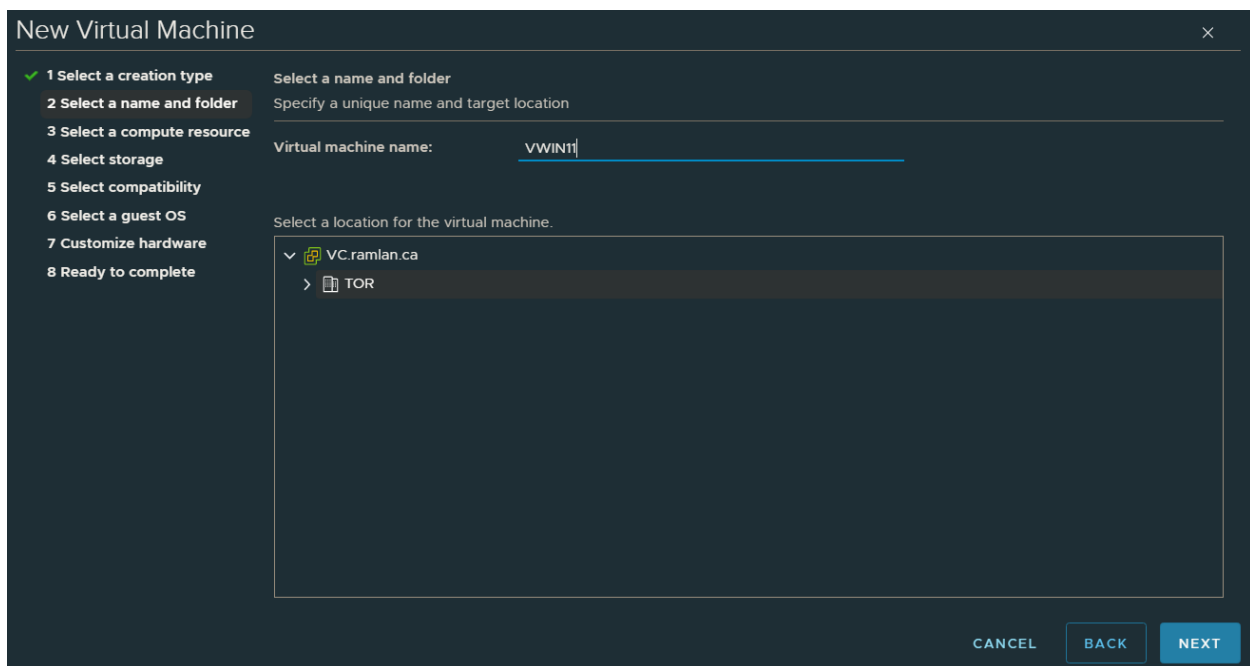
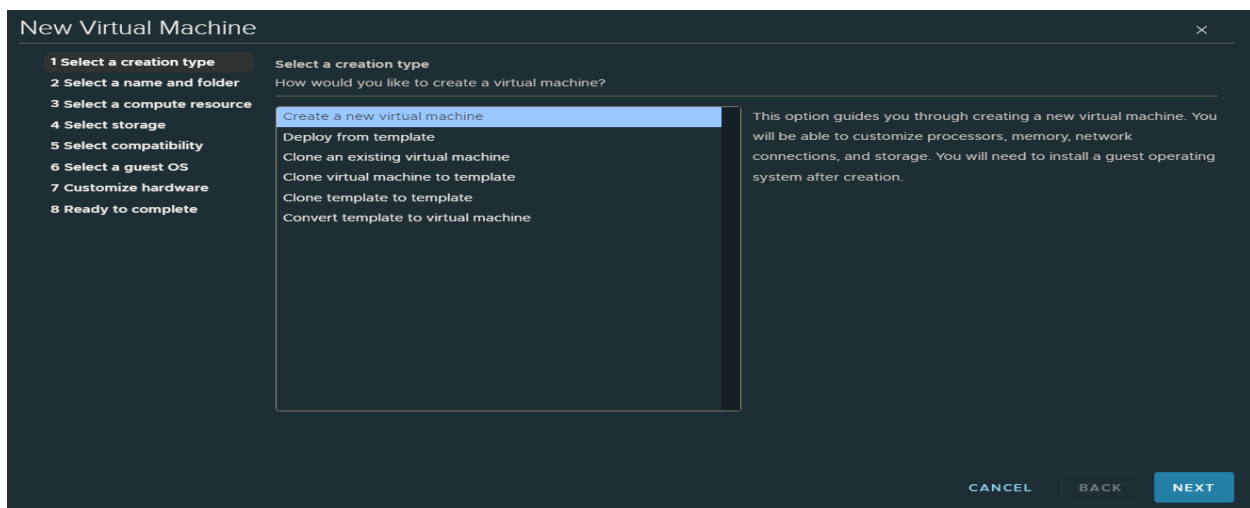
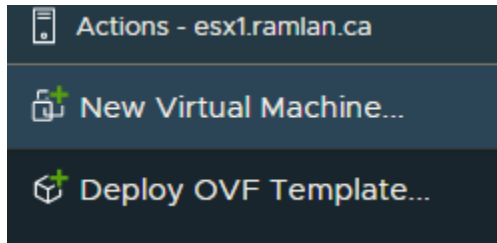


How to install Windows 11 on vSphere ESXi 7.0.3

In this post, I am going to install Windows 11 as virtual machine on vSphere ESXi 7.0.3. As of now when you start virtual machine creation there is no option to select Windows 11 – just Windows 10 is the only option available.

We will select Windows 10 as the base OS and then make necessary changes to the settings before installing Windows 11.



New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Select a compute resource

Select the destination compute resource for this operation

TOR

NORTH AMERICA

esx1.ramlan.ca

esx2.ramlan.ca

Compatibility

✓

Compatibility checks succeeded.

CANCEL

BACK

NEXT

I was not able to Select the box to Encrypt VM because it was missing Key provider. Created one below:

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Select storage

Select the storage for the configuration and disk files

Encrypt this virtual machine (Requires Key Management Server)

VM Storage Policy

Datastore Default

Disable Storage DRS for this virtual machine

	Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster
	DatastoreCluster	--	999.75 GB	21.26 GB	978.49 GB		
	ESX1DS	--	1.51 TB	259.59 GB	1.46 TB	VMFS 6	

2 items

Compatibility

✓

Compatibility checks succeeded.

CANCEL

BACK

NEXT

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Select storage

Select the storage for the configuration and disk files

Encrypt this virtual machine

VM Storage Policy

VM Encryption Policy

Disable Storage DRS for this virtual machine

	Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster
	DatastoreCluster	Compatible	999.75 GB	21.26 GB	978.49 GB		
	ESX1DS	Compatible	1.51 TB	259.59 GB	1.46 TB	VMFS 6	

2 items

Compatibility

✓

Compatibility checks succeeded.

CANCEL

BACK

NEXT

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Select compatibility

Select compatibility for this virtual machine depending on the hosts in your environment

The host or cluster supports more than one VMware virtual machine version. Select a compatibility for the virtual machine.

Compatible with: ESXi 7.0 U2 and later

This virtual machine uses hardware version 19, which provides the best performance and latest features available in ESXi 7.0 U2.

CANCEL

BACK

NEXT

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Select a guest OS

Choose the guest OS that will be installed on the virtual machine

Identifying the guest operating system here allows the wizard to provide the appropriate defaults for the operating system installation.

Guest OS Family: Windows

Guest OS Version: Microsoft Windows 10 (64-bit)

☐ Enable Windows Virtualization Based Security

Compatibility: ESXi 7.0 U2 and later (VM version 19)

CANCEL

BACK

NEXT

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select storage

5 Select compatibility

6 Select a guest OS

7 Customize hardware

8 Ready to complete

Configure the virtual machine hardware

Virtual Hardware

VM Options

ADD NEW DEVICE

Encryption	VM configuration files are encrypted.	
> CPU	2	
> Memory *	8	GB
> New Hard disk *	100	GB
> New SCSI controller *	LSI Logic SAS	
> New Network *	VM Network	<input checked="" type="checkbox"/> Connect...
> New CD/DVD Drive *	Datastore ISO File	<input checked="" type="checkbox"/> Connect...
> New USB Controller	USB 3.1	
> Video card *	Specify custom settings	

CANCEL

BACK

NEXT

Click Add New Device

ADD NEW DEVICE ▾

Disks, Drives and Storage

- Hard Disk
- Existing Hard Disk
- RDM Disk
- Host USB Device
- NVDIMM
- CD/DVD Drive

Controllers

- NVMe Controller
- SATA Controller
- SCSI Controller
- USB Controller

Other Devices

- PCI Device
- Trusted Platform Module



New Virtual Machine

- ✓ 1 Select a creation type
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Select storage
- ✓ 5 Select compatibility
- ✓ 6 Select a guest OS
- ✓ 7 Customize hardware
- 8 Ready to complete

> New SCSI controller *

LSI Logic SAS

> New Network *

VM Network ▾

✓ Connect...

> New CD/DVD Drive *

Datastore ISO File ▾

✓ Connect...

> New USB Controller

USB 3.1 ▾

> Video card *

Specify custom settings ▾

Security Devices

TPM

SGX

SGX not available on the host

Restrictions

⚠ Some operations and features are restricted ⓘ

Trusted Platform Module

Present ⓘ

VMCI device

New SATA Controller

New SATA Controller

> Other

Additional Hardware

New Virtual Machine

- ✓ 1 Select a creation type
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Select storage
- ✓ 5 Select compatibility
- ✓ 6 Select a guest OS
- ✓ 7 Customize hardware
- 8 Ready to complete

Ready to complete

Click Finish to start creation.

Virtual machine name	VWIN11
Folder	TOR
Host	esx1.ramlan.ca
Datastore	ESX1DS
VM storage policy	Personal Encryption Policy
VM Encryption	Full
Guest OS name	Microsoft Windows 10 (64-bit)
Virtualization Based Security	Disabled
CPUs	2
Memory	8 GB
NICs	1

CANCEL BACK FINISH

New Virtual Machine

✓ 1 Select a creation type

✓ 2 Select a name and folder

✓ 3 Select a compute resource

✓ 4 Select storage

✓ 5 Select compatibility

✓ 6 Select a guest OS

✓ 7 Customize hardware

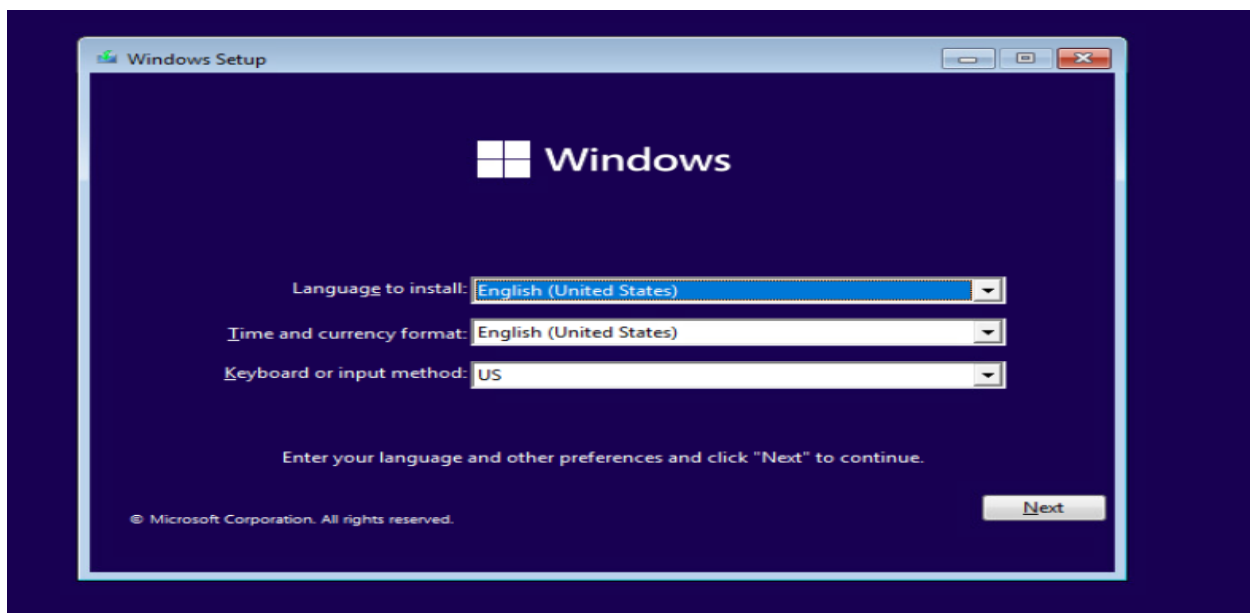
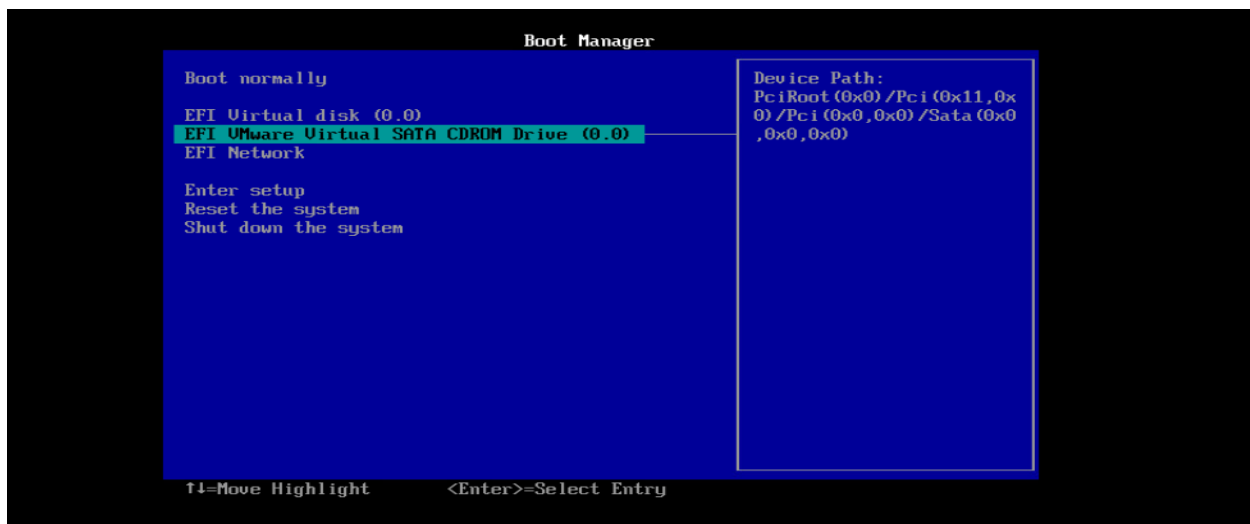
8 Ready to complete

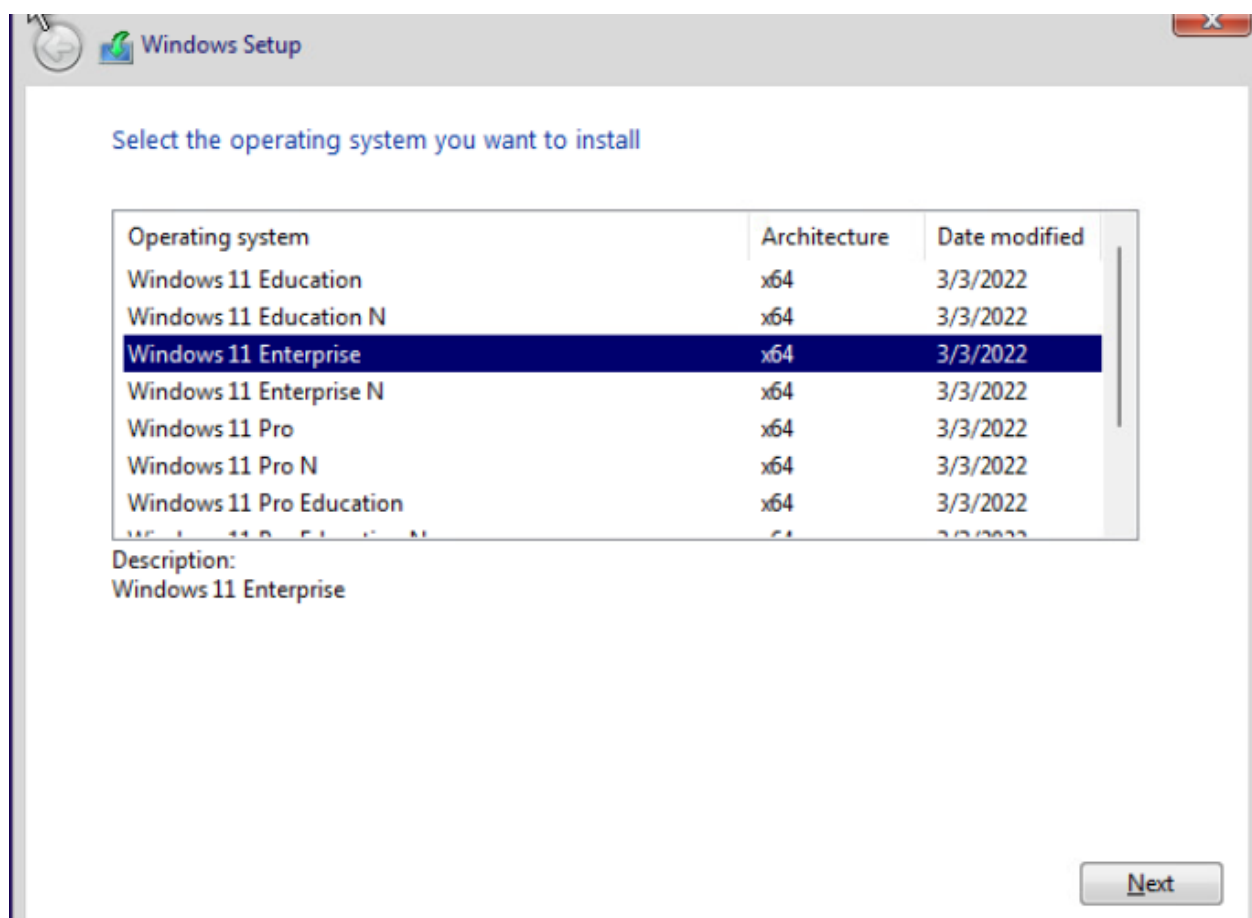
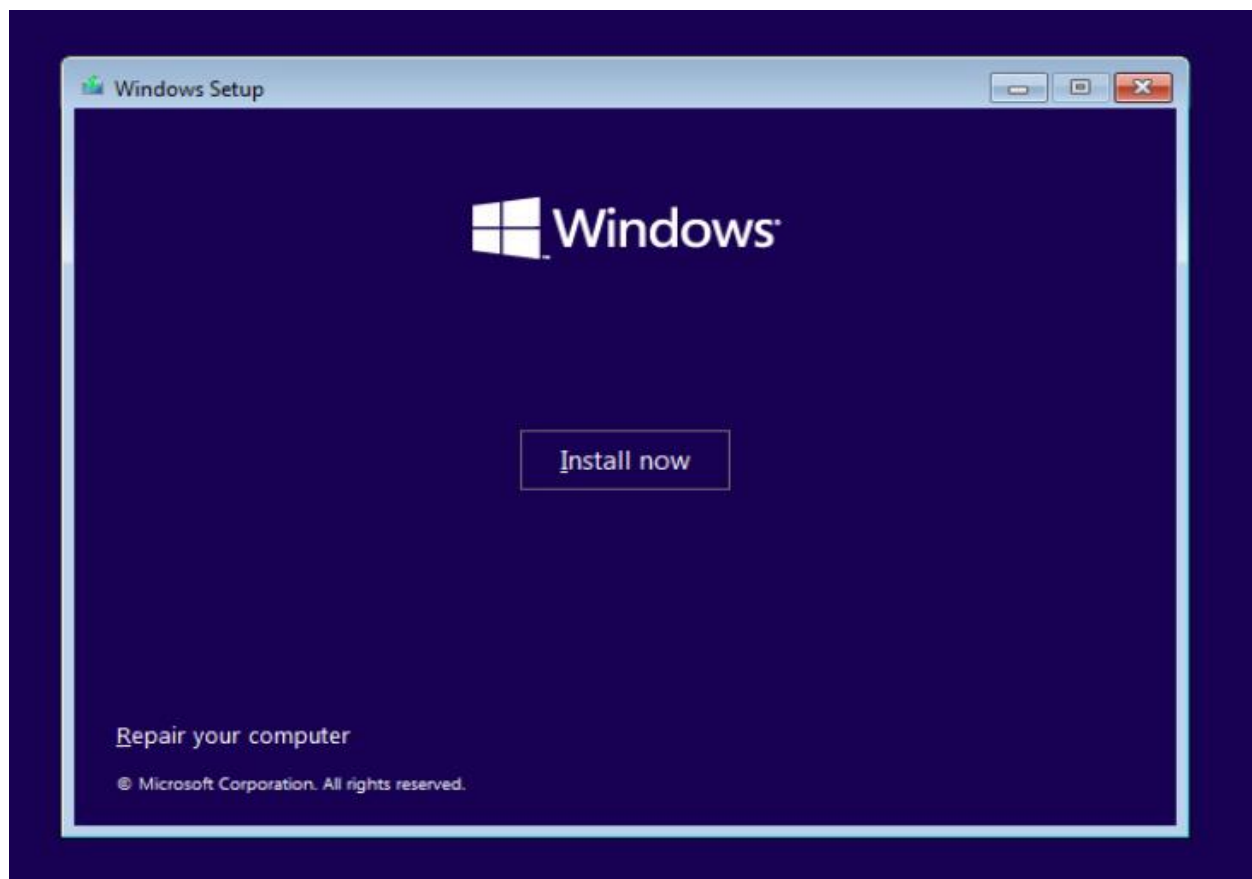
Memory	8 GB
NICs	1
NIC 1 network	VM Network
NIC 1 type	VMXNET 3
SCSI controller 1	LSI Logic SAS
Trusted Platform Module	Present
Create hard disk 1 (encrypted)	New virtual disk
Capacity	100 GB
Datastore	ESX10S
VM storage policy	Personal Encryption Policy
Virtual device node	SCSI(0:0)
Mode	Dependent

Compatibility: ESXi 7.0 U2 and later (VM version 19)


CANCEL BACK FINISH

Power the Virtual machine and start the OS install





Where do you want to install Windows?

Name	Total size	Free space	Type
 Drive 0 Unallocated Space	100.0 GB	100.0 GB	

 Refresh

 Delete

 Format

 New

 Load driver

 Extend

Next

Is this the right country or region?



Burkina Faso

Burundi

Cabo Verde

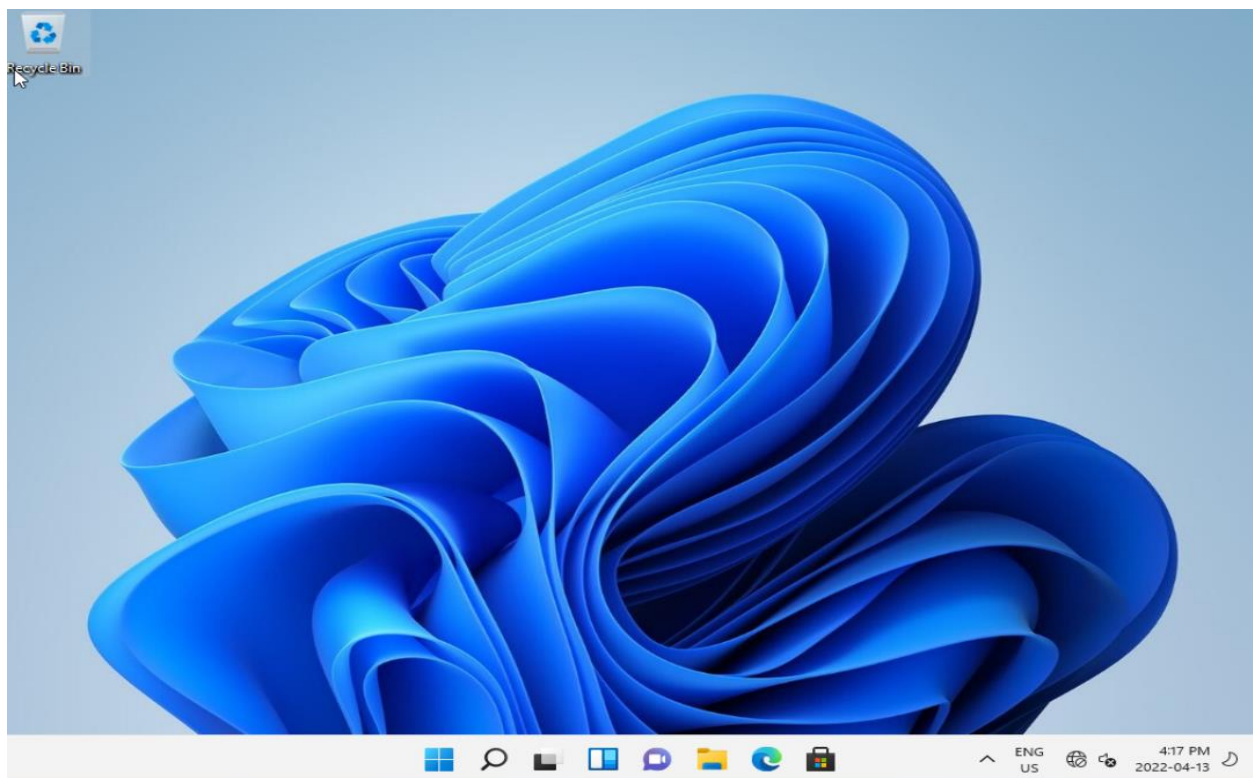
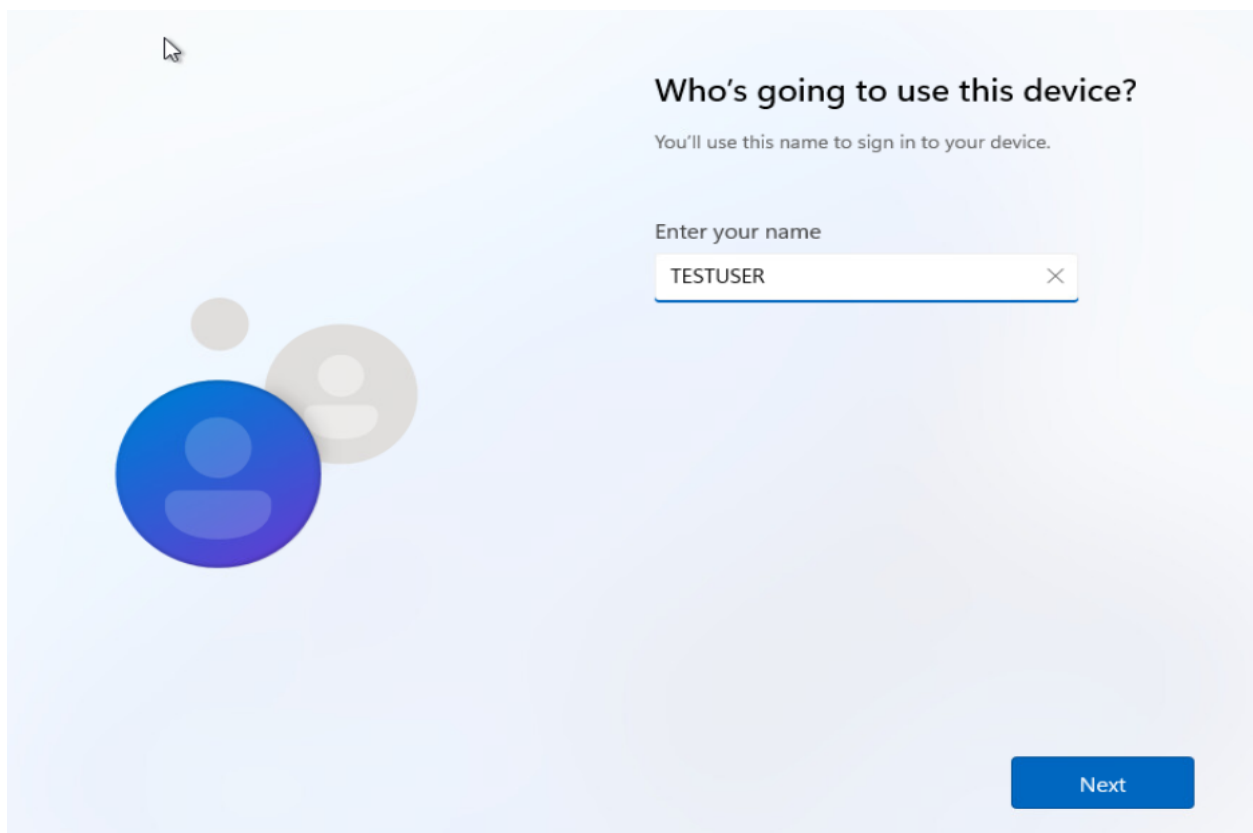
Cambodia

Cameroon

Canada

Cayman Islands

Yes



Now we have completed Win 11 on vSphere ESXi 7.0.3 as a VM.

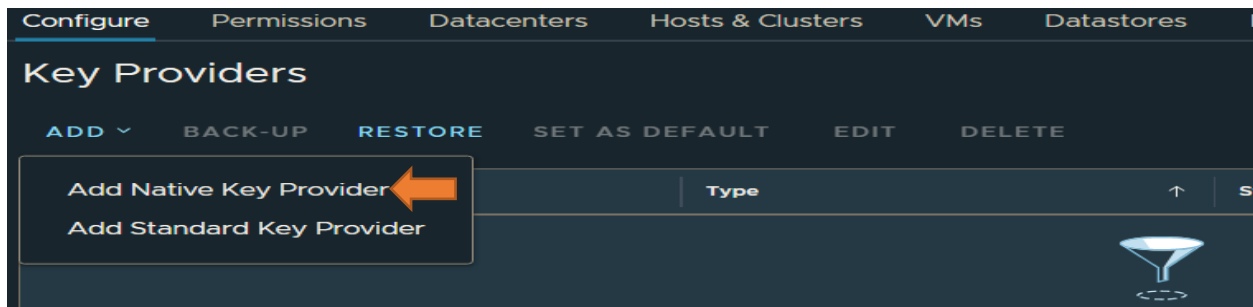
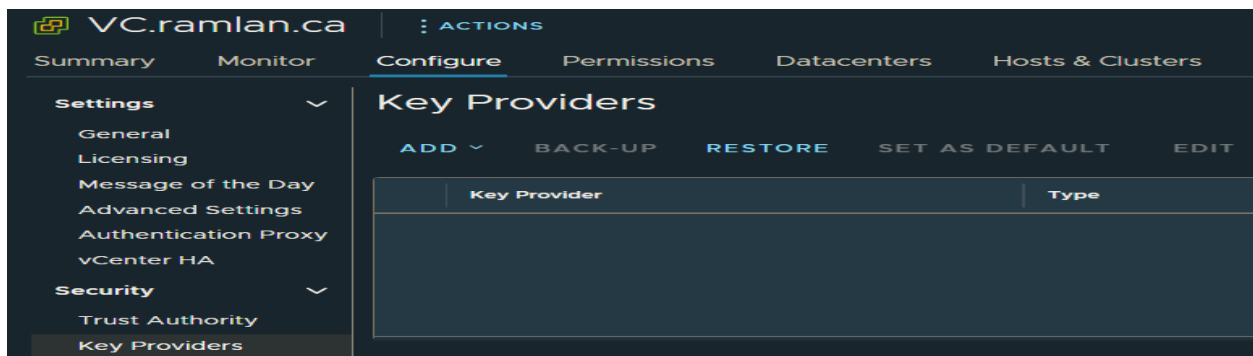
Thanks

Ram
13th Apr 2022

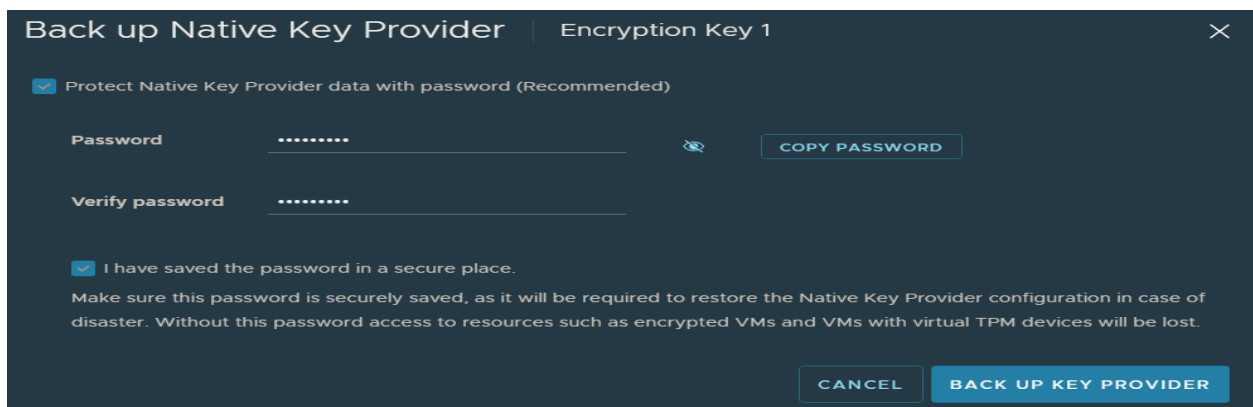
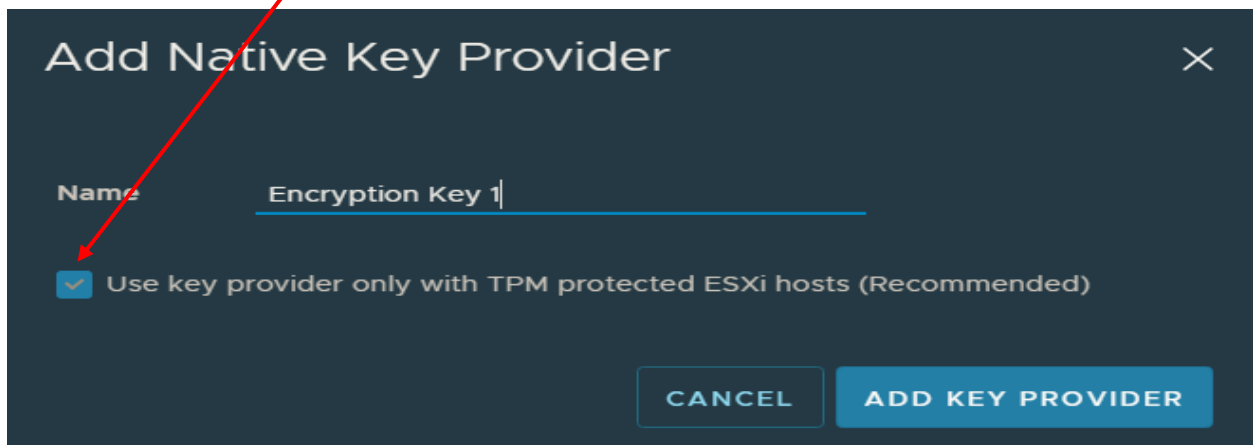
Please make sure to complete below configuration before you start creating Win 11 VM.

CREATING KEY PROVIDER:

Follow below steps to create Native Key Provider



Make sure to uncheck this



Key Providers

ADD ▾ BACK-UP RESTORE SET AS DEFAULT EDIT DELETE

Key Provider	Type	Status	Certificates
Encryption Key 1 (default)	Native	Active	

Provider Encryption Key 1 - Key Management Servers

Details Constraints

Key ID d0873866-b21f-4646-8688-74e40d7d43fd

✓
Add Native Key Provider

✓
Back up Key Provider
BACK UP

✓
Active

CREATING VM STORAGE POLICIES:

I created Personal Encryption Policy for VM within Storage Policy.

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Name and description

Name: Personal Encryption Policy

Description:

CANCEL NEXT

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Policy structure

Host based services

Create rules for data services provided by hosts. Available data services could include encryption, I/O control, caching, etc. Host based services will be applied in addition to any datastore specific rules.

☒ Enable host based rules

Datastore specific rules

Create rules for a specific storage type to configure data services provided by the datastores. The rules will be applied when VMs are placed on the specific storage type.

- ☐ Enable rules for "vSAN" storage
- ☐ Enable rules for "vSANDirect" storage
- ☐ Enable tag based placement rules

CANCEL BACK NEXT

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Host based services

Create rules for data services provided by hosts. Available data services could include encryption, I/O control, caching, etc. Host based services will be applied in addition to any datastore specific rules.

Encryption

Storage I/O Control

Disabled

Use storage policy component

Default encryption properties

Storage policy component

Description

Provider

Allow I/O filters before encryption

Default encryption properties

Storage policy component for VM and virtual disk encryption

VMware VM Encryption

False

Custom

CANCEL

BACK

NEXT

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Host based services

Create rules for data services provided by hosts. Available data services could include encryption, I/O control, caching, etc. Host based services will be applied in addition to any datastore specific rules.

Encryption

Storage I/O Control

Disabled

Use storage policy component

Normal IO shares allocation

Storage policy component

Description

Provider

VMware Storage I/O Control

IOPS limit

IOPS reservation

IOPS shares

Normal IO shares allocation

Storage policy component for Medium SIOC controls

VMware Storage IO Control

10,000

50

1,000

Custom

CANCEL

BACK

NEXT

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Storage compatibility

COMPATIBLE

INCOMPATIBLE

Expand datastore clusters

Compatible storage 4.12 TB (3.95 TB free)

Filter

Name	Datacenter	Type	Free Space	Capacity	Warnings
DatastoreCluster	TOR	VMFS	978.49 GB	999.75 GB	
ESX1DS	TOR	VMFS 6	1.46 TB	1.51 TB	
ESX2DS	TOR	VMFS 6	1.54 TB	1.64 TB	

3 items

CANCEL

BACK

NEXT

Edit VM Storage Policy

1 Name and description

2 Policy structure

3 Host based services

4 Storage compatibility

5 Review and finish

Review and finish

General

Name

Personal Encryption Policy

Description

vCenter ServerVC.ramlan.ca

Host based services

Encryption

Storage policy component

Default encryption properties

Description

Storage policy component for VM and virtual disk encryption

Provider

VMware VM Encryption

Allow I/O filters before encryption

False

Storage I/O Control

Storage policy component

Normal IO shares allocation

Description

Storage policy component for Medium SIOC controls

Provider

VMware Storage IO Control

VMware Storage I/O Control

IOPS limit

10,000

IOPS reservation

50

CANCEL

BACK

FINISH

I used this VM Storage Policy during VWIN11 virtual machine creation.

Rules	VM Compliance	VM Template	Storage Compatibility
Name	Compliance Status	Last Checked	
 VWIN11	 Compliant	Apr 13, 2022 3:51 PM	

Rules	VM Compliance	VM Template	Storage Compatibility	
<div><div>COMPATIBLE</div><div>INCOMPATIBLE</div></div> <div><input type="checkbox"/> Expand datastore clusters</div>				
Name	Datacenter	Type	Free Space	Capacity
 DatastoreCluster	TOR	VMFS	978.49 GB	999.75 GB
 ESX1DS	TOR	VMFS 6	1.46 TB	1.51 TB
 ESX2DS	TOR	VMFS 6	1.54 TB	1.64 TB