

How to create and deploy Nested ESXi

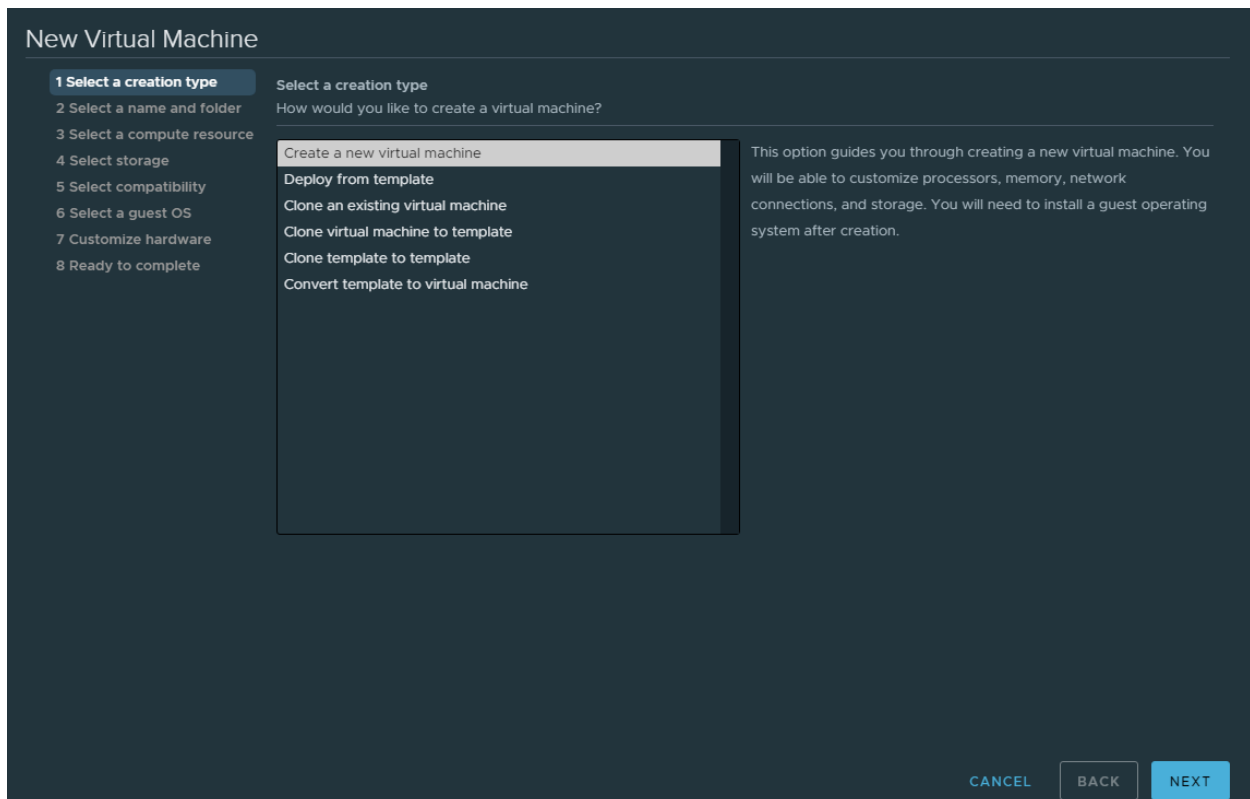
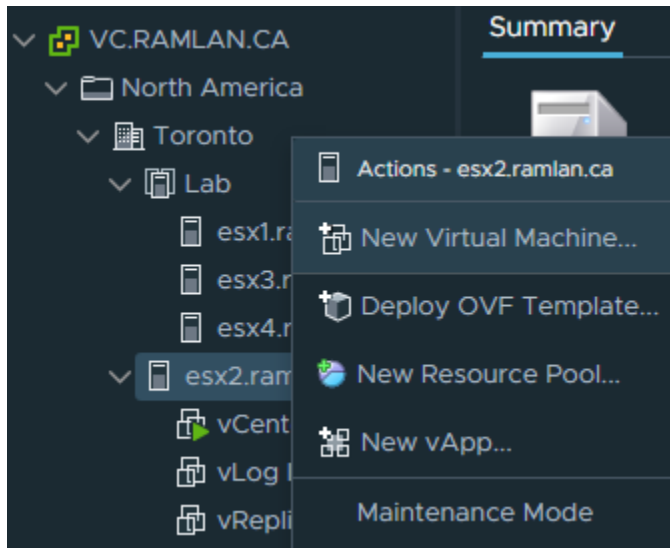
In this post, I will show you the steps to deploy nested ESXi within ESXi Host. In the lab, I have ESX2 host that has few VM on it. On this host, I will create a new virtual machine and nest it.

Configuration:

Host – ESX2

Guest – ESX5

We will create new VM



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 name and folder

Specify a unique name and target location

Virtual machine name:

Select a location for the virtual machine.

- ✓ VC.RAMLAN.CA
 - ✓ North America
 - Toronto**
 - Discovered virtual machine

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 compute resource

Select the destination compute resource for this operation

- ✓ Toronto
 - > Lab
 - esx2.ramlan.ca**

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

NEXT

New Virtual Machine

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- ✓ 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:

Name	Capacity	Provisioned	Free	Type	Cluster
datastore1	104.75 GB	495.6 GB	21.28 GB	VMFS 6	
Datastore5	999.75 GB	1.42 GB	998.33 GB	VMFS 6	
SATAHD	465.5 GB	606.03 GB	417.39 GB	VMFS 6	

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

NEXT

New Virtual Machine

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- ✓ 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: ⓘ

This virtual machine uses hardware version 17, which provides the best performance and latest features available in ESXi 7.0

CANCEL BACK NEXT

You can ignore below warning.

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:

Guest OS Version:

⚠ This operating system is not supported, see description of "Unsupported" at: <http://kb.vmware.com/kb/2015161>

Compatibility: ESXi 7.0 and later (VM version 17)

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

Customize hardware
Configure the virtual machine hardware

Virtual Hardware VM Options

ADD NEW DEVICE

CPU	2	
Cores per Socket	2	Sockets: 1
CPU Hot Plug	<input type="checkbox"/> Enable CPU Hot Add	
Reservation	0	MHz
Limit	Unlimited	MHz
Shares	Normal	2000
Hardware virtualization	<input checked="" type="checkbox"/> Expose hardware assisted virtualization to the guest OS	
Performance Counters	<input type="checkbox"/> Enable virtualized CPU performance counters	
Scheduling Affinity		
I/O MMU	<input type="checkbox"/> Enabled	

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

Customize hardware
Configure the virtual machine hardware

Virtual Hardware VM Options

ADD NEW DEVICE

Shares	Normal	2000
Hardware virtualization	<input checked="" type="checkbox"/> Expose hardware assisted virtualization to the guest OS	
Performance Counters	<input type="checkbox"/> Enable virtualized CPU performance counters	
Scheduling Affinity		
I/O MMU	<input type="checkbox"/> Enabled	
Memory	4	GB
Reservation	0	MB
	<input type="checkbox"/> Reserve all guest memory (All locked)	
Limit	Unlimited	MB
Shares	Normal	40960
Memory Hot Plug	<input type="checkbox"/> Enable	

New Virtual Machine

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- ✓ 3 Select a compute resource
- ✓ 4 Select storage
- ✓ 5 Select compatibility
- ✓ 6 Select a guest OS
- 7 Customize hardware**
- 8 Ready to complete

Customize hardware
Configure the virtual machine hardware

Virtual Hardware VM Options

ADD NEW DEVICE

Limit	Unlimited	MB
Shares	Normal	40960
Memory Hot Plug	<input type="checkbox"/> Enable	
> New Hard disk *	40	GB
> New SCSI controller *	VMware Paravirtual	
> New Network *	VM Network	
Status	<input checked="" type="checkbox"/> Connect At Power On	
Adapter Type	VMXNET 3	
DirectPath I/O	<input checked="" type="checkbox"/> Enable	
MAC Address	Automatic	
> New CD/DVD Drive *	Client Device	<input type="checkbox"/> Connect...

Compatibility: ESXi 7.0 and later (VM version 17)

CANCEL

BACK

NEXT

New Virtual Machine

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- ✓ 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

Customize hardware
Configure the virtual machine hardware

Virtual Hardware VM Options

ADD NEW DEVICE

> New Hard disk *	40 GB
> New SCSI controller *	VMware Paravirtual
> New Network *	VM Network <input checked="" type="checkbox"/> Connect...
▼ New CD/DVD Drive *	Datastore ISO File
Status	<input checked="" type="checkbox"/> Connect At Power On
CD/DVD Media	[Datastore5] ISO/VMware BROWSE...
Device Mode	Passthrough CD-ROM
Virtual Device Node	IDE 0 IDE(0:0) New CD/DVD Drive
> Video card *	Specify custom settings
> Security Devices	Not Configured
VMCI device	

Compatibility: ESXi 7.0 and later (VM version 17)

CANCEL

BACK

NEXT

New Virtual Machine

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- ✓ 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	ESX5
Folder	Toronto
Host	esx2.ramlan.ca
Datastore	SATAHD
Guest OS name	VMware ESXi 7.0 or later
Virtualization Based Security	Disabled
CPUs	2
Memory	4 GB
NICs	1
NIC 1 network	VM Network
NIC 1 type	VMXNET 3
SCSI controller 1	VMware Paravirtual
Create hard disk 1	New virtual disk
Capacity	40 GB
Datastore	SATAHD

CANCEL

BACK

FINISH

Edit Settings

ESX5

Virtual Hardware

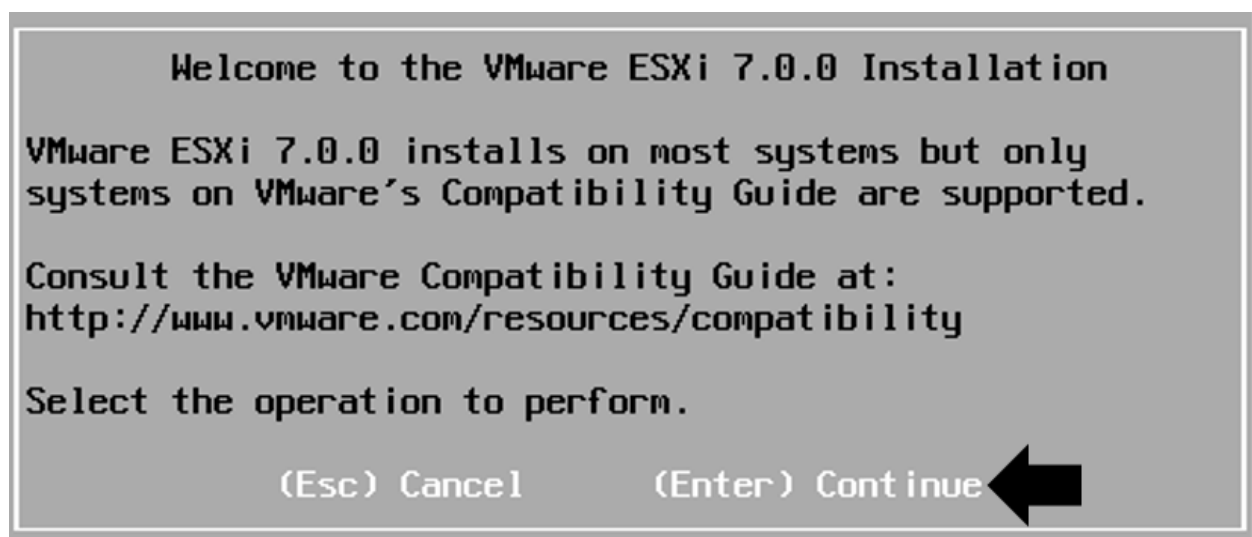
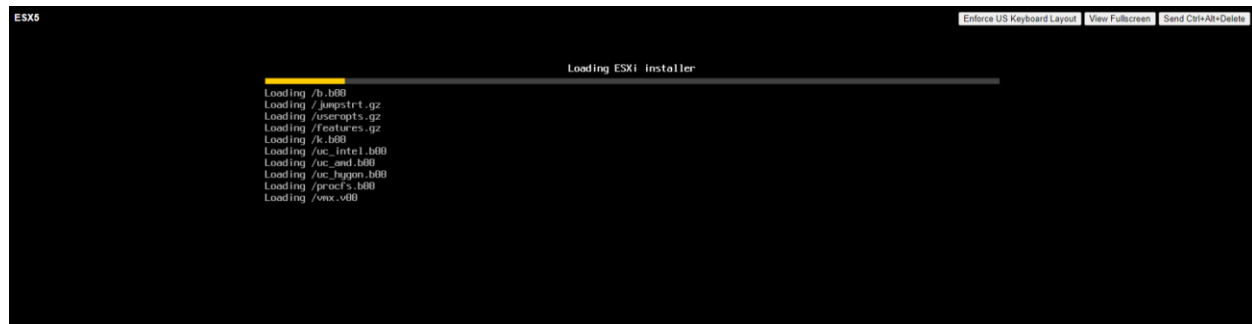
VM Options

ADD NEW DEVICE

> CPU	2			
> Memory	4		GB	
> Hard disk 1	40		GB	
> SCSI controller 0	VMware Paravirtual			
> Network adapter 1	VM Network			<input checked="" type="checkbox"/> Connect...
> CD/DVD drive 1	Datastore ISO File			<input checked="" type="checkbox"/> Connect...
> Video card	Specify custom settings			
> Security Devices	Not Configured			
VMCI device				
> Other	Additional Hardware			

CANCEL

OK



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Use the arrow keys to scroll the EULA text

(ESC) Do not Accept

(F11) Accept and Continue



Select a Disk to Install or Upgrade
(any existing VMFS-3 will be automatically upgraded to VMFS-5)

* Contains a VMFS partition
Claimed by VMware vSAN

Storage Device	Capacity

Local:	
VMware Virtual disk (mpx.vmhba0:C0:T0:L0)	40.00 GiB
Remote:	
(none)	

(Esc) Cancel

(F1) Details

(F5) Refresh



(Enter) Continue

Please select a keyboard layout

Swiss French
Swiss German
Turkish
US Default
US Dvorak
Ukrainian
United Kingdom

Use the arrow keys to scroll.

(Esc) Cancel

(F9) Back



(Enter) Continue

Enter a root password

Root password: *****
Confirm password: *****

Please enter a password.

(Esc) Cancel (F9) Back ➡ (Enter) Continue

Error(s)/Warning(s) Found During System Scan

The system encountered the following warning(s).

Warning(s)

<CPU_SUPPORT WARNING: The CPU in this host may not be supported in future ESXi releases. Please plan accordingly.>

Use the arrow keys to scroll

(Esc) Cancel (F9) Back ➡ (Enter) Continue

Confirm Install

The installer is configured to **install** ESXi 7.0.0 on:
mpx.vmhba0:C0:T0:L0.

Warning: This disk will be repartitioned.

(Esc) Cancel (F9) Back ➡ (F11) Install

Installing ESXi 7.0.0

16 %

Installation Complete

ESXi 7.0.0 has been installed successfully.

ESXi 7.0.0 will operate in evaluation mode for 60 days.
To use ESXi 7.0.0 after the evaluation period, you must register for a VMware product license.

To administer your server, navigate to the server's hostname or IP address from your web browser or use the Direct Control User Interface.

Remove the installation media before rebooting.

Reboot the server to start using ESXi 7.0.0.

 (Enter) Reboot

VMware ESXi 7.0.0 (VMKernel Release Build 16324942)

VMware, Inc. VMware7,1

Intel(R) Core(TM) i5-3470 CPU @ 3.20GHz
4 GiB Memory

To manage this host, go to:
<https://192.168.0.112/> (DHCP)
[https://\[fe80::250:56ff:fea2:7d7b\]/](https://[fe80::250:56ff:fea2:7d7b]/) (STATIC)

This concludes nested ESXi within another ESXi Physical Host.

Thanks

Ram Lan

9th Aug 2020