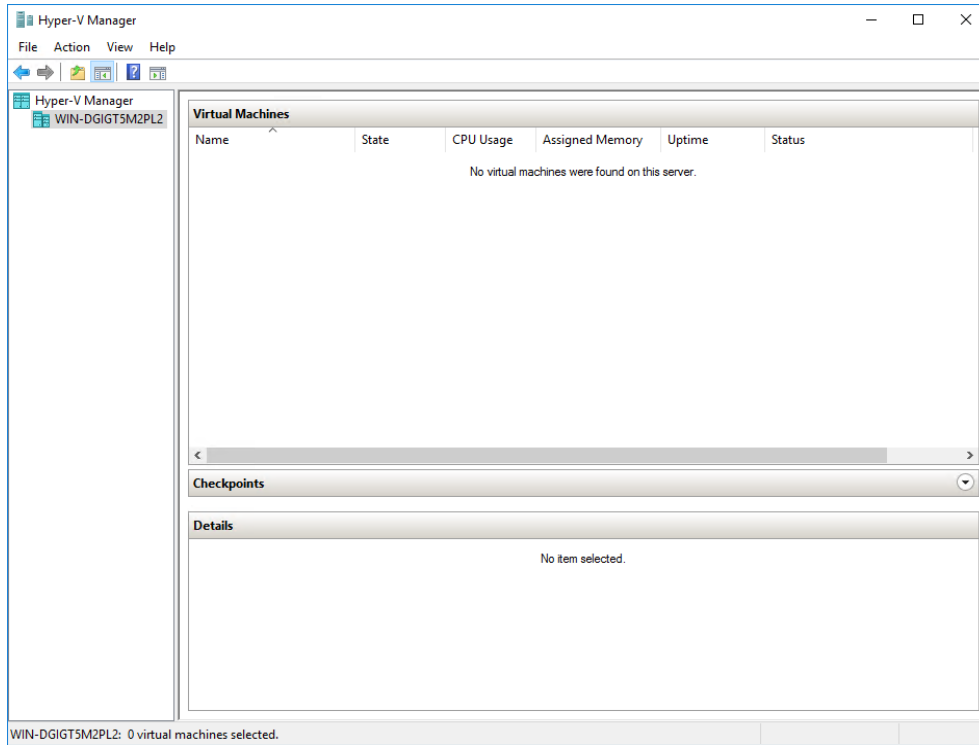


Fig. 10. Hyper-V Manager management console.

In the main view of the Hyper-V Manager window, choose the target server and select the option **Import Virtual Machine** from the menu accessible by pressing the right mouse button.

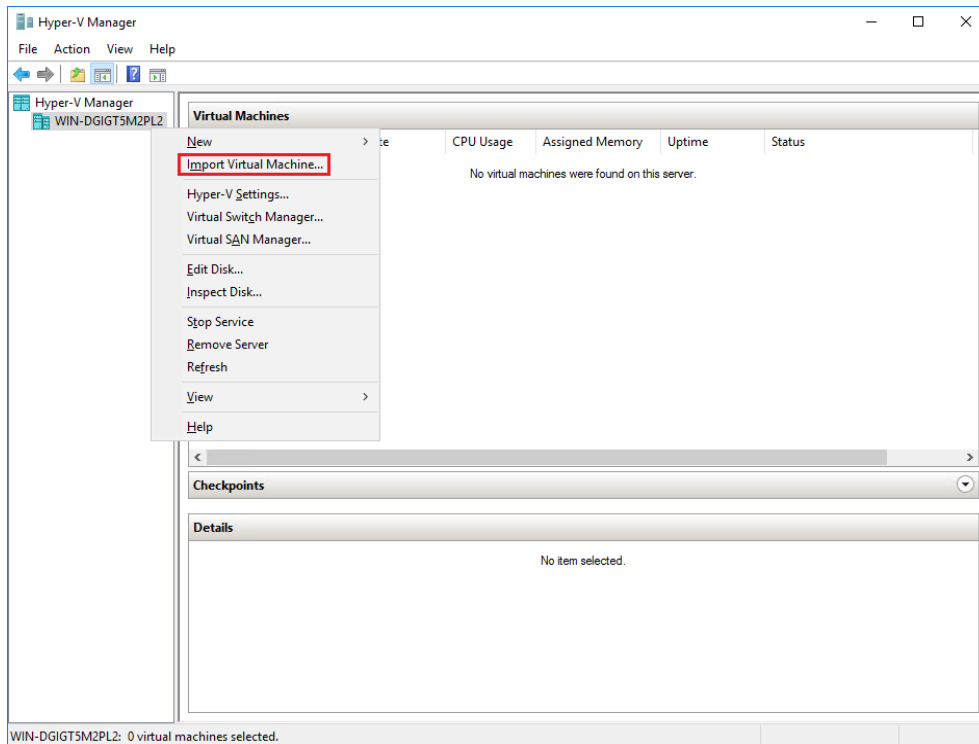


Fig. 11. Hyper-V installation - virtual machine import.

The option **Import Virtual Machine** opens a configurator window for virtual machine import.

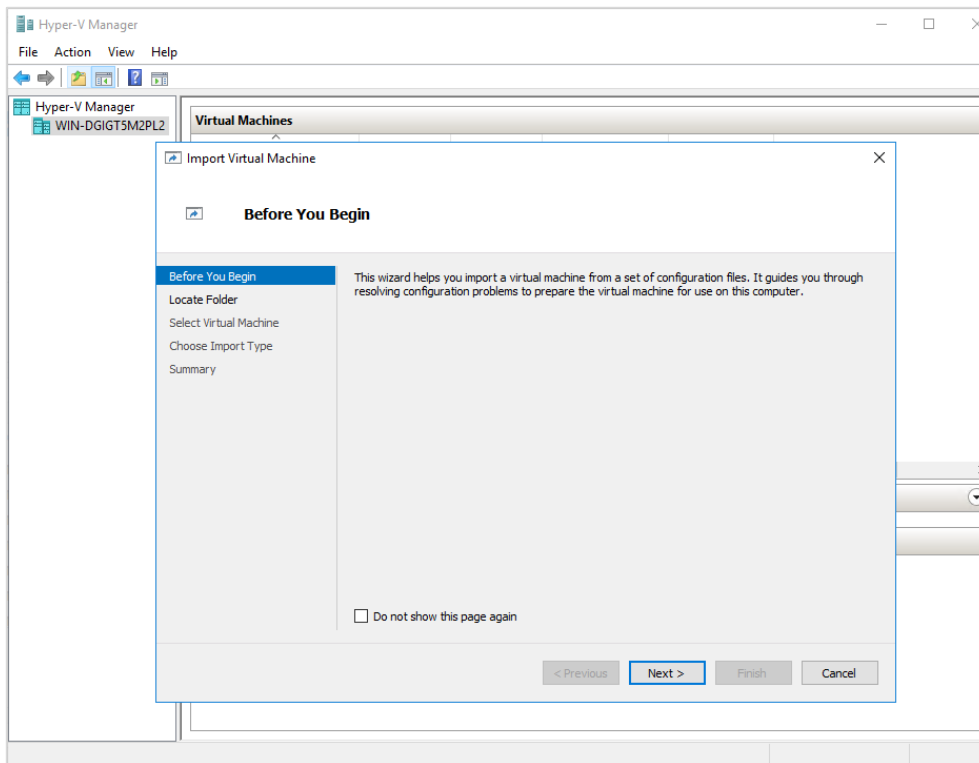


Fig. 12. Hyper-V installation - virtual machine import configurator.

In the next step specify the path to the folder with the virtual machine to be imported.

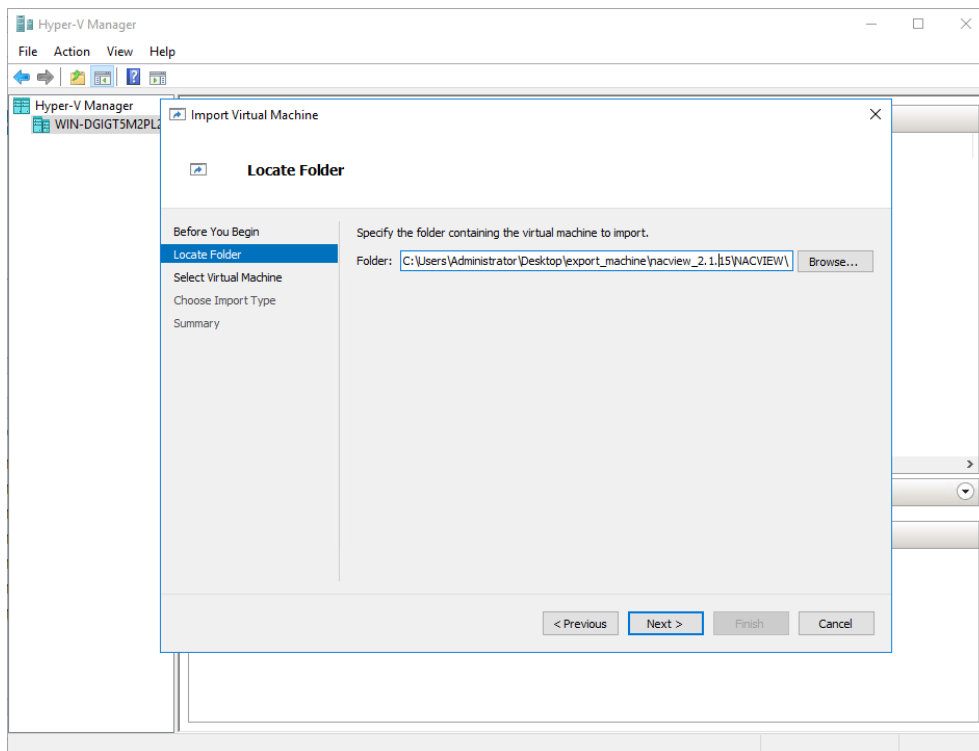


Fig. 13. Hyper-V installation - virtual machine file location.

Select the NACVIEW virtual machine file to import and click the **Next** button.

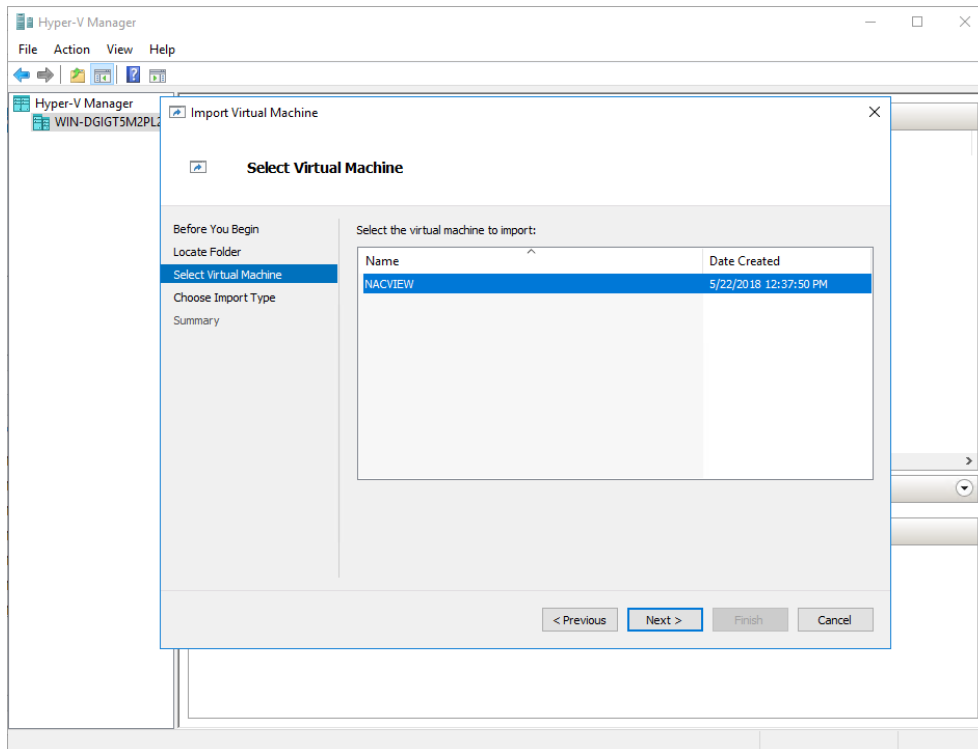


Fig. 14. Hyper-V installation - virtual machine selection.

In the next step, there are available different options for virtual machine import type. Choose ***Copy the virtual machine (create a new unique ID)*** option.

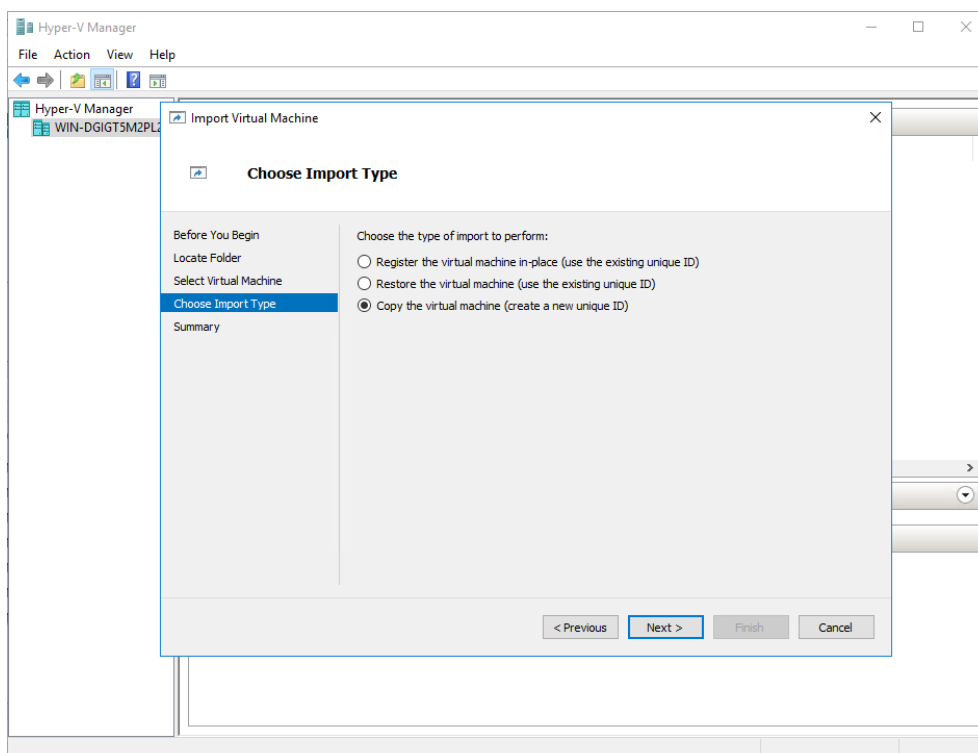


Fig. 15. Hyper-V installation – virtual machine import type.

In the next step the default destination folder for virtual machine files is selected. You can select the folder and click ***Next***.

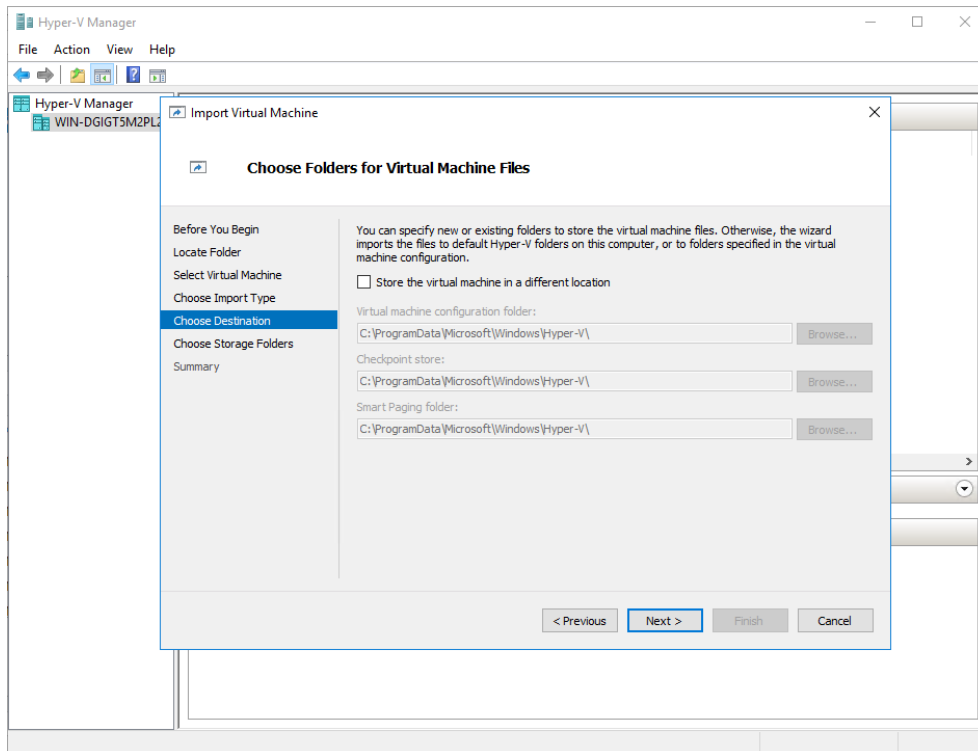


Fig. 16. Hyper-V installation – destination folder for virtual machine files.

In the next window the default storage folders for virtual machine are selected.

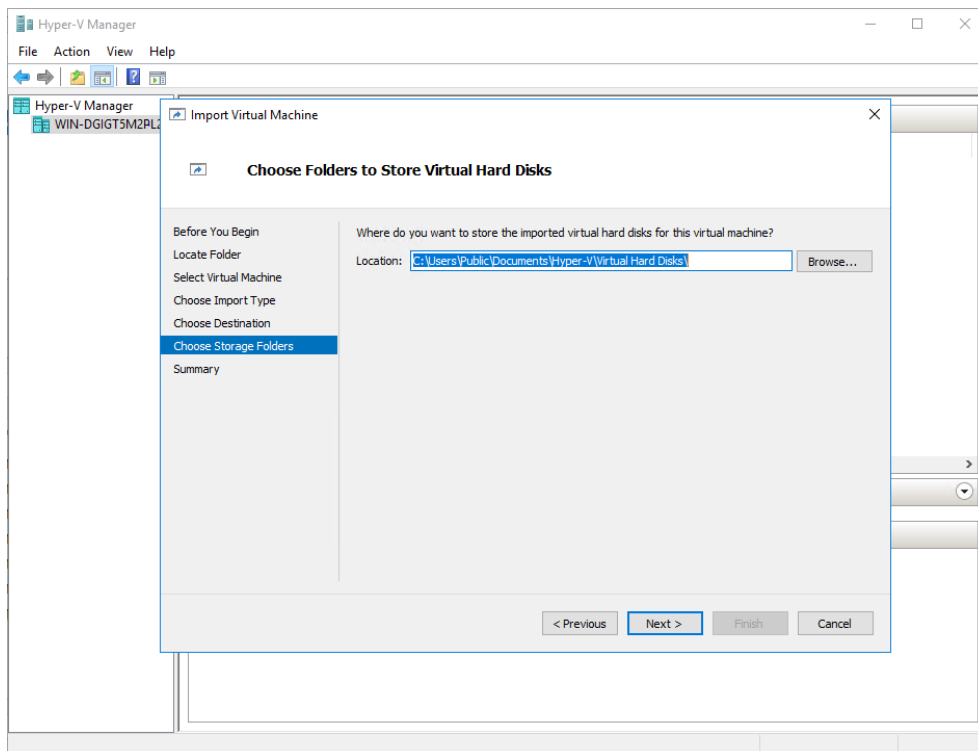


Fig. 17. Hyper-V installation – storage folders for virtual machine.

The last window in the configurator is a summary of the current configuration parameters.

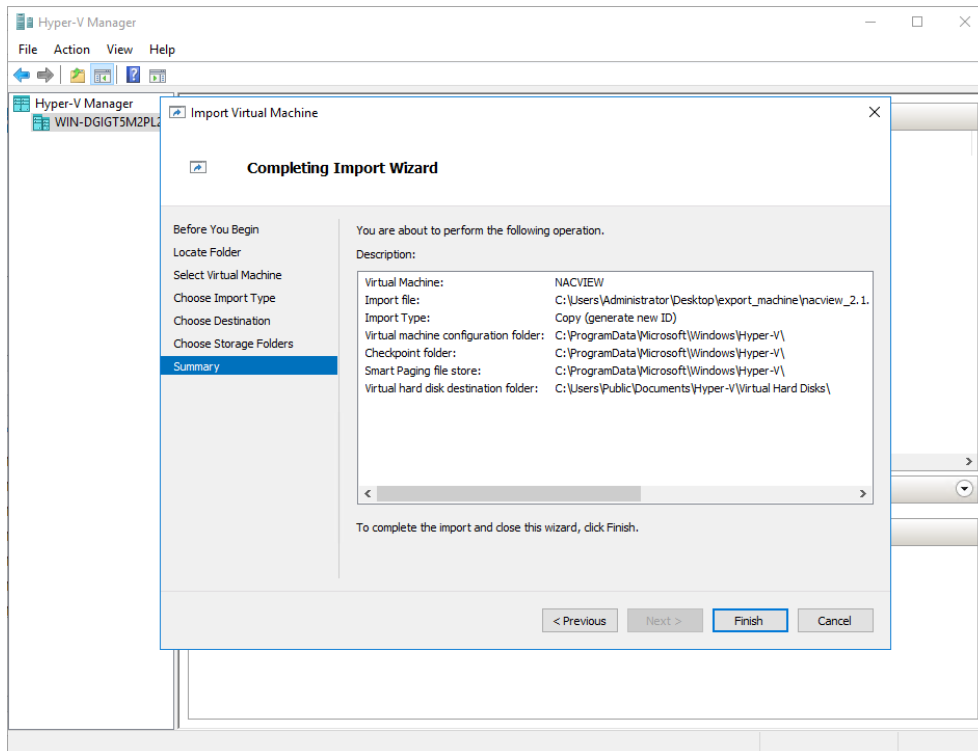


Fig. 18. Hyper-V installation - summary window.

After confirming the parameters, Hyper-V imports the virtual machine.

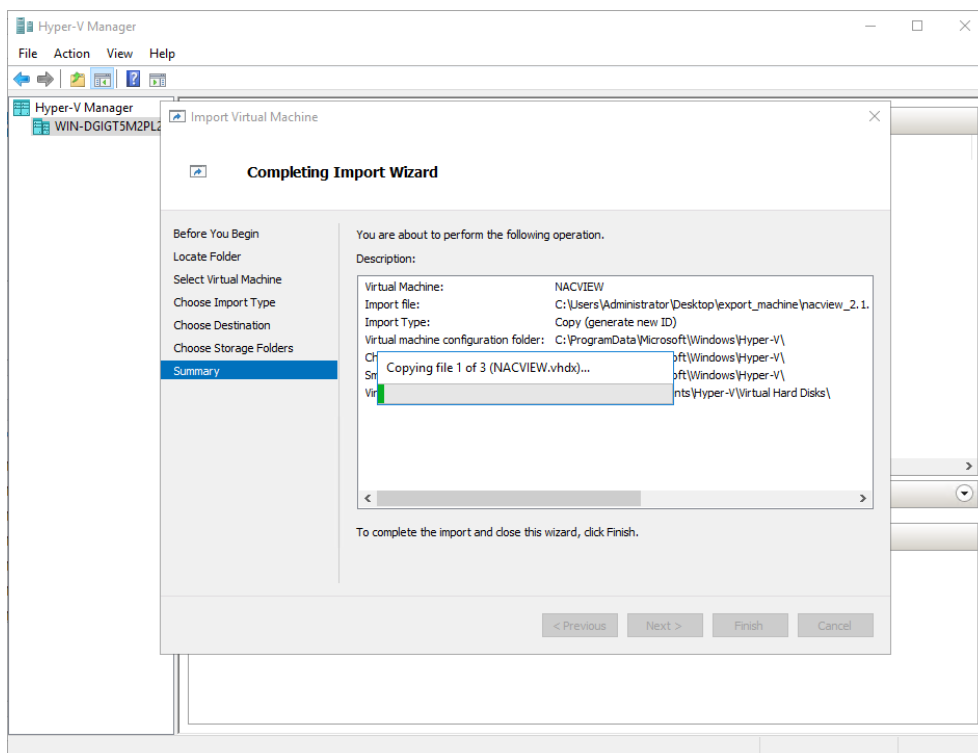


Fig. 19. Hyper-V installation - virtual machine import.

The virtual machine appears in the Hyper-V Manager list.

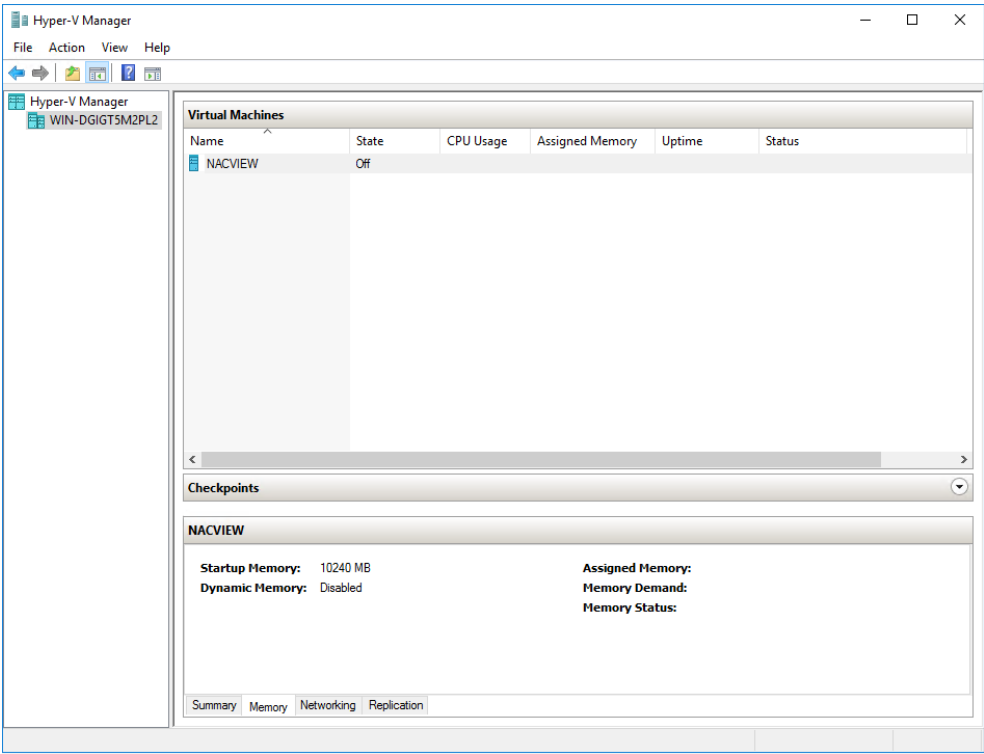


Fig. 20. Hyper-V installation – imported NACVIEW machine.

2.3. Installation on the Windows Synology platform

This section describes the NACVIEW system installation on the Synology virtualization platform.

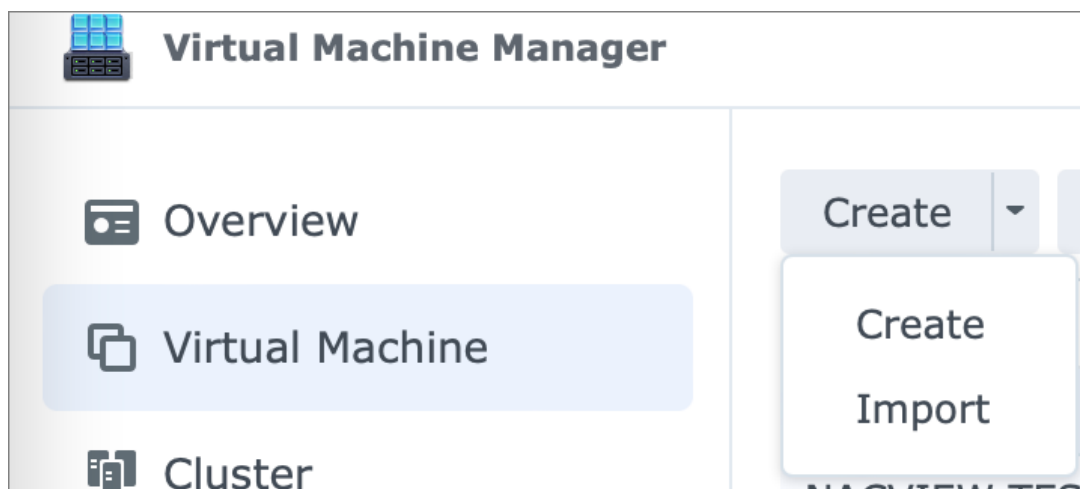


Fig. 21. Synology management console.

In the main view of the Synology window, choose the Virtual Machine and select Import.

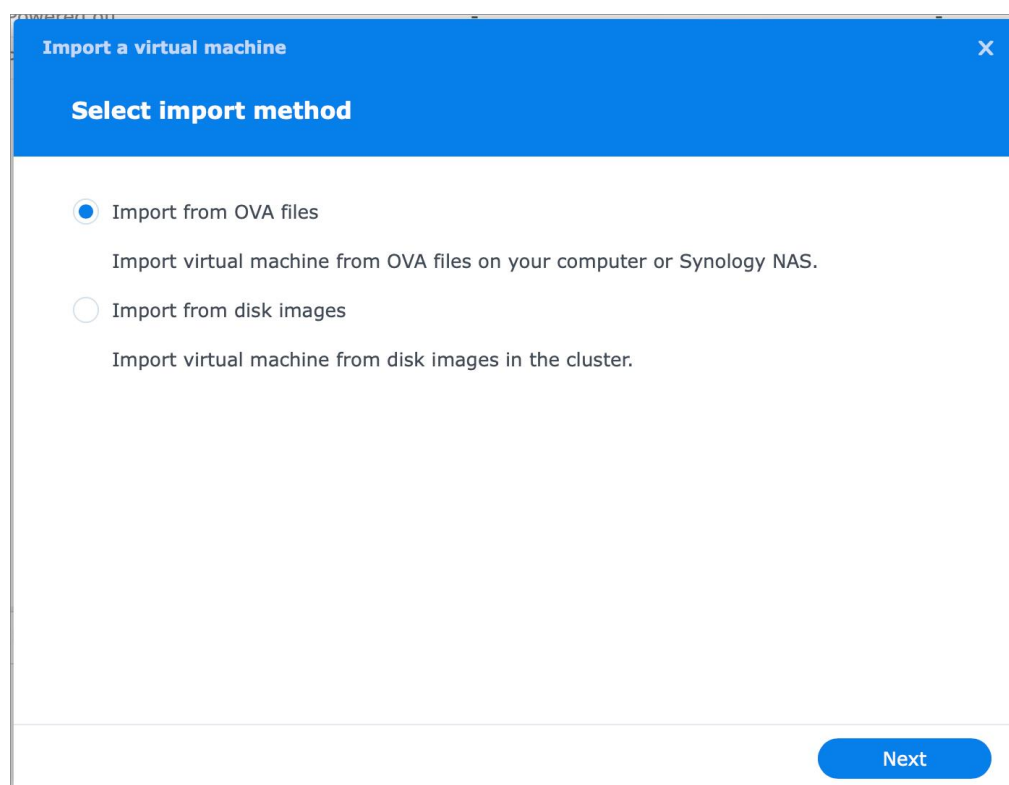


Fig. 22. Synology installation – select import method.

In the next step specify the import method. Select the **Import from OVA files**.

Import a virtual machine

Select import method

☒ Upload a file from PC

File:

NACVIEW_synology_2.3.ov

Browse

☐ Select a file from Synology NAS

File:

Browse

Back

Next

Fig. 23. Synology installation – select import method.

Select the NACVIEW virtual machine file to import and click the **Next** button.

Import a virtual machine

Select Storage

List All Storage

Host	Name	Status	Available S...	RAID Type	Note
VERNIT-HO...	VERNIT-HO...	Healthy	1.82 TB	Synology H...	

Back

Next

Fig. 24. Synology installation – select storage.

After clicking the Next button, appears a window with option to select disk resources where the NACVIEW system will be installed. Choose the storage disk and click the **Next** button.

Import a virtual machine

Configure General Specifications

Name:

CPU(s):

Memory:

Video Card:

Description:

Back
Next

Fig. 25. Synology installation – configuration.

In the next step specify parameters for virtual machine. More in point 1.3 minimum technical parameters of virtual machines.

Import a virtual machine

Storage

Virtual Disk 1:

Virtual Disk 2:

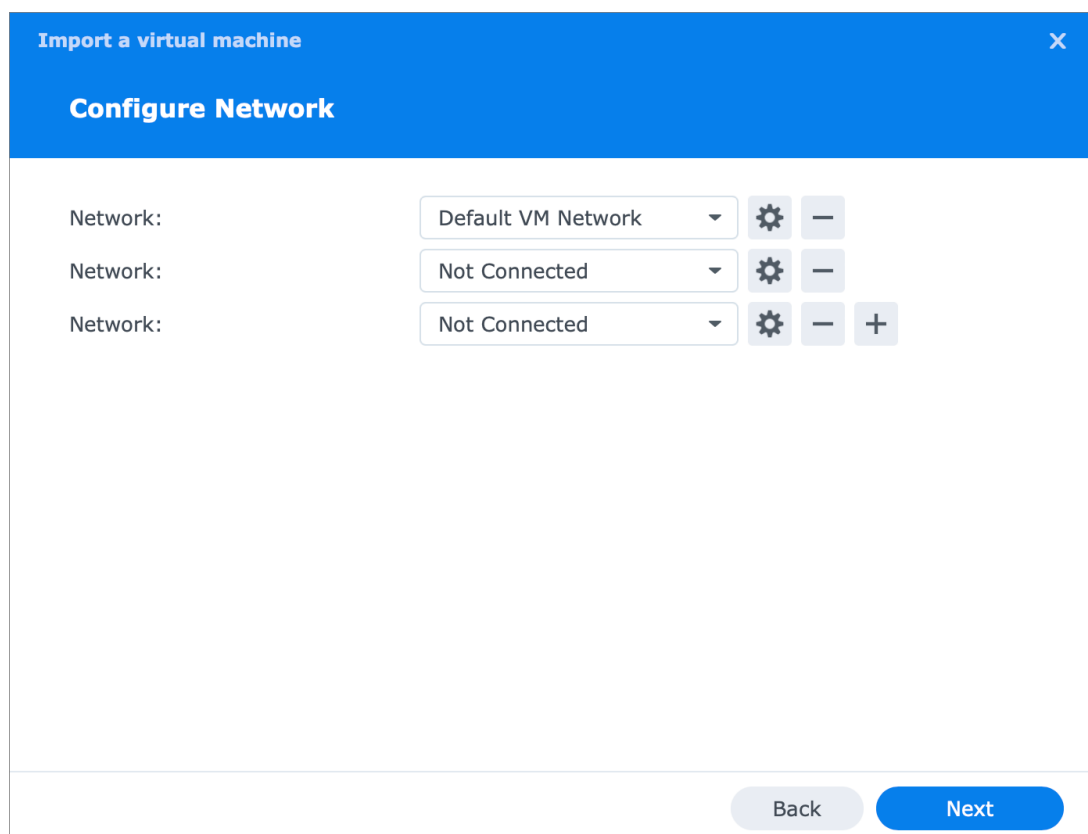
Virtual Disk 3:

☐ Automatically switch the disk controller to Virtio after installing the Synology Guest Tool.

Back
Next

Fig. 26. Synology installation – storage configuration.

In the next window select storages capacity.



Import a virtual machine ×

Configure Network

Network: Default VM Network ⚙️ −

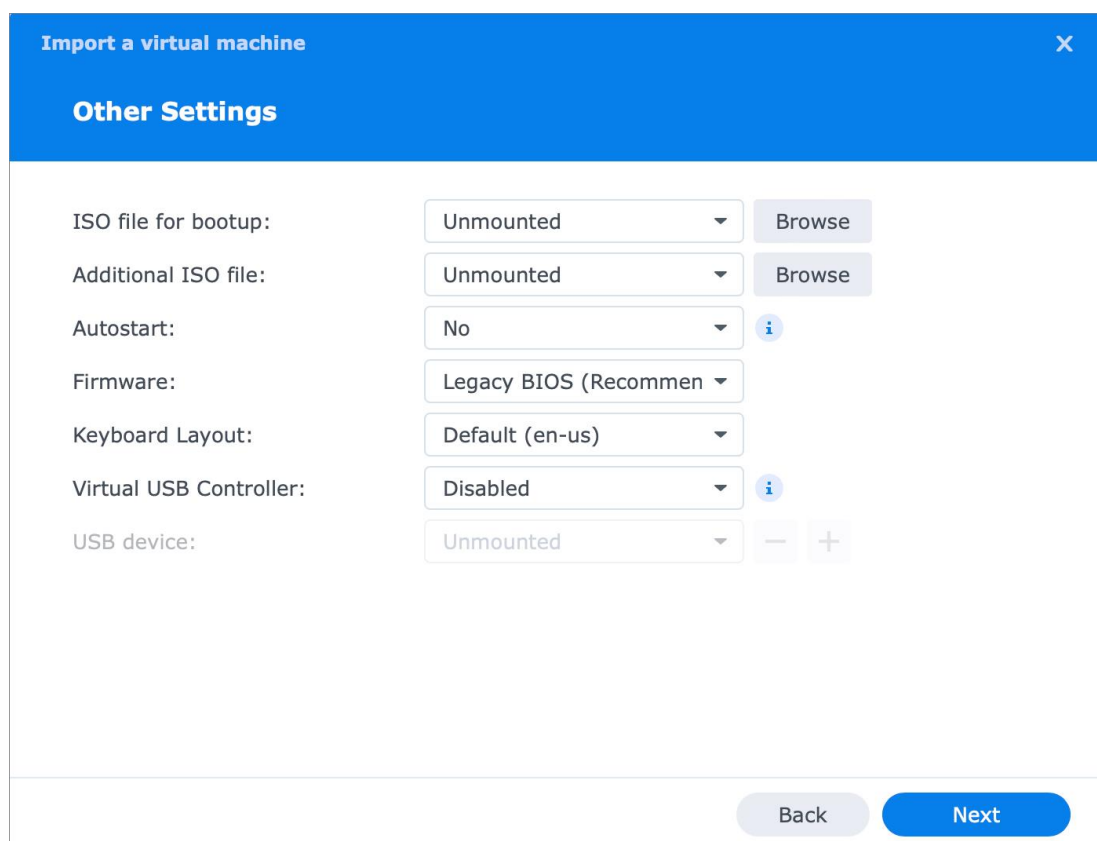
Network: Not Connected ⚙️ −

Network: Not Connected ⚙️ − +

Back Next

Fig. 27. Synology installation – network configuration.

Select the network in which NACVIEW is to operate.



Import a virtual machine ×

Other Settings

ISO file for bootup: Unmounted ⚙️ Browse

Additional ISO file: Unmounted ⚙️ Browse

Autostart: No ⓘ

Firmware: Legacy BIOS (Recommen ⚙️

Keyboard Layout: Default (en-us) ⚙️

Virtual USB Controller: Disabled ⓘ

USB device: Unmounted − +

Back Next

Fig. 28. Synology installation – other settings.

In other settings, you can leave the default values.

Import a virtual machine

X

Summary

Item	Value
Storage	V[REDACTED] - VM Storage 1
Name	NACVIEW1
CPU(s)	2
Memory	8 GB
Video Card	vmvga
Description	-
Enable CPU compatibility mode	Disabled
Reserved CPU Threads	-
CPU Relative Weight	Normal
Virtual Disk 1	100 GB (VirtIO)

☐ Power on the virtual machine after creation

Back

Done

Fig. 29. Synology installation – summary.

The last window displays configuration summary.