



Enterprise Standards and Best Practices For IT Infrastructure.
Sri Lanka Institute of Information Technology.
4th Year Second Semester.

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Student ID: IT13002084

Practical Session: WE/Tuesday

Practical: Lab Assignment Vmotion

- 1) Log in to the vmware vSphere Client to do the vmware vsphere migration. Go to the **Configuration** tab and click on **Network Adapters**.

Servidor 1 VMware ESXi, 5.0.0, 623860

Summary Virtual Machines Performance **Configuration** Tasks & Events Alarms Permissions Maps Storage Views Hardware Status

Hardware

- Processors
- Memory
- Storage
- Networking
- Storage Adapters
- ▶ **Network Adapters**
- Advanced Settings
- Power Management

Software

- Licensed Features
- Time Configuration
- DNS and Routing
- Authentication Services
- Power Management
- Virtual Machine Startup/Shutdown
- Virtual Machine Swapfile Location
- Security Profile
- Host Cache Configuration
- System Resource Allocation
- Agent VM Settings
- Advanced Settings

Network Adapters

Device	Speed	Configured	Switch	MAC Address	Observed
Broadcom Corporation Broadcom NetXtreme II BCM5709 1000Base-T					
vmnic1	100 Full	Negotiate	vSwitch1	00:1a:64:dc:be:86	10.56.
vmnic0	1000 Full	Negotiate	vSwitch0	00:1a:64:dc:be:84	10.56.
Intel Corporation 82571EB Gigabit Ethernet Controller (Copper)					
vmnic9	1000 Full	Negotiate	None	00:15:17:ba:ba:0e	None
vmnic8	Down	Negotiate	None	00:15:17:ba:ba:0f	None
vmnic7	Down	Negotiate	None	00:15:17:ba:ba:0c	None
vmnic6	Down	Negotiate	None	00:15:17:ba:ba:0d	None
vmnic5	1000 Full	Negotiate	vSwitch0	00:15:17:ba:bb:aa	10.56.
vmnic4	Down	Negotiate	None	00:15:17:ba:bb:ab	None
vmnic3	Down	Negotiate	None	00:15:17:ba:bb:a8	None
vmnic2	1000 Full	Negotiate	vSwitch1	00:15:17:ba:bb:a9	10.56.

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View: vSphere Standard Switch vSphere Distributed Switch

Networking [Refresh](#) [Add Networking...](#) [Properties...](#)

Standard Switch: vSwitch0 [Remove...](#) [Properties...](#)

Virtual Machine Port Group: Management
VMkernel Port: Management Network
vmmk0 :

Physical Adapters: vmnic5 1000 Full, vmnic0 1000 Full

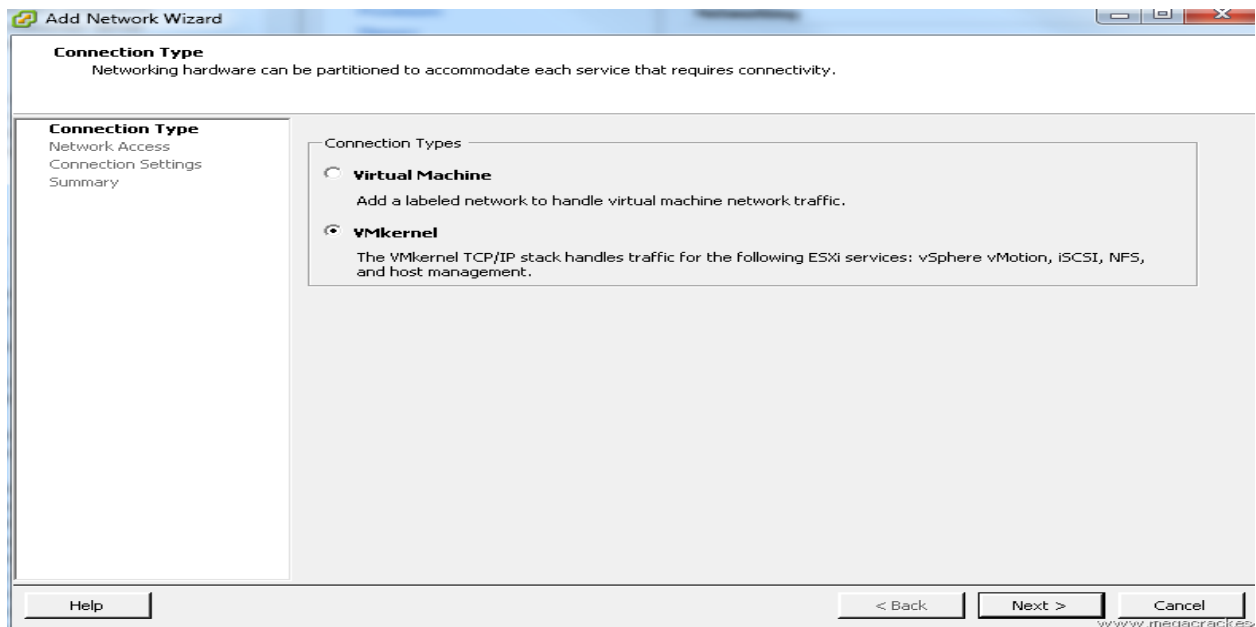
Standard Switch: vSwitch1 [Remove...](#) [Properties...](#)

Virtual Machine Port Group: VLAN 4 Servers I
7 virtual machine(s)

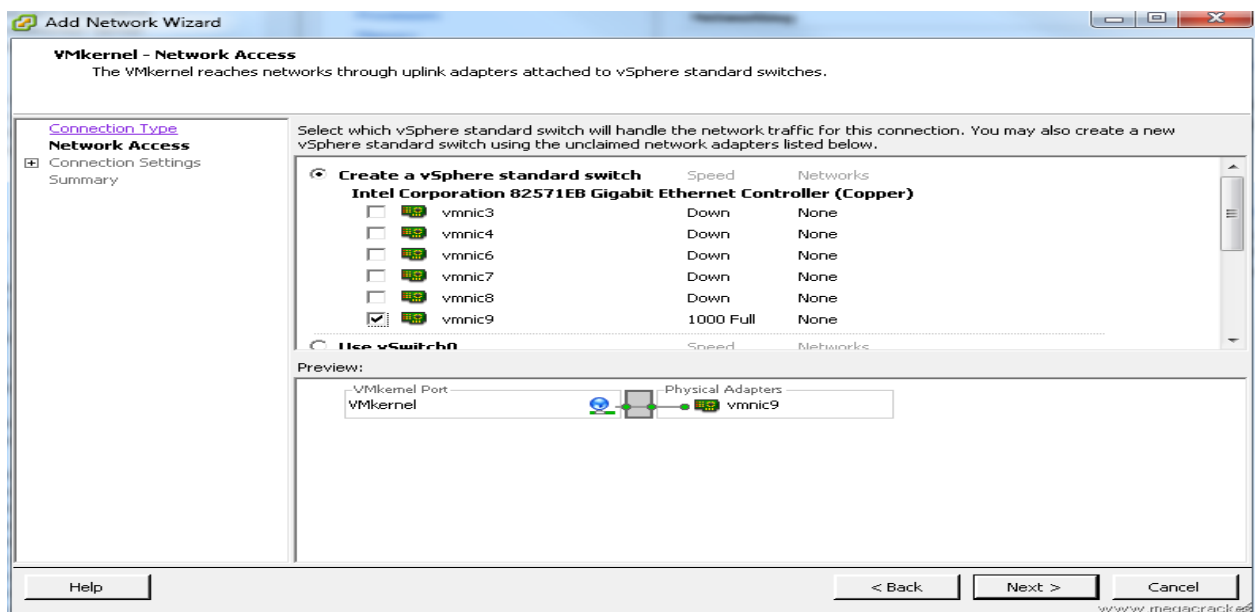
Physical Adapters: vmnic2 1000 Full, vmnic1 100 Full

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- 2) Now click on **Add Networking** to create the vSwitch. Select connection type as **VMkernel** in the Add network Wizard. then click Next.



- 3) After appearing this window then click next button. Do not change any default selection.



- 4) Making a network card or cards that have connected from one server to another (in our case **vmnic9**) And click on **Next** (give the network label as vMotion. And select the first option as the VLAN ID. This is key step of the scenario. After doing that click next button.)

Add Network Wizard

VMkernel - Connection Settings
Use network labels to identify VMkernel connections while managing your hosts and datacenters.

[Connection Type](#)
[Network Access](#)
Connection Settings
IP Settings
Summary

Port Group Properties

Network Label:

VLAN ID (Optional):

☒ Use this port group for vMotion
☐ Use this port group for Fault Tolerance logging
☐ Use this port group for management traffic

Preview:

VMkernel Port: **vmotion** — Physical Adapters: **vmnic9**

[Help](#) [< Back](#) [Next >](#) [Cancel](#)

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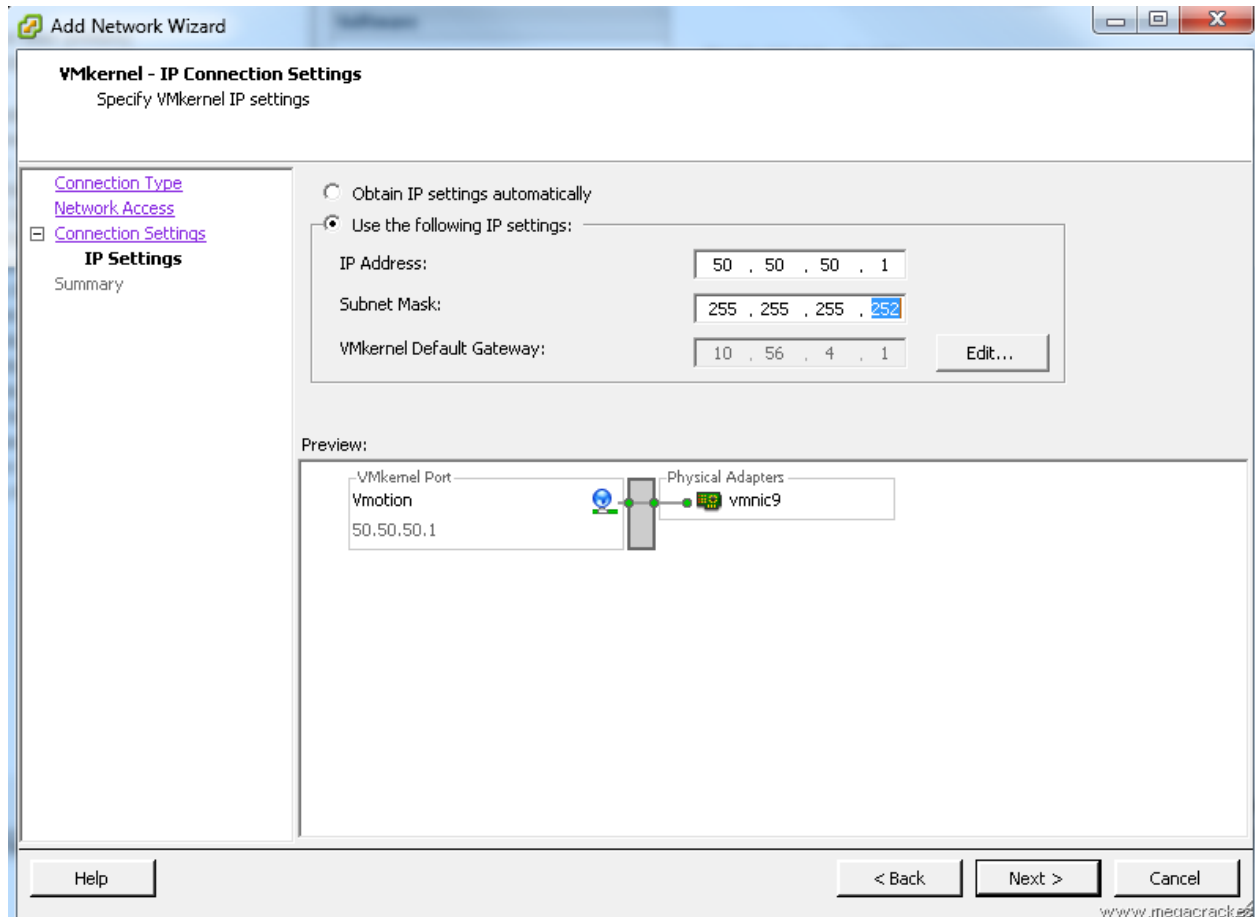
5) We set **Use this port group for vMotion.**

We wrote a **Label Network** different if you want (optional) and click on **Next**. We for example we put **Vmotion**. we have to give unique,

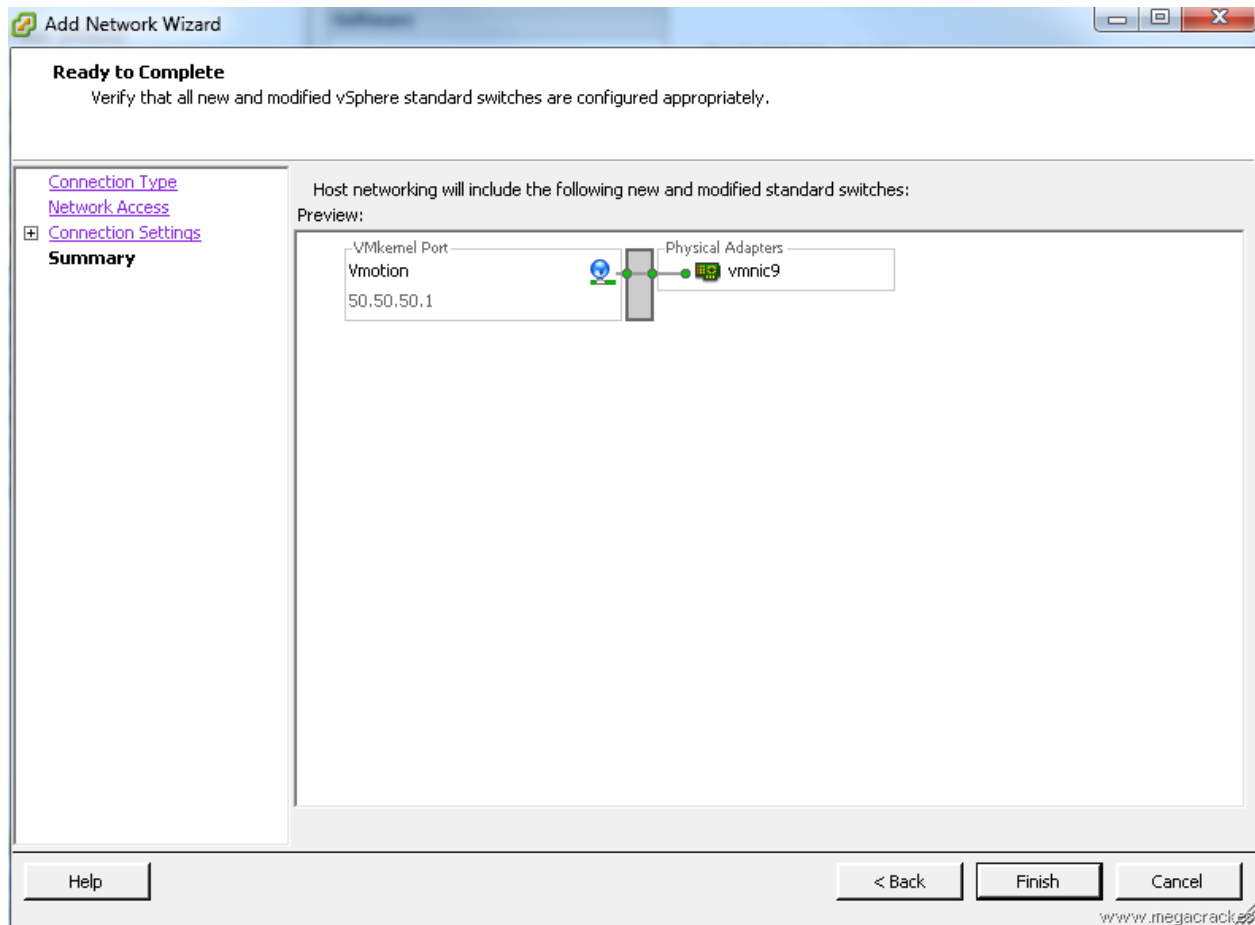
ip address – 50.50.50.1

Subnet Mask – 255.255.255.0

Then click on **Next**.



6) Click on **Finish** button.



7) Do the same procedure starting from step1 to step 7 to the exsi02.

Server 2 VMware ESXi, 5.0.0, 623860

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View: vSphere Standard Switch vSphere Distributed Switch

Networking [Refresh](#) [Add Networking...](#) [Properties...](#)

Standard Switch: vSwitch0 [Remove...](#) [Properties...](#)

Virtual Machine Port Group

- Management
- VMkernel Port
- Management Network
- vmk0 :

Physical Adapters

- vmnic5 1000 Full
- vmnic0 1000 Full

Standard Switch: vSwitch1 [Remove...](#) [Properties...](#)

Virtual Machine Port Group

- VLAN 4 Servers I
- 7 virtual machine(s)

Physical Adapters

- vmnic2 1000 Full
- vmnic1 100 Full

Standard Switch: vSwitch2 [Remove...](#) [Properties...](#)

VMkernel Port

- Vmotion
- vmk1 : 50.50.50.1

Physical Adapters

- vmnic9 1000 Full

Servidor 2

VMware ESXi, 5.0.0, 623860

Summary

Virtual Machines

Performance

Configuration

Tasks & Events

Alarms

Permissions

Maps

Storage Views

Hardware Status

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Processors

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Storage

Networking

Storage Adapters

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Intel Corporation 82571EB Gigabit Ethernet Controller (Copper)					
vmnic9	1000 Full	Negotiate	None	00:15:17:ba:bd:ea	None
vmnic8	Down	Negotiate	None	00:15:17:ba:bd:eb	None
vmnic7	Down	Negotiate	None	00:15:17:ba:bd:e8	None
vmnic6	Down	Negotiate	None	00:15:17:ba:bd:e9	None
vmnic5	1000 Full	Negotiate	vSwitch0	00:15:17:ba:bb:b2	10.56.
vmnic4	Down	Negotiate	None	00:15:17:ba:bb:b3	None
vmnic3	Down	Negotiate	None	00:15:17:ba:bb:b0	None
vmnic2	1000 Full	Negotiate	vSwitch1	00:15:17:ba:bb:b1	10.56.

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Servidor 2

VMware ESXi, 5.0.0, 623860

Summary

Virtual Machines

Performance

Configuration

Tasks & Events

Alarms

Permissions

Maps

Storage Views

Hardware Status

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Advanced Settings

View: vSphere Standard Switch vSphere Distributed Switch

Networking

Refresh Add Networking... Properties...

Standard Switch: vSwitch0

Remove... Properties...

Virtual Machine Port Group

VM Network

VMkernel Port

Management Network

vmk0 :

Physical Adapters

vmnic5 1000 Full

vmnic0 1000 Full

Standard Switch: vSwitch1

Remove... Properties...

Virtual Machine Port Group

VLAN 4 Servers I

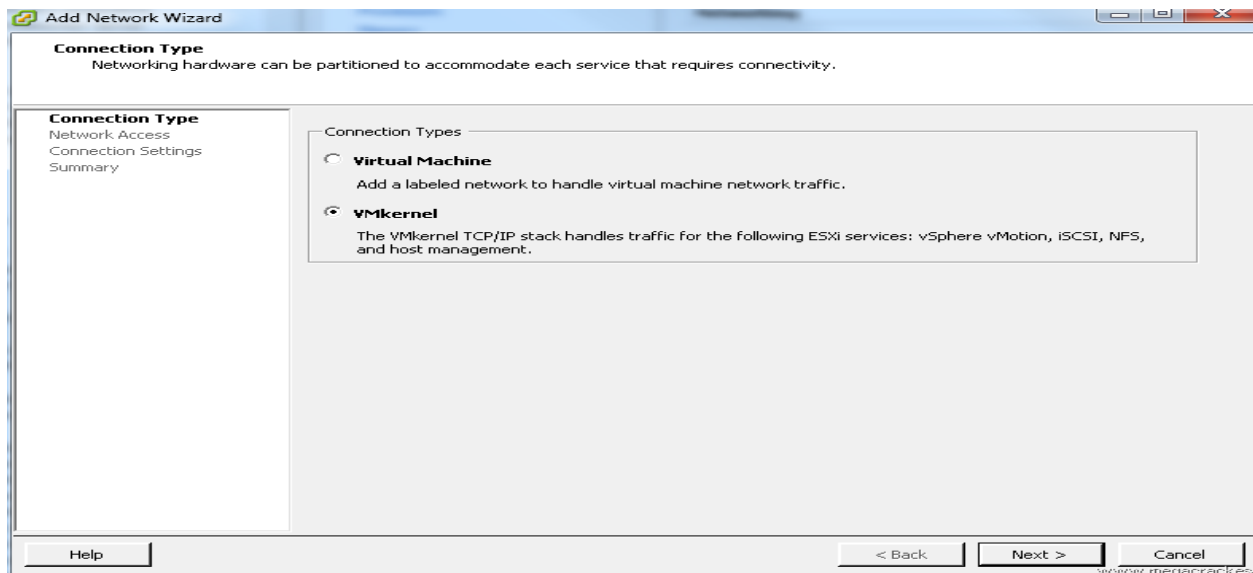
20 virtual machine(s)

Physical Adapters

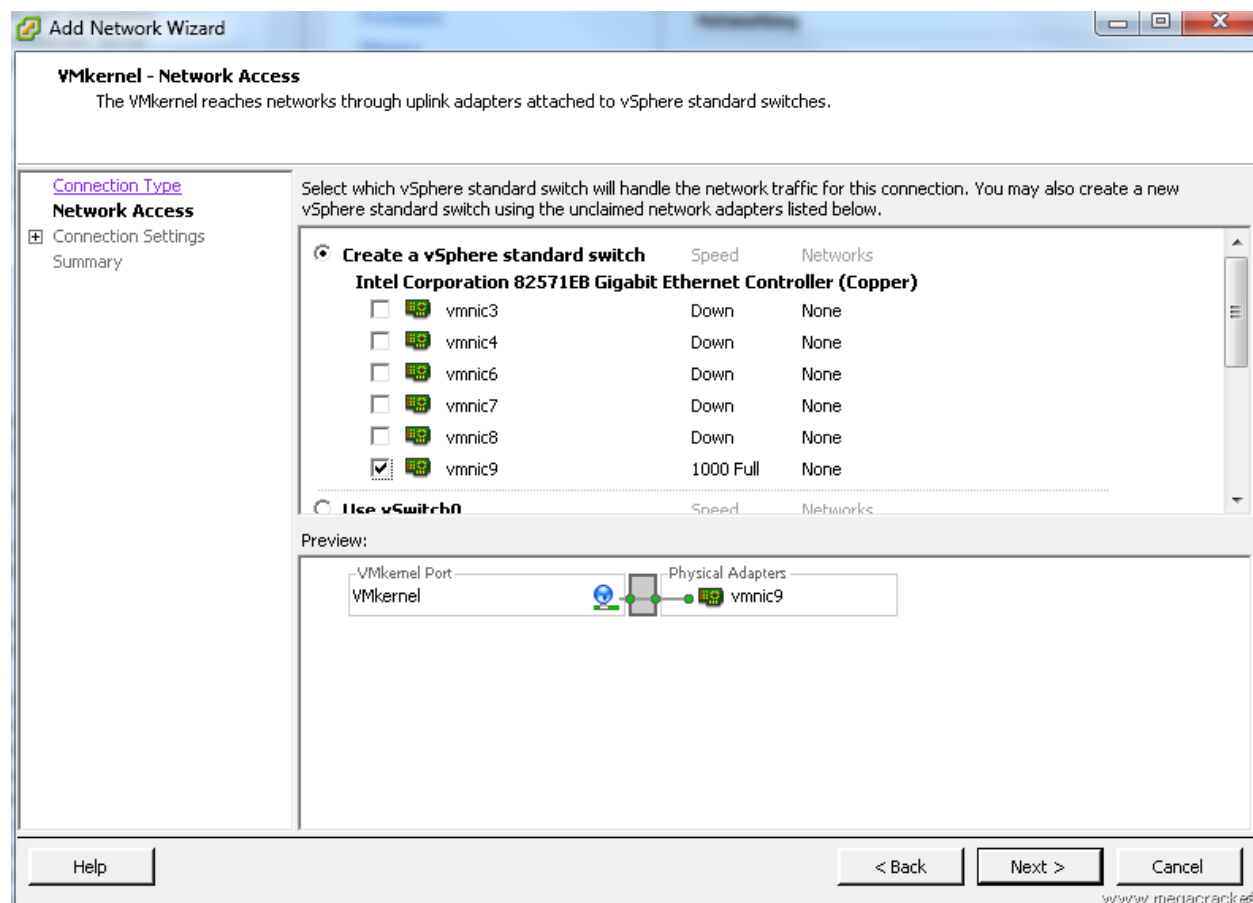
vmnic2 1000 Full

vmnic1 1000 Full

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8) Making a network card or cards that have connected from one server to another (in our case **vmnic9**) And click on **Next**.



Add Network Wizard

VMkernel - Connection Settings

Use network labels to identify VMkernel connections while managing your hosts and datacenters.

Connection Type

Network Access

Connection Settings

IP Settings

Summary

Port Group Properties

Network Label:

vmotion

VLAN ID (Optional):

None (0)

☒ Use this port group for vMotion

☐ Use this port group for Fault Tolerance logging

☐ Use this port group for management traffic

Preview:

VMkernel Port

vmotion

Physical Adapters

vmnic9

Help

< Back

Next >

Cancel

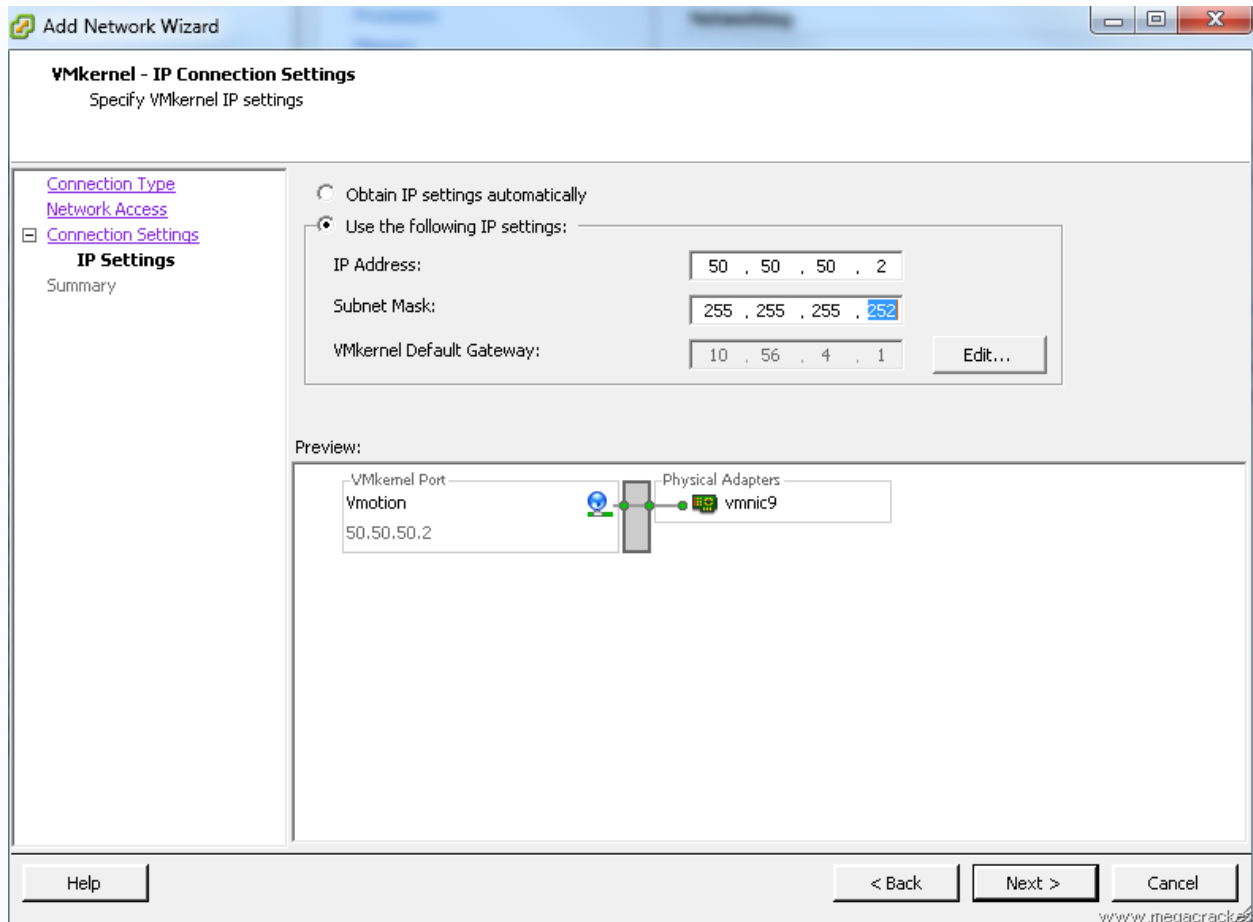
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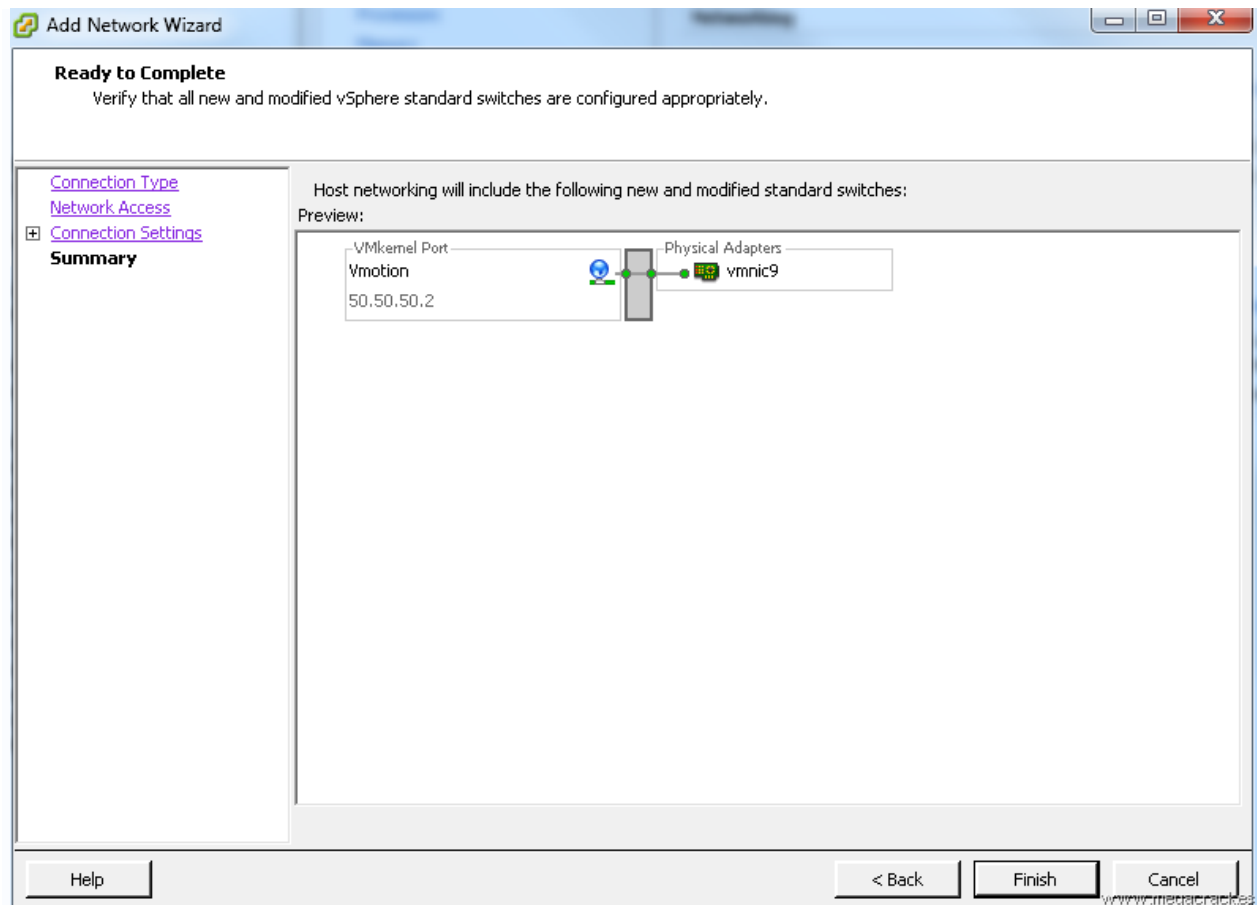
9) We set **Use the following IP settings:**

IP Address: 50.50.50.2 (This ip must be different from the server that we configured earlier.

Subnet Mask: 255.255.255.252 (Since we will use only 2 ip's).

Click on **Next**.

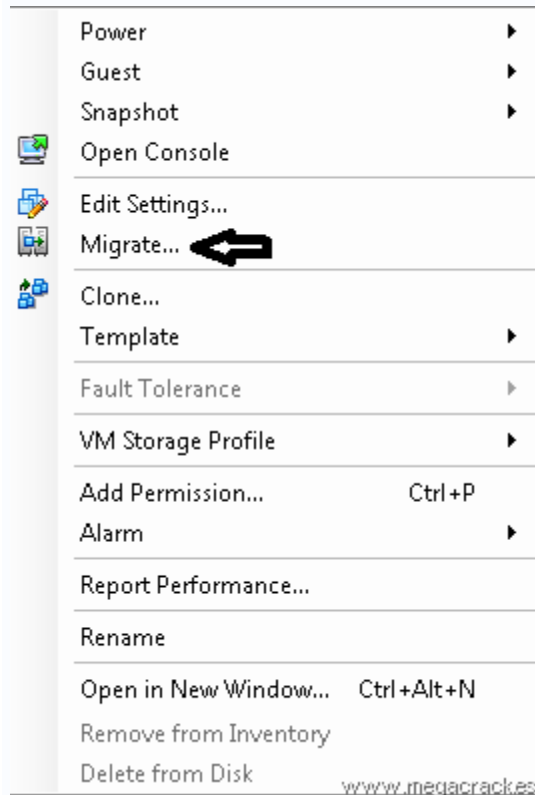




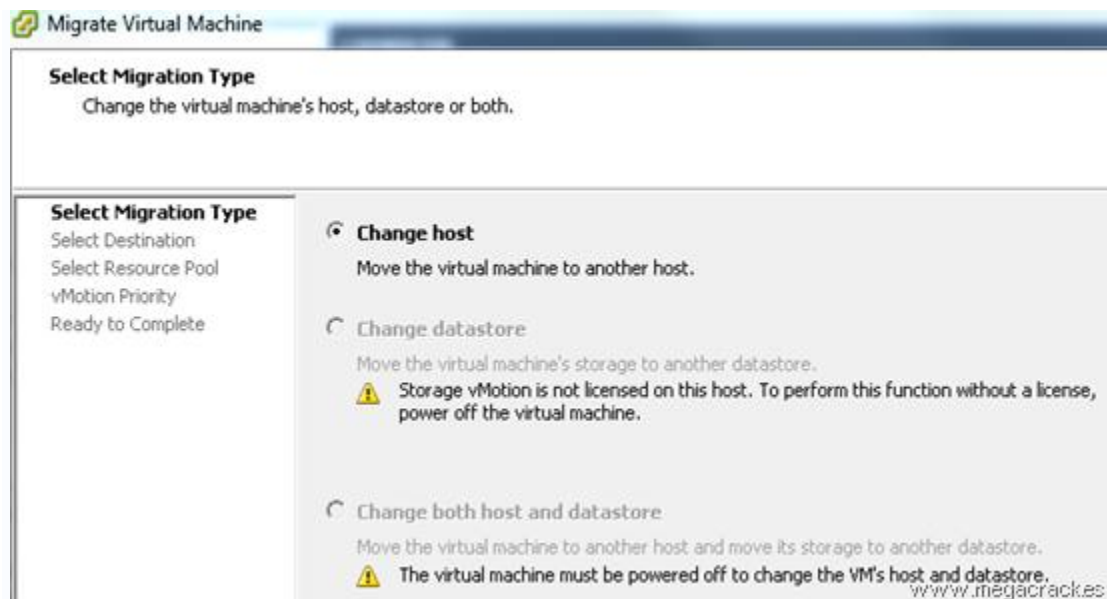
Click on **Finish**.

10) To ensure that the entire system is working properly migrate a VM from one ESXi to the other using Vmotion functionality you just configured.

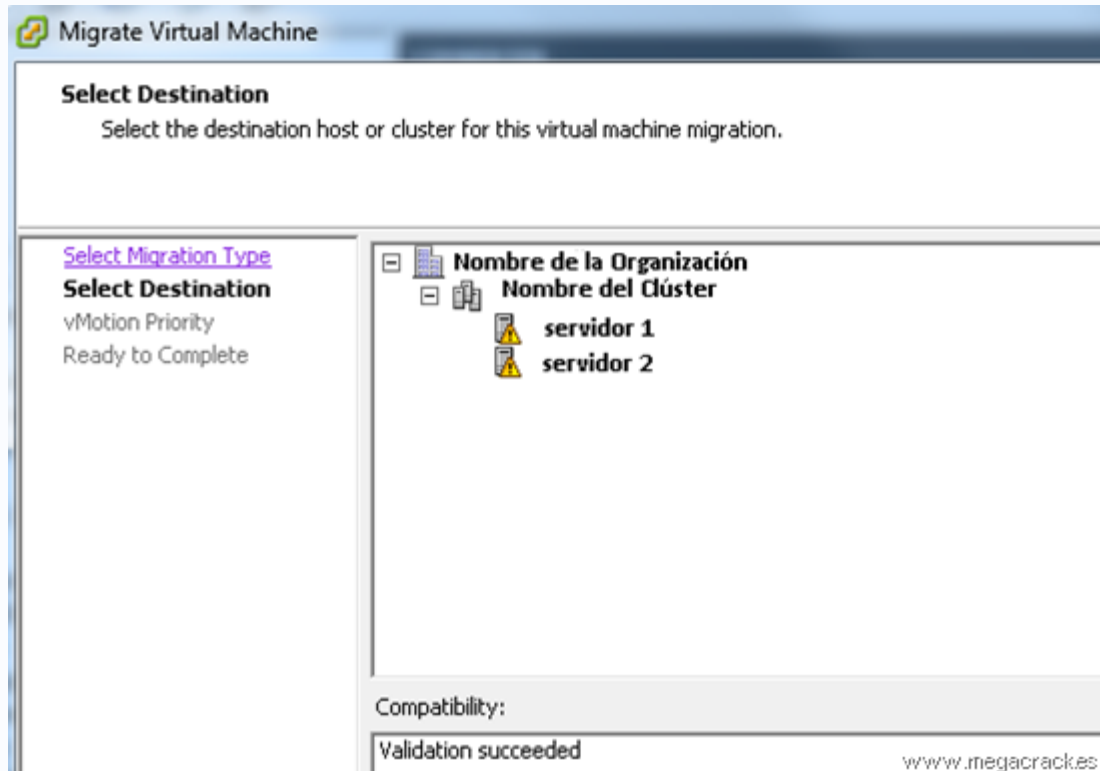
Press the right mouse button on a virtual machine



11) Click on **Migrate**

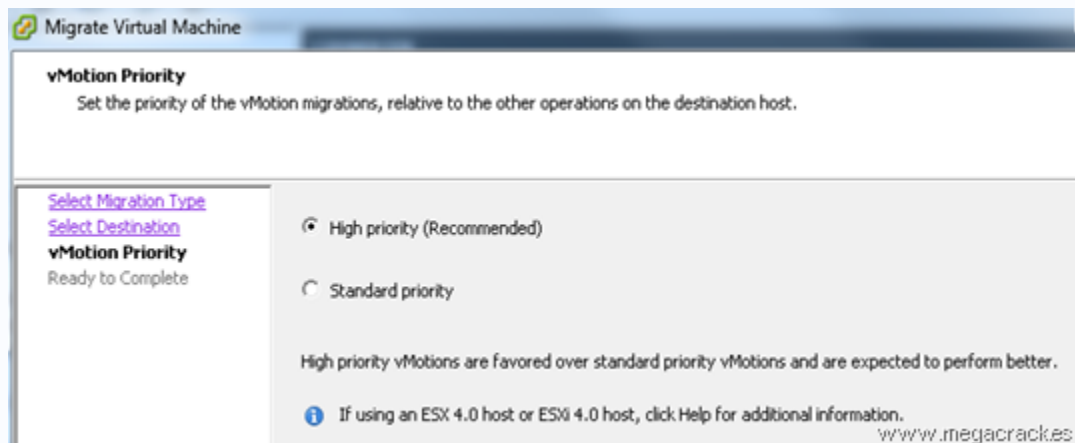


Click on **Next**

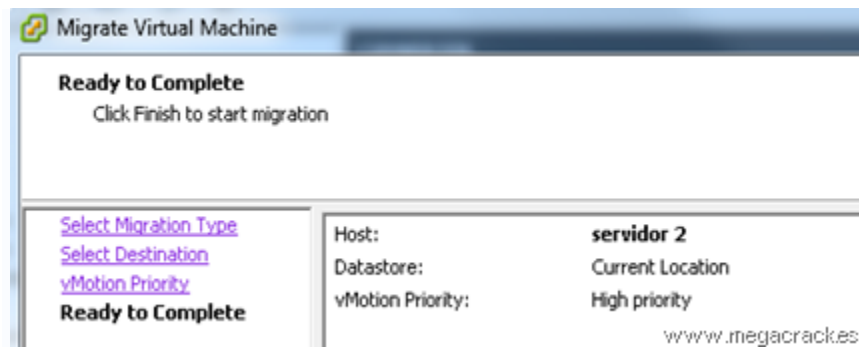


12) Select the target server where we will move the virtual machine.

Click on **Next**



Click on **Next**



13) Click on **Finish** to start the migration