

1. Creating Virtual Machine

The screenshot shows the vSphere Client interface running in a Firefox browser window. The URL is <https://vcsa-01a.corp.vmbeans.com/ui/app/host;nav=h/urn:vmomi:HostSystem:host-1009:4c4f3e17>. The title bar indicates the session is for 'esx-01a.corp.vmbeans.com'.

The left sidebar shows the navigation tree:

- Activities
- Firefox Web Browser
- vSphere - esx-01a.corp.vmbeans.com
- HOL Admin
- Region A
- esx-03a Admin

The main content area displays the host details for 'esx-01a.corp.vmbeans.com'. The 'Summary' tab is selected. The 'Host Details' section provides the following information:

Detail	Value
Hypervisor	VMware ESXi, 8.0.0, 20513097
Model	VMware7.1
Processor Type	Intel(R) Xeon(R) Gold 6330 CPU @ 2.00GHz
Logical Processors	2
NICs	4
Virtual Machines	1
State	Connected
Uptime	20 minutes

The 'Capacity and Usage' section shows the following resource usage:

Resource	Used	Allocated
CPU	195 MHz used	3.99 GHz allocated
Memory	1.9 GB used	8 GB allocated
Storage	21.59 GB used	90.53 GB allocated

At the bottom, there are 'Configuration' and 'Related Objects' sections, along with standard browser controls like back, forward, and search.

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 creation type

How would you like to create a virtual machine?

Create a new virtual machine

Deploy from template

Clone an existing virtual machine

Clone virtual machine to template

Convert template to virtual machine

Clone template to template

This option guides you through creating a new virtual machine. You will be able to customize processors, memory, network connections, and storage. You will need to install a guest operating system after creation.

CANCEL

NEXT

TinyLinux | **ACTIONS**

[Summary](#) [Monitor](#) [Configure](#) [Permissions](#) [Datastores](#) [Networks](#) [Snapshots](#) [Updates](#)

vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

- esx-01a.corp.vmbeans.com
- esx-02a.corp.vmbeans.com
- lpu
- LPU1
- TinyLinux **(selected)**
- TinyLinux2
- Windows10

Guest OS

Virtual Machine Details **ACTIONS**

Power Status	Powered On
Guest OS	Other 3.x or later Linux (32-bit)
VMware Tools	Running, version:2147483647 (Guest Managed)
DNS Name (1)	tinylinux
IP Addresses (1)	192.168.120.51
Encryption	Not encrypted

LAUNCH REMOTE CONSOLE

LAUNCH WEB CONSOLE

Capacity and Usage

VM Hardware

← → ⌂ ⌂ https://vcsa-01a.corp.vmbeans.com/ui/app/host;nav=h/urn:vmomi:HostSystem:host-1009:4c4f3e17 ⌂

HOL Admin Region A esx-03a Admin

vSphere Client Search in all environments Administrator@VSPHERE.LOCAL

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: New Virtual Machine

Select a location for the virtual machine.

vcsa-01a.corp.vmbeans.com
RegionA01

CANCEL BACK NEXT

Recent Tasks Alarms Configuration Related Objects

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:

lpu

Select a location for the virtual machine.

- ▼ vcsa-01a.corp.vmbeans.com
 - RegionA01

CANCEL

BACK

NEXT

Configuration

Related Objects

HOL Admin Region A esx-03a Admin

vSphere Client

Search in all environments



Administrator@VSPHERE.LOCAL



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

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

Compatibility

Compatibility checks succeeded.

CANCEL

BACK

NEXT

Configuration

Related Objects



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
ds-iscsi...	--	84.75 GB	33.95 GB	63.16 GB	VMFS 6	
ds-nfs01	--	5.78 GB	88 KB	5.78 GB	NFS v3	

Compatibility

Compatibility checks succeeded.

CANCEL

BACK

NEXT

Configuration

Related Objects

HOL Admin □ Region A □ esx-03a Admin

vSphere Client

Search in all environments



Administrator@VSPHERE.LOCAL



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 6.7 U2 and later



ESX/ESXi 3.5 and later

ESX/ESXi 4.0 and later

ESXi 5.0 and later

ESXi 5.1 and later

ESXi 5.5 and later

ESXi 6.0 and later

Workstation 12 and later

ESXi 6.5 and later

ESXi 6.7 and later

ESXi 6.7 U2 and later

Workstation 15 and later

ESXi 7.0 and later

ESXi 7.0 U1 and later

ESXi 7.0 U2 and later

ESXi 8.0 and later

compatible with ESXi 6.7 U2 and later. Some virtual

CANCEL

BACK

NEXT

Configuration

Related Objects

Recent Tasks

Alarms

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 Server 2012 (64-bit)**

Compatibility: ESXi 6.7 U2 and later (VM version 15)

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

> New SCSI controller LSI Logic SAS

> New Network VM Network Connected

> New CD/DVD Drive Client Device Connected

> New USB Controller USB 2.0

> Video card Specify custom settings

> New SATA Controller New SATA Controller

> Other Additional Hardware

Compatibility: ESXi 6.7 U2 and later (VM version 15)

CANCEL

BACK

NEXT

esx-01a.corp.vmbeans.com | ACTIONS

Summary

Monitor

Configure

Permissions

VMs

Datastores

Networks

Updates



vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

lpu

TinyLinux

TinyLinux2

Windows10

Host Details



Hypervisor: VMware ESXi, 8.0.0, 20513097

Model: VMware7.1

Processor Type: Intel(R) Xeon(R) Gold 6330 CPU @ 2.00GHz

Logical Processors: 2

NICs: 4

Virtual Machines: 2

State: Connected

Uptime: 32 minutes

Capacity and Usage

Last updated at 12:24 AM

CPU

195 MHz used 3.99 GHz allocated

Memory

1.9 GB used 8 GB allocated

Storage

21.59 GB used 90.53 GB allocated

VIEW STATS

Configuration

Related Objects

2. CLONING

The screenshot shows the VMware vSphere Web Client interface. The left sidebar displays a tree view of hosts and datacenters, with 'vcsa-01a.corp.vmbeans.com' selected. Under it, 'RegionA01' is expanded, showing 'RegionA01-COMPO1' which contains 'esx-01a.corp.vmbeans.com', 'esx-02a.corp.vmbeans.com', and 'lpu'. 'RegionA01' also contains 'TinyLinux', 'TinyLinux2', and 'Windows10'. A button labeled 'TinyLinux' is visible at the bottom of the sidebar. The main content area is titled 'TinyLinux' and shows the 'Summary' tab is active. The 'Guest OS' section shows a large black placeholder image. The 'Virtual Machine Details' section provides the following information:

Virtual Machine Details	
Power Status	Powered On
Guest OS	Other 3.x or later Linux (32-bit)
VMware Tools	Running, version:2147483647 (Guest Managed) (i)
DNS Name (1)	tinylinux
IP Addresses (1)	192.168.120.51
Encryption	Not encrypted

At the bottom of the main content area, there are buttons for 'LAUNCH REMOTE CONSOLE' and 'LAUNCH WEB CONSOLE'.

vSphere Client Actions - TinyLinux

- Power >
- Guest OS >
- Snapshots >
- Open Remote Console

Migrate... Clone > Fault Tolerance > VM Policies > Template > Compatibility > Export System Logs... Edit Settings... Move to folder... Rename... Edit Notes...

UX Monitor Configure Permissions Datastores Networks Snapshots Updates

Virtual Machine Details

ACTIONS

Clone to Virtual Machine... Power Status Powered On

Clone to Template... Guest OS Other 3.x or later Linux (32-bit)

Clone as Template to Library... VMware Tools Running, version:2147483647 (Guest Managed) i

EMOTE CONSOLE DNS Name (1) tinylinux

WEB CONSOLE IP Addresses (1) 192.168.120.51

Encryption Not encrypted

VM Hardware

TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Ready to complete

Select a name and folder

Specify a unique name and target location

Virtual machine name:

LPU1

Select a location for the virtual machine.

- ▼ vcsa-01a.corp.vmbeans.com
 - > RegionA01

CANCEL

NEXT

TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Ready to complete

Select a compute resource

Select the destination compute resource for this operation

> RegionA01

X

Compatibility

! Select a cluster, host, resource pool, or vApp as destination.

CANCEL

BACK

NEXT



TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Ready to complete

Select a compute resource

Select the destination compute resource for this operation

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

NEXT

Capacity and Usage

VM Hardware

TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Ready to complete

Select storage

1 Usable storage DRS for this virtual machine

Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster
ds-iscsi...	--	84.75 GB	80.98 GB	24.17 GB	VMFS 6	
ds-nfs01	--	5.78 GB	88 KB	5.78 GB	NFS v3	

Items per page 10 2 items

Compatibility

① Select a valid destination storage.

CANCEL

BACK

NEXT

TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Customize guest OS

6 Ready to complete

Select clone options

Select further clone options

Customize the operating system

Customize this virtual machine's hardware

Power on virtual machine after creation

CANCEL

BACK

NEXT

Capacity and Usage

VM Hardware

TinyLinux - Clone Existing Virtual Machine

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Select clone options

5 Customize guest OS

6 Ready to complete

Ready to complete

Click Finish to start creation.

Source virtual machine
TinyLinux

Virtual machine name LPU1

Folder RegionA01

Host esx-01a.corp.vmbeans.com

Datastore ds-iscsi01

Disk storage Same format as source

CANCEL

BACK

FINISH

3. Template

A template is a master copy of a virtual machine that you can use to create and provision virtual machines. Creating a template can be useful when you need to deploy multiple virtual machines from a single baseline but want to customize each system independently of the next. A common value point for using templates is to save time.

Activities Firefox Web Browser Oct 14 4:12 AM

vSphere - TinyLinux2 - Su x +

HOL Admin Region A esx-03a Admin

vSphere Client

Actions - TinyLinux2

- Power >
- Guest OS >
- Snapshots >
- Open Remote Console
- Migrate...
- Clone >
- Fault Tolerance >
- VM Policies >
- Template >
- Compatibility >
- Export System Logs...
- Edit Settings...
- Move to folder...
- Rename...
- Edit Notes...
- Tags & Custom Attributes >

https://vcsa-01a.corp.vmbeans.com/ui/app/vm;nav=h/urn:vmomi:VirtualMachine:vm-11005:4c4f3e1

C Administrator@VSPHERE.LOCAL

ACTIONS

Configure Permissions Datastores Networks Snapshots Update

Virtual Machine Details

Clone to Virtual Machine... Status Powered On

Clone to Template... OS Other 3.x or later Linux (32-bit)

Clone as Template to Library... are Tools Running, version:2147483647 (Guest Managed) ①

DNS Name (1) tinylinux2

IP Addresses (1) 192.168.100.102

Encryption Not encrypted

E CONSOLE ① CONSOLE

VM Hardware

Recent Tasks Alarms

TinyLinux2 - Clone Virtual Machine To Template

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Ready to complete

Select a name and folder

Specify a unique name and target location

VM template name:

lovelypu

Select a location for the template.

vcsa-01a.corp.vmbeans.com
RegionA01

CANCEL

NEXT

Capacity and Usage

VM Hardware

TinyLinux2 - Clone Virtual Machine To Template

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Ready to complete

Select a compute resource

Select the destination compute resource for this operation

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

NEXT

TinyLinux2 - Clone Virtual Machine To Template

1 Select a name and folder

2 Select a compute resource

3 Select storage

4 Ready to complete

Select storage

Select the storage for the configuration and disk files

VM Storage Policy

Keep existing VM storage policies

Disable Storage DRS for this virtual machine

Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster
ds-iscsi...	--	84.75 GB	34.88 GB	64.16 GB	VMFS 6	
ds-nfs01	--	5.78 GB	88 KB	5.78 GB	NFS v3	

Items per page 10 2 items

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

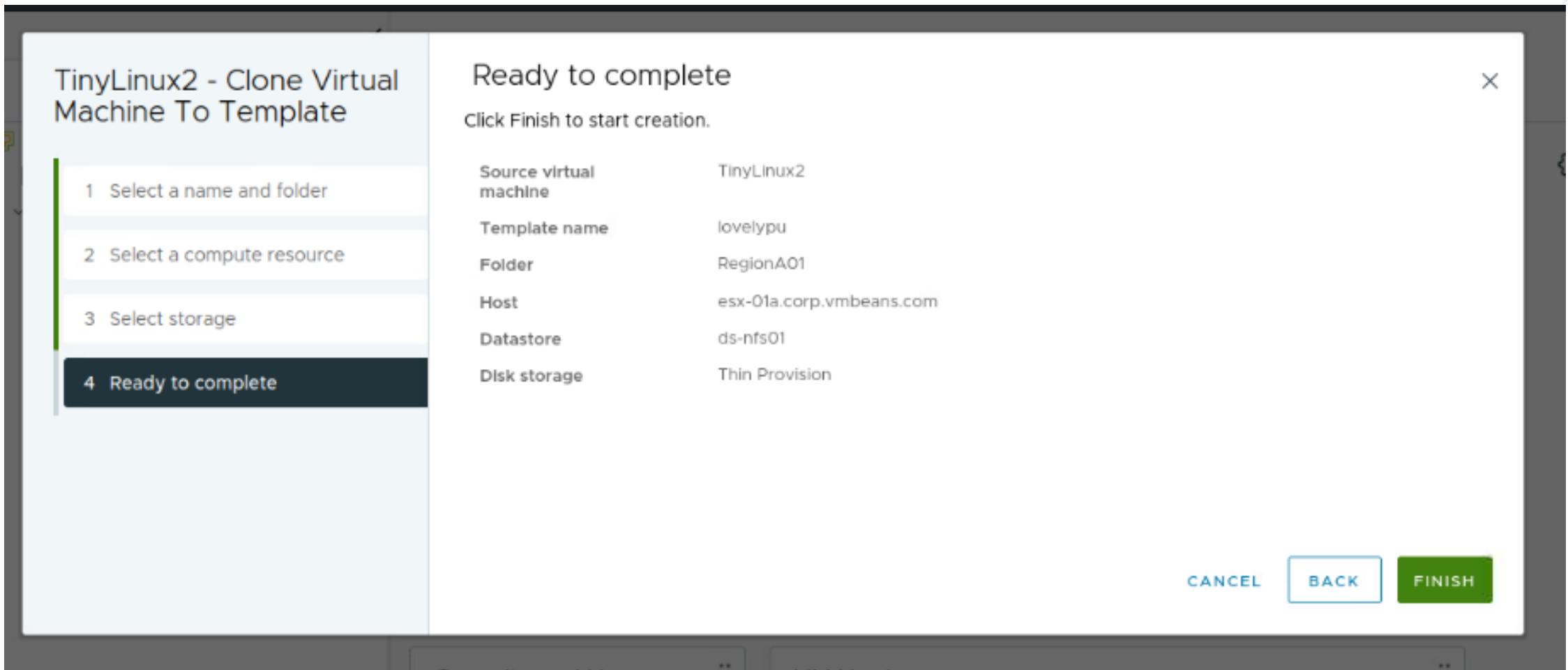
NEXT

Capacity and Usage

VM Hardware

Recent Tasks

Alarms



TinyLinux2 | ▶ 🔍 🖥 ⚙️ ⚡ | : ACTIONS

Summary Monitor Configure Permissions Datastores Networks Snapshots Updates

vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

lovelypu

TinyLinux2

Windows10

Guest OS

Virtual Machine Details

ACTIONS

Power Status Powered On

Guest OS Other 3.x or later Linux (32-bit)

VMware Tools Running, version:2147483647 (Guest Managed) i

DNS Name (1) tinylinux2

IP Addresses (1) 192.168.100.102

Encryption Not encrypted

LAUNCH REMOTE CONSOLE

LAUNCH WEB CONSOLE

Capacity and Usage

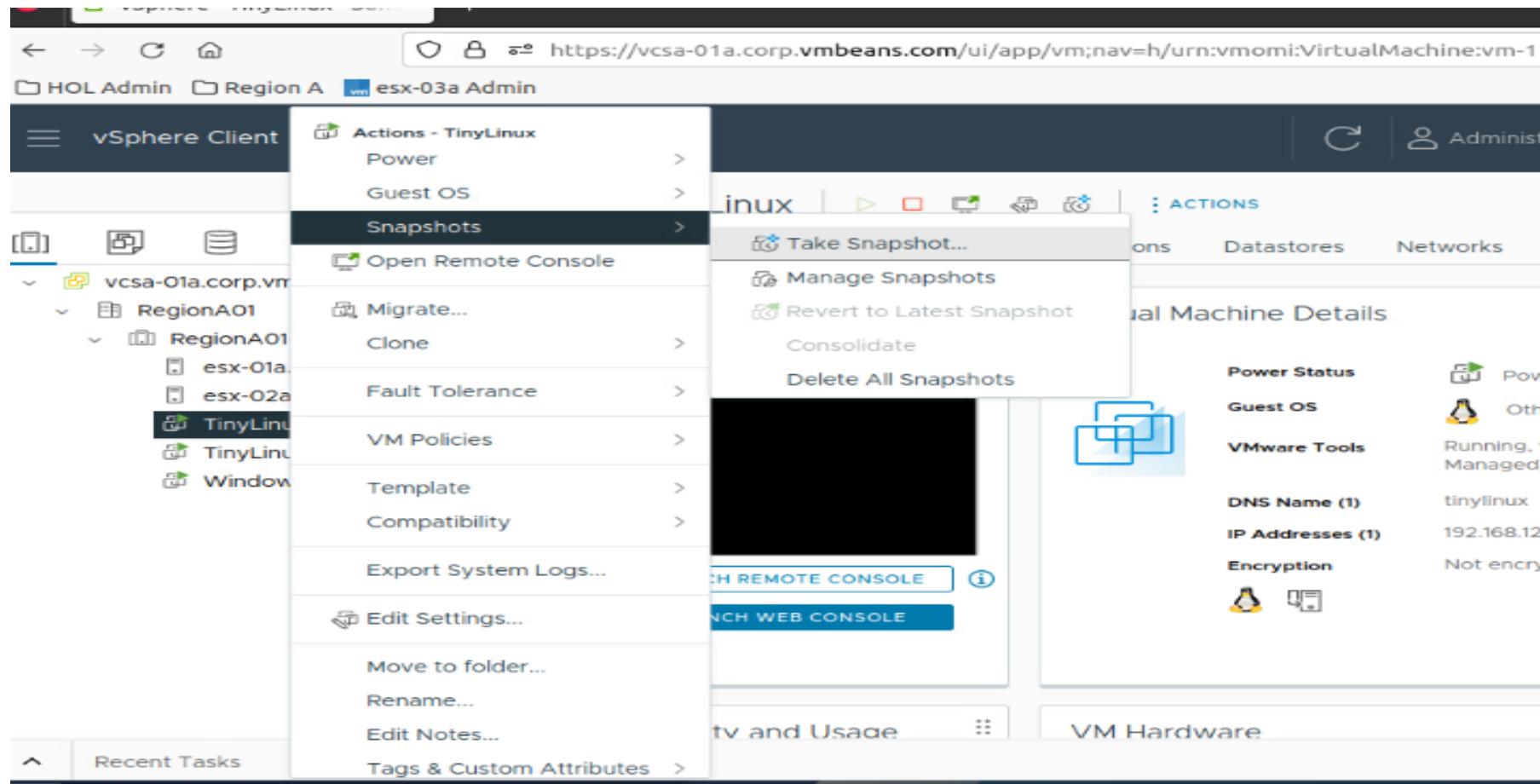
VM Hardware

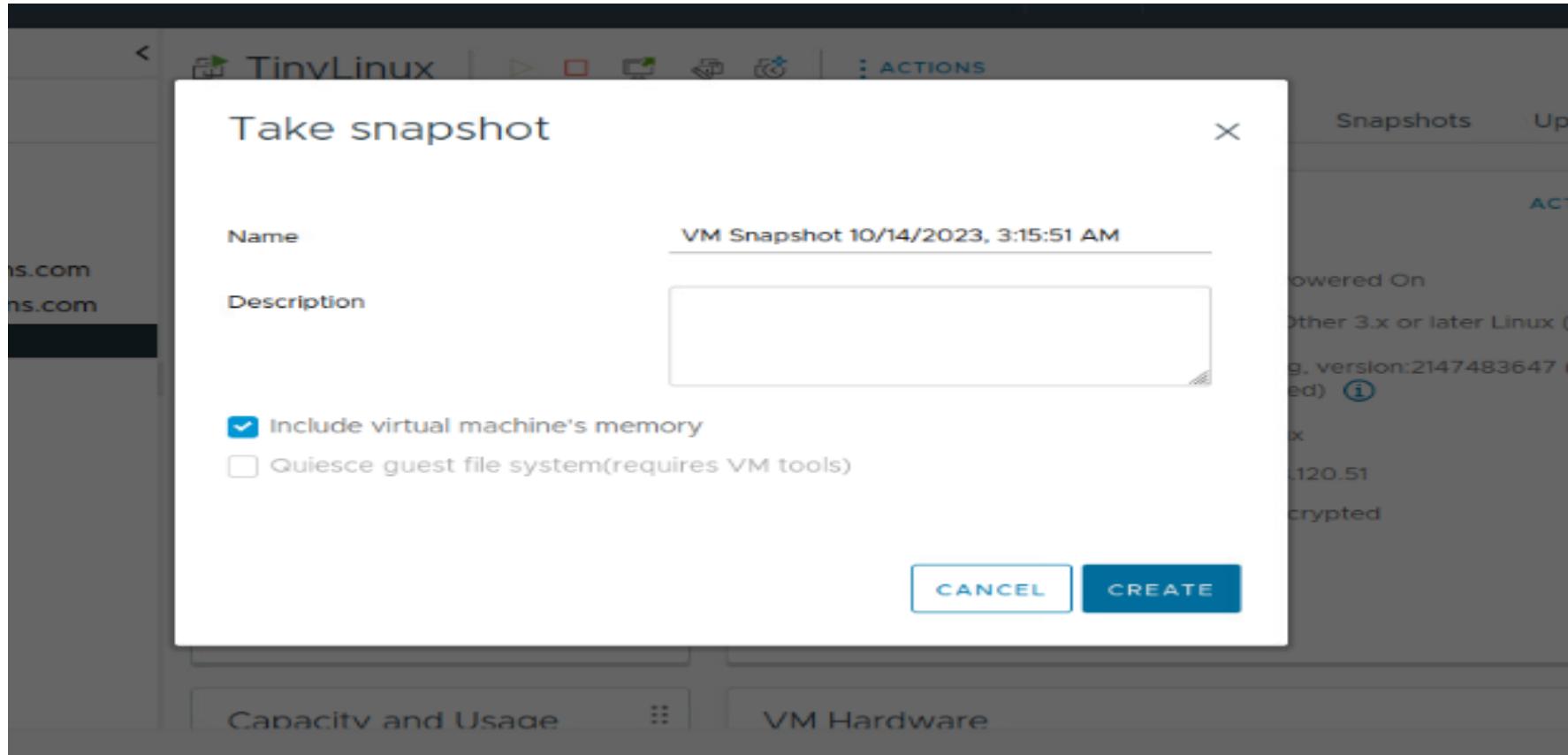
Difference Between a VM Clone and a VM Template

A regular VM clone is an exact copy of the source VM at the appropriate point of time. If you were to periodically clone a VM that is in a running state, the resulting clones would differ from one another. It is preferable to clone a powered-off VM, although standard cloning still doesn't offer all the benefits of a template.

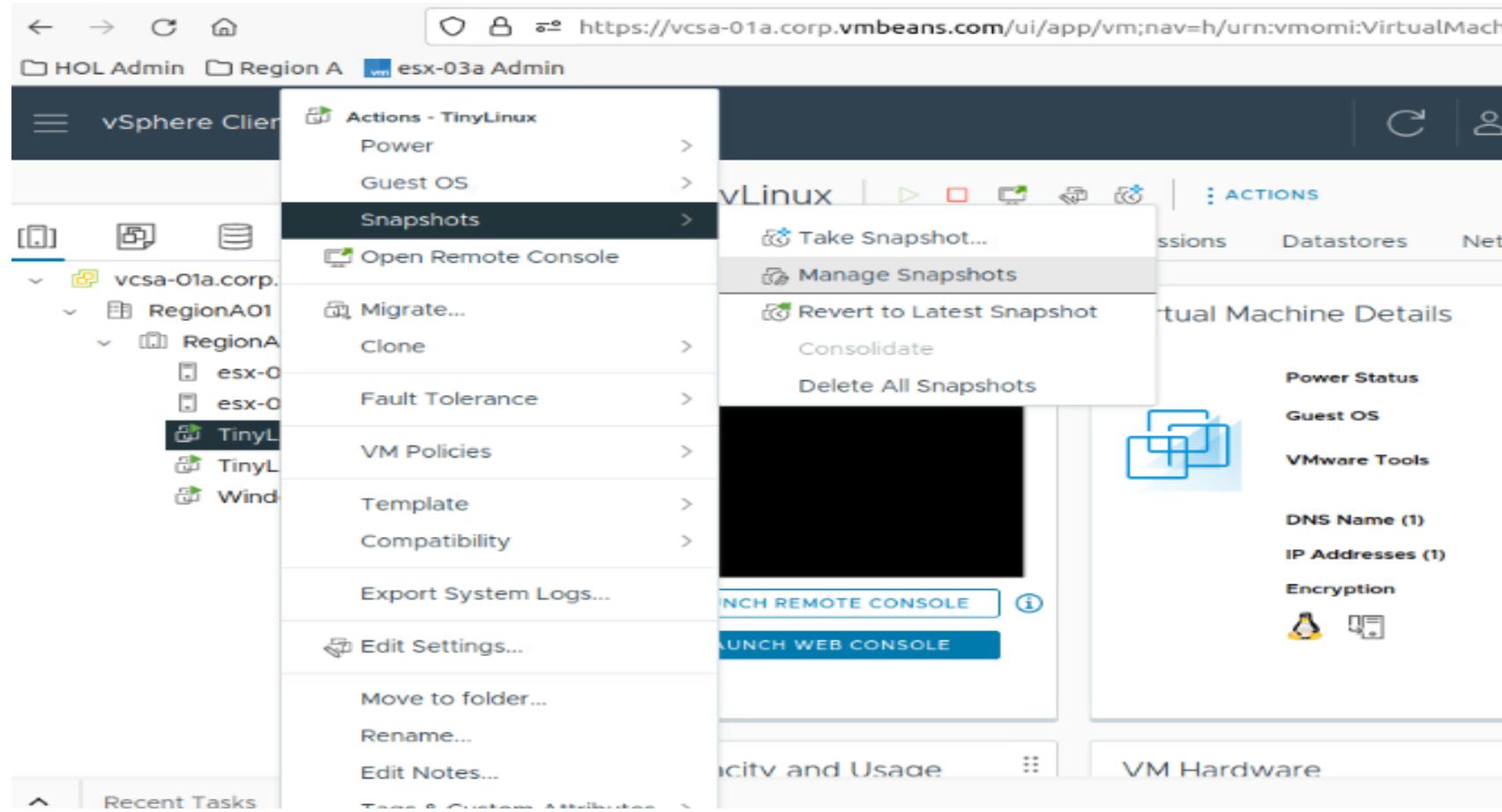
When a VM is cloned, all settings such as static IP network, computer name, and identifiers are left identical for each VM clone. As a result, network conflicts can occur. A VM template helps you prevent these issues, because a VM template cannot be edited, nor can it ever be in a running state. VMware provides tools that simplify guest OS customization for VM clones.

4.Snapshot





To check snapshot



vSphere Client Search in all environments C Administrator@VSPHERE.LOCAL

TinyLinux | Summary Monitor Configure Permissions Datastores Networks Snapshots Updates

TAKE SNAPSHOT... REVERT EDIT DELETE DELETE ALL

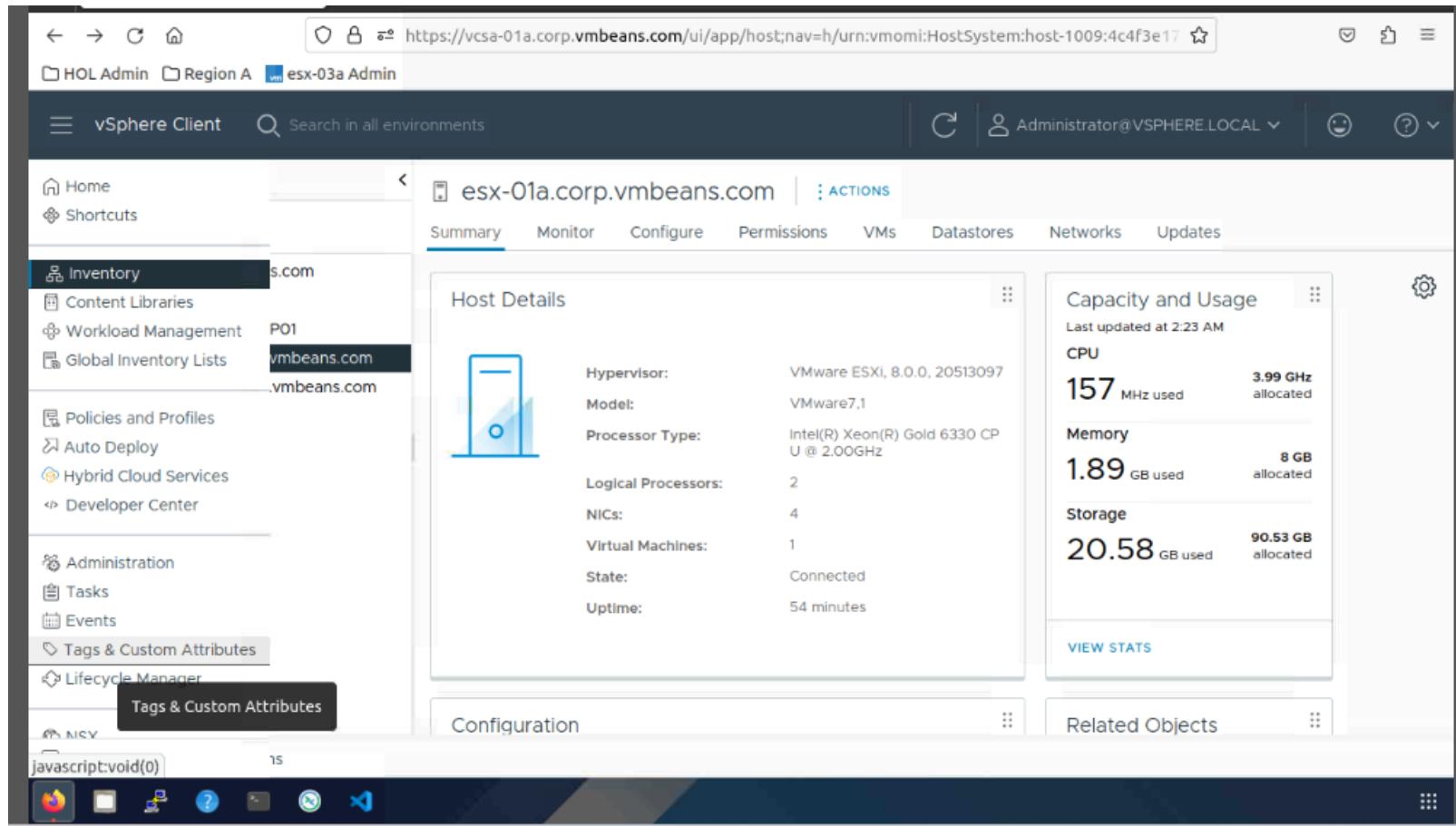
VM Snapshot 10/14/2023, 3:15:51 AM

You are here

Name	VM Snapshot 10/14/2023, 3:15:51 AM
Description	
Timestamp	10/14/23, 3:16 AM
Size	292.22 MB
Snapshot the virtual machine's memory	Yes
Quiesce guest file system	No

Recent Tasks Alarms

5. TAGGING AND SEARCHING



vSphere - Tags

https://vcsa-01a.corp.vmbeans.com/ui/app/tags/tags

HOL Admin Region A esx-03a Admin

vSphere Client Search in all environments Administrator@VSPHERE.LOCAL

Tags & Custom Attributes

Tags Custom Attributes

TAGS CATEGORIES

NEW EDIT DELETE ADD PERMISSION

Tag Name	Category	Description
New		No items found

Recent Tasks Alarms

Firefox Home Help Taskbar

vSphere Client

Search in all environments



Administrator@VSPHERE.LOCAL



Tags & Custom Attributes

Tags Custom Attributes

TAGS CATEGORIES

NEW EDIT DELETE ADD PERMISSION

Tag Name

Create Tag



Name: LPU

Description: CREATE TAG

Category: [Create New Category](#)

CANCEL

CREATE

Create Client

Custom A

Custom Attribute

CATEGORY

e

Create Category

X

Category Name:

Description:

Tags Per Object:

 One tag Many tagsAssociable
Object Types: All objects Folder Datacenter Datastore Cluster Distributed Switch Content Library Network vApp Cluster Datastore Distributed Port Group Host Library Item Resource Pool Virtual Machine

CANCEL

CREATE

Create Category

X

Category Name: LPU1

Description:

Tags Per Object:

One tag Many tags

Associable
Object Types:

- | | |
|---|--|
| <input type="checkbox"/> All objects | <input checked="" type="checkbox"/> Cluster |
| <input type="checkbox"/> Folder | <input checked="" type="checkbox"/> Datastore |
| <input checked="" type="checkbox"/> Datacenter | <input checked="" type="checkbox"/> Distributed Port Group |
| <input type="checkbox"/> Datastore Cluster | <input checked="" type="checkbox"/> Host |
| <input type="checkbox"/> Distributed Switch | <input type="checkbox"/> Library Item |
| <input checked="" type="checkbox"/> Content Library | <input checked="" type="checkbox"/> Resource Pool |
| <input checked="" type="checkbox"/> Network | <input checked="" type="checkbox"/> Virtual Machine |
| <input checked="" type="checkbox"/> vApp | |

CANCEL

CREATE

Tags & Custom Attributes

Tags Custom Attributes

TAGS**CATEGORIES**

NEW EDIT DELETE ADD PERMISSION

	Tag Name	Category	Description
<input type="radio"/>	LPU	LPU1	CREATE TAG



1 item



Recent Tasks

Alarms



Now, Assigning Tag to VM

The screenshot shows the vSphere Client interface with the URL <https://vcsa-01a.corp.vmbeans.com/ui/app/tags/tags>. The navigation bar includes tabs for HOL Admin, Region A, and esx-03a Admin. The main menu bar has items like vSphere Client, Search in all environments, and Administrator@VSPHERE.LOCAL. The left sidebar lists Home, Shortcuts, Inventory (selected), Content Libraries, Workload Management, Global Inventory Lists, Policies and Profiles, Auto Deploy, Hybrid Cloud Services, Developer Center, Administration, Tasks, Events, Tags & Custom Attributes (selected), and Lifecycle Manager. The main content area displays a table titled 'ADD PERMISSION' with one item: Category LPU1 and Description CREATE TAG. A status message at the bottom right says '1 item'.

Category	Description
LPU1	CREATE TAG

https://vcsa-01a.corp.vmbeans.com/ui/app/vm;nav=h/urn:vmomi:VirtualMachine:vm-11005:4c4f3e1

HOL Admin Region A esx-03a Admin

vSphere Client

Clone >

Fault Tolerance >

VM Policies > linux2 | Monitor Configure Permissions Datastores Networks Snapshots Updates

Template >

Compatibility >

Export System Logs...

Edit Settings...

Move to folder...

Rename...

Edit Notes...

Tags & Custom Attributes > Assign Tag... Remove Tag Edit Custom Attributes...

Add Permission...

Alarms >

Remove from Inventory

Delete from Disk

Recent Tasks

vSAN >

Administrator@VSPHERE.LOCAL

Virtual Machine Details

Power Status	Powered On
Guest OS	Other 3.x or later Linux (32-bit)
VMware Tools	Running, version:2147483647 (Guest Managed) i
DNS Name (1)	tinylinux2
IP Addresses (1)	192.168.100.102
Encryption	Not encrypted

VM and Usage VM Hardware

TinyLinux2 | ▶ 🔍 🖥 ⚙️ ⚡ | : ACTIONS

Summary Monitor Configure Permissions Datastores Networks Snapshots Update

sa-01a.corp.vmbeans.com

RegionA01

- RegionA01-com
- esx-01a.corp
- esx-02a.corp
- TinyLinux
- TinyLinux2**
- Windows10

Assign Tag | TinyLinux2 X

ADD TAG

Tag Name	Category	Description
LPU	LPU1	CREATE TAG

1 item

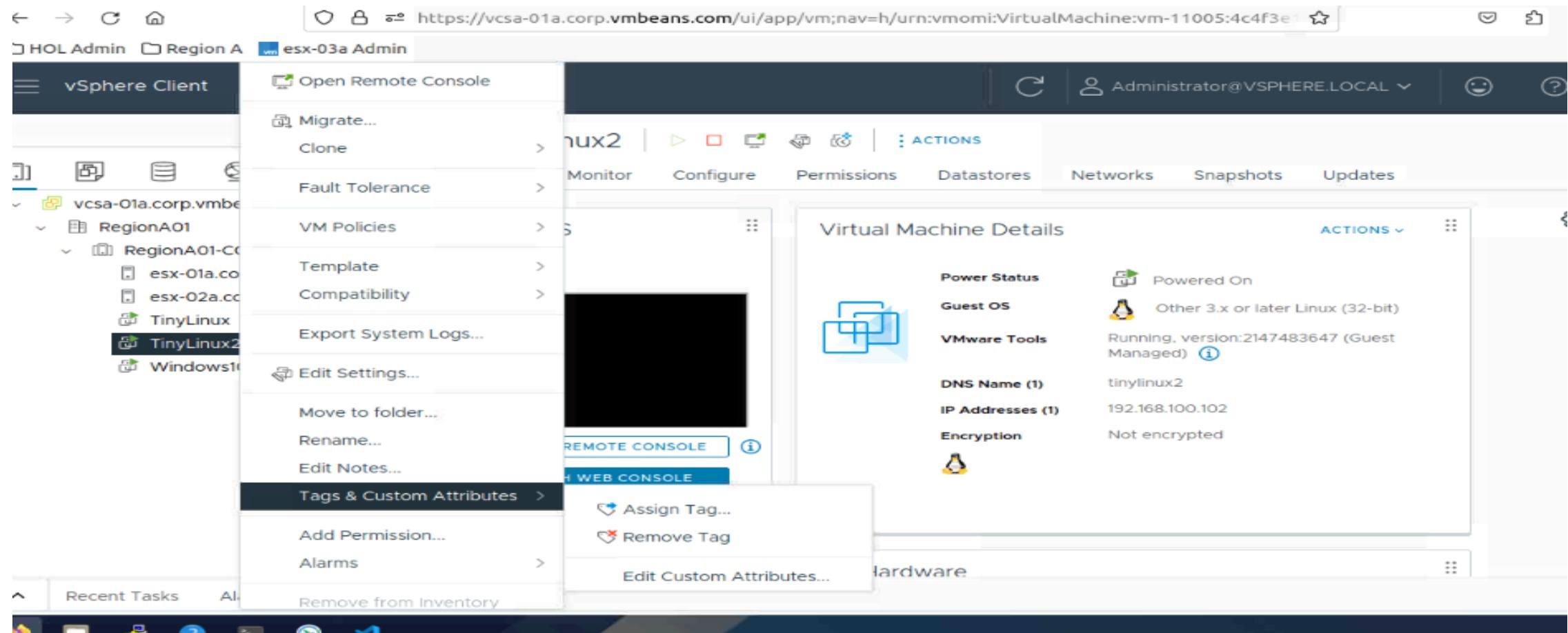
CANCEL ASSIGN

LAUNCH WEB CONSOLE

The screenshot shows the vSphere Web Client interface. A modal dialog box titled "Assign Tag" is open over the main summary screen of a VM named "TinyLinux2". The dialog contains a table with one row, showing a tag named "LPU" assigned to the category "LPU1". There are "CREATE TAG" and "1 item" buttons at the bottom right of the table. At the very bottom of the page, there is a "LAUNCH WEB CONSOLE" button.

Searching

Now, check if tag is assign to VM or not



rp.vmbeans.com

01

nA01-CO

x-01a.cor

x-02a.cor

yLinux

yLinux2

ndows10

LAUNCH WEB CONSOLE

Remove Tag | TinyLinux2 X

Assigned Tag	Category	Description
<input type="checkbox"/> LPU	LPU1	CREATE TAG
1 item		

CANCEL REMOVE

The screenshot shows a VMware interface with a "Remove Tag" dialog box. The dialog title is "Remove Tag | TinyLinux2". Inside, there's a table listing a single tag entry: "LPU" under "Assigned Tag", "LPU1" under "Category", and "CREATE TAG" under "Description". A "CANCEL" button is on the left and a "REMOVE" button is on the right. The background shows a list of hosts or VMs including "rp.vmbeans.com", "nA01-CO", "x-01a.cor", "x-02a.cor", "yLinux", "yLinux2", and "ndows10". A "LAUNCH WEB CONSOLE" button is also visible.

Summary Monitor Configure Permissions Datastores Networks Snapshots Updates

.vmbeans.com

Remove Tag | TinyLinux2

X

Assigned Tag	Category	Description
<input checked="" type="checkbox"/> LPU	LPU1	CREATE TAG

1 item

CANCEL REMOVE

LAUNCH WEB CONSOLE

The screenshot shows a 'Remove Tag' dialog box overlaid on a vSphere interface. The dialog title is 'Remove Tag | TinyLinux2'. Inside, there's a table with three columns: 'Assigned Tag', 'Category', and 'Description'. A single row is shown, with the 'Assigned Tag' column containing 'LPU' and the 'Category' column containing 'LPU1'. The 'Description' column contains the text 'CREATE TAG'. A red box highlights the 'LPU' entry in the 'Assigned Tag' column. At the bottom of the dialog are 'CANCEL' and 'REMOVE' buttons. In the background, the vSphere interface shows a list of VMs on the left and various tabs like 'Summary', 'Monitor', etc., at the top.

Remove Tag | TinyLinux2

X

<input type="checkbox"/> Assigned Tag	Category	Description
 No items found		
0 Items		8:27:ed

CANCEL

REMOVE

VIEW STATS

EDIT

6. Monitoring Event and Alarm

The screenshot shows the vSphere Client interface with the following details:

- Top Bar:** HOL Admin, Region A, esx-03a Admin.
- Header:** Deploy OVF Template..., New vApp..., Import VMs, Administrator@VSPHERE.LOCAL, Smiley icon.
- Left Sidebar:** vSphere Client, Storage, vcsa-01a.corp, RegionA01, Region, esx-03a, esx-03b, Tiny, Tiny, Win, Recent Tasks, vSAN.
- Current View:** RegionA01-COMP01, Datastores tab selected.
- Datastore Cluster Table:**

Name	Status	Type	Datastore Cluster	Capacity	Free
ds-iscsi01	Normal	VMFS 6		84.75 GB	64.16 GB
ds-nfs01	Normal	NFS 3		5.78 GB	5.78 GB
- Context Menu (Alarms):** New Alarm Definition..., Enable Alarm Actions, Disable Alarm Actions.
- Bottom Right:** Items per page: 35.

New Alarm Definition

X

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

Name and Targets

Alarm Name *

lpu5

Description

Target type *

Virtual Machines

Targets

Virtual Machines

Hosts

Clusters

-COMP01 (3)

CANCEL

NEXT

New Alarm Definition

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

Name and Targets

X

Alarm Name *

Ipu5

Description

Target type *

Virtual Machines

Targets

All Virtual Machines on [RegionA01-COMP01] (3)

CANCEL

NEXT

EXPORT

Items per page 35 2 item

vSphere Client search in all environments Administrator@VSphere.LOCAL

New Alarm Definition

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

Alarm Rule 1

IF

Search

Capacity and Usage (9)

Virtual machine PMem bandwidth usage is high

Virtual machine PMem bandwidth usage is nor...

VM CPU Ready Time

VM CPU Usage

ADD ANOTHER RULE DUPLICATE RULE REMOVE RULE

CANCEL BACK NEXT

EXPORT Items per page 35 2 items

Recent Tasks Alarms

New Alarm Definition

Alarm Rule 1

X

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

IF

VM CPU Usage

is above

50 ▾ % for

30 sec

ADD ADDITIONAL TRIGGER

THEN

ADD ANOTHER RULE

DUPLICATE RULE

REMOVE RULE

CANCEL

BACK

NEXT

EXPORT

Items per page 35

New Alarm Definition

Alarm Rule 1

X

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

THEN

Trigger the alarm and *

Show as Critical



Send email notifications



Send SNMP traps



Run script

[ADD ANOTHER RULE](#)

[DUPLICATE RULE](#)

[REMOVE RULE](#)

[CANCEL](#)

[BACK](#)

[NEXT](#)

[EXPORT](#)

Items per page 35 2

New Alarm Definition

1 Name and Targets

2 Alarm Rule 1

3 Reset Rule 1

4 Review

Review



Alarm Name

lpu5

Description

Targets All Virtual Machines on RegionA01-COMP01 (3)

Alarm Rules

IF VM CPU Usage is above 50 % for 30 sec

THEN Trigger the alarm as Critical

Reset Rules

IF the warning or critical conditions/states are no longer met

THEN Trigger the alarm as Normal

Enable this alarm

CANCEL

BACK

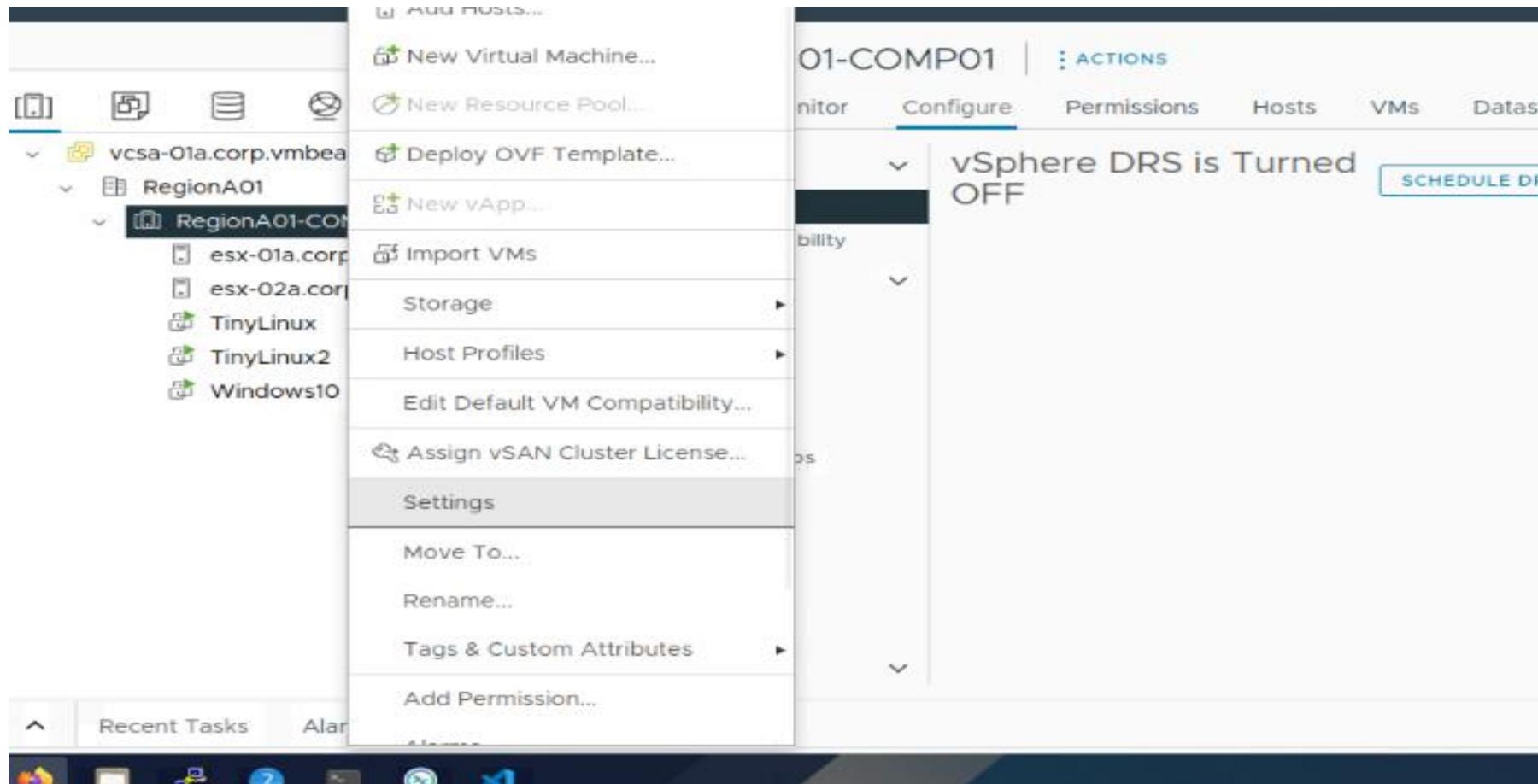
CREATE

EXPORT

Items per page: 35

7. DRS, HA

DRS (Distributed Resource Scheduling)



vSphere Client Search in all environments Administrator@VSPHERE.LOCAL

RegionA01-COMP01

ACTIONS

Summary Monitor Configure Permissions Hosts VMs Datastores Networks Updates

Services vSphere DRS vSphere Availability Configuration Quickstart General Key Provider VMware EVC VM/Host Groups VM/Host Rules VM Overrides I/O Filters Host Options Host Profile Licensing

vSphere DRS is Turned OFF

SCHEDULE DRS... RESTORE RESOURCE POOL TREE... ... Edit...

Recent Tasks Alarms

Client

Edit Cluster Settings | RegionA01-COMPO1

X

vSphere DRS [Automation](#)[Additional Options](#)[Power Management](#)[Advanced Options](#)

Automation Level

Partially Automated

DRS automatically places virtual machines onto hosts at VM power-on. Migration recommendations need to be manually applied or ignored.

Migration Threshold 

Conservative
(Less
Frequent
vMotions)

(3) DRS provides recommendations when workloads are moderately imbalanced. This threshold is suggested for environments with stable workloads. (Default)

Aggressive
(More
Frequent
vMotions)

Predictive DRS  EnableVirtual Machine Automation  Enable

CANCEL

OK

vSphere DRS is Turned
ON

SCHEDULE DRS...

RESTORE RESOURCE POOL TREE...

...

➤ DRS Automation	Fully Automated
➤ Additional Options	Expand for policies
➤ Power Management	Off
➤ Advanced Options	Expand for advanced options

HA (High Availability)

The screenshot shows the vSphere Client interface with the URL <https://vcsa-01a.corp.vmbeans.com/ui/app/cluster;nav=h/urn:vmomi:ClusterComputeResource:don>. The navigation bar includes links for HOL Admin, Region A, and esx-03a Admin. The search bar contains "Search in all environments". The top right shows the user "Administrator@VSPHERE.LOCAL" and various icons.

The main content area displays the configuration for the cluster "RegionA01-COMP01". The "Configure" tab is selected. The "vSphere Availability" section shows the status: "vSphere HA is Turned OFF" and "Proactive HA is Turned OFF". It also lists "Failure conditions and responses" with the following table:

Failure	Response	Details
Host failure	Disable...	vSphere HA disabled. VMs are not restarted in the event of a host failure.
Proactive HA	Disable...	Proactive HA is not enabled.
Host Isolation	Disable...	vSphere HA disabled. VMs are not restarted in the event of host isolation.
Datastore with Permanent Device Loss	Disable...	vSphere HA disabled. VMs are not restarted in the event of permanent device loss on a datastore.
Datastore with All Paths Down	Disable...	vSphere HA disabled. VMs are not restarted in the event of all paths down to a datastore.
Guest not heartbeating	Disable...	vSphere HA disabled. VMs are not restarted in the event of a guest not heartbeating.

At the bottom, there are "Admission Control" and "Expand for details" buttons.

here Client

a-01a.corp.vmbea
RegionA01

RegionA01-CO

esx-01a.cor

esx-02a.cor

TinyLinux

TinyLinux2

Windows10

Edit Cluster Settings | RegionA01-COMP01

vSphere HA [Failures and responses](#)[Admission Control](#)[Heartbeat Datastores](#)[Advanced Options](#)

You can configure how vSphere HA responds to the failure conditions on this cluster. The following failure conditions are supported: host, host isolation, VM component protection (datastore with PDL and APD), VM and application.

Enable Host Monitoring [Host Failure Response](#)

Restart VMs

[Response for Host Isolation](#)

Disabled

[Datastore with PDL](#)

Power off and restart VMs

[Datastore with APD](#)

Power off and restart VMs - Conservative restart policy

[VM Monitoring](#)

Disabled

CANCEL

OK

Administrator@VSPHERE.LOCAL

vA01-COMPO1 | ACTIONS

Monitor Configure Permissions Hosts VMs Datastores Networks Updates

RS

vavailability

n

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/C

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ies

ns

2

vSphere HA is Turned ON

Runtime information for vSphere HA is reported under vSphere HA Monitoring

Proactive HA is Turned OFF

Failure conditions and responses

Failure	Response	Details
Host failure	✓ Restart...	Restart VMs using VM restart priority ordering.
Proactive HA	ⓘ Disable...	Proactive HA is not enabled.
Host Isolation	ⓘ Disable...	VMs on isolated hosts will remain powered on.
Datastore with Permanent Device Lo...	✓ Power...	Datastore protection enabled. Always attempt to re-
Datastore with All Paths Down	✓ Power...	Datastore protection enabled. Ensure resources are
Guest not heartbeating	ⓘ Disable...	VM and application monitoring disabled.

6 items

> Admission Control Expand for details

8. Performance Monitoring

The screenshot shows the vSphere Web Client interface. On the left, the navigation tree displays a hierarchy: vcsa-01a.corp.vmbeans.com > RegionA01 > RegionA01-COMP01 > esx-02a.corp.vmbeans.com. The 'esx-02a.corp.vmbeans.com' node is selected and highlighted with a dark blue background. On the right, the main content area is titled 'esx-02a.corp.vmb'. The 'Monitor' tab is selected, showing the 'Performance' section. A dropdown menu under 'Performance' is open, with 'Overview' selected and highlighted in blue. Below the dropdown, the message 'No perf selecte' is displayed. At the bottom of the interface, there are buttons for 'Recent Tasks' and 'Alarms'.

esx-02a.corp.vmbeans.com

ACTIONS

Summary Monitor Configure Permissions VMs Datastores Networks Updates

vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

esx-01a.corp.vmbeans.com

esx-02a.corp.vmbeans.com

TinyLinux

TinyLinux2

Windows10

Issues and Alarms

All Issues

Triggered Alarms

Performance

Overview

Advanced

Tasks and Events

Tasks

Events

Hardware Health

Skyline Health

Performance Overview

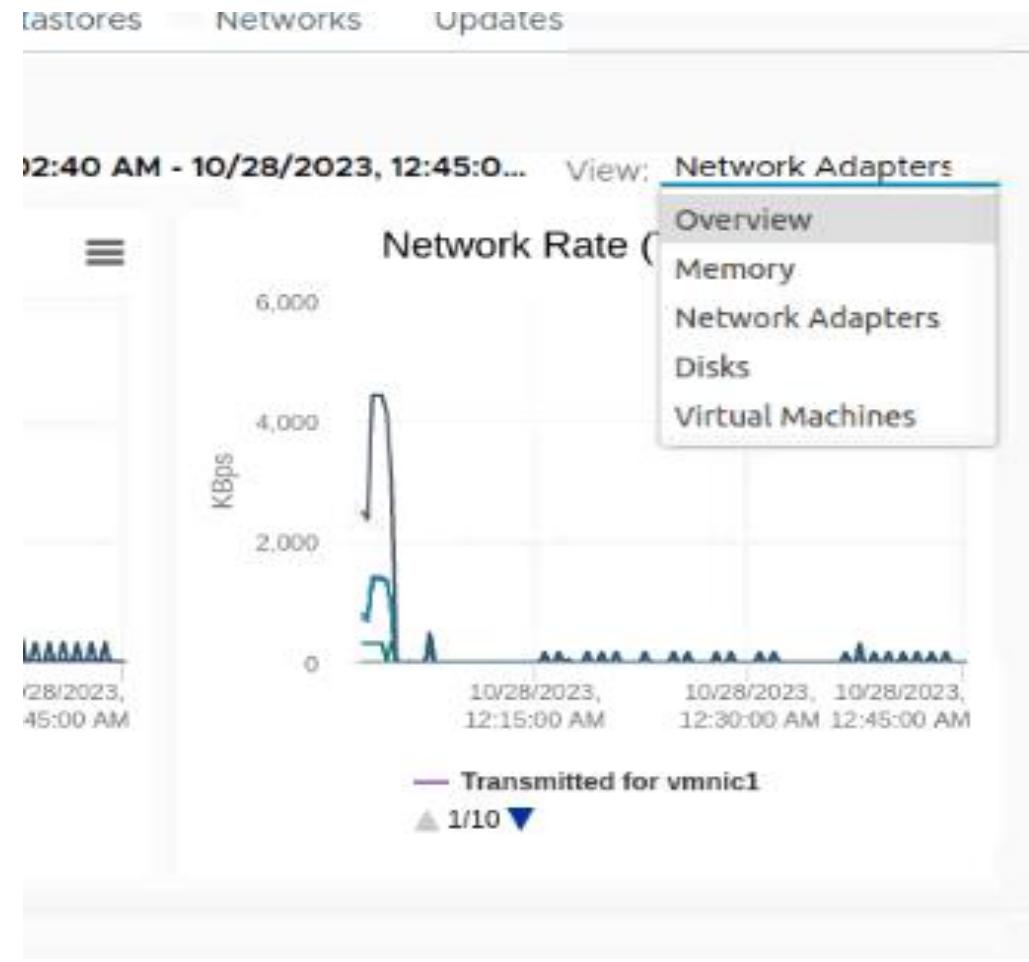
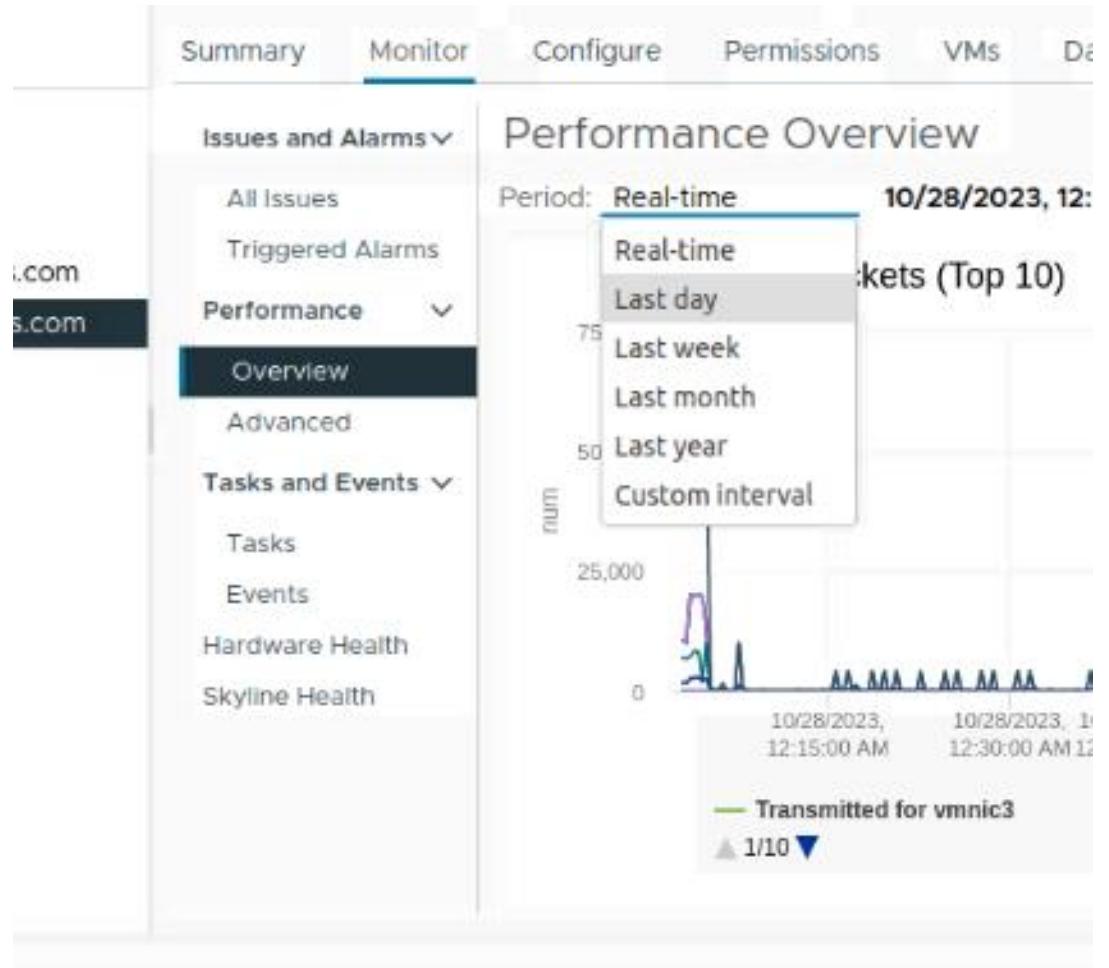
Period: Real-time 10/27/2023, 11:42:01 PM - 10/28/2023, 12:41:01... View: Virtual Machines

CPU Usage (Top 10)

No performance data is available for the currently selected metrics

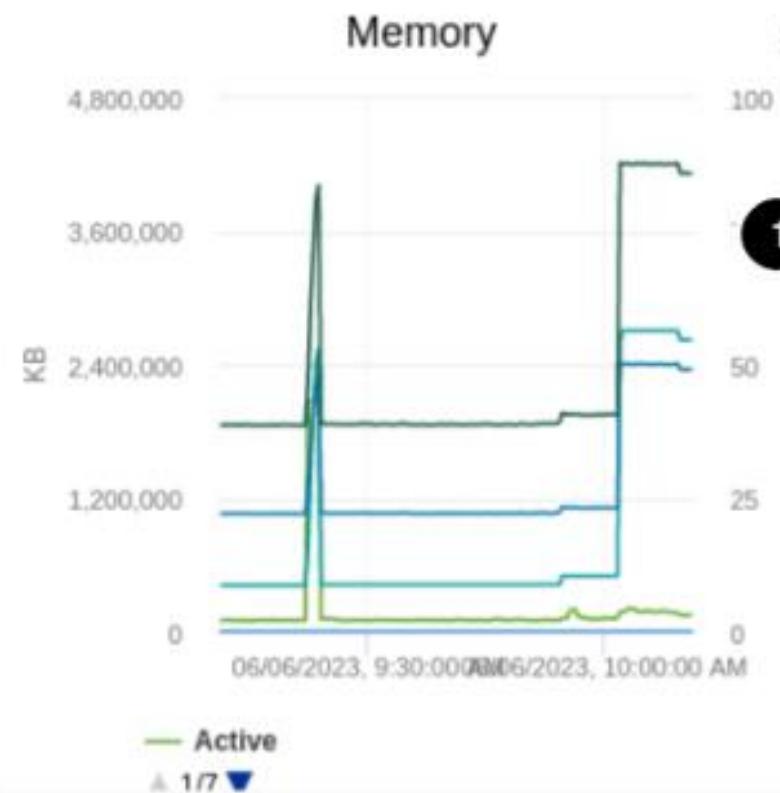
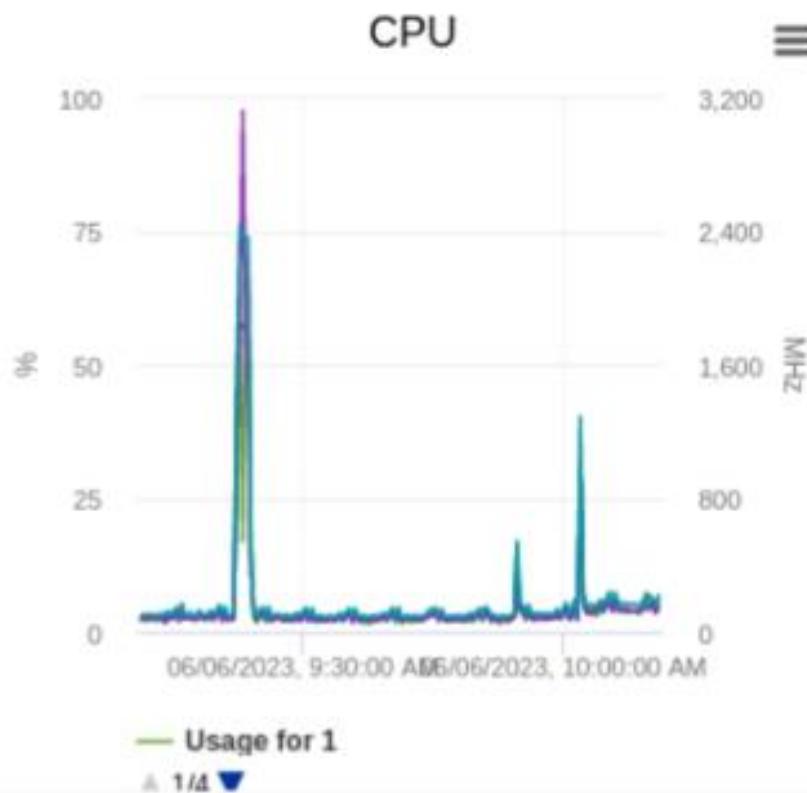
Memory Usage (Top 10)

No performance data is available for the currently selected metrics



Performance Overview

Period: Real-time



9. MIGRATING VIRTUAL MACHINES WITH VMWARE

- Off DRS

The screenshot shows the VMware vSphere Web Client interface. On the left, a navigation tree displays a vCenter server (vcsa-01a.corp.vmbeans.com) under RegionA01, with a resource pool named 'RegionA01-COMP01' selected (marked with a red box and number 1). The main content area shows the 'Configure' tab selected (marked with a red box and number 2). The 'vSphere DRS' section indicates that 'vSphere DRS is Turned ON'. Below this, there are four expandable sections: 'DRS Automation' (Fully Automated), 'Additional Options' (Expand for policies), 'Power Management' (Off), and 'Advanced Options' (Expand for advanced options). A red box and number 3 highlight the 'Edit...' button located next to the 'vSphere DRS' status.

VMware vSphere Web Client - https://vcsa-01a.corp.vmbeans.com

Navigation Bar: Summary, Monitor, Configure, Permissions, **VMs**, Datastores, Networks, Updates

Sub-navigation: Virtual Machines, VM Templates

Filter: Filter

	Name	State	Status	Provisioned Space	Used Space	Host CPU	Host
	TinyLinux2	Powered ...	Normal	436.92 MB	371.92 MB	0 Hz	181

Virtual Machine List:

- esx-01a.corp.vmbeans.com
- esx-02a.corp.vmbeans.com
- TinyLinux
- TinyLinux2
- Windows10

ESATVZA.corp.vmbeans.com | Overview

Summary Monitor Configure Permissions **VMs** Datastores Networks Updates

Virtual Machines **VM Templates**

Filter

	Name	↑ State	Status	Provisioned Space	Used Space	Host CPU	Host Memory
<input type="checkbox"/>	TinyLinux	Powered ...	✓ Normal	436.55 MB	371.55 MB	0 Hz	172
<input type="checkbox"/>	Windows10	Powered ...	✓ Normal	32.08 GB	17.87 GB	83 MHz	2.0

vcsa-01a.corp.vmbeans.com
RegionA01
RegionA01-COMP01
esx-01a.corp.vmbeans.com
esx-02a.corp.vmbeans.com
TinyLinux
TinyLinux2
Windows10

SOL Admin Region A esx-03a Admin

vSphere Client Search in all environments

es Summary Virtua

vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

- esx-01a.corp.vmbeans.com
- esx-02a.corp.vmbeans.com**
- TinyLinux
- TinyLinux2
- Windows10

Actions - Windows10

- Power >
- Guest OS >
- Snapshots >
- Open Remote Console
- Migrate...
- Clone >
- Fault Tolerance >
- VM Policies > Powered ... ✓ Normal 32.08 GB
- Template >
- Compatibility >
- Export System Logs...
- Edit Settings...
- Move to folder...
- Rename...
- Edit Notes...
- Tags & Custom Attributes >

Administrator@VSPHERE.LOCAL

Power On ctrl + alt + B

Power Off ctrl + alt + E

Suspend ctrl + alt + Z

Reset ctrl + alt + T

Hard stop

Shut Down Guest OS ctrl + alt + D

Restart Guest OS ctrl + alt + R

Updates

Filter

Used Space	Host CPU	Host
371.55 MB	0 Hz	172
17.87 GB	83 MHz	2.0

Items per page 35 2 items

Recent Tasks Alarms

vSphere Client Search in all environments

esx-01a.corp.vn

Summary Monitor Actions - TinyLinux2

Virtual Machines VM Templates

vcsa-01a.corp.vmbeans.com

RegionA01

RegionA01-COMP01

- esx-01a.corp.vmbeans.com
- esx-02a.corp.vmbeans.com
- TinyLinux
- TinyLinux2
- Windows10

EXPORT

Parent Tasks Alarms

Power >

Guest OS >

Snapshots >

Open Remote Console

Migrate...

Clone >

Fault Tolerance >

VM Policies >

Template >

Compatibility >

Export System Logs...

Edit Settings...

Move to folder...

Rename...

Edit Notes...

Datastores Networks Updates

Administrator@VSPHERE.LOCAL

Filter

	Provisioned Space	Used Space	Host CPU
Normal	436.92 MB	371.92 MB	0 Hz

Items per page 35

Migrate | TinyLinux2

1 Select a migration type

2 Select a compute resource

3 Select networks

4 Select vMotion priority

5 Ready to complete

Select a migration type

Change the virtual machines' compute resource, storage, or both.

VM origin

Change compute resource only

Migrate the virtual machines to another host or cluster.

Change storage only

Migrate the virtual machines' storage to a compatible datastore or datastore cluster.

Change both compute resource and storage

Migrate the virtual machines to a specific host or cluster and their storage to a specific datastore or datastore cluster.

Cross vCenter Server export

Migrate the virtual machines to a vCenter Server not linked to the current SSO domain.

CANCEL

NEXT

Migrate | TinyLinux2

1 Select a migration type

2 Select a compute resource

3 Select networks

4 Select vMotion priority

5 Ready to complete

Select a compute resource

Select a cluster, host, vApp or resource pool to run the virtual machines.

VM origin ⓘ

Hosts Clusters Resource Pools vApps

Filter

	Name	State	Status	Cluster	Consumers
•	esx-02a.corp.vmbeans.com	Connected	Normal	RegionA01-C...	2 items

Compatibility

✓ Compatibility checks succeeded.

CANCEL

BACK

NEXT

Migrate | TinyLinux2

- 1 Select a migration type
- 2 Select a compute resource
- 3 Select networks
- 4 Select vMotion priority
- 5 Ready to complete

Select networks

Select destination networks for the virtual machine migration.

VM origin

Migrate VM networking by selecting a new destination network for all VM network adapters attached to the same source network.

	Source Network	Used By	Destination Network
»	VM Network	1 VMs / 1 Network adapters	VM Network
<small>1 item</small>			

Compatibility

Compatibility checks succeeded.

CANCEL

BACK

NEXT

Migrate | TinyLinux2

1 Select a migration type

2 Select a compute resource

3 Select networks

4 Select vMotion priority

5 Ready to complete

Select vMotion priority



VM origin

Protect the performance of your running virtual machines by prioritizing the allocation of CPU resources.

Schedule vMotion with high priority (recommended)

vMotion receives higher CPU scheduling preference relative to normal priority migrations. vMotion might complete more quickly.

Schedule normal vMotion

vMotion receives lower CPU scheduling preference relative to high priority migrations. You can extend vMotion duration.

CANCEL

BACK

NEXT

Migrate | TinyLinux2

X

1 Select a migration type

VM origin ⓘ

2 Select a compute resource

3 Select networks

4 Select vMotion priority

5 Ready to complete

Ready to complete

Verify that the information is correct and click Finish to start the migration.

Migration Type Change compute resource. Leave VM on the original storage

Virtual Machine

TinyLinux2

Cluster

RegionA01-COMP01

Host

esx-01a.corp.vmbeans.com

vMotion Priority

High

Networks

No network reassessments

CANCEL

BACK

FINISH

Recent Tasks Alarms

Task Name	Target	Status	Details	Initiator	Queued For	Start 1
Relocate virtual machine	TinyLinux2	Completed	Migrating Virtual Machine ac...	VSPHERE.LOCAL\Administrator	4 ms	10/28
Relocate virtual machine	TinyLinux2	Completed		VSPHERE.LOCAL\Administrator	3 ms	10/28

esx-02a.corp.vmbeans.com | ACTIONS

VMs

Virtual Machines VM Templates

Filter

	Name	State	Status	Provisioned Space	Used Space	Host CPU	Host Mem
<input type="checkbox"/>	TinyLinux	Powered ...	✓ Normal	436.55 MB	371.55 MB	0 Hz	172 MB
<input type="checkbox"/>	TinyLinux2	Powered ...	✓ Normal	436.92 MB	371.92 MB	0 Hz	185 MB
<input type="checkbox"/>	Windows10	Powered ...	✓ Normal	32.08 GB	17.91 GB	146 MHz	2.04 GB

EXPORT

Items per page: 35 | 3 items

9. Vsphere Standard Switch

The screenshot shows the vSphere Client interface with the following details:

- Left Navigation:** Shows a tree view of the vSphere environment. The selected node is "esx-01a.corp.vmbeans.com".
 - Under "RegionA01": "RegionA01-COMP01" is expanded, showing "esx-01a.corp.vmbeans.com" (selected), "esx-02a.corp.vmbeans.com", "TinyLinux", "TinyLinux2", and "Windows10".
- Top Bar:** Displays "vSphere Client" and a search bar "Search in all environments".
- Selected Host:** "esx-01a.corp.vmbeans.com" is selected.
- Current View:** "Configure" tab is selected.
- Storage:** Options include Storage Adapters, Storage Devices, Host Cache Configuration, Protocol Endpoints, and I/O Filters.
- Networking:** Options include Virtual switches, VMkernel adapters, Physical adapters, TCP/IP configuration, and Virtual Machines.
- Virtual machines:** Options include VM Startup/Shutdown, Agent VM Settings, and Default VM Compatibility.
- Virtual switches:** A list of existing virtual switches:
 - ESXi-RegionA01-vD:** VLAN ID: --
 - > VMkernel Ports (1)
 - Virtual Machines (0)
 - Storage-RegionA01:** VLAN ID: --
 - > VMkernel Ports (1)
 - Virtual Machines (0)
 - vMotion-RegionA01:** VLAN ID: --
 - > VMkernel Ports (1)
- Bottom Navigation:** "Recent Tasks" and "Alarms".

Add Networking

1 Select connection type

2 Select target device

3 Connection settings

4 Ready to complete

Select connection type

Select a connection type to create.

VMkernel Network Adapter

The VMkernel TCP/IP stack handles traffic for ESXi services such as vSphere vMotion, iSCSI, NFS, FCoE, Fault Tolerance, vSAN, host management and etc.

Virtual Machine Port Group for a Standard Switch

A port group handles the virtual machine traffic on standard switch.

Physical Network Adapter

A physical network adapter handles the network traffic to other hosts on the network.

CANCEL

NEXT

Add Networking

- Select connection type
- Select target device**
- Create a Standard Switch
- Connection settings
- Ready to complete

Select target device

Select a target device for the new connection.

Select an existing standard switch
 New standard switch

MTU (Bytes)

CANCEL **BACK** **NEXT**

Add Networking

1 Select connection type

2 Select target device

3 Create a Standard Switch

4 Connection settings

5 Ready to complete

Create a Standard Switch



Assign free physical network adapters to the new switch.

Select unclaimed (free) adapters on the host and move them to the Active/Standby/Unused adapters of the switch.

All Properties CDP LLDP

MOVE UP MOVE DOWN

Unclaimed adapters

Active adapters

(New) vmnic3

Standby adapters

Unused adapters

Properties

Adapter VMware Inc. vmxnet3 Virtual Ethernet Controller

Name vmnic3

Location PCI 0000:04:00.0

Driver nvmxnet3

Status

Status Connected

CANCEL

BACK

NEXT

Add Networking

1 Select connection type

2 Select target device

3 Create a Standard Switch

4 Connection settings

5 Ready to complete

Connection settings



Use network labels to identify migration-compatible connections common to two or more hosts.

Network label

VM Network 2

VLAN ID

None (0) ▾

CANCEL

BACK

NEXT

EXPORT

Items per page: 35 ▾

Add Networking

1 Select connection type

2 Select target device

3 Create a Standard Switch

4 Connection settings

5 Ready to complete

Ready to complete



Review your selections before finishing the wizard

▼ Select target device

New standard switch vSwitch1

Switch MTU 1500

▼ Create a Standard Switch

Assigned adapters vmnic3

▼ Connection settings

New port group VM Network 2

VLAN ID None (0)

CANCEL

BACK

FINISH

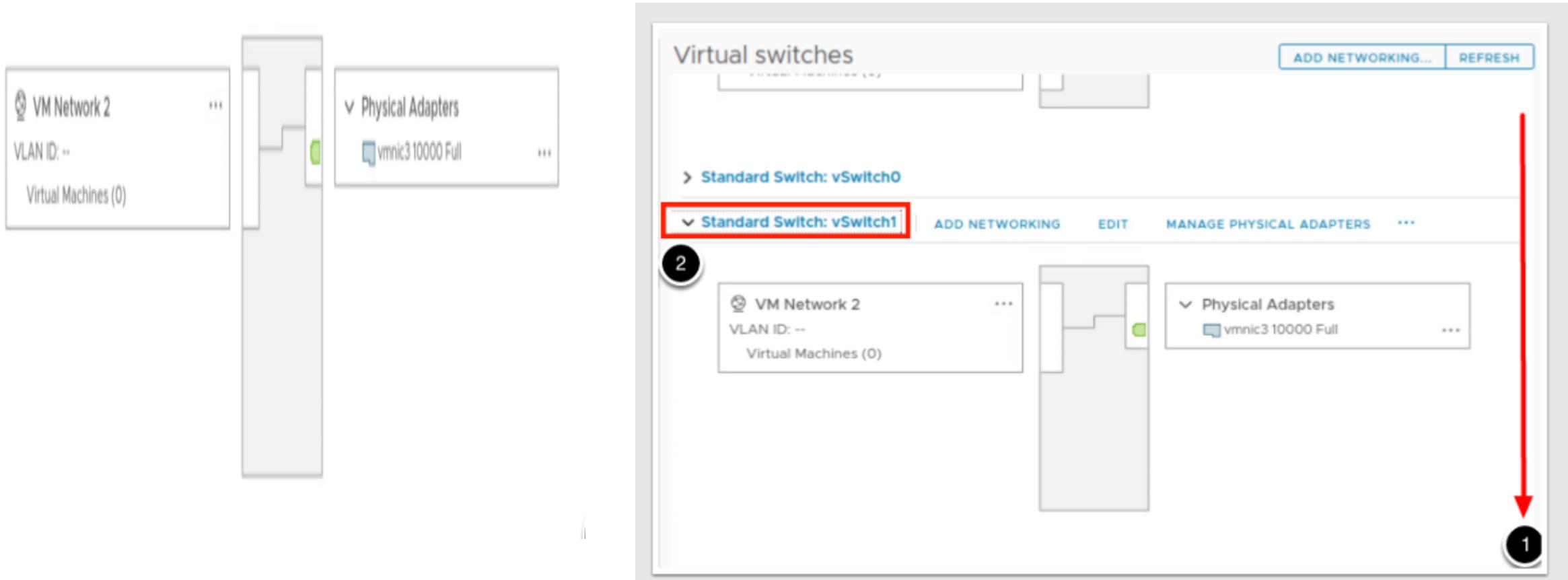
Verify Virtual Switches

The screenshot shows the vSphere Client interface with the following details:

- Header:** vSphere Client, SEARCH IN ALL ENVIRONMENTS, Administration\VSphereLocal, Logout.
- Left Sidebar:** A tree view of the vSphere environment:
 - vcsa-01a.corp.vmbeans.com
 - RegionA01
 - RegionA01-COMP01
 - esx-01a.corp.vmbeans.com
 - esx-02a.corp.vmbeans.com** (selected)
 - TinyLinux
 - TinyLinux2
 - Windows10
- Current Host:** esx-02a.corp.vmbeans.com
- Selected Tab:** Configure
- Storage Section:** Storage Adapters
 - Storage Adapters** (selected)
 - Storage Devices
 - Host Cache Configuration
 - Protocol Endpoints
 - I/O Filters
- Actions Bar:** ADD SOFTWARE ADAPTER, REFRESH, RESCAN STORAGE, RESCAN ADAPTER, REN.
- Table View:** Storage Adapters

Adapter	Model	Type	St
vmhba65	iSCSI Software Adapter	iSCSI	O
vmhba1	PIIX4 for 430TX/440BX/MX IDE Controll...	Block SCSI	U
- Networking Section:** Virtual switches, VMkernel adapters, Physical adapters, TCP/IP configuration.
- Virtual Machines Section:** VM Startup/Shutdown, Agent VM Settings, Default VM Compatibility.
- Message:** No items selected

- You should showing a virtual port group (VM Network 2) that is on vSwitch1 and it is using vmnic3



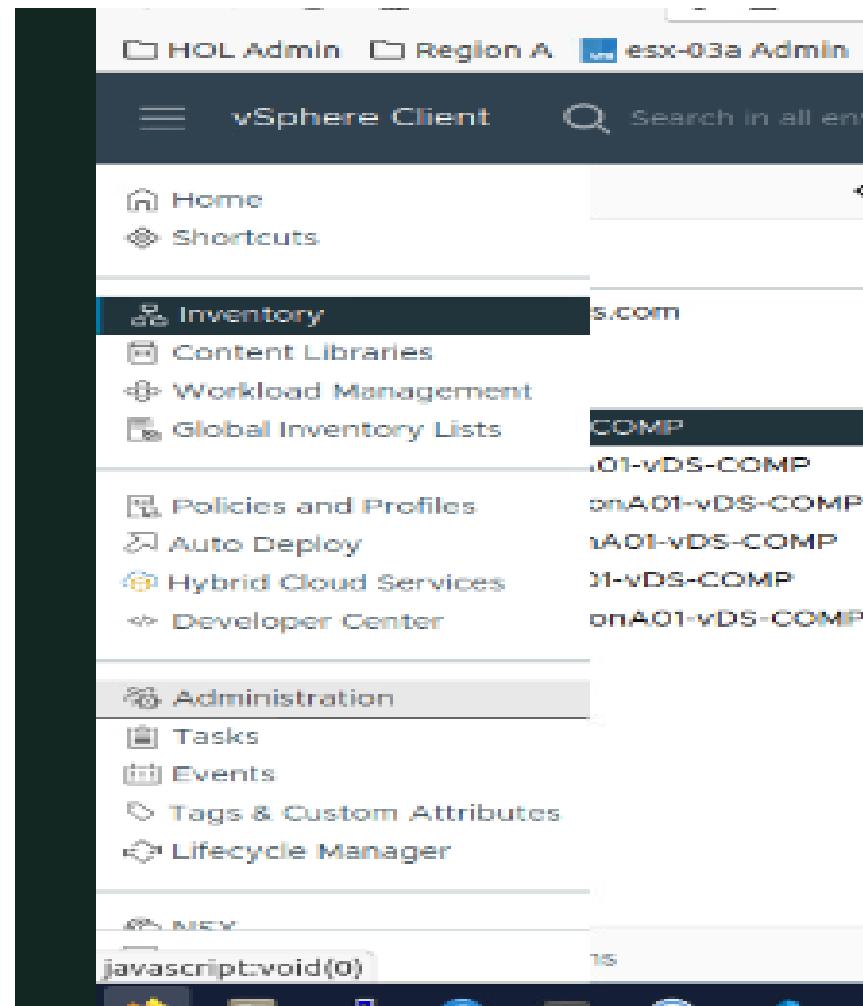
Vsphere Distributed Switch (lab manual- 287)

The screenshot shows the VMware vSphere Web Client interface for managing a VM Network. The left sidebar displays a tree view of network resources under the 'vcsa-01a.corp.vmbeans.com' host. The 'RegionA01' folder is expanded, showing its sub-components: 'VM Network', 'RegionA01-vDS-COMP', and several specific port groups like 'ESXi-RegionA01-vDS-COMP', 'Storage-RegionA01-vDS-COMP', etc. The 'VM Network' item is currently selected, highlighted with a dark blue background.

The main content area is titled 'VM Network' and includes an 'ACTIONS' button. Below it are tabs for 'Summary', 'Monitor', 'Permissions', and 'Hosts'. The 'Hosts' tab is active, showing a table with two entries:

	Name	State
<input type="checkbox"/>	esx-01a.corp.vmbeans.com	Connected
<input type="checkbox"/>	esx-02a.corp.vmbeans.com	Connected

Single Signon



vSphere Client Search in all environments

Configuration

Administration

- Access Control
 - Roles
 - Global Permissions
- Licensing
 - Licenses
- Solutions
 - Client Plugins
 - vCenter Server Extensions
- Deployment
 - System Configuration
 - Customer Experience Improvement Program
 - Client Configuration
- Support
 - Upload File to Service Request
- Single Sign On
 - Users and Groups

1 Configuration

2 Identity Sources

Type

Identity Provider Local Account

Active Directory Domain Smart Card Authentication

The screenshot shows the vSphere Client configuration interface. The left sidebar lists various administrative categories like Access Control, Licensing, and Deployment. The 'Configuration' tab is selected. In the main pane, under 'Identity Provider', the 'Identity Sources' option is highlighted with a red box and circled with the number 2. A secondary red box highlights the 'Configuration' button at the bottom of the sidebar, which is also circled with the number 1.

Administration

- Licenses

Solutions

- Client Plugins
- vCenter Server Extensions

Deployment

- System Configuration
- Customer Experience Improvement Program
- Client Configuration

Support

- Upload File to Service Request

Certificates

- Certificate Management

Single Sign On

- Users and Groups

Configuration

A Recent Tasks Alarms

The screenshot shows the 'Configuration' page in the vSphere Client. The left sidebar has a dark header 'Administration' with sections for Licenses, Solutions, Deployment, Support, Certificates, Single Sign On, and Configuration. 'Configuration' is highlighted with a dark bar. Below the sidebar are buttons for 'Recent Tasks' and 'Alarms'. The main area has a title 'Configuration' with tabs for 'Identity Provider', 'Local Accounts', and 'Login Message'. The 'Identity Provider' tab is selected, showing a sub-tab 'Active Directory Domain' which is also highlighted with a dark bar. To the right of the tabs is a 'CHANGE IDENTITY PROVIDER' button with a help icon. Below these are sections for 'Type' (set to 'Embedded'), 'Identity Sources' (with 'Active Directory Domain' selected), and 'JOIN AD' and 'LEAVE AD' buttons. A table lists nodes and their Active Directory status, showing one node ('vcsa-0fa.corp.vmbeans.com') that hasn't joined any Active Directory. A message at the bottom of the table says 'The node didn't join any Active Directory.' There are 'Items' buttons at the bottom of the table and a help icon in the top right corner.

Configuration

Identity Provider Local Accounts Login Message

CHANGE IDENTITY PROVIDER ⓘ

Type	Embedded
Identity Sources	
Active Directory Domain	JOIN AD LEAVE AD
Smart Card Authentication	

JOIN AD LEAVE AD

Node
vcsa-0fa.corp.vmbeans.com

The node didn't join any Active Directory.

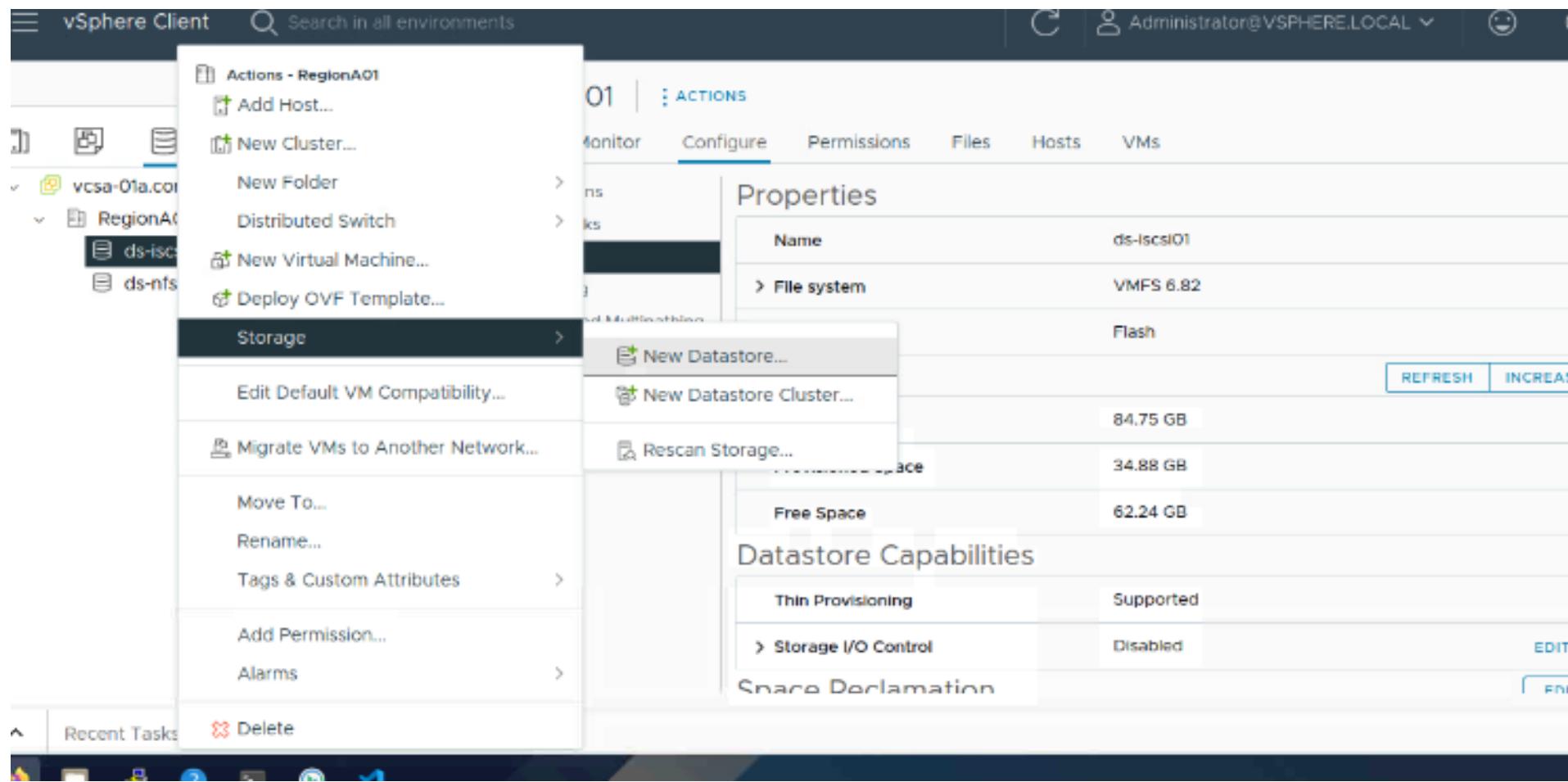
Items ⓘ

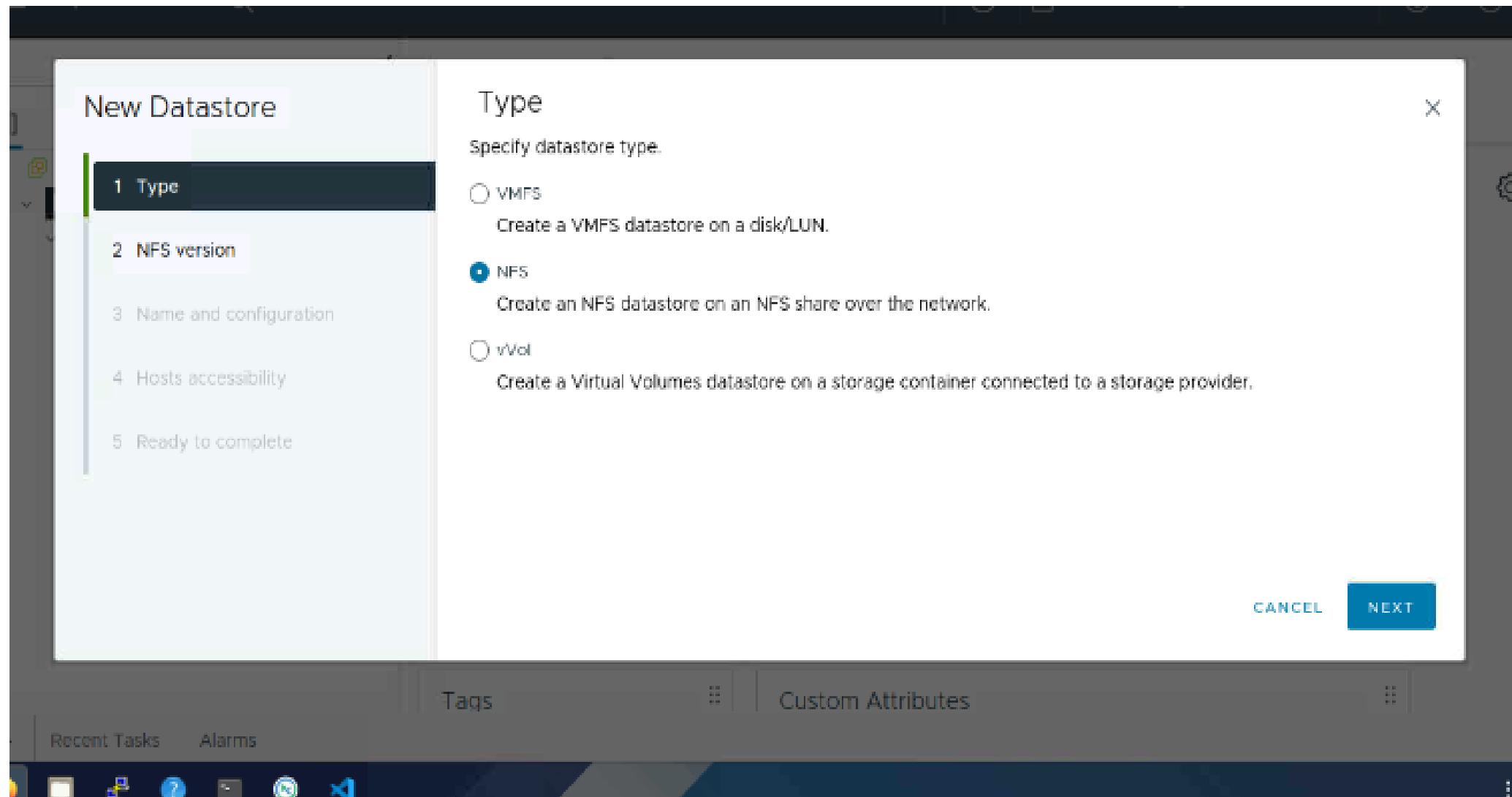
ADD A VCENTER SINGLE SIGN ON USER WITH THE VSPPHERE CLIENT

The screenshot shows the 'Users and Groups' interface in the vSphere Client. The left sidebar has a red box around the 'Single Sign On' section, with a red circle labeled '1' next to 'Users and Groups'. The main pane shows a table of users with one row selected. The 'Domain' field contains 'vsphere.local' with a red box and a red circle labeled '2'. The 'ADD' button at the bottom left of the table area is highlighted with a red box and a red circle labeled '3'.

	Username	First Name	Last Name	Email	Description
<input type="radio"/>	K/M				
<input type="radio"/>	Administrator	Administrator	vsphere.local		
<input type="radio"/>	krbtgt/VSPHERE.LOCAL				
<input type="radio"/>	walter-77a7199a-0d16-49a9-be89-6aaaf3333ba1	walter	77a7199a-0d16-49a9-be89-6aaaf3333ba1		

Creating Vsphere Database





New Datastore

1 Type

2 NFS version

3 Name and configuration

4 Hosts accessibility

5 Ready to complete

NFS version

Select the NFS version.

 NFS 3

NFS 3 allows the datastore to be accessed by ESX/ESXi hosts of version earlier than 6.0

 NFS 4.1

NFS 4.1 provides multipathing for servers and supports the Kerberos authentication protocol

CANCEL

BACK

NEXT

Tags

Custom Attributes

New Datastore

1 Type

2 NFS version

3 Name and configuration

4 Hosts accessibility

5 Ready to complete

Name and configuration

Specify datastore name and configuration.

NFS Share Details

Name

Folder

Eg: /vol/vol0/datastore-001

Server

Eg: nas, nas.it.com or 192.168.0.1

Vmknic binding Bind to vmknic

Access Mode

Mount NFS as read-only

CANCEL

BACK

NEXT

New Datastore

1 Type

2 NFS version

3 Name and configuration

4 Hosts accessibility

5 Ready to complete

Hosts accessibility

Select the hosts that require access to the datastore.

① Select at least one entity to continue.

COMPATIBLE (2 HOSTS)

INCOMPATIBLE (0 HOSTS)

Filter

<input type="checkbox"/>	Host	Cluster
<input checked="" type="checkbox"/>	esx-01a.corp.vmbeans.com	RegionA01-COMP01
<input type="checkbox"/>	esx-02a.corp.vmbeans.com	RegionA01-COMP01
<input checked="" type="checkbox"/>		2 items

CANCEL

BACK

NEXT

Tags

Custom Attributes

New Datastore

X

1 Type

2 NFS version

3 Name and configuration

4 Hosts accessibility

5 Ready to complete

Ready to complete

Review your selections before finishing the wizard

▼ NFS version

Version NFS 3

▼ Name and configuration

Datastore name Datastore2

Server 10.10.20.60

Folder nmtNFS02

Access Mode Read-write

▼ Hosts accessibility

Hosts esx-01a.corp.vmbeans.com

CANCEL

BACK

FINISH

Datastore

ACTIONS

Summary Monitor Configure Permissions Files Hosts VMs

vcsa-01a.corp.vmbeans.com

RegionA01

- Datastore
- ds-iscsi01
- ds-ntfs01

Properties

Name	Datastore
Type	NFS 3
Maximum file size	64 TB
Maximum virtual disk size	62 TB

Capacity

Total Capacity	5.78 GB
Provisioned Space	0B KB
Free Space	5.78 GB

REFRESH

Datastore Capabilities

Storage I/O Control	Disabled	EDIT
---------------------	----------	------

Recent Tasks Alarms

Single Signon

The screenshot shows the vSphere Client interface with a dark theme. At the top, there are three user names: HOL Admin, Region A, and esx-03a Admin. The main navigation bar includes Home, Shortcuts, Inventory, Content Libraries, Workload Management, Global Inventory Lists, Policies and Profiles, Auto Deploy, Hybrid Cloud Services, Developer Center, Administration, Tasks, Events, Tags & Custom Attributes, and Lifecycle Manager. The Administration menu item is currently selected. On the right side, a sidebar titled "Roles" lists various role definitions with their descriptions and permissions. One role, "Administrator", is highlighted.

Role	Description	Permissions
Administrator	Read-only access to all objects	No access
Read-only	Read-only access to all objects	No access
No access	No access to any object	No access
AutoUpdate	Ability to update objects	No access
Content	Ability to upload and manage content	No access
Content (sample)	Ability to upload and manage content (sample)	No access
Datastore	Ability to manage datastores	No access
Namespaces	Ability to manage namespaces	No access
Network	Ability to manage networks	No access
No crypto	No use of encryption	No access
No Trust	No trust between hosts	No access
NSOpen	Ability to open NSX objects	No access
NSX Admin	Ability to manage NSX objects	No access

The screenshot shows the vSphere Client interface with a dark theme. At the top, there is a search bar. The main navigation bar includes Administration, Global Permissions, Licensing, Solutions, Deployment, Support, Single Sign On, Users and Groups, and Configuration. The Administration menu item is currently selected. On the right side, a sidebar titled "Role" lists various role definitions with their descriptions and permissions. One role, "Administrator", is highlighted.

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NSOpen	Ability to open NSX objects	No access
NSX Admin	Ability to manage NSX objects	No access

← → ⌂ ⌂ https://vcsa-01a.corp.vmbeans.com/ui/app/admin/sso-users/users

HOL Admin Region A esx-03a Admin

vSphere Client esx-03a Admin https://esx-03a.corp.vmbeans.com/ui/#/login

Administrator@VSPHERE.LOCAL

Users and Groups

Administration

- Global Permissions
- Licensing
- Licenses
- Solutions
- Client Plugins
- vCenter Server Extensions
- Deployment
- System Configuration
- Customer Experience Improvement Program
- Client Configuration
- Support
- Upload File to Service Request
- Single Sign On
- Users and Groups**
- Configuration

Users Groups

Domain vsphere.local

Find

ADD

	Username	First Name	Last Name	Email	Description	Locked	Disabled	Domain
<input type="radio"/>	K/M					No	No	vsphere.local
<input type="radio"/>	Administrator	Administrat	vsphere.local			No	No	vsphere.local
<input type="radio"/>	krbtgt/VSPHE					No	No	vsphere.local
<input type="radio"/>	walter-77a719	walter	77a7199a-0d16-49a	9-be89-6aa03333ba1		No	No	vsphere.local

1 - 4 of 4 users

Administrator@VSP

Add User

Username: example

Password: VMware1!

Confirm Password: *****

First Name:

Last Name:

Email:

Description:

CANCEL ADD

vSphere Client Search in all environments C Administrator@VSPHERE.LOCAL

Users and Groups

Users Groups

Domain vsphere.local Find

ADD EDIT DELETE MORE

	Username	First Name	Last Name	Email	Description	Locked	Disabled	Domain
○	Administrator	Administrat	vsphere.local			No	No	vsphere.local
○	krbtgt/VSPHE RE.LOCAL					No	No	vsphere.local
○	walter-77a719 9a-0d16-49a9-be89-6aaef03333b a1	walter	77a7199a-0d16-49a 9-be89-6aaef03333ba1			No	No	vsphere.local
●	example					No	No	vsphere.local

1 - 5 of 5 users

Recent Tasks Alarms

[←](#) [→](#) [⟳](#) [HomeAs](#) https://vcsa-01a.corp.vmbeans.com/ui/app/admin/sso-users/groups [★](#)

[HOL Admin](#) [Region A](#) [esx-03a Admin](#)

vSphere Client Search in all environments [C](#) [Administrator@VSPHERE.LOCAL](#) [?](#)

Administration

- Global Permissions
- Licensing
- Licenses
- Solutions
- Client Plugins
- vCenter Server Extensions
- Deployment
- System Configuration
- Customer Experience Improvement Program
- Client Configuration
- Support
- Upload File to Service Request
- Single Sign On
- Users and Groups**
- Configuration

Users and Groups

Users [Groups](#)

Find [🔍](#) [ⓘ](#)

[ADD](#) [EDIT](#) [DELETE](#)

	Group Name	Description
<input type="radio"/>	ActAsUsers	Act-As Users
<input checked="" type="radio"/>	Administrators	
<input type="radio"/>	AnalyticsService.Administrators	Analytics Service Administrators
<input type="radio"/>	AutoUpdate	Users allowed to perform update related operations
<input type="radio"/>	CAAdmins	
<input type="radio"/>	ComponentManager.Administrators	Component Manager Administrators
<input type="radio"/>	DCA admins	
<input type="radio"/>	DCClients	
<input type="radio"/>	ExternalIDPUsers	Well-known external IDP users' group, which registers external IDP users as guests.
<input type="radio"/>		

1 - 10 of 28 users [◀](#) [◀](#) [1](#) / [3](#) [▶](#) [▶](#)

[Recent Tasks](#) [Alarms](#)

Edit Group

Group Name * Administrators

Description

Add Members * vsphere.local

example

example

vsphere-ui-5f1e74bd-f4d4-4c97-976d-b4c27be3b099 X

example X

[OVERVIEW](#) [JOBS](#) [REPORTS](#) [NOTIFICATIONS](#) [HELP](#) [LOG OUT](#)

LOCAL ▾

CANCEL SAVE

local IDP user

vSphere Client Search in all environments Administrator@VSPHERE.LOCAL

Users and Groups

Administration Global Permissions

Licensing Licenses

Solutions Client Plugins vCenter Server Extensions

Deployment System Configuration Customer Experience Improvement Program Client Configuration

Support Upload File to Service Request

Single Sign On

Users and Groups Configuration

Recent Tasks Alarms

Users Groups ALL GROUPS Administrators ADD MEMBERS

Member Name	Domain
Administrator	vsphere.local
example	vsphere.local
vsphere-uf-6f1e74bd-f4d4-4c97-976d-b4c27be3b099	vsphere.local

1 - 3 of 3 items

The screenshot displays the vSphere Client interface, specifically the 'Users and Groups' section under the 'Groups' tab. The left sidebar shows various administrative categories like Administration, Licensing, Solutions, Deployment, Support, and Single Sign On. The 'Users and Groups' item is currently selected. The main pane shows the 'Administrators' group with three members listed: 'Administrator', 'example', and a UUID-based entry. All members belong to the 'vsphere.local' domain.

Administration

Roles

Global Permissions

Licensing

Licenses

Solutions

Client Plugins

vCenter Server Extensions

Deployment

Support

Upload File to Service Request

Single Sign On

Users and Groups

Configuration

Certificates

Certificate Management

Global Permissions

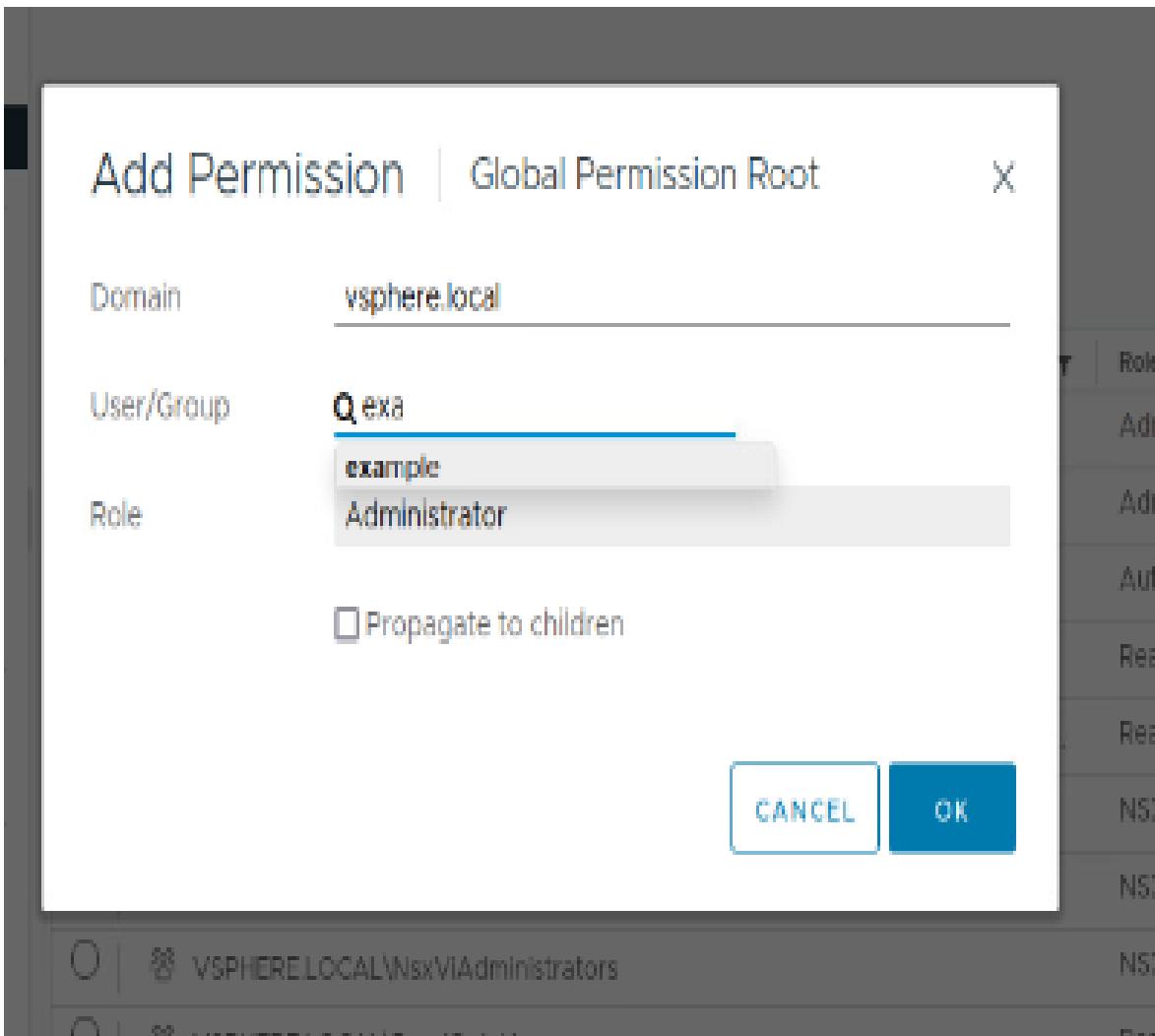
Permissions provider: VSphere.LOCAL

ADD EDIT DELETE

	User/Group	Role
<input type="radio"/>	VSphere.LOCAL\Administrator	Administrator
<input type="radio"/>	VSphere.LOCAL\Administrators	Administrator
<input type="radio"/>	VSphere.LOCAL\AutoUpdate	AutoUpdateUser
<input type="radio"/>	VSphere.LOCAL\CAAdmins	Read-only
<input type="radio"/>	VSphere.LOCAL\certificateauthority-6f1e74bd-f4d4-4c97-976d-b4c27be3b0...	Read-only
<input type="radio"/>	VSphere.LOCAL\NsxAdministrators	NSX Administrator
<input type="radio"/>	VSphere.LOCAL\NsxAuditors	NSX Auditor
<input type="radio"/>	VSphere.LOCAL\NsxVIAdministrators	NSX VI Administrator
<input type="radio"/>	VSphere.LOCAL\ReadOnlyUsers	Read-only

1 - 15 of 21 items 1 / 2

Recent Tasks Alarms



Sphere Client

Administration

Roles

Global Permissions

Licensing

Licenses

Solutions

Client Plugins

vCenter Server Extensions

Deployment

Support

Upload File to Service Request

Single Sign On

Users and Groups

Configuration

Certificates

Certificate Management

Recent Tasks Alarms

Roles provider: VS SPHERE.LOCAL

NEW CLONE EDIT DELETE

Administrator

Read-only

No access

AutoUpdateUser

Content library administrator (sample)

Content Library Registry administrator (sample)

Datastore consumer (sample)

NamespacesQueryRole

Network administrator (sample)

No cryptography administrator

No Trusted Infrastructure administrator

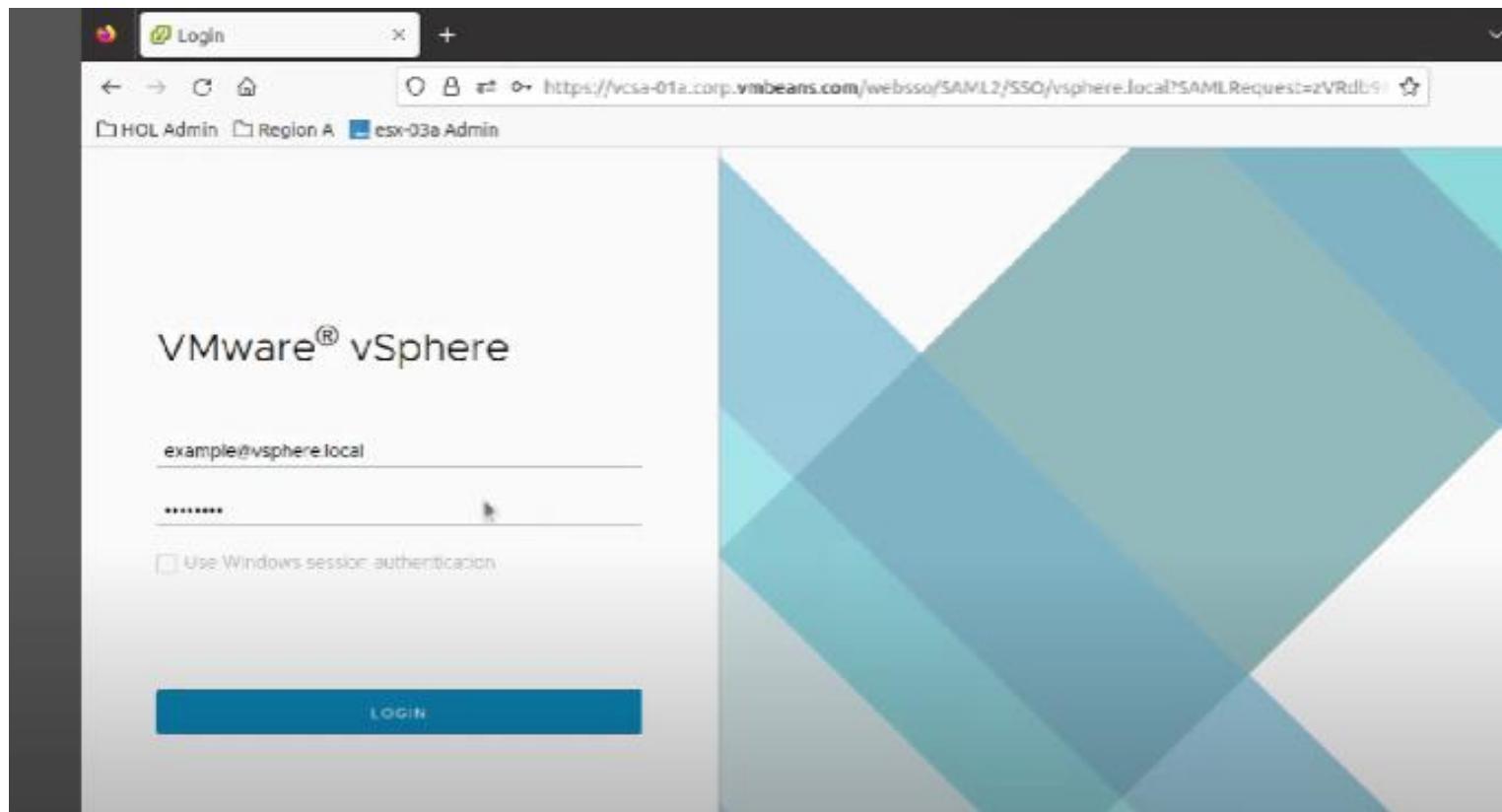
NSOperatorController

NSX Administrator

DESCRIPTION USAGE PRIVILEGES

Full access rights

This screenshot shows the 'Roles' section of the vSphere Client interface. The left sidebar has a tree view with categories like Administration, Licensing, Solutions, Deployment, Support, Single Sign On, and Certificates, each with sub-options. The 'Roles' option under 'Administration' is selected and highlighted in dark blue. The main pane displays a list of roles. At the top of the list is 'Administrator', which is also highlighted in dark blue. Below it are other roles: 'Read-only', 'No access', 'AutoUpdateUser', and several sample roles ('Content library administrator (sample)', 'Content Library Registry administrator (sample)', 'Datastore consumer (sample)', 'NamespacesQueryRole', 'Network administrator (sample)', 'No cryptography administrator', 'No Trusted Infrastructure administrator', 'NSOperatorController', 'NSX Administrator'). To the right of the role list are three tabs: 'DESCRIPTION', 'USAGE', and 'PRIVILEGES'. The 'DESCRIPTION' tab is currently active, showing the text 'Full access rights'. The top of the window shows the title 'Sphere Client' and the 'Administration' category. The bottom of the window has buttons for 'Recent Tasks' and 'Alarms'.



VSphere Client Search in all environments example.VSPHERE.LOCAL

vcsa-01a.corp.vmbeans.com ACTIONS

Summary Monitor Configure Permissions Datacenters Hosts & Clusters VMs Datastores Networks

Issues and Alarms

vCenter Server Health Alarm Details

vCenter Details

Version:	8.0.0
Build:	20220323
Last updated:	Jan 20, 2023, 2:35 PM
Last File-Based Backup:	Not scheduled
Clusters:	1

Capacity and Usage

CPU	425 MHz used	7.98 GHz allocated
Memory	5.8 GB used	16 GB allocated
Storage		

Recent Tasks Alarms

The screenshot shows the vSphere Client interface with the following details:

- Navigation Bar:** VSphere Client, Search in all environments, example.VSPHERE.LOCAL.
- Title Bar:** vcsa-01a.corp.vmbeans.com, ACTIONS.
- Top Menu:** Summary, Monitor, Configure, Permissions, Datacenters, Hosts & Clusters, VMs, Datastores, Networks.
- Left Sidebar:** A tree view showing the hierarchy: RegionA01, RegionA01-COMP01, and several virtual machines (esx-01a.corp.vmbeans.com, esx-02a.corp.vmbeans.com, TinyLinux, TinyLinux2, Windows10).
- Issues and Alarms:** A section listing a single alarm: "vCenter Server Health Alarm".
- vCenter Details:** Displays the version (8.0.0), build (20220323), last update (Jan 20, 2023, 2:35 PM), and cluster count (1). It also shows the status of the last file-based backup as "Not scheduled".
- Capacity and Usage:** Shows CPU usage (425 MHz used / 7.98 GHz allocated), memory usage (5.8 GB used / 16 GB allocated), and storage information.
- Bottom Navigation:** Recent Tasks, Alarms.