CA-2 Cloud computing and virtualization

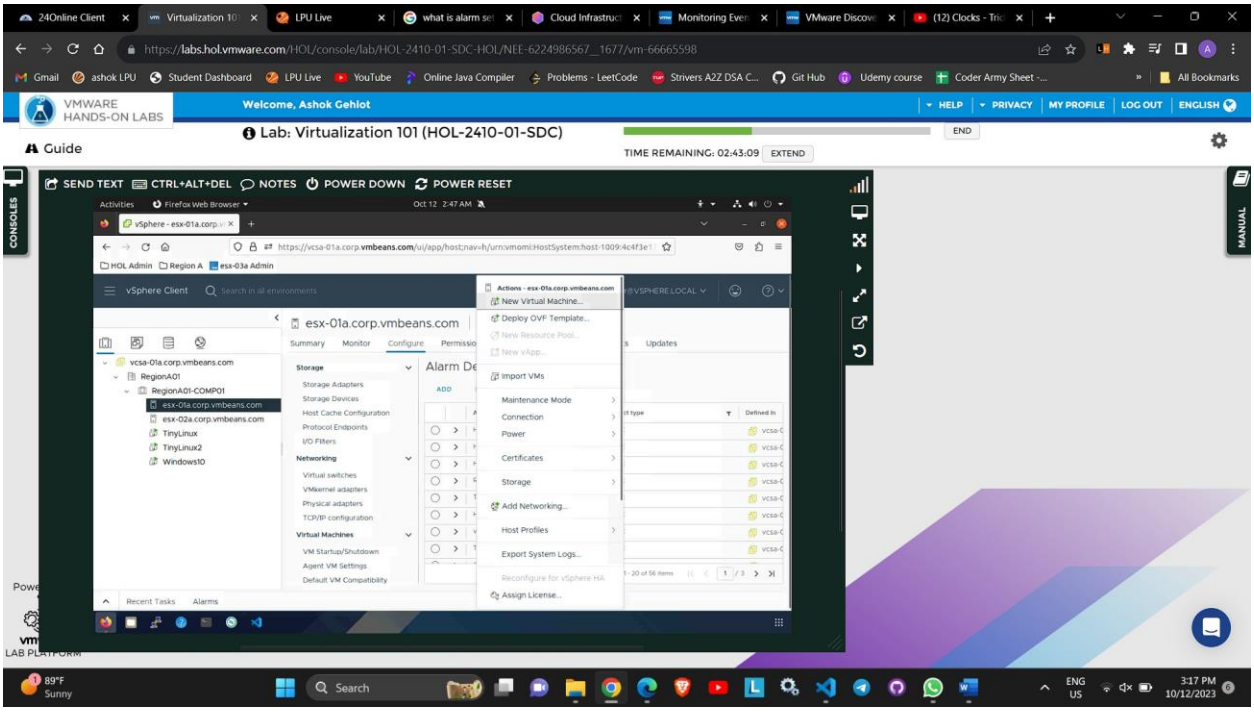
Name – Ashok

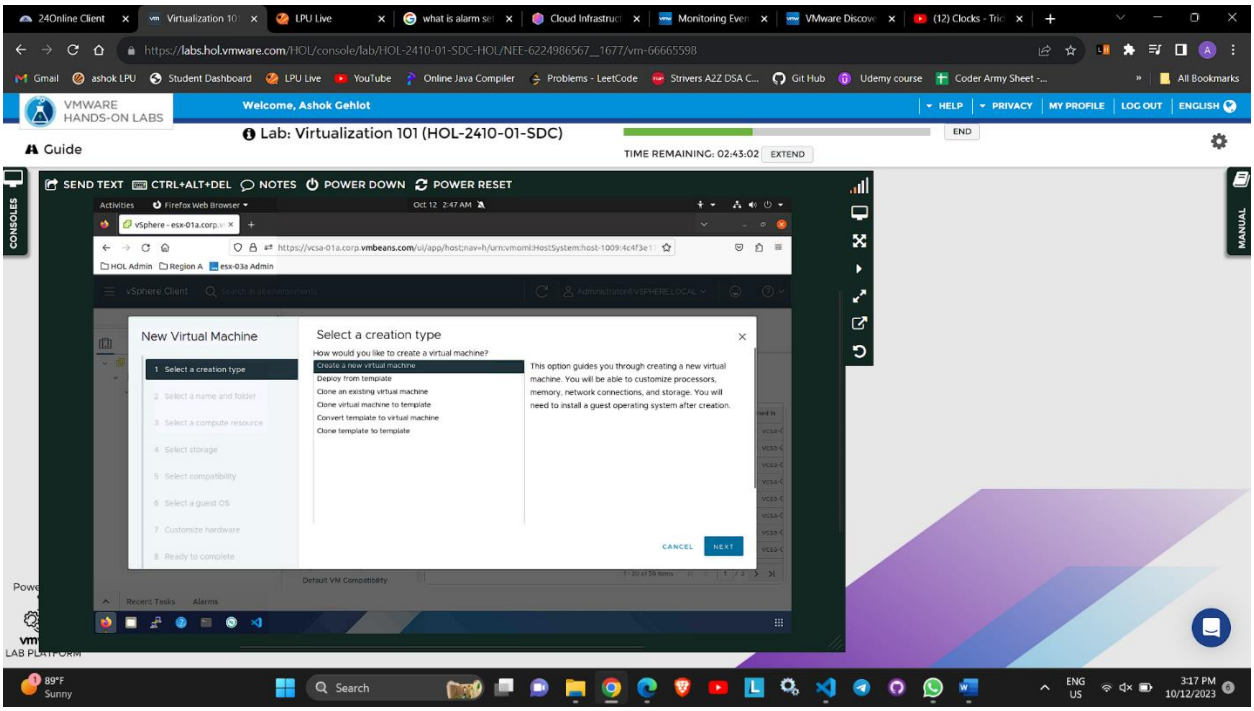
Reg.No.-12113114

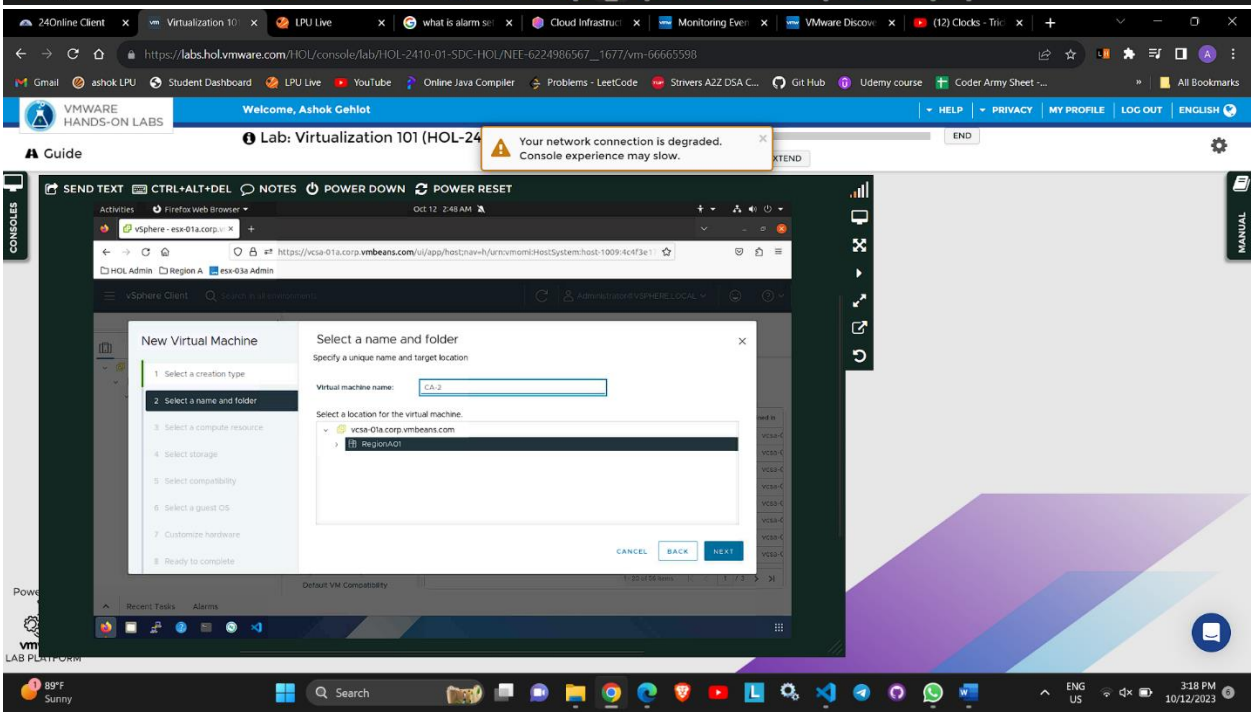
Roll no. – RK21ITB59

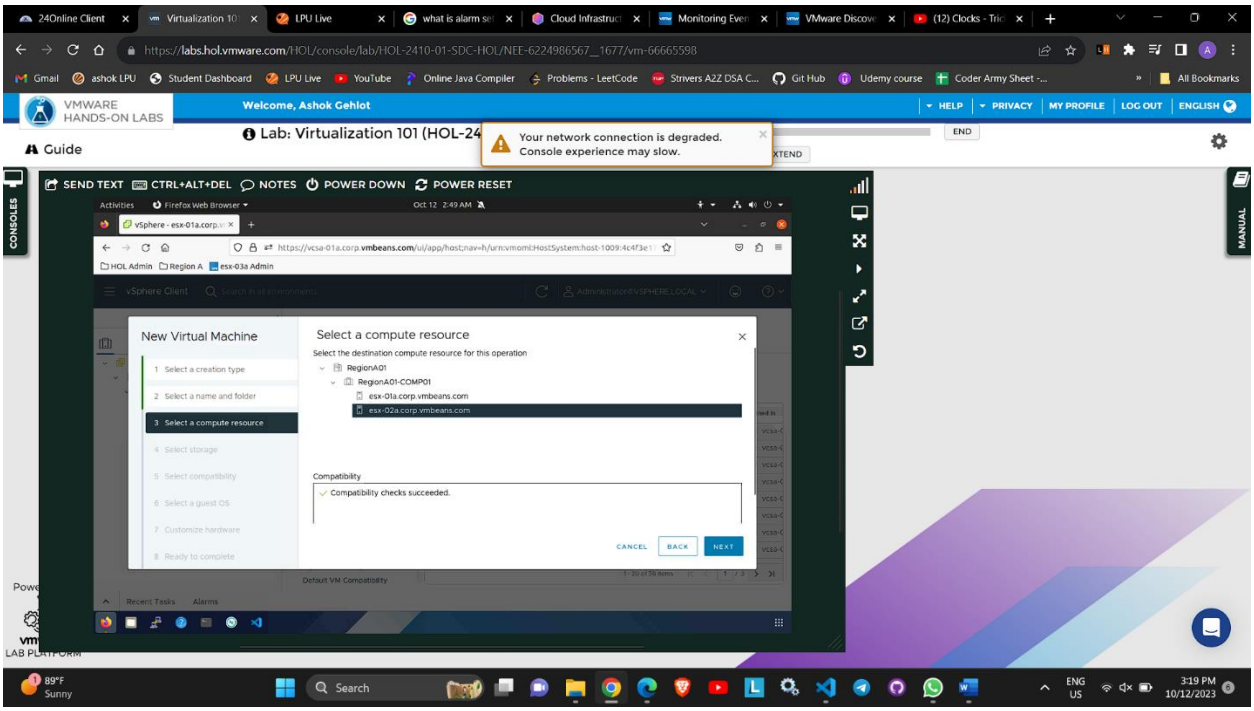
Group - 2

1.Create a virtual machine and create its template and set the alarm if cpu usages is above 5%.




Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:43:02
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Virtual Machine
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


Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Virtual Machine
Select a name and folder
Specify a unique name and target location
Virtual machine name:
CA-2
Select a location for the virtual machine.
vcsa-01a.corp.vmbeans.com
RegionA01
CANCEL
BACK
NEXT


24Online Client
Virtualization 101
LPU Live
what is alarm set
Cloud Infrastructure
Monitoring Events
VMware Discover
(12) Clocks - Trick
https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-6224986567_1677/vm-66665598
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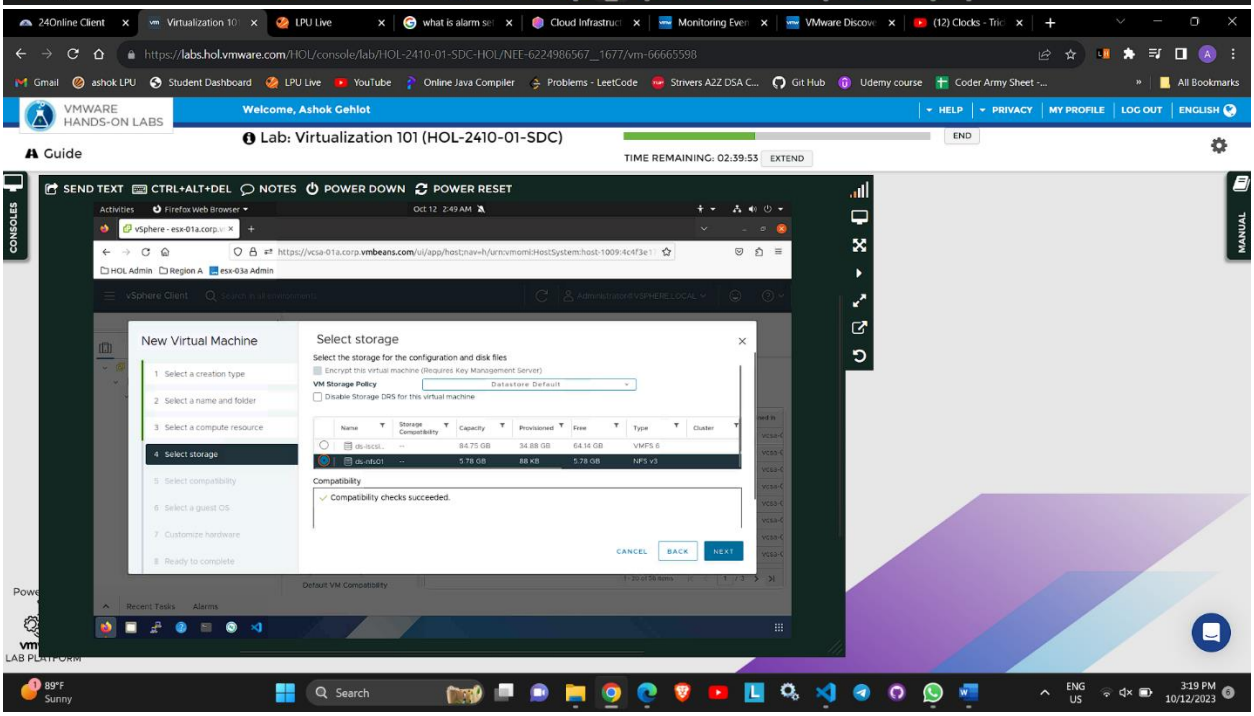
Udemy course
Coder Army Sheet -...
All Bookmarks
VMWARE HANDS-ON LABS
Welcome, Ashok Gehlot
HELP
PRIVACY
MY PROFILE
LOG OUT
ENGLISH
Guide
Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
END
XTEND
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CONSOLES
MANUAL
New Virtual Machine
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
Recent Tasks
Alarms
89°F
Sunny
Search
ENG
US
3:19 PM
10/12/2023


24Online Client
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Monitoring Events
VMware Discover
(12) Clocks - Trick
https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-6224986567_1677/vm-66665598
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MY PROFILE
LOG OUT
ENGLISH
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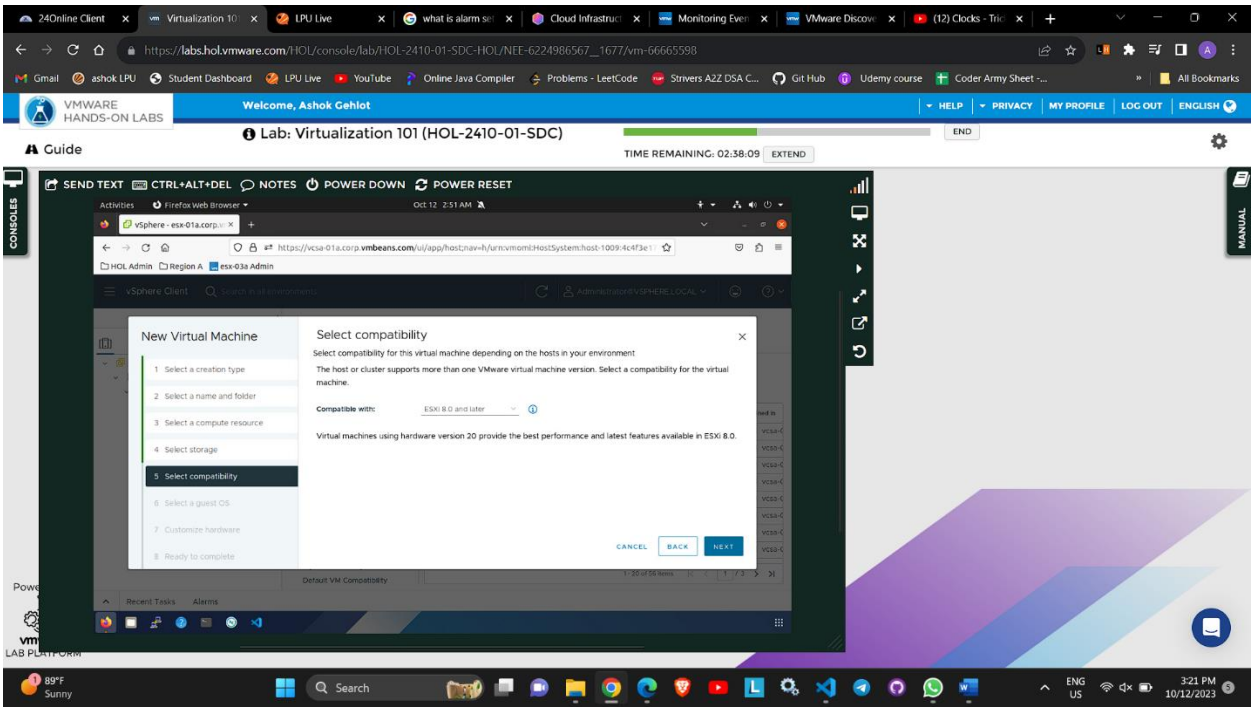
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:39:53
EXTEND
END
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CONSOLES
MANUAL
New Virtual Machine
Select storage
Select the storage for the configuration and disk files
Encrypt this virtual machine (Requires Key Management Server)
VM Storage Policy
Datastore Default
Disable Storage DRS for this virtual machine
Name
Storage Compatibility
Capacity
Provisioned
Free
Type
Cluster
ds-iscsi...
84.75 GB
34.88 GB
64.16 GB
VMFS 6
ds-nfs01
5.78 GB
88 KB
5.78 GB
NFS v3
Compatibility
Compatibility checks succeeded.
CANCEL
BACK
NEXT
Recent Tasks
Alarms
89°F
Sunny
Search
ENG
US
3:19 PM
10/12/2023


24Online Client
Virtualization 10
LPU Live
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Cloud Infrastruct
Monitoring Even
VMware Discove
(12) Clocks - Tric
https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-6224986567__1677/vm-66665598
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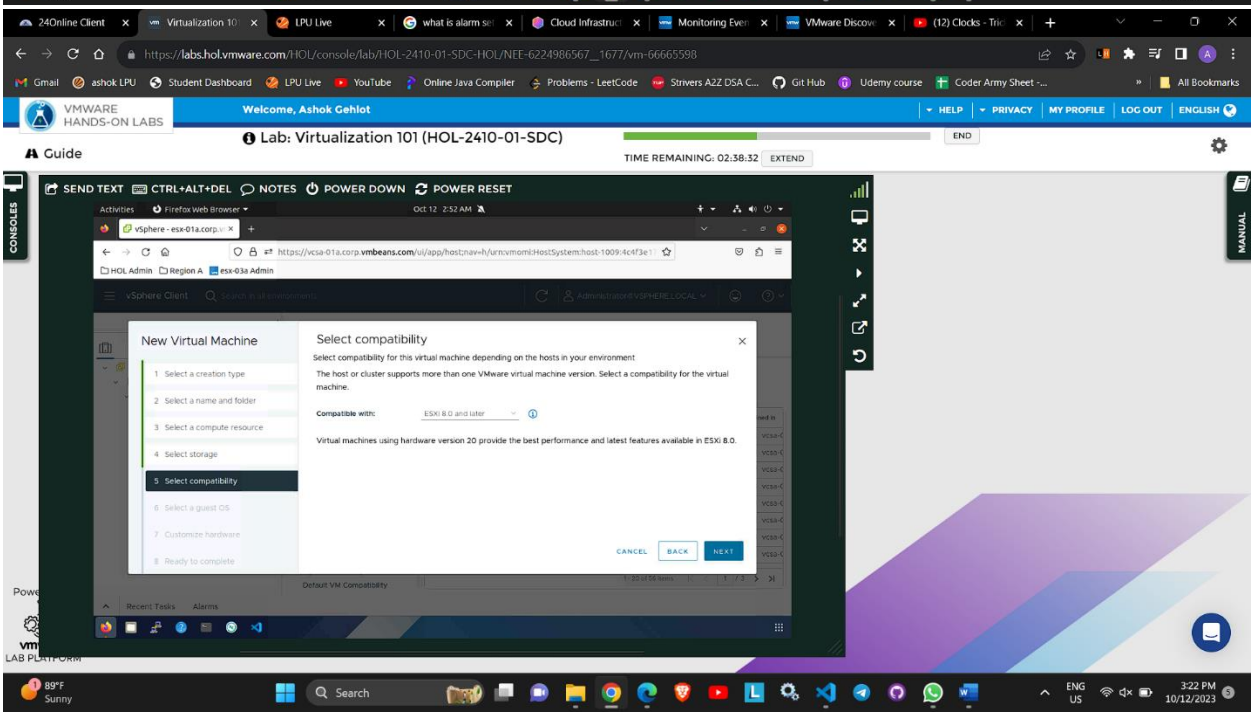
Lab: Virtualization 101 (HOL-2410-01-SDC)
END
TIME REMAINING: 02:38:09
EXTEND
CONSOLES
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
MANUAL
Activities
Firefox Web Browser
Oct 12 2:51 AM
vSphere - esx-01a.corp.vm
https://vcsa-01a.corp.vmbeans.com/ui/app/host;nav=h/urn:vmomi:HostSystem:host-1009:4c4f3e1
HOL Admin
Region A
esx-03a Admin
vSphere Client
New Virtual Machine
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 8.0 and later
Virtual machines using hardware version 20 provide the best performance and latest features available in ESXi 8.0.
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
CANCEL
BACK
NEXT
Default VM Compatibility
Recent Tasks
Alarms
LAB PLATFORM
89°F
Sunny
Search
ENG
US
3:21 PM
10/12/2023


24Online Client
Virtualization 10
LPU Live
what is alarm se
Cloud Infrastruct
Monitoring Even
VMware Discove
(12) Clocks - Tric
https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-6224986567__1677/vm-66665598
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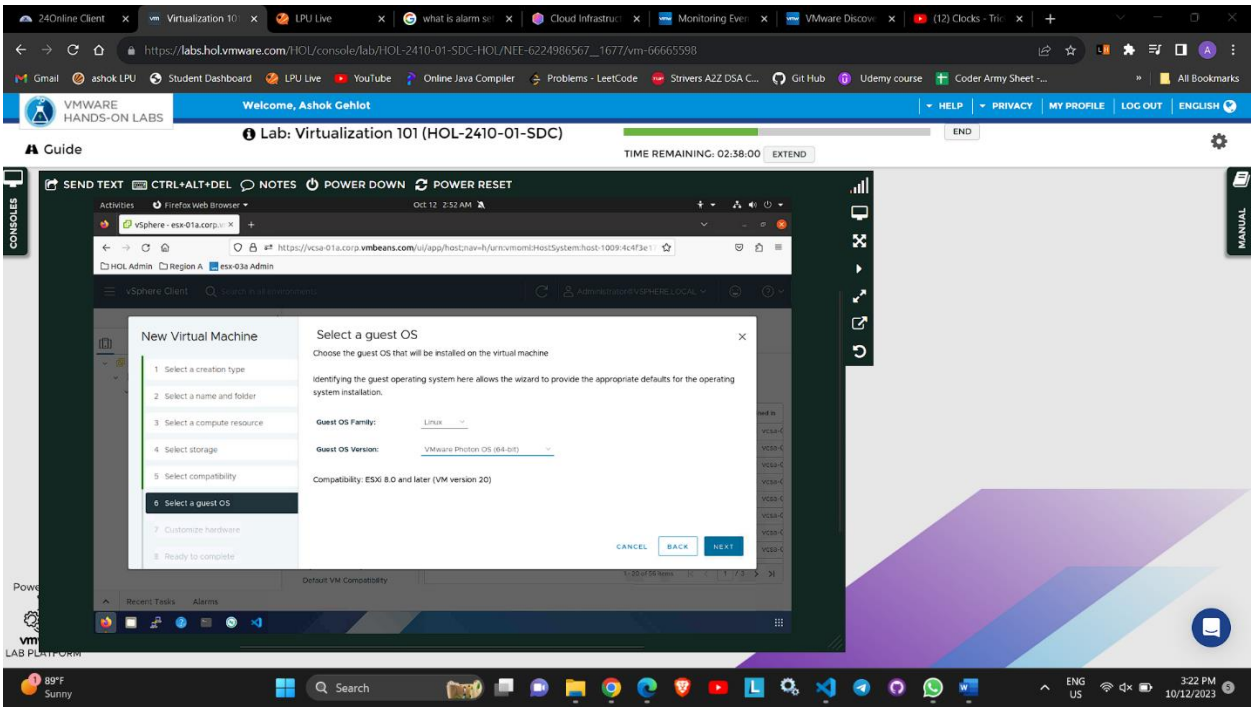
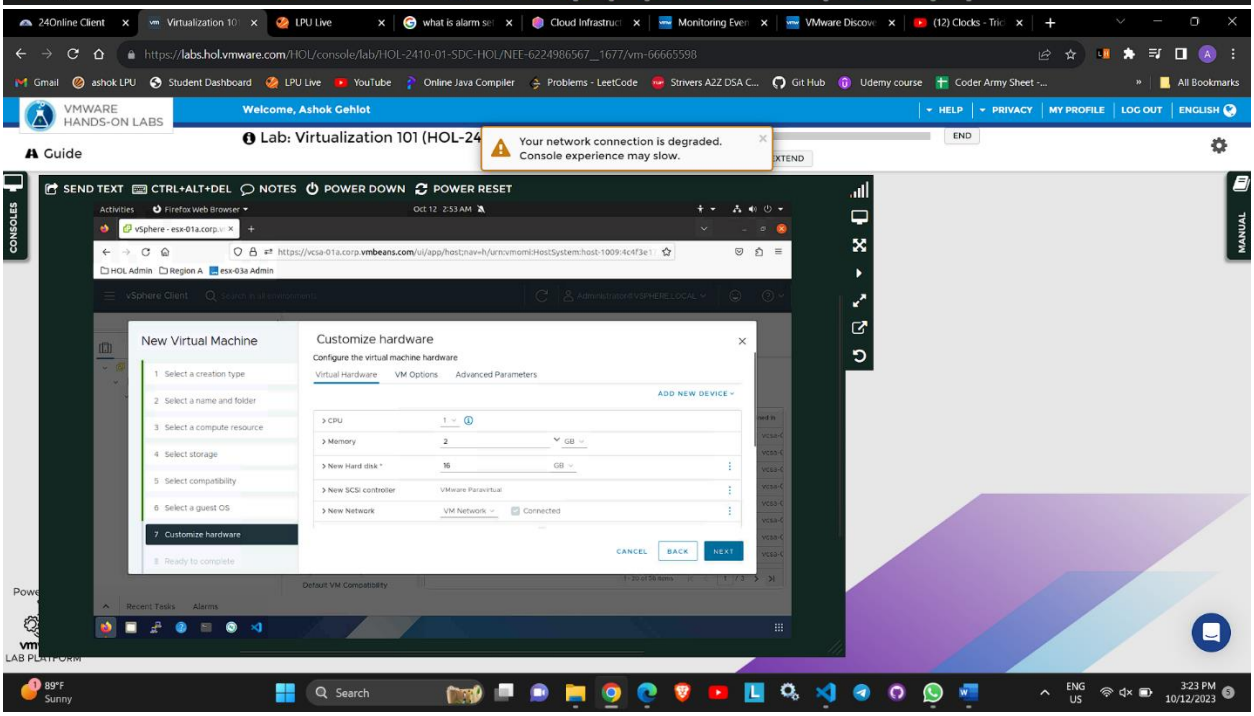
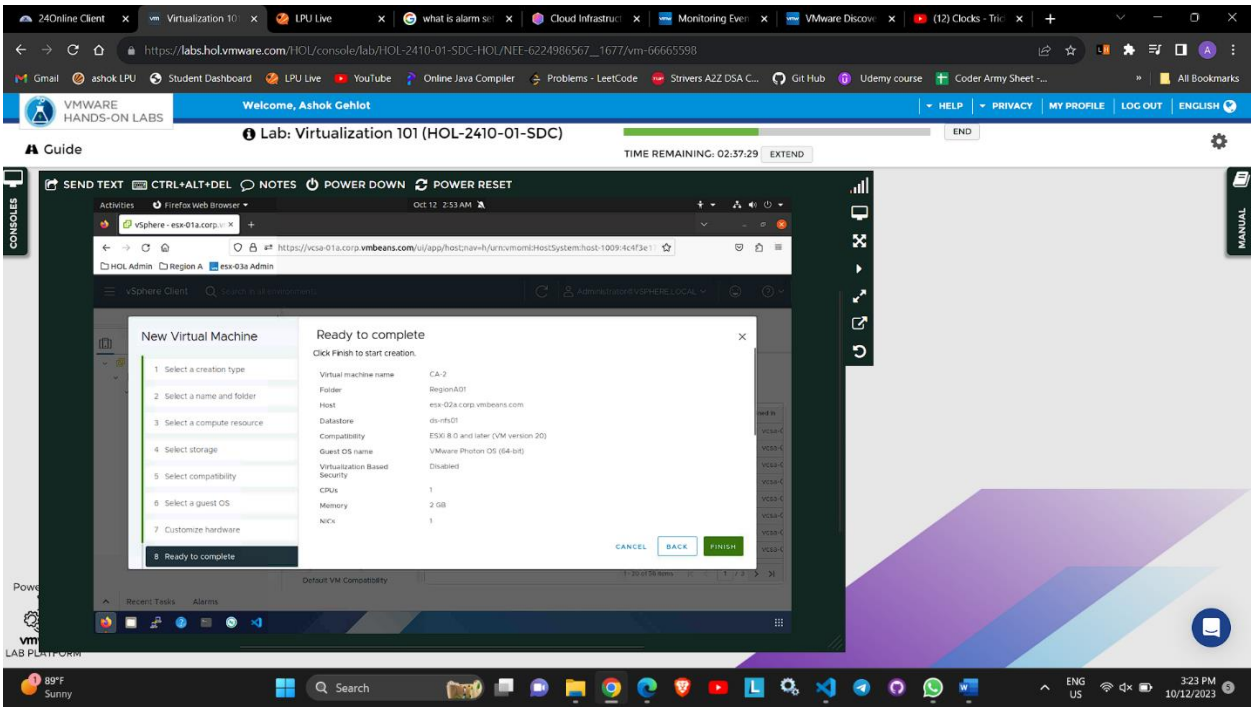
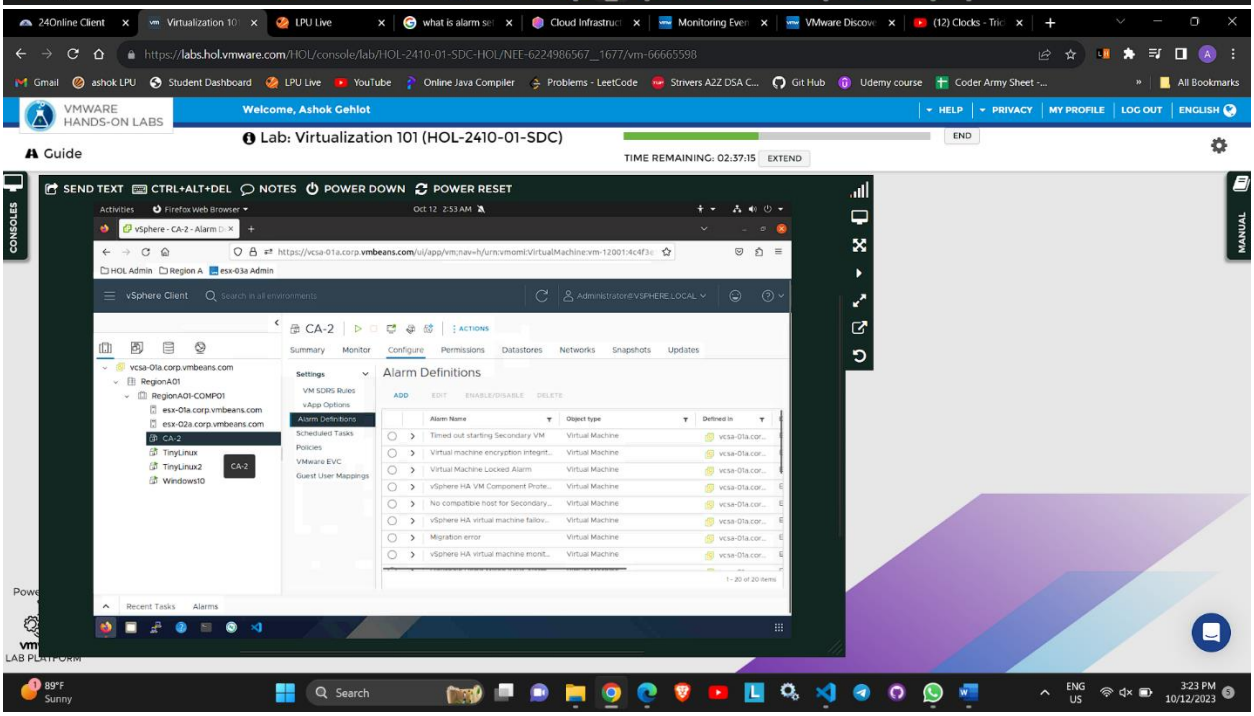
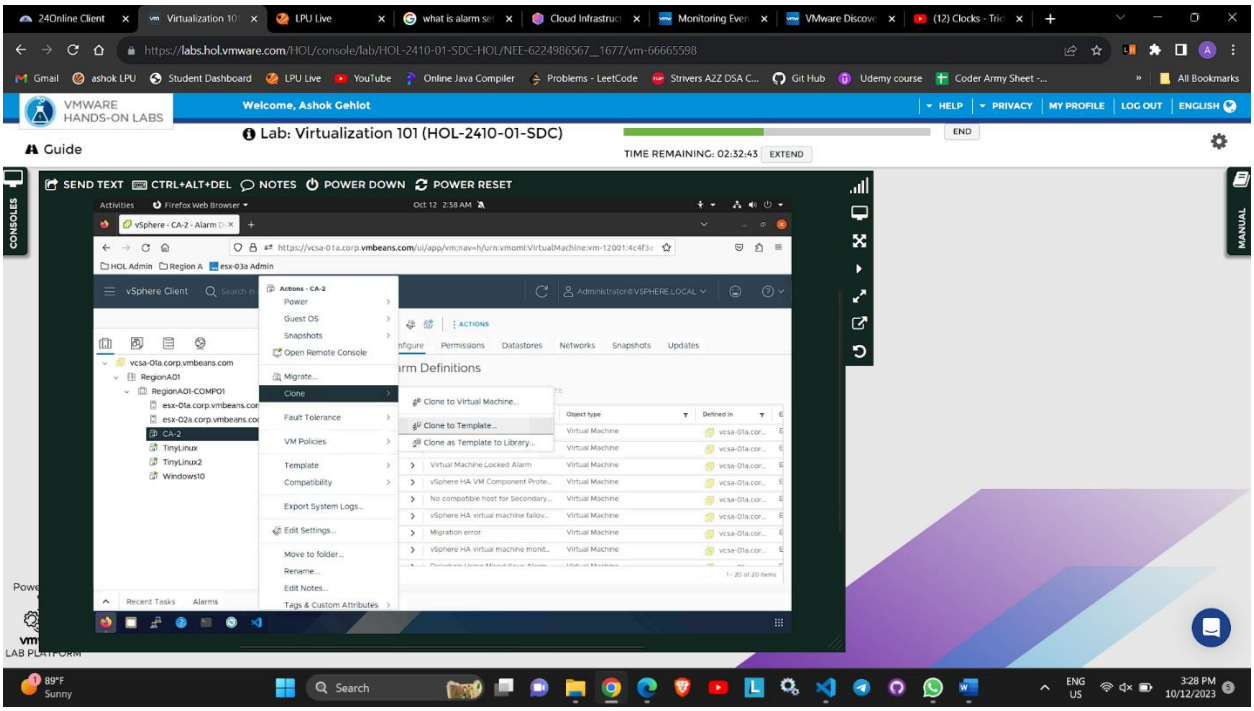
Lab: Virtualization 101 (HOL-2410-01-SDC)
END
TIME REMAINING: 02:38:32
EXTEND
CONSOLES
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
MANUAL
Activities
Firefox Web Browser
Oct 12 2:52 AM
vSphere - esx-01a.corp.vm
https://vcsa-01a.corp.vmbeans.com/ui/app/host;nav=h/urn:vmomi:HostSystem:host-1009:4c4f3e1
HOL Admin
Region A
esx-03a Admin
vSphere Client
New Virtual Machine
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 8.0 and later
Virtual machines using hardware version 20 provide the best performance and latest features available in ESXi 8.0.
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
CANCEL
BACK
NEXT
Default VM Compatibility
Recent Tasks
Alarms
LAB PLATFORM
89°F
Sunny
Search
ENG
US
3:22 PM
10/12/2023


Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:38:00
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Virtual Machine
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:
Linux
Guest OS Version:
VMware Photon OS (64-bit)
Compatibility: ESXi 8.0 and later (VM version 20)
CANCEL
BACK
NEXT


Your network connection is degraded.
Console experience may slow.
Lab: Virtualization 101 (HOL-24
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Virtual Machine
Customize hardware
Configure the virtual machine hardware
Virtual Hardware
VM Options
Advanced Parameters
ADD NEW DEVICE
CPU
Memory
New Hard disk *
New SCSI controller
New Network
CANCEL
BACK
NEXT


Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:37:29
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Virtual Machine
Ready to complete
Click Finish to start creation.
CANCEL
BACK
FINISH


Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:37:15
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CA-2
Alarm Definitions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Monitoring Events
VMware Discover
(12) Clocks - Tric
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Problems - LeetCode
Strivers A2Z DSA C...
Git Hub
Udemy course
Coder Army Sheet -...
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HELP
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MY PROFILE
LOG OUT
ENGLISH
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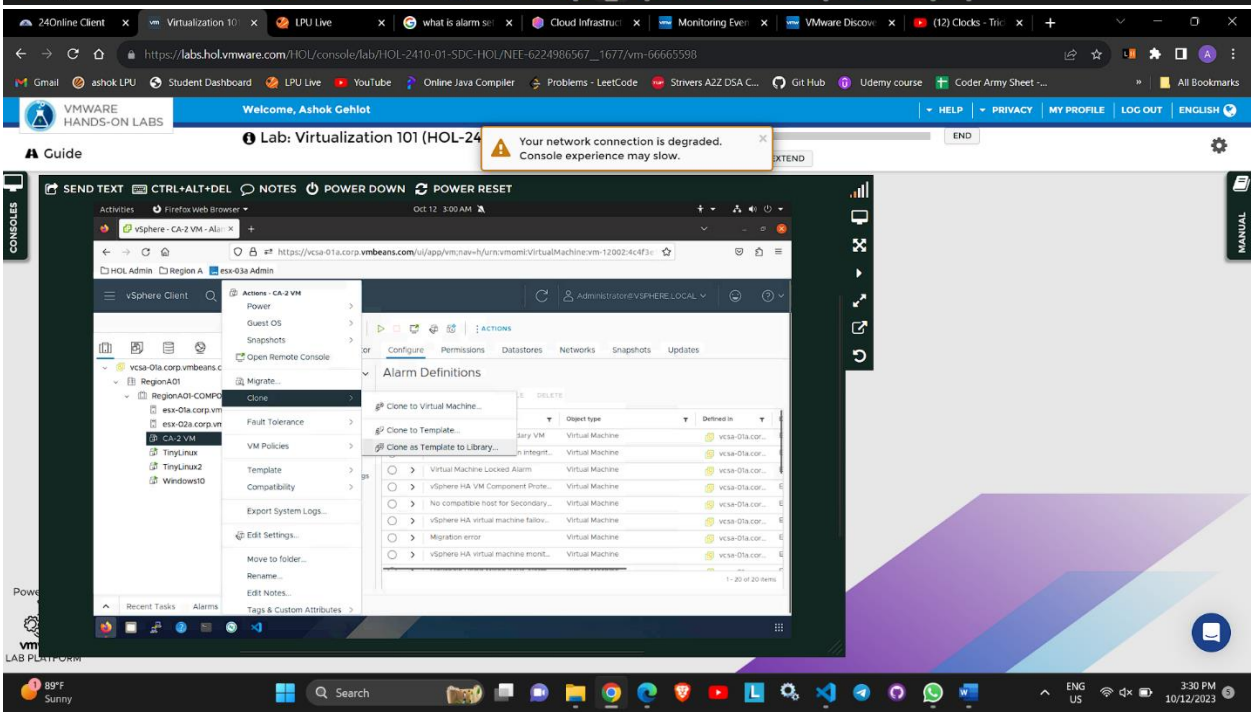
Lab: Virtualization 101 (HOL-2410-01-SDC)
END
TIME REMAINING: 02:32:43
EXTEND
CONSOLES
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
MANUAL
vSphere Client
Actions - CA-2
Power
Guest OS
Snapshots
Open Remote Console
Migrate...
Clone
Fault Tolerance
VM Policies
Template
Compatibility
Export System Logs...
Edit Settings...
Move to folder...
Rename...
Edit Notes...
Tags & Custom Attributes
Clone to Virtual Machine...
Clone to Template...
Clone as Template to Library...
Alarm Definitions
Recent Tasks
Alarms
89°F
Sunny
Search
ENG
US
3:28 PM
10/12/2023


24Online Client
Virtualization 101
LPU Live
what is alarm set
Cloud Infrastructure
Monitoring Events
VMware Discover
(12) Clocks - Tric
https://labs.hol.vmware.com/HOL/console/lab/HOL-2410-01-SDC-HOL/NEE-6224986567__1677/vm-66665598
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LPU Live
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Online Java Compiler
Problems - LeetCode
Strivers A2Z DSA C...
Git Hub
Udemy course
Coder Army Sheet -...
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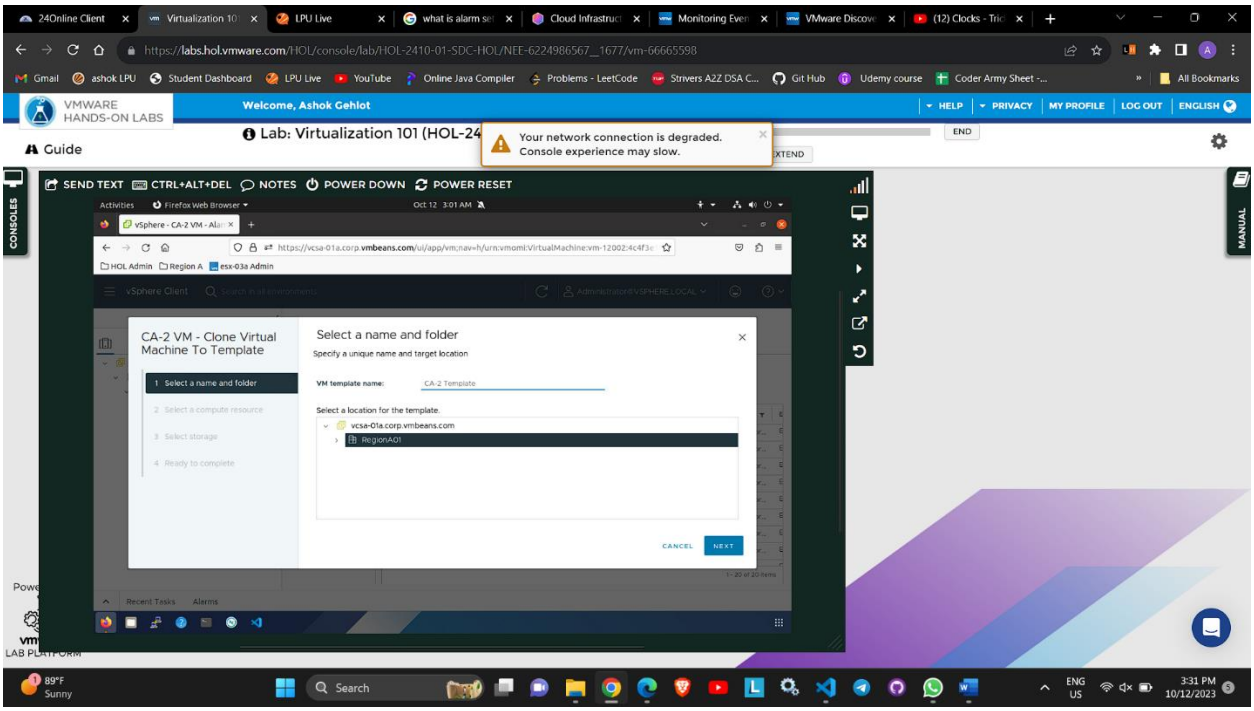
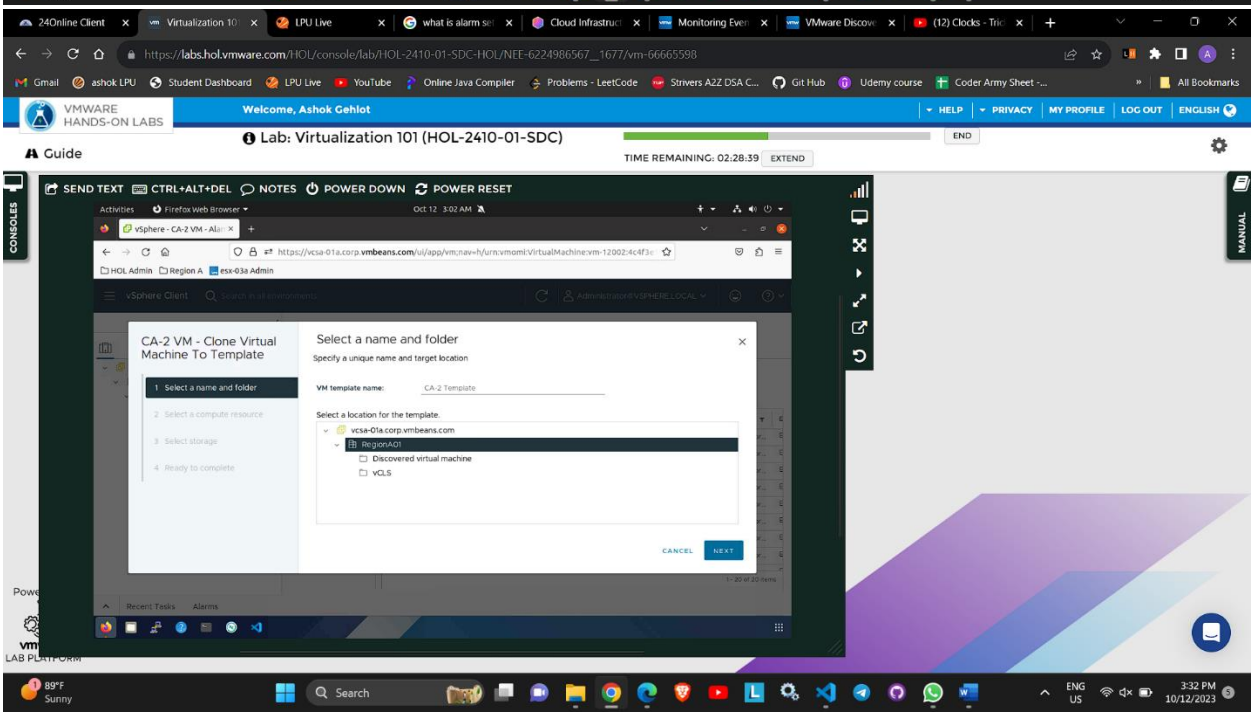
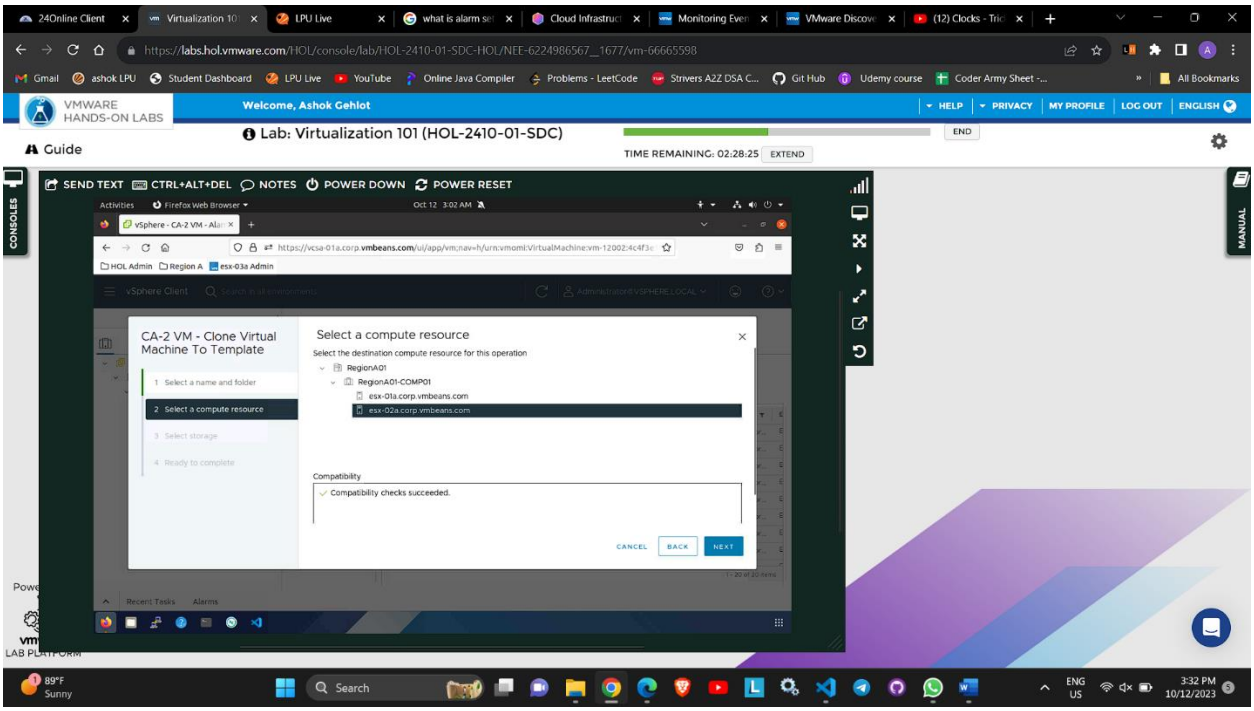
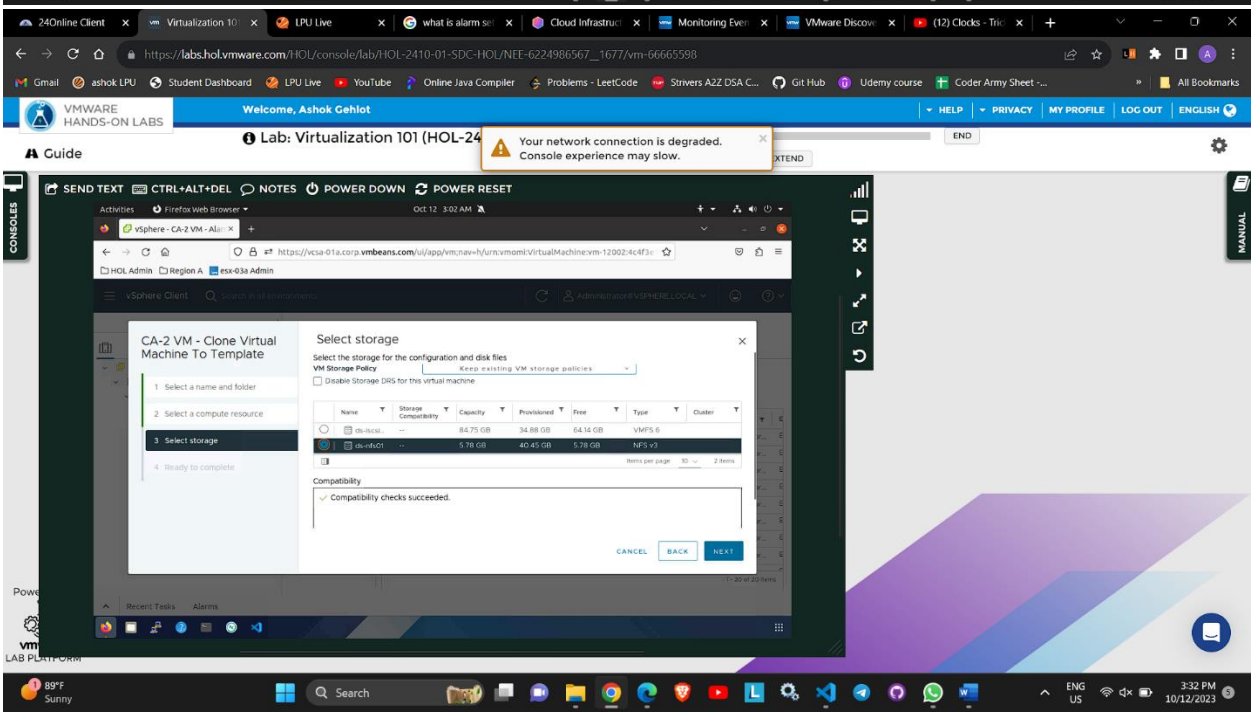
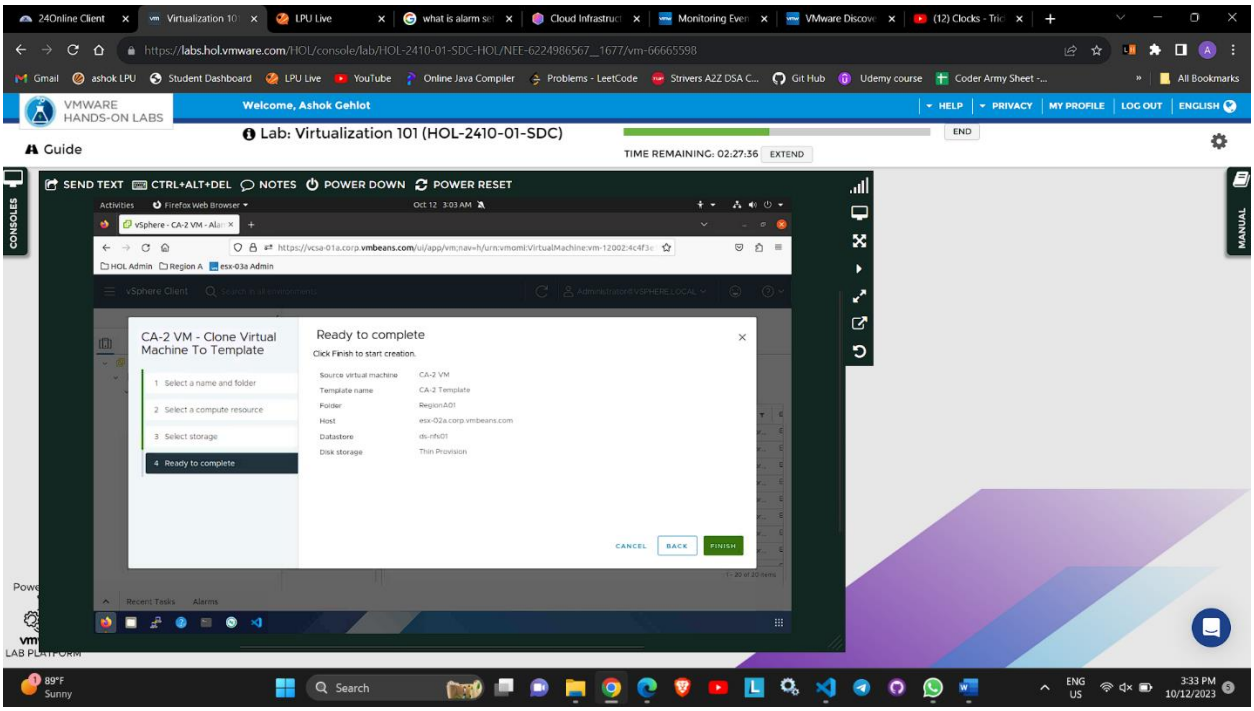
Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
END
EXTEND
CONSOLES
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
MANUAL
vSphere Client
Actions - CA-2 VM
Power
Guest OS
Snapshots
Open Remote Console
Migrate...
Clone
Fault Tolerance
VM Policies
Template
Compatibility
Export System Logs...
Edit Settings...
Move to folder...
Rename...
Edit Notes...
Tags & Custom Attributes
Clone to Virtual Machine...
Clone to Template...
Clone as Template to Library...
Alarm Definitions
Recent Tasks
Alarms
89°F
Sunny
Search
ENG
US
3:30 PM
10/12/2023

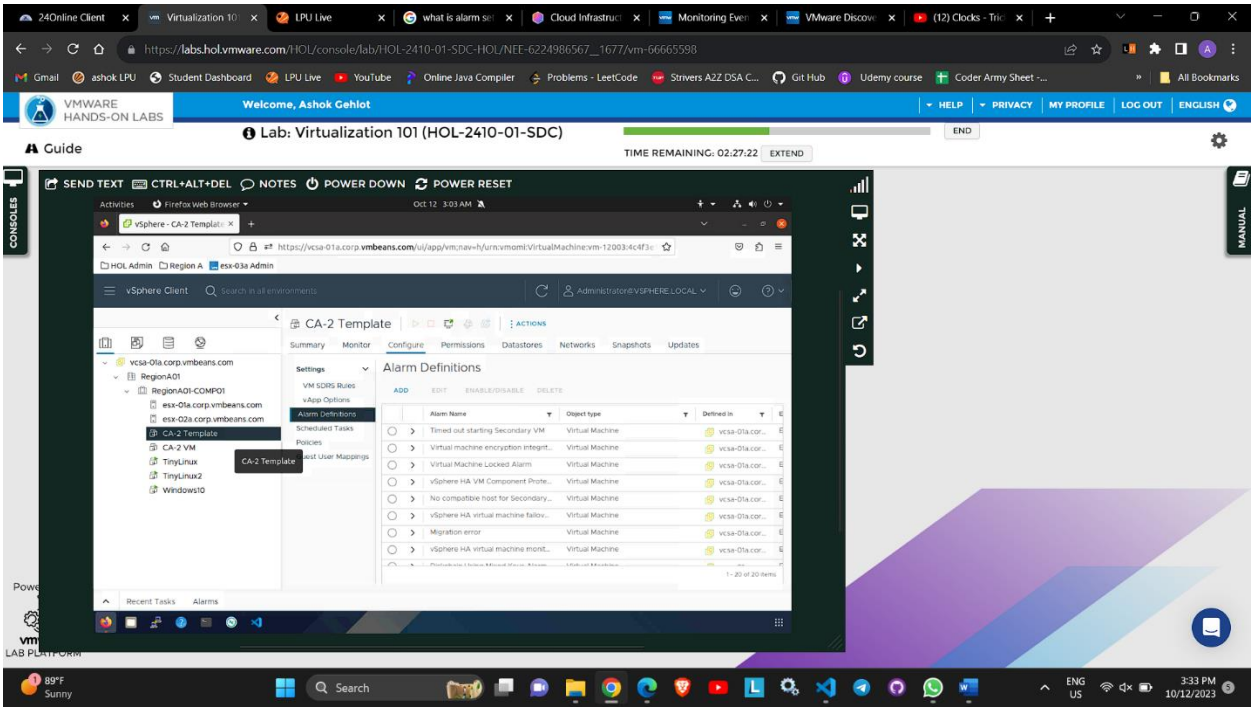

Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CA-2 VM - Clone Virtual Machine To Template
Select a name and folder
Specify a unique name and target location
VM template name:
CA-2 Template
Select a location for the template.
vcsa-01a.corp.vmbeans.com
RegionA01
CANCEL
NEXT
89°F
Sunny
Search
ENG
US
3:31 PM
10/12/2023


Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:28:39
EXTEND
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CA-2 VM - Clone Virtual Machine To Template
Select a name and folder
Specify a unique name and target location
VM template name:
CA-2 Template
Select a location for the template.
vcsa-01a.corp.vmbeans.com
RegionA01
Discovered virtual machine
vCLS
CANCEL
NEXT
89°F
Sunny
Search
ENG
US
3:32 PM
10/12/2023


Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:28:25
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CA-2 VM - Clone Virtual Machine To Template
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


Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
CA-2 VM - Clone Virtual Machine To Template
Select storage
Select the storage for the configuration and disk files
Compatibility
Compatibility checks succeeded.
CANCEL
BACK
NEXT


VMWARE HANDS-ON LABS
Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:27:36
SEND TEXT CTRL+ALT+DEL NOTES POWER DOWN POWER RESET
CA-2 VM - Clone Virtual Machine To Template
Ready to complete
Click Finish to start creation.
CANCEL BACK FINISH


VMWARE HANDS-ON LABS
Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:27:22
SEND TEXT CTRL+ALT+DEL NOTES POWER DOWN POWER RESET
CA-2 Template
Alarm Definitions

Create New Alarm

1. Click on the hamburger Menu on your top left

2.Click Inventory

3. Select the vCenter - vcsa-01a.corp.vmbeans.com

4.Click the Configure tab

5.Click on Alarm Definitions.

The default alarm definitions are shown. Alarms can be defined at different levels. In the case of the highlighted alarm, you can see it is defined at the top level. Alarms that are defined at the top level are then inherited by the objects below.

6. Click on the Alarm Name filter field and type "CPU" in the search field.

7.Select the Host CPU usage alarm

8.Click the new button

9. Click Next.

10.Change cpu usages is above 5 %

11.Use the scroll bar to scroll to the bottom

12. Click on Add Advanced Actions.

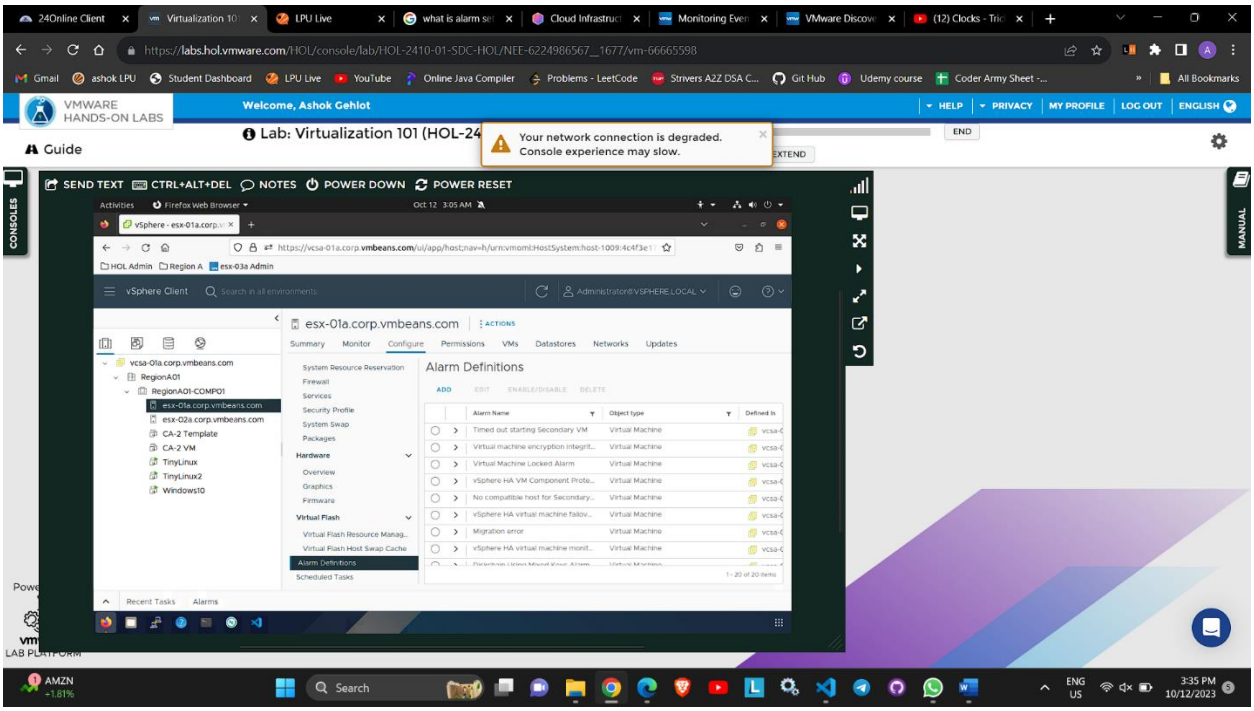
13.From the drop-down menu (Select an advanced action), select Enter maintenance mode.

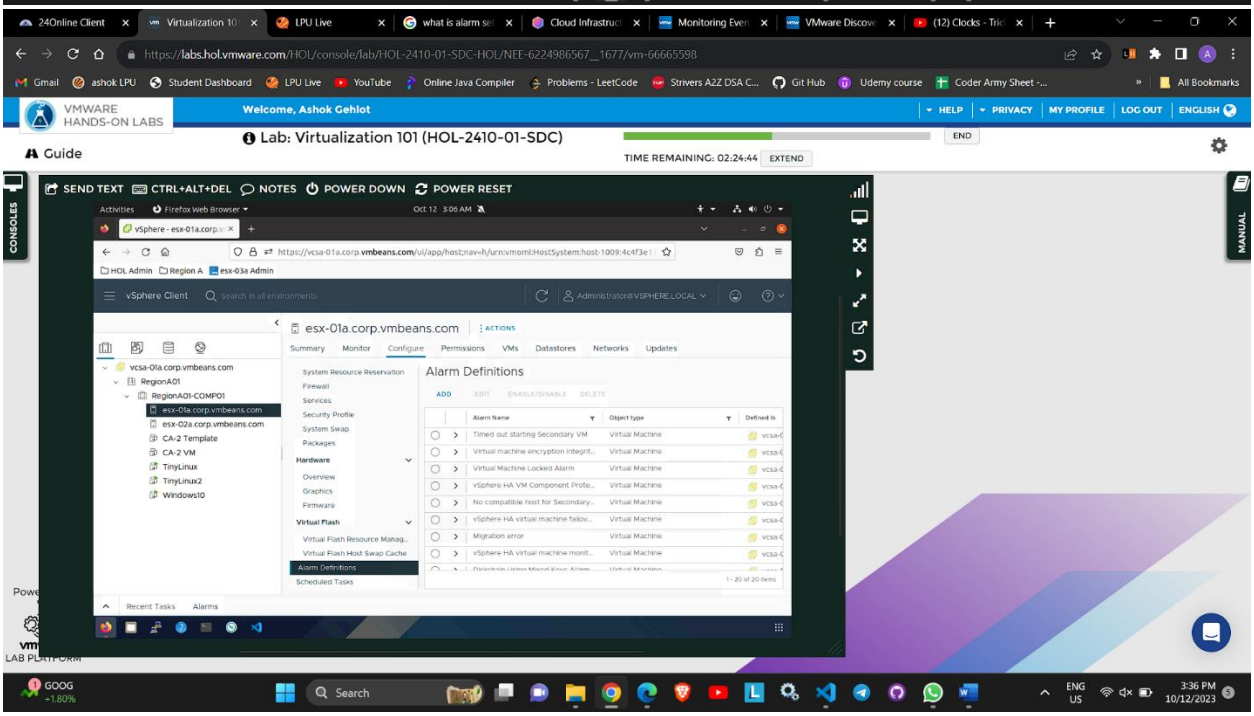
14.Click Next

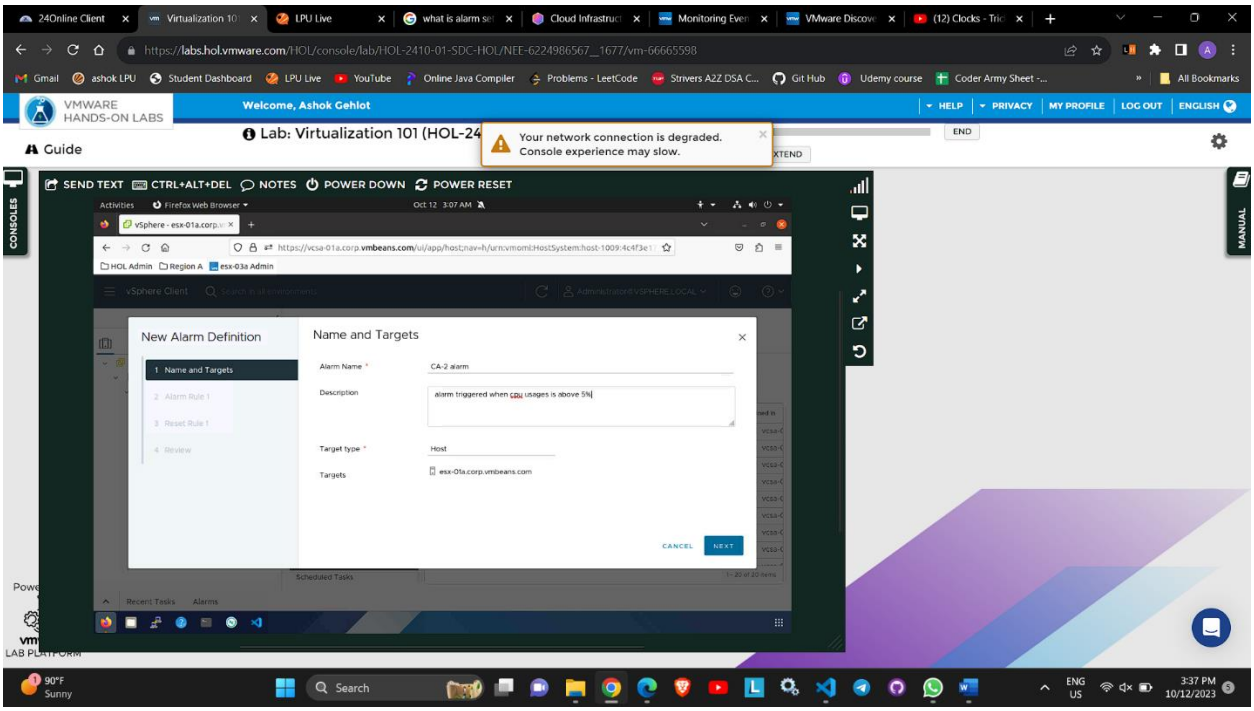
15.Click Next.

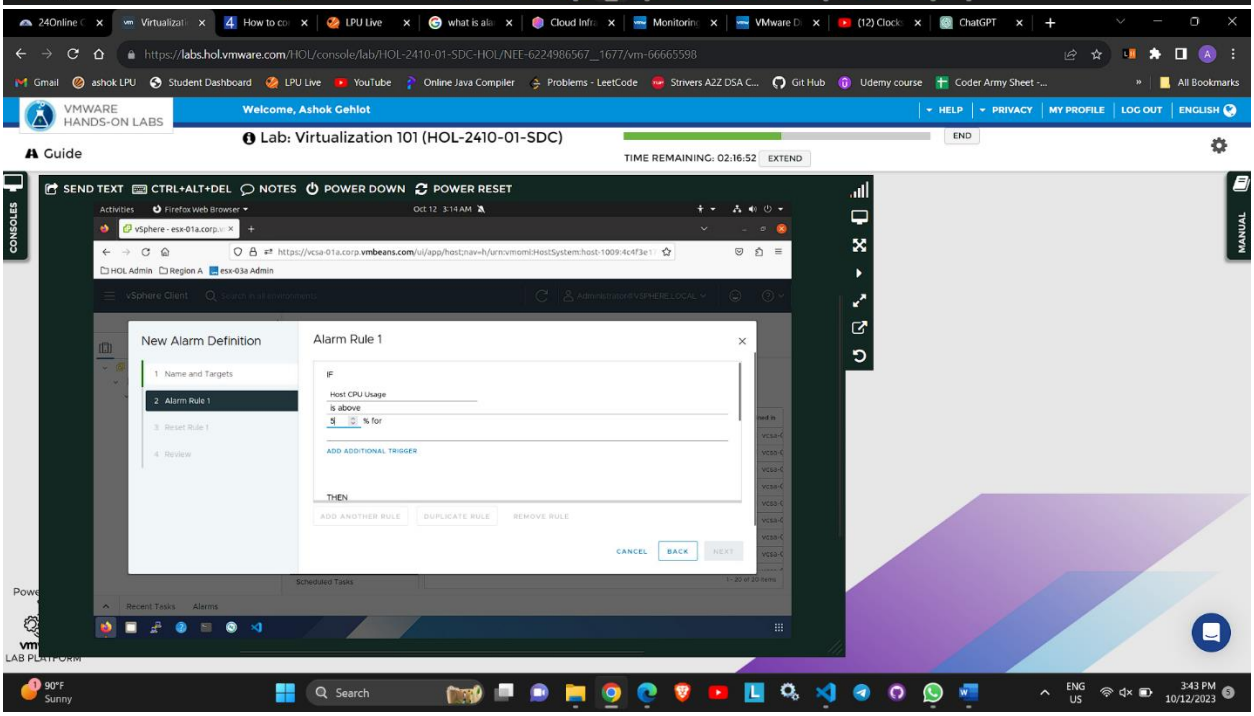
16. Click Next

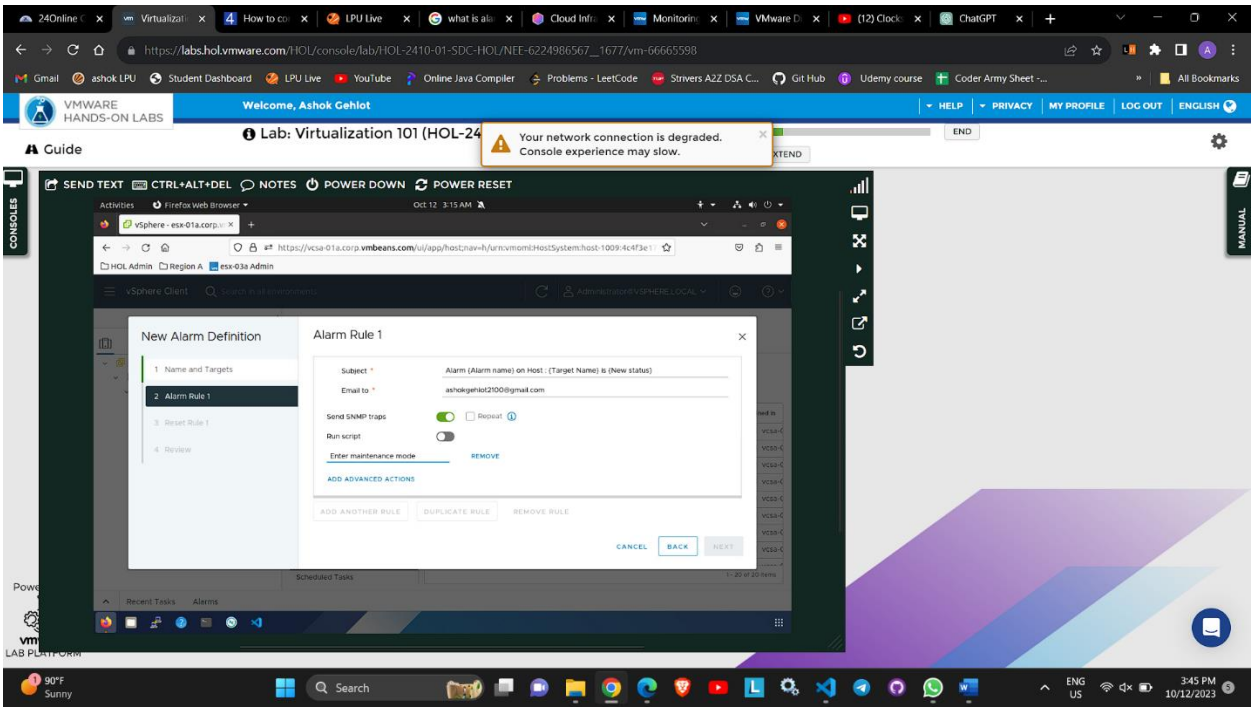
17. Click Save to keep the changes made to the Alarm

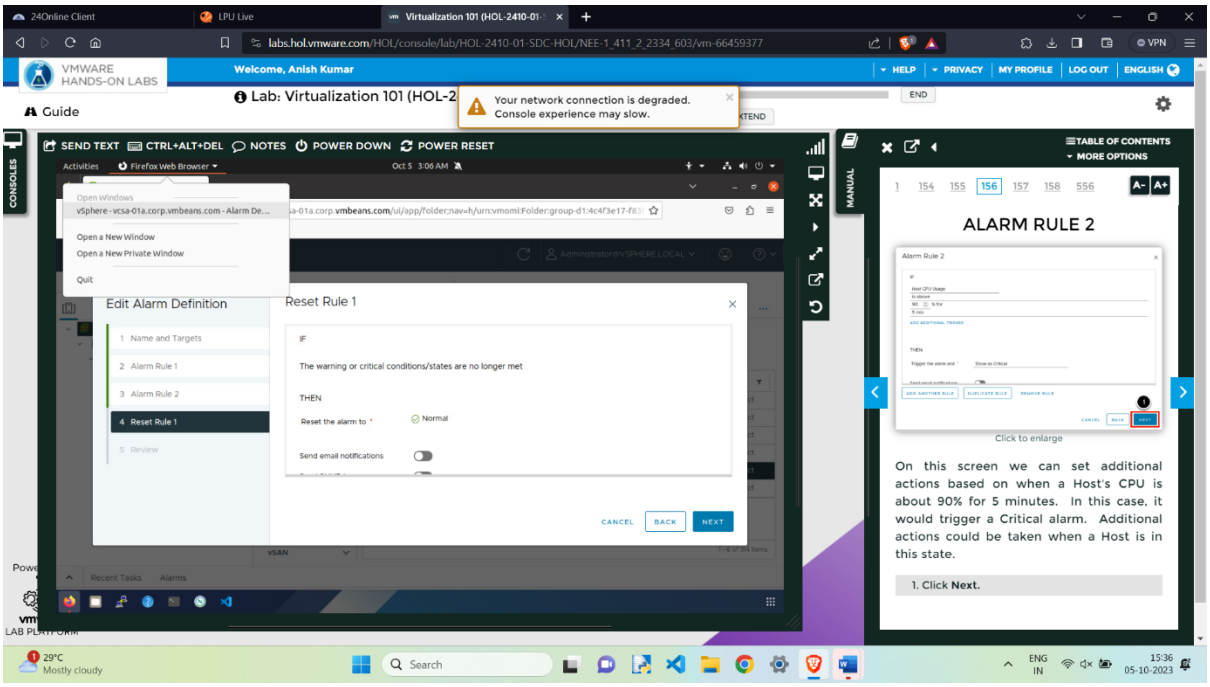

Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
esx-01a.corp.vmbeans.com
Alarm Definitions

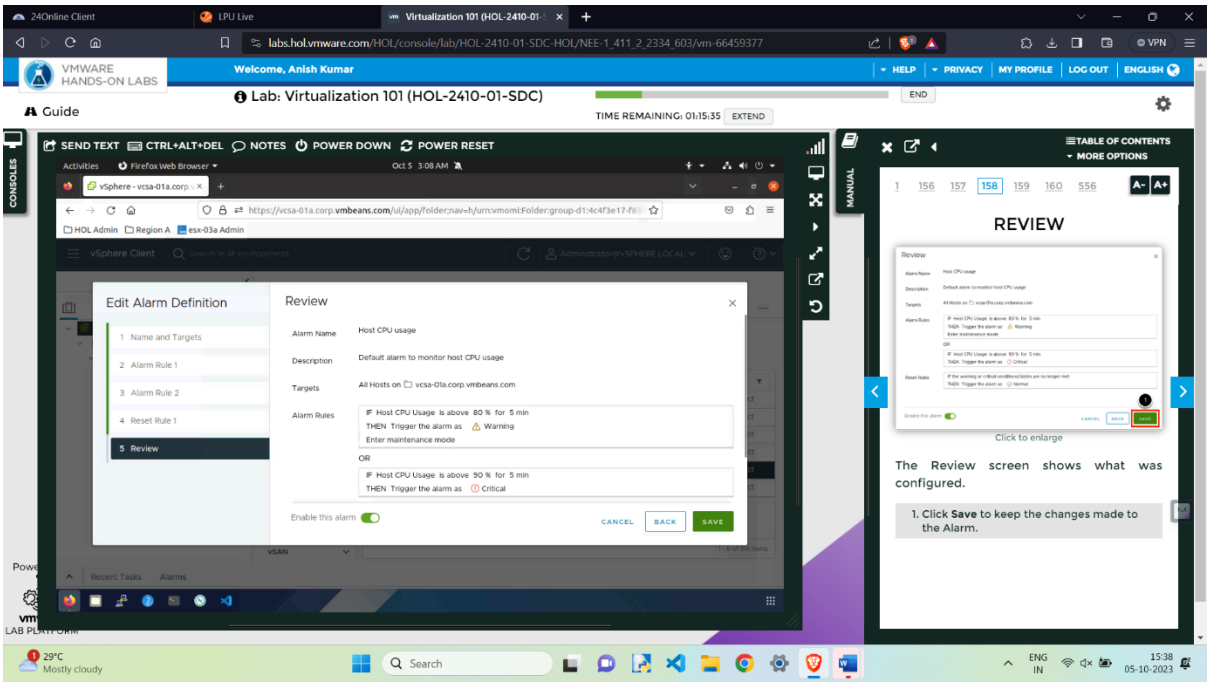

Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:24:44
EXTEND
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
esx-01a.corp.vmbeans.com
Alarm Definitions

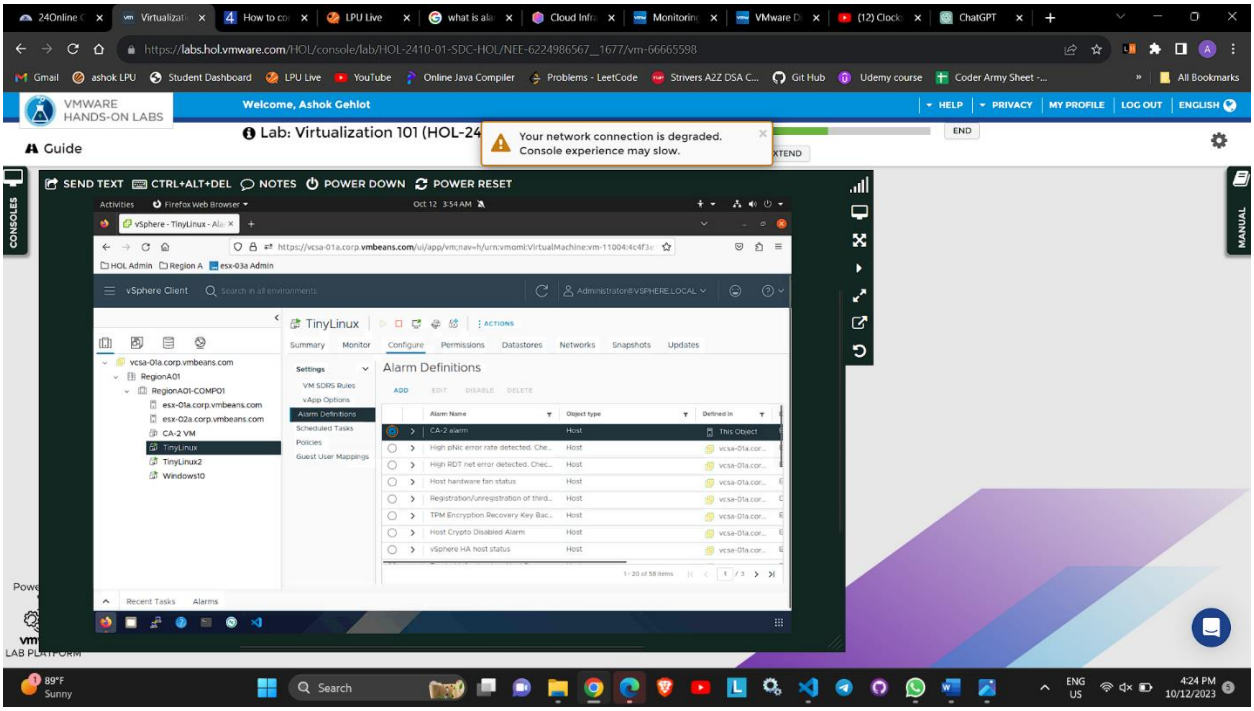

Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Alarm Definition
Name and Targets
Alarm Name *
CA-2 alarm
Description
alarm triggered when CPU usages is above 5%
Target type *
Host
Targets
esx-01a.corp.vmbeans.com
CANCEL
NEXT


Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 02:16:52
EXTEND
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Alarm Definition
Alarm Rule 1
IF
Host CPU Usage
is above
5
% for
ADD ADDITIONAL TRIGGER
THEN
CANCEL
BACK
NEXT


Welcome, Ashok Gehlot
Lab: Virtualization 101 (HOL-24
Your network connection is degraded.
Console experience may slow.
Guide
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
New Alarm Definition
Alarm Rule 1
Name and Targets
Alarm Rule 1
Reset Rule 1
Review
Subject *
Alarm (Alarm name) on Host : (Target Name) is (New status)
Email to *
ashokgehlot2100@gmail.com
Send SNMP traps
Repeat
Run script
Enter maintenance mode
REMOVE
ADD ADVANCED ACTIONS
ADD ANOTHER RULE
DUPLICATE RULE
REMOVE RULE
CANCEL
BACK
NEXT
Recent Tasks
Alarms
Search


Welcome, Anish Kumar
Lab: Virtualization 101 (HOL-2
Your network connection is degraded.
Console experience may slow.
Guide
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
Edit Alarm Definition
Reset Rule 1
Name and Targets
Alarm Rule 1
Alarm Rule 2
Reset Rule 1
Review
IF
The warning or critical conditions/states are no longer met
THEN
Reset the alarm to *
Normal
Send email notifications
CANCEL
BACK
NEXT
TABLE OF CONTENTS
MORE OPTIONS
ALARM RULE 2
Click to enlarge
On this screen we can set additional actions based on when a Host's CPU is about 90% for 5 minutes. In this case, it would trigger a Critical alarm. Additional actions could be taken when a Host is in this state.
1. Click Next.
Search


Welcome, Anish Kumar
Lab: Virtualization 101 (HOL-2410-01-SDC)
TIME REMAINING: 01:15:35
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
Edit Alarm Definition
Review
Alarm Name
Host CPU usage
Description
Default alarm to monitor host CPU usage
Targets
All Hosts on vcsa-01a.corp.vmbeans.com
Alarm Rules
IF Host CPU Usage is above 80 % for 5 min
THEN Trigger the alarm as Warning
Enter maintenance mode
OR
IF Host CPU Usage is above 90 % for 5 min
THEN Trigger the alarm as Critical
Enable this alarm
CANCEL
BACK
SAVE
REVIEW
Click to enlarge
The Review screen shows what was configured.
1. Click Save to keep the changes made to the Alarm.


Welcome, Ashok Gehlot
Your network connection is degraded.
Console experience may slow.
SEND TEXT
CTRL+ALT+DEL
NOTES
POWER DOWN
POWER RESET
TinyLinux
Alarm Definitions