

VM Deployment, Configuration, and Migration (vSphere)

Overview

This project documents the end-to-end lifecycle of a virtual machine in a VMware vSphere environment, from initial deployment through operating system installation, system configuration, asset documentation, and live migration.

Workflow Summary

Deployed a virtual machine from a template using standardized naming and placement

Configured compute, storage, networking, and compatibility settings

Installed CentOS Stream 9 and verified successful boot

Applied post-install system configuration, including hostname and network cleanup

Validated VM state and resource usage in vSphere

Documented the system in AssetTiger for inventory tracking

Performed a compute-only vMotion migration and confirmed successful placement

Result

The virtual machine was successfully deployed, configured, documented, and migrated without downtime, demonstrating practical experience with enterprise virtualization workflows and Linux system administration.

This screenshot shows the vSphere Client Summary page for an ESXi host in a production sandbox environment. The view provides a high-level overview of host hardware, status, and resource utilization.

What's Shown

Hypervisor: VMware ESXi (Dell EMC host)

Host State: Connected and operational

Uptime: Continuous runtime without interruption

Hardware Details: CPU model, logical processors, and system memory

Resource Usage: Real-time CPU, memory, and storage capacity metrics

The screenshot displays the vSphere Client interface for a host named 10.110.90. The top navigation bar shows tabs for Board, CenOS9 KickStart - ProCare, 0.1110 | labble - Dashboard, and vSphere - 10.110.90 - Summary. The main content area is titled "10.110.90" and includes the following sections:

- Actions:** Includes options like New Virtual Machine, Deploy OVF Template, New Resource Pool, New vApp, Import VMs, Maintenance Mode, Connection, Power, Certificates, Storage, Add Networking, Host Profiles, Export System Logs, Assign License, Settings, Move To, Tags & Custom Attributes, Remove from Inventory, Add Permission, Alarms, and vSAN.
- Summary:** Provides high-level host information:
 - Hypervisor: VMware ESXi, 7.0.3, 21930508
 - Model: PowerEdge R620
 - Processor Type: Intel(R) Xeon(R) CPU E5-2650 0 @ 2.00GHz
 - Logical Processors: 32
 - NICs: 8
 - Virtual Machines: 70
 - State: Connected
 - Uptime: 11 days
- Hardware:** Shows real-time resource usage metrics:
 - CPU: Used: 16.92 GHz / Capacity: 31.86 GHz
 - Memory: Used: 52.47 GB / Capacity: 127.96 GB
 - Storage: Used: 1.12 TB / Capacity: 7.51 TH
- Configuration:** Includes sections for Tags (Assigned Tag, Category, Description), Related Objects (None), and Custom Attributes (Attribute, Value).

This screen shows the vSphere New Virtual Machine wizard at the stage where the VM creation method is selected. The Deploy from template option is chosen to create a new virtual machine based on a preconfigured template.

Purpose

Using a template allows for faster, standardized VM provisioning by reusing an existing OS configuration, reducing setup time and ensuring consistency across environments.

The screenshot shows the 'New Virtual Machine' wizard in progress, specifically step 1: 'Select a creation type'. A sidebar on the left lists steps 1 through 10. The main panel asks 'How would you like to create a virtual machine?' and lists several options: 'Create a new virtual machine' (selected), 'Deploy from template' (highlighted in blue), 'Clone an existing virtual machine', 'Clone virtual machine to template', 'Clone template to template', and 'Convert template to virtual machine'. A detailed description of the selected option is provided on the right: '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.' At the bottom are 'CANCEL', 'BACK', and 'NEXT' buttons.

New Virtual Machine

1 Select a creation type

2 Select a name and folder

3 Select a compute resource

4 Select a 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

Clone template to template

Convert template to virtual machine

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 BACK NEXT

Defines the virtual machine name and selects the appropriate vCenter inventory location, ensuring the VM is clearly identified and placed in the correct datacenter before deployment.

New Virtual Machine X

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

Select a name and folder
Specify a unique name and target location

Virtual machine name: stage-web-eg3 procure prod

Select a location for the virtual machine.

vcenter sandbox prod

Procore-DC

CANCEL BACK NEXT

Selects the destination ESXi host as the compute resource for the virtual machine and confirms compatibility checks before proceeding with deployment.

New Virtual Machine x

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

Select a compute resource
Select the destination compute resource for this operation

✓ Procore-DC
 > 10.1.10.40
 > **10.1.10.90**
 > 10.1.15.50

Compatibility
✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Selects the datastore for the virtual machine's configuration and disk files, verifying sufficient capacity and successful compatibility checks before continuing.

New Virtual Machine

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

Select storage
Select the storage for the configuration and disk files

VM Storage Policy ⚠

Disable Storage DRS for this virtual machine

Name	Storage Compatibility	Capacity	Provisioned	Free	Type	Cluster	Storage DRS
DS-01	--	7.51 TB	2.33 TB	6.37 TB	VMFS 6		

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Selects the virtual machine hardware compatibility level (ESXi 7.0 U2 and later), ensuring the VM uses the appropriate hardware version for optimal performance and feature support.

New Virtual Machine X

7 Select compatibility

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

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

Compatible with: ESXi 7.0 U2 and later ▼ ⓘ

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

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 Select hardware
8 Ready to complete

CANCEL **BACK** **NEXT**

Selects the guest operating system for the virtual machine, specifying Microsoft Windows Server 2019 (64-bit) so vSphere can apply the correct defaults and compatibility settings for the OS installation.

New Virtual Machine

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

Select a guest OS

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

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

Guest OS Family:

Guest OS Version:

Enable Windows Virtualization Based Security (i)

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

CANCEL

BACK

NEXT

Customizes the virtual machine hardware by defining CPU, memory, and disk settings, including allocating a 20 GB virtual disk with thin provisioning and default controller options before deployment.

New Virtual Machine

Customize hardware
Configure the virtual machine hardware

Virtual Hardware VM Options

ADD NEW DEVICE 

CPU *	1
Memory *	1 GB
New Hard disk *	20 GB
Maximum Size	6.37 TB
VM storage policy	
Location	Store with the virtual machine
Disk Provisioning	Thin Provision
Sharing	Unspecified
Shares	Normal 1000
Limit - IOPs	Unlimited
Disk Mode	Dependent
Virtual Device Node	New SCSI controller SCS(0.0) New Hard disk
New SCSI controller *	LSI Logic SAS

CANCEL **BACK** **NEXT**

Configures additional virtual machine hardware settings, including network connectivity, ISO attachment, controllers, and device options, ensuring the VM is fully prepared for installation and initial boot.

New Virtual Machine

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

Disk Provisioning	Thin Provision
Sharing	Unspecified
Shares	Normal 1000
Limit - IOPS	Unlimited
Disk Mode	Dependent
Virtual Device Node	New SCSI controller <input checked="" type="checkbox"/> SCSI(0:0) New Hard disk
> New SCSI controller	LSI Logic SAS
> New Network	YT-Intran-VLAN <input checked="" type="checkbox"/> Connect...
> New CD/DVD Drive	Datastore ISO File <input checked="" type="checkbox"/> Connect...
> New USB Controller	USB 3.1
> Video card	Specify custom settings
> Security Devices	Not Configured
VMCI device	
New SATA Controller	New SATA Controller
> Other	Additional Hardware

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

CANCEL BACK NEXT

Reviews and confirms all virtual machine configuration settings, including compute, storage, networking, and guest OS details, before finalizing and creating the virtual machine.

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 Select a guest OS
- ✓ 8 Customize hardware
- 10 Ready to complete

Folder	Procore-DC
Host	10.110.90
Datastore	DS-01
Guest OS name	Microsoft Windows Server 2019 (64-bit)
Virtualization Based Security	Disabled
CPUs	1
Memory	1 GB
NICs	1
NIC 1 network	YT-Intran-VLAN
NIC 1 type	E1000E
SCSI controller 1	LSI Logic SAS
Create hard disk 1	New virtual disk
Capacity	20 GB
Datastore	DS-01
Virtual device node	SCSI(0:0)
Mode	Dependent

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

CANCEL

BACK

FINISH

Confirms successful creation of the virtual machine in vSphere, showing its current powered-off state, assigned resources, guest OS configuration, and network/storage associations in the Summary view.

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

- Left Sidebar:** A tree view of clusters and hosts, including DTurner-CLUSTER, egarrido-CLUSTER, egrion-cluster, JKEOWN-CLUSTER, kgates-cluster, kgrant-cluster, khaynes-cluster, MBOYLAN-CLUSTER, MCLOW-CLUSTER, New Resource Pool, PSEKAR2-CLUSTER, qd-cluster, rbatista-cluster, Slesperance-CLUSTER, tacquaye-cluster, TDEXTER-CLUSTER, TLINDSEY-CLUSTER, tshank-cluster, tsint-cluster, ucharles-cluster, and the selected object: stage-web-eg3.procore.prod1.
- Top Bar:** Shows tabs for Board, Edward Garrido - Pro-Core-..., CentOS9 KickStart - Procore-Plus..., CentOS9 KickStart - Procore-Plus..., 1:32:43 | libble - Dashboard, and vSphere - stage-web-eg3.procore.prod1. The URL is https://vcenter.sandbox.prod/ui/app/vm:nav=urn:vmomi:VirtualMachine:vm-2375:f095ce46-59d5-4b1e-ba75-05bb55ea0ebd/summary.
- Summary View:** The main content area displays the following information:
 - Guest OS:** Powered Off, Microsoft Windows Server 2019 (64-bit), Not running, not installed, Not encrypted.
 - VM Hardware:** CPU: 1 CPU(s), 0 MHz used; Memory: 1 GB, 0 GB memory active; Hard disk 1: 20 GB | Thin Provision, DS-01; Network adapter 1: YT-Intran-VLAN (disconnected), 00:50:56:8b:d4:e3; CD/DVD drive 1: Disconnected; Compatibility: ESXi 7.0 U2 and later (VM version 19).
 - Related Objects:** Host: 10.1.10.90; Networks: YT-Intran-VLAN; Storage: DS-01.
 - Tags:** No tags assigned.
- Bottom Navigation:** Recent Tasks and Alarms.

Launches the CentOS Stream 9 installer via the VM console and begins the operating system installation by selecting the installation language and locale.

The screenshot shows the 'CENTOS STREAM 9 INSTALLATION' interface. On the left, there's a dark sidebar with the 'CentOS' logo. The main area has a title 'WELCOME TO CENTOS STREAM 9.' and a subtitle 'What language would you like to use during the installation process?'. Below this, there are two columns of language options. The first column lists languages in English, and the second column lists their corresponding names in English. A third column on the right lists various English locales. At the bottom, there's a search bar and two buttons: 'Quit' and 'Continue'.

English	English	English (United States)
العربية	Arabic	English (United Kingdom)
Français	French	English (India)
Deutsch	German	English (Australia)
日本語	Japanese	English (Canada)
中文	Mandarin Chinese	English (Denmark)
Русский	Russian	English (Ireland)
Español	Spanish	English (New Zealand)
Afrikaans	Afrikaans	English (Nigeria)
አማርኛ	Amharic	English (Hong Kong SAR China)
অসমীয়া	Assamese	English (Philippines)
Asturianu	Asturian	English (Singapore)
Беларуская	Belarusian	English (South Africa)
Български	Bulgarian	English (Zambia)
বাংলা	Bangla	English (Zimbabwe)
Català	Catalan	English (Botswana)
		English (Antigua & Barbuda)
		English (Israel)

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

CENTOS STREAM 9 INSTALLATION
us Help!

WELCOME TO CENTOS STREAM 9.

What language would you like to use during the installation process?

English English English (United States)

العربية Arabic English (United Kingdom)
Français French English (India)
Deutsch German English (Australia)
日本語 Japanese English (Canada)
中文 Mandarin Chinese English (Denmark)
Русский Russian English (Ireland)
Español Spanish English (New Zealand)
Afrikaans Afrikaans English (Nigeria)
አማርኛ Amharic English (Hong Kong SAR China)
অসমীয়া Assamese English (Philippines)
Asturianu Asturian English (Singapore)
Беларуская Belarusian English (South Africa)
Български Bulgarian English (Zambia)
বাংলা Bangla English (Zimbabwe)
Català Catalan English (Botswana)
English (Antigua & Barbuda)
English (Israel)

|

Quit Continue

Reviews the CentOS Stream 9 installation summary, confirming localization, software selection, storage configuration, and system settings before beginning the operating system installation.

The screenshot shows the 'INSTALLATION SUMMARY' screen of the CentOS Stream 9 KickStart interface. The screen is divided into three main sections: LOCALIZATION, SOFTWARE, and SYSTEM, each with specific configuration details. On the left, there is a sidebar with the CentOS logo and a dark background. At the bottom, there are buttons for 'Quit' and 'Begin Installation', with a note: 'We won't touch your disks until you click "Begin Installation".'

INSTALLATION SUMMARY

CENTOS STREAM 9 INSTALLATION

LOCALIZATION

- Keyboard**: English (US)
- Language Support**: English (United States)
- Time & Date**: Americas/New York timezone

USER SETTINGS

- Root Password**: Root password is set
- User Creation**: No user will be created

SOFTWARE

- Installation Source**: Local media
- Software Selection**: Minimal Install

SYSTEM

- Installation Destination**: Automatic partitioning selected
- KDUMP**: Kdump is enabled
- Network & Host Name**: Unknown
- Security Profile**: No profile selected

Not secure <https://vcenter.sandbox.prod/ui/webconsole.html?vmId=vm-2375&vmName=stage-web-eg3.procure.prod1&numMksConnections=0&...>

stage-web-eg3.procure.prod1

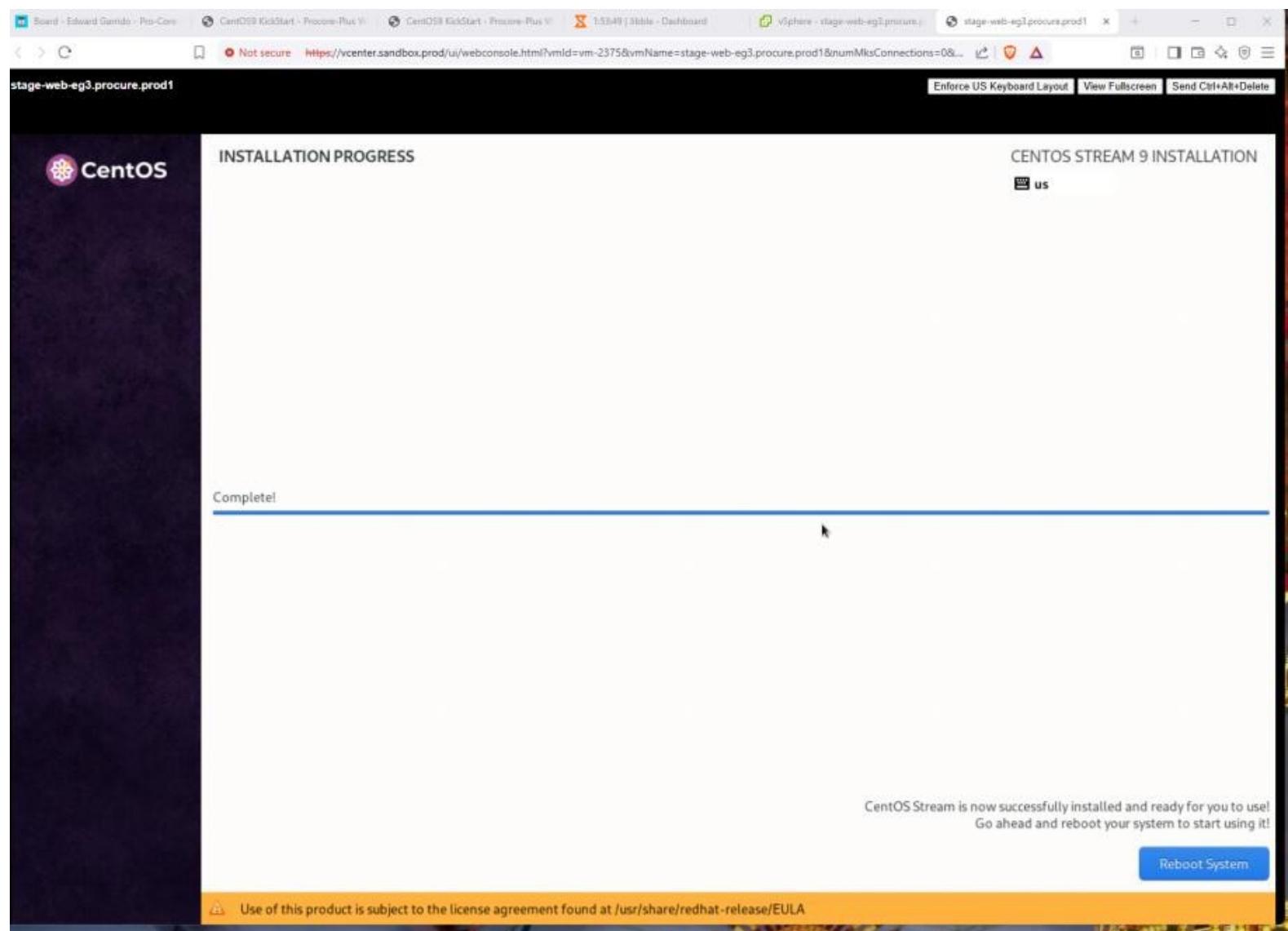
Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

Help!

Quit Begin Installation

We won't touch your disks until you click 'Begin Installation'.

Completes the CentOS Stream 9 installation, confirming a successful install and prompting for a system reboot to begin using the newly configured virtual machine.



Begins asset registration by opening the Add an Asset form in AssetTiger, preparing to document server details such as hostname, hardware specs, network information, OS, and ownership for inventory tracking.

The screenshot shows the 'Add an Asset' form in the AssetTiger application. The form is titled 'Add an Asset' and is divided into sections for 'Asset Details' and 'Hardware Specs'.

Asset Details:

- Asset Tag ID: [Input field]
- Server Name: [Input field]
- Serial No: [Input field]
- Description: [Input field]
- Owner: [Input field]
- Brand: [Input field]
- Model: [Input field]
- Organization: [Input field]
- IP: [Input field]
- MAC: [Input field]
- CPU: [Input field]
- Memory: [Input field]
- OS: [Input field]

Hardware Specs:

- Status: [Select Status dropdown]
- Group: [Select Group dropdown]

Bottom Right:

- Need Help? [Yellow button]

Populates the AssetTiger asset record with the virtual machine's details, including hostname, OS, IP address, MAC address, CPU, memory, ownership, and environment, completing inventory documentation for the newly deployed server.

The screenshot shows the AssetTiger web interface for adding a new asset. The left sidebar has a yellow 'Assets' tab selected. The main form is titled 'Procore' and contains the following data:

Server Name *	stage-web-eg3.procore.prod1
Serial No	cd2f0b42-feae-7a32-af0a-cc26640125e5
Description *	CentOS Stream 9
Owner *	edward garrido
Organization *	Pro-CorePlus
IP *	10.1.31.136
MAC *	00:50:56:8b:d4:e3
CPU *	1 VCPU
Memory *	1GB
OS *	CentOS Stream 9
Status *	Active
Group	Dev

At the bottom, there are dropdowns for 'Site' (Select Site) and 'Category' (Select Category), and a 'Need Help?' button.

Verifies the completed asset record in AssetTiger, confirming that the virtual machine details—hostname, OS, IP, MAC, CPU, memory, ownership, and status—are accurately recorded and available for inventory tracking.

Screenshot of the AssetTiger Asset View page for a CentOS Stream 9 VM.

The page shows the following details:

Asset Tag ID	EG_TICKET21	Site	vSphere
Brand		Location	virtual
Model		Category	
		Assigned to	
		Status	Available

Details tab (selected):

Miscellaneous	Serial No	cd2f0b42-fee4-7a32-af0a-cc26640125e5
Custom fields	Server Name	stage-web-eg3.procure.prod1
	Organization	Pro-CorePlus
	IP	10.1.31.136
	CPU	1 VCPU
	OS	CentOS Stream 9
Creation	Date Created	09/23/2025 09:12 PM
	Created by	Edward Garrido

History tab (disabled):

Download AssetTiger App

GET IT ON Google Play
Download on the App Store

Review us on Capterra 4.6

About Us Terms of Service Privacy Policy Contact
2025 © AssetTiger by MyAssetTag.com

Removes an unused network connection, verifies active network interfaces, and updates the system hostname using elevated privileges after resolving permission and authentication requirements.

```
[egarriido@stage-web-eg3 ~]$ nmcli con show
NAME UUID                                     TYPE      DEVICE
LAN1 b18c2249-d10a-40bd-8d82-fc9a5f549412  ethernet  ens192
lo ed271182-b810-4196-aa32-95f42c7cacf3  loopback  lo
[egarriido@stage-web-eg3 ~]$ nmcli con delete LAN1
Connection 'LAN1' (b18c2249-d10a-40bd-8d82-fc9a5f549412) successfully deleted.
[egarriido@stage-web-eg3 ~]$ nmcli con show
NAME UUID                                     TYPE      DEVICE
lo ed271182-b810-4196-aa32-95f42c7cacf3  loopback  lo
[egarriido@stage-web-eg3 ~]$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:50:56:8b:d4:e3 brd ff:ff:ff:ff:ff:ff
    altname enp11s0
[egarriido@stage-web-eg3 ~]$ hostnamectl set-hostname DELETE
==== AUTHENTICATING FOR org.freedesktop.hostname1.set-static-hostname ====
Authentication is required to set the statically configured local hostname, as well as the pretty hostname
authenticating as: procrole
password: Could not set static hostname: Connection timed out
[egarriido@stage-web-eg3 ~]$ su - root
password:
last login: Wed Sep 24 23:31:20 EDT 2025 on pts/0
root@stage-web-eg3 ~# hostnamectl set-hostname DELETE
root@stage-web-eg3 ~# exec bash
root@DELETE ~#
```

Confirms the virtual machine is powered on in vSphere with CentOS 9 installed, displaying updated hostname, IP address, and active resource usage in the Summary view after post-install configuration.

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

- Left Sidebar:** Shows a tree view of clusters and hosts, including "dev-performance-eg3", "eiron-cluster", "JKEDOWN-CLUSTER" (selected), "kgates-cluster", "kgrant-cluster", "khaynes-cluster", "MBOYLAN-CLUSTER", "MCLOW-CLUSTER", "New Resource Pool", "PSEKAR2-CLUSTER", "qd-cluster", "rbatista-cluster", "Siesperance-CLUSTER", "tacquaye-cluster", "TDEXTER-CLUSTER", "TLINDSEY-CLUSTER", "tshank-cluster", "trint-cluster", and "ucharles-cluster".
- Header:** "vSphere Client" and "Search in all environments".
- Top Bar:** "DELETE" and "ACTIONS" buttons, followed by tabs: Summary, Monitor, Configure, Permissions, Datastores, Networks, Snapshots, and "CUSTOMIZE VIEW".
- Summary Tab Content:**
 - Guest OS:** Shows a thumbnail of the terminal window with the command "hostnamectl status", output showing "CentOS Linux release 9.0.2211 (Final)". Buttons: "LAUNCH REMOTE CONSOLE" and "LAUNCH WEB CONSOLE".
 - Power Status:** Powered On
 - Guest OS:** CentOS 9 (64-bit)
 - VMware Tools:** Running, version:12448 (Guest Managed)
 - DNS Name (1):** DELETE
 - IP Addresses:** (None listed)
 - Encryption:** Not encrypted
- Bottom Left:** "DELETE" button and IP address "10.115.50".
- Bottom Right:** "VIEW STATS" button.

Selects Deploy from template as the virtual machine creation method, enabling standardized and efficient VM provisioning using a preconfigured template.

New Virtual Machine

Select a creation type
How would you like to create a virtual machine?

- Deploy from template**
- Clone an existing virtual machine
- Clone virtual machine to template
- Clone template to template
- Convert template to virtual machine

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 **BACK** **NEXT**

Assigns the virtual machine name and selects the appropriate vCenter datacenter and folder, ensuring proper identification and placement before deployment.

New Virtual Machine

Select a name and folder
Specify a unique name and target location

Virtual machine name: stage-web-eg3 procure.prod1

Select a location for the virtual machine.

vcenter sandbox prod > Procure-DC

CANCEL BACK NEXT

Selects the destination ESXi host as the compute resource for the virtual machine and confirms compatibility before proceeding with deployment.

New Virtual Machine

Select a compute resource
Select the destination compute resource for this operation

- Procore-DC
- 10.110.40
- 10.110.90
- 10.115.50

Compatibility

Compatibility checks succeeded.

CANCEL BACK NEXT

Selects the datastore for the virtual machine's configuration and virtual disks, confirming available capacity and successful compatibility checks before continuing.

New Virtual Machine

Select storage

Select the storage for the configuration and disk files

VM Storage Policy

Disable Storage DRS for this virtual machine

Name	T	Storage Compatibility	T	Capacity	T	Provisioned	T	Free	T	Type	T	Cluster
DS-01	---	--	--	7.51 TB	---	2.36 TB	---	6.35 TB	---	VMFS 6	---	---

1 item

Compatibility

 Compatibility checks succeeded.

CANCEL

BACK

NEXT

Selects the virtual machine hardware compatibility level (ESXi 7.0 U2 and later) to ensure optimal performance and feature support for the VM.

New Virtual Machine

Select compatibility

Select compatibility for the 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.

Selects the datastore for the virtual machine's configuration and virtual disks, confirming available capacity and successful compatibility checks before continuing.

Compatible with: ESXi 7.0 U2 and later 

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

CANCEL

BACK

NEXT

Selects the guest operating system type and version (Microsoft Windows Server 2019, 64-bit), allowing vSphere to apply the correct defaults and compatibility settings for the virtual machine.

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: Windows

Guest OS Version: Microsoft Windows Server 2019 (64-bit)

Enable Windows Virtualization Based Security ⓘ

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

CANCEL

BACK

NEXT

Configures the remaining virtual machine hardware settings, including disk provisioning, network connectivity, ISO attachment, and controller options, ensuring the VM is fully prepared for installation.

New Virtual Machine

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

Disk Provisioning	Thin Provision
Sharing	Unspecified
Shares	Normal 1000
Limit - IOPS	Unlimited
Disk Mode	Dependent
Virtual Device Node	New SCSI controller SCSII(0:0) New Hard disk
» New SCSI controller	LSI Logic SAS
» New Network	YT-Intran-VLAN
» New CD/DVD Drive	Datastore ISO File
» New USB Controller	USB 3.1
» Video card	Specify custom settings
» Security Devices	Not Configured
VMCI device	
New SATA Controller	New SATA Controller
» Other	Additional Hardware

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

CANCEL

BACK

NEXT

Customizes core virtual machine hardware by setting CPU, memory, disk size, network, and installation media, finalizing the VM configuration before creation.

New Virtual Machine

Virtual Hardware **VM Options**

ADD NEW DEVICE

> CPU *	1	GHz
> Memory *	1	GB
> New Hard disk *	20	GB
> New SCSI controller *	LSI Logic SAS	
> New Network *	YT-Intran-VLAN	<input checked="" type="checkbox"/> Connect...
> New CD/DVD Drive *	Datastore ISO File	<input checked="" type="checkbox"/> Connect...
> New USB Controller	USB 3.1	
> Video card *	Specify custom settings	
> Security Devices	Not Configured	
VMCI device		
New SATA Controller	New SATA Controller	
> Other	Additional Hardware	

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

CANCEL **BACK** **NEXT**

Reviews and confirms all virtual machine settings—including compute, storage, networking, and guest OS—before finalizing and creating the virtual machine.

New Virtual Machine

Virtual machine name	stage-web-eg3.procure.prod1
Folder	Procure-DC
Host	10.1.10.90
Datastore	DS-01
Guest OS name	Microsoft Windows Server 2019 (64-bit)
Virtualization Based Security	Disabled
CPUs	1
Memory	1 GB
NICs	1
NIC 1 network	YT-Intran-VLAN
NIC 1 type	E1000E
SCSI controller 1	LSI Logic SAS
Create hard disk 1	New virtual disk
Capacity	20 GB
Datastore	DS-01
Virtual device node	SCSI(0:0)
Mode	Dependent

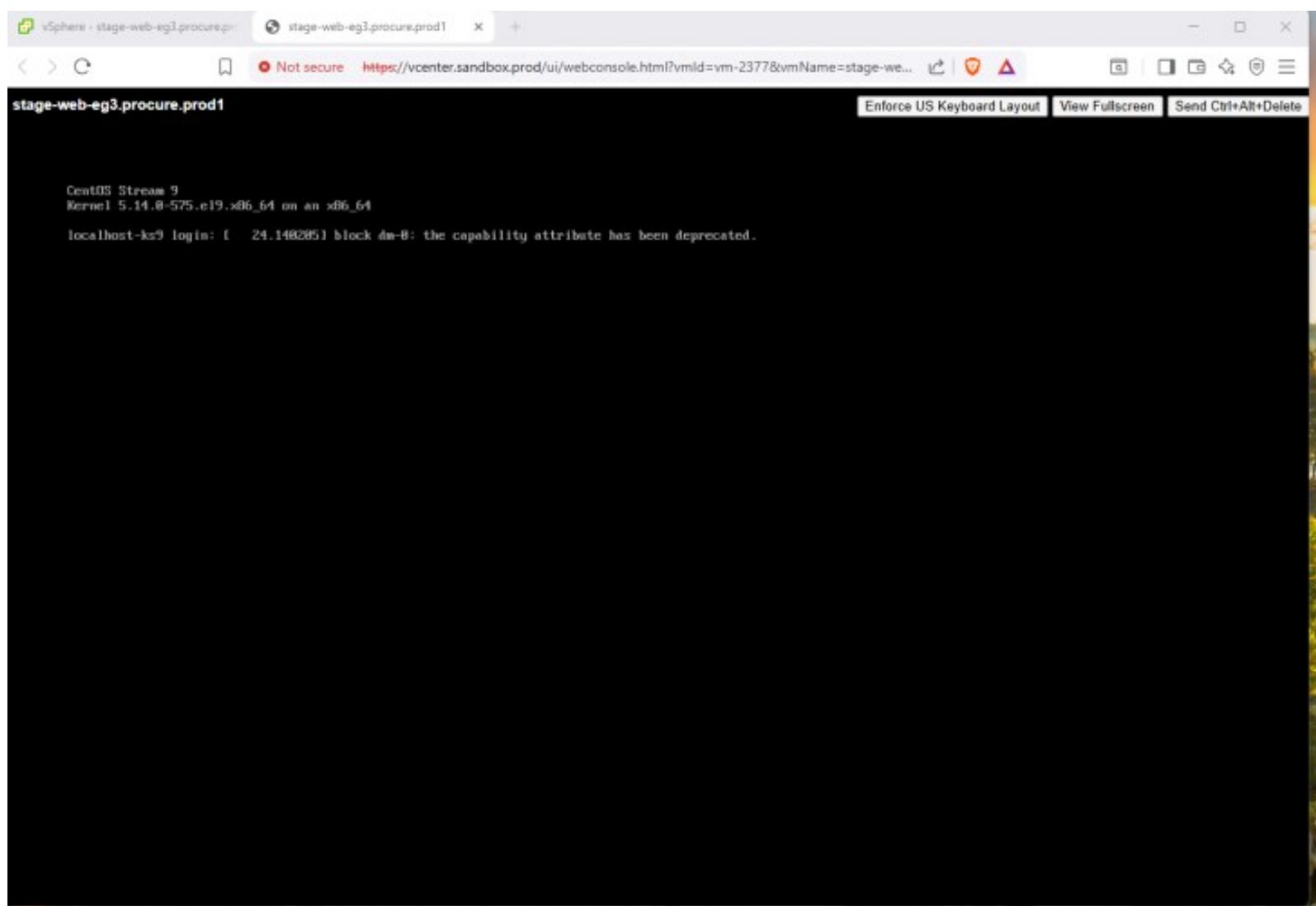
CANCEL BACK FINISH

Confirms the newly created virtual machine appears in vSphere with the assigned configuration, showing its initial powered-off state and allocated resources prior to operating system installation.

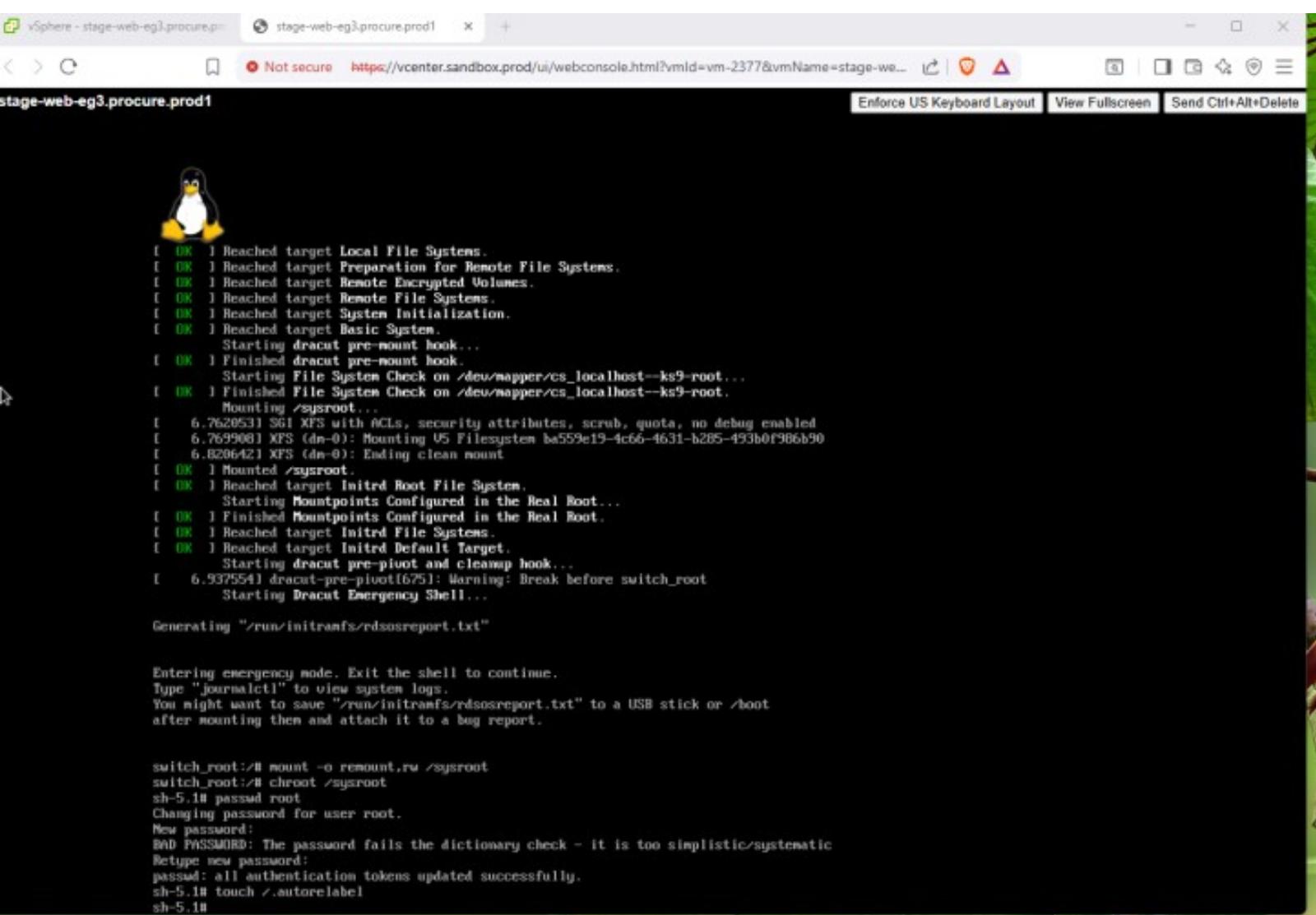
The screenshot shows the vSphere Client interface with the following details:

- Left Sidebar:** A tree view of clusters and resource pools, including:
 - egiron-cluster
 - JKEOWN-CLUSTER
 - dev-app-jkl.procure.p...
 - dev-performance-jkl...
 - stage-web-jkl.procure...
 - kgates-cluster
 - kgrant-cluster
 - khaynes-cluster
 - MBOYLAN-CLUSTER
 - MCLOW-CLUSTER
 - New Resource Pool
 - PSEKAR2-CLUSTER
 - qd-cluster
 - rbatista-cluster
 - Slesperance-CLUSTER
 - tacquaye-cluster
 - TDEXTER-CLUSTER
 - TLINDSEY-CLUSTER
 - tshank-cluster
 - tsint-cluster
 - ucharles-cluster
- Top Bar:** Shows tabs for Summary, Monitor, Configure, Permissions, Datastores, Networks, and Snapshots. The Summary tab is selected.
- VM Details:** The virtual machine 'stage-web-eg3.procure.prod1' is selected. Key details shown include:
 - Guest OS:** Microsoft Windows Server 2019 (64-bit)
 - Power Status:** Powered Off
 - VMware Tools:** Not running, not installed
 - DNS Name:** (not explicitly listed)
 - IP Addresses:** (not explicitly listed)
 - Encryption:** Not encrypted
- Bottom Left:** Buttons for LAUNCH REMOTE CONSOLE and LAUNCH WEB CONSOLE.
- Bottom Right:** Capacity and Usage statistics:
 - CPU: 0 MHz used, 1 CPU allocated
 - Memory: 0 MB used, 1 GB allocated
 - Storage: 0 B used, 22.69 GB allocated
- Bottom Navigation:** Buttons for VIEW STATS, Recent Tasks, and Alarms.

Displays the CentOS Stream 9 console login screen after VM creation, confirming the operating system has booted successfully and is ready for initial configuration and user login.



Shows the CentOS Stream 9 boot process entering emergency mode, displaying system initialization messages and filesystem checks while prompting for root authentication to perform recovery or corrective actions.



vSphere - stage-web-eg3.procure.p... stage-web-eg3.procure.prod1 Not secure https://vcenter.sandbox.prod/ui/webconsole.html?vmId=vm-2377&vmName=stage-we... Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

stage-web-eg3.procure.prod1

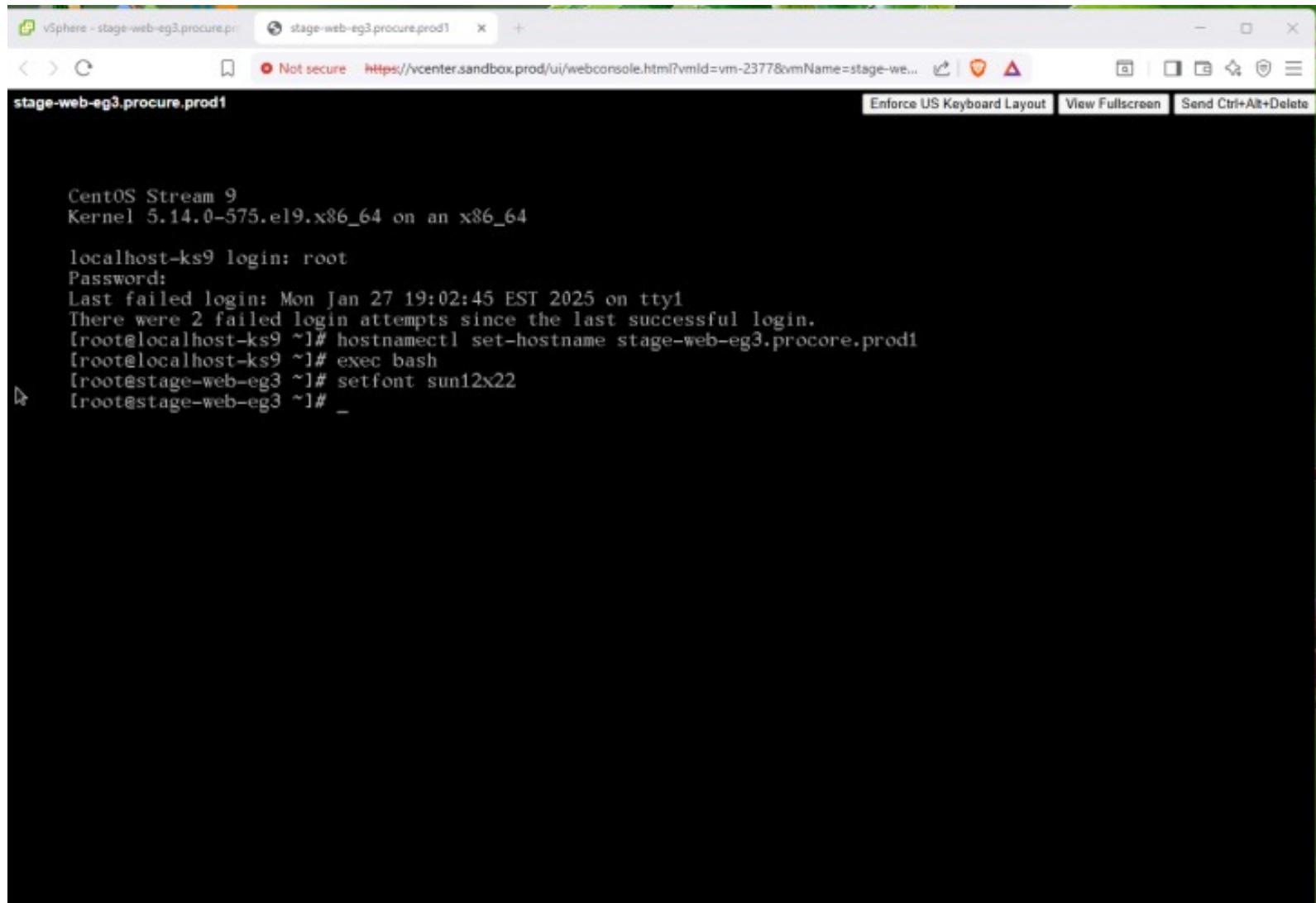
```
[ OK ] Reached target Local File Systems.
[ OK ] Reached target Preparation for Remote File Systems.
[ OK ] Reached target Remote Encrypted Volumes.
[ OK ] Reached target Remote File Systems.
[ OK ] Reached target System Initialization.
[ OK ] Reached target Basic System.
  Starting dracut pre-mount hook...
[ OK ] Finished dracut pre-mount hook.
  Starting File System Check on /dev/mapper/cs_localhost--ks9-root...
[ OK ] Finished File System Check on /dev/mapper/cs_localhost--ks9-root.
  Mounting /sysroot...
[ 6.762053] SGI XFS with ACLs, security attributes, scrub, quota, no debug enabled
[ 6.769908] XFS (dm-0): Mounting U5 Filesystem ba559e19-4c66-4631-b285-493b0f986b90
[ 6.820642] XFS (dm-0): Ending clean mount
[ OK ] Mounted /sysroot.
[ OK ] Reached target Initrd Root File System.
  Starting Mountpoints Configured in the Real Root...
[ OK ] Finished Mountpoints Configured in the Real Root.
[ OK ] Reached target Initrd File Systems.
[ OK ] Reached target Initrd Default Target.
  Starting dracut pre-pivot and cleanup hook...
[ 6.937554] dracut-pre-pivot[675]: Warning: Break before switch_root
  Starting Dracut Emergency Shell...

Generating "/run/initramfs/rdsosreport.txt"

Entering emergency mode. Exit the shell to continue.
Type "journalctl" to view system logs.
You might want to save "/run/initramfs/rdsosreport.txt" to a USB stick or /boot
after mounting them and attach it to a bug report.

switch_root:/# mount -o remount,rw /sysroot
switch_root:/# chroot /sysroot
sh-5.1# passwd root
Changing password for user root.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
passwd: all authentication tokens updated successfully.
sh-5.1# touch /.autorelabel
sh-5.1#
```

Logs in as root on the CentOS Stream 9 system, updates the hostname to the standardized server name, and applies console font settings to complete initial post-install configuration.



The screenshot shows a web browser window titled "stage-web-eg3.procure.prod1" with the URL "https://vcenter.sandbox.prod/ui/webconsole.html?vmId=vm-23778&vmName=stage-we...". The browser indicates "Not secure". The page content is a terminal session:

```
CentOS Stream 9
Kernel 5.14.0-575.el9.x86_64 on an x86_64

localhost-ks9 login: root
Password:
Last failed login: Mon Jan 27 19:02:45 EST 2025 on tty1
There were 2 failed login attempts since the last successful login.
[root@localhost-ks9 ~]# hostnamectl set-hostname stage-web-eg3.procure.prod1
[root@localhost-ks9 ~]# exec bash
[root@stage-web-eg3 ~]# setfont sun12x22
[root@stage-web-eg3 ~]# _
```

Confirms the AssetTiger record reflects the finalized CentOS Stream 9 virtual machine, validating updated hostname, IP address, hardware resources, ownership, and active status for accurate asset inventory tracking.

ASSETTIGER List of Assets Add an Asset Search Changelog See 15 Buy Asset Tags

Procore Edward Garrido Dashboard Assets List of Assets Add an Asset Move Reports Tools Setup Help / Support

Asset View CentOS Stream 9

Asset Tag ID: EG_TICKET21 Site: vSphere
Brand: Location: virtual
Model: Category:
Assigned to:
Status: Available

Details History

Asset Details

Miscellaneous	Serial No	6b0e0b42312bf896ba9a3b047db18ea9		
Custom fields	Server Name	stage-web-eg3.procore.prod1	Owner	edward.garrido
	Organization	Pro-CorePlus	Status	Active
	IP	10.1.30.3	MAC	00:50:56:8b:4a:1a
	CPU	1 VCPU	Memory	1GB
	OS	CentOS Stream 9	Group	Dev

Creation Date Created: 09/23/2025 09:12 PM Created by: Edward Garrido

Download AssetTiger App GET IT ON Google Play Download on the App Store

Review us on Capterra 4.6

Selects Change compute resource only to migrate the virtual machine to a different ESXi host while keeping its existing storage unchanged.

≡ Migrate | stage-web-eg3.procure.prod1 X

Select a migration type VM origin ⓘ

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

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

Selects the destination cluster or host as the new compute resource for the virtual machine migration, confirming compatibility before proceeding.

≡ Migrate | stage-web-eg3.procure.prod1

Select a compute resource

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

VM origin ⓘ

Hosts Clusters Resource Pools vApps

Name	CPU Res...	CPU Limit...	CPU Alo...	CPU Shar...	CPU Shar...	Memory ...
egamido-CLUSTER	0	Unlimited	Expandable	Normal	0	0
egtron-cluster	0	Unlimited	Expandable	Normal	0	0

Filter T

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

Verifies the destination network mapping for the virtual machine during migration, ensuring the network adapter remains connected to the correct VLAN with successful compatibility checks.

☰ Migrate | stage-web-eg3.procure.prod1

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
YT-Intran-VLAN	1 VMs / 1 Network adapters	YT-Intran-VLAN

YT-Intran-VLAN is in use at:

VM	Network Adapter	Network
stage-web-eg3.procure.prod1	Network adapter 1	YT-Intran-VLAN

[ADVANCED >>](#)

Compatibility

 Compatibility checks succeeded.

CANCEL

BACK

NEXT

Selects a high-priority vMotion setting to prioritize CPU resources during the virtual machine migration, helping ensure faster and smoother completion of the move.

Migrate | stage-web-eg3.procure.prod1

Select vMotion priority

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

Reviews and confirms the vMotion migration details—including target host, resource pool, priority, and network settings—before finalizing and starting the virtual machine migration.

≡ Migrate | stage-web-eg3.procure.prod1

Ready to complete

VM origin ⓘ

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	stage-web-eg3.procure.prod1
Host	10.1.10.90
Resource Pool	egarrido-CLUSTER
vMotion Priority	High
Networks	No network reassignments

CANCEL

BACK

FINISH

Confirms the virtual machine is present and accessible in vSphere after migration, indicating successful placement on the target host and readiness for normal operations.

The screenshot shows the vSphere Client interface. On the left is the navigation tree under 'vcenter.sandbox.prod' containing clusters like 'Procore-DC', 'alopez-cluster', 'DTurner-CLUSTER', 'egarido-CLUSTER', 'egiron-cluster', and 'JKOWN-CLUSTER'. In the center, the 'Summary' tab is selected for a virtual machine named 'stage-web-eg3.procure.prod1'. A modal window titled 'Compute Policies' is open, showing the policy 'stage-web-eg3 procure...' which has been applied. Below the summary tab, there are sections for 'Guest OS' and 'Actions'. At the bottom, there are tabs for 'Recent Tasks' and 'Alarms'.

Summary:

A virtual machine was deployed and configured in a VMware vSphere environment, including OS installation with CentOS Stream 9, post-install system setup, asset documentation, and a compute-only vMotion migration. The workflow demonstrates standardized VM provisioning, Linux system administration, and successful live migration with minimal impact.