

# Tenable Core + Tenable Nessus User Guide

Last Revised: August 29, 2023

# Table of Contents

Welcome to Tenable Core + Tenable Nessus	
Get Started	
Tenable Core Requirements	
System and License Requirements	10
Access Requirements	
Default Security Configuration Standards	15
Deploy or Install Tenable Core	20
Deploy Tenable Core in VMware	
Deploy Tenable Core in Hyper-V	23
Deploy Tenable Core in AWS	
Deploy Tenable Core in AWS with Limited Options	
Deploy Tenable Core in AWS with Advanced Options	
Deploy Tenable Core in Microsoft Azure	
Deploy Tenable Core in Microsoft Azure via the Portal	
Deploy Tenable Core in Microsoft Azure via the CLI	
Install Tenable Core on Hardware	
Edit the Network Configuration	
Edit the Proxy Configuration	
Migrate to Oracle Linux 8 Tenable Core (Nessus)	
Disk Management	
Add or Expand Disk Space	
Manually Configure a Static IP Address	
Create an Initial Administrator User Account	

Ø

	Create a Password for the Initial Administrator User Account	52
	Log In to Tenable Core	54
	Configure Tenable Nessus in the Tenable Nessus User Interface	56
C	configure and Manage	57
	View the Dashboard	59
	Add a Server	60
	Edit a Server	61
	Delete a Server	62
	Synchronize Accounts	63
	Manage the System	64
	Change Performance Profile	66
	Restart Tenable Core	67
	Shut Down Tenable Core	68
	Edit Your Tenable Core Hostname	69
	Edit Your Time Settings	70
	View the System Log	71
	Filter the System Log	72
	Manage System Networking	73
	Add a Bonded Interface	74
	Add a Team of Interfaces	76
	Add a Bridge Network	77
	Add a VLAN	78
	Manage System Storage	79
	Rename a Filesystem	80

- Ø -

Delete a Filesystem	81
Manage User Accounts	
Create New User Account	
Edit a User Account	
Delete a User Account	
Manage Services	
Create a Timer	
Generate a Diagnostic Report	
Access the Terminal	
Configure Tenable Nessus in Tenable Core	
Configure a Proxy Server	
Start, Stop, or Restart Your Application	
Manage Updates	102
Configure Automatic Updates	
Configure Your Automatic Update Schedule	
Update On Demand	
Update Tenable Core Offline	
Manage Certificates	
Manage the Server Certificate	
Upload a Custom Server Certificate	
Remove a Custom Server Certificate	117
Upload a Certificate for a Trusted Certificate Authority	
Use Different Certificates for Tenable Core and Your Application	
Application Data Backup and Restore	121

\_\_\_\_\_ Ø –

Configure a Remote Storage Host	
Perform an On-Demand Backup	
Change the Scheduled Backup Time	
Restore a Backup	
SNMP Agent Configuration	
Configure an SNMP Agent via the User Interface	
Configure an SNMP Agent via the CLI	
Take a Virtual Machine Snapshot	
FAQ	

- Ø -

## Welcome to Tenable Core + Tenable Nessus

You can use the Tenable Core operating system to run an instance of Tenable Nessus in your environment. After you deploy Tenable Core + Tenable Nessus, you can monitor and manage your Tenable Nessus processes through the secure Tenable Core platform.

To get started quickly with Tenable Core + Tenable Nessus, see <u>Get Started</u>.

### Features

- Secure, stable platform that reduces the time to your first scan.
- Provides automatic application installation and updates via Tenable public repositories.
- Built on Oracle Linux 8.
- Targets Center for Internet Security (CIS) standards for Oracle Linux 8 with SELinux enabled. For more information, see Default Security Configuration Standards.
- Root access enabled on builds.

### Other Tenable Core Configurations

To run a different Tenable application on Tenable Core, see:

- Tenable Core + Nessus Network Monitor
- Tenable Core + Tenable Security Center
- Tenable Core + Tenable Web App Scanning
- Tenable Core + Tenable OT Security
- Tenable Core + Tenable OT Security Sensor

**Note:** Tenable does not recommend deploying multiple applications on a single instance of Tenable Core. If you want to deploy several applications on Tenable Core, deploy a unique instance for each application.

### **Get Started**

Tenable recommends the following sequence to deploy and get started with Tenable Core + Tenable Nessus.

To get started with Tenable Core:

- 1. Confirm that your environment meets the requirements in <u>Tenable Core Requirements</u>. If necessary, prepare to increase your disk space after you deploy.
- 2. <u>Deploy or install</u> Tenable Core + Tenable Nessus.

**Note**: You can also deploy Tenable Core using the command-line interface (CLI). For more information, see <u>Deploy Tenable Core in Microsoft Azure via the CLI</u>.

- 3. (Optional) If you want to increase your disk space to accommodate your organization's data storage needs, do one of the following:
  - If you are deploying Tenable Core + Tenable Nessus as a virtual machine or on hardware, see <u>Disk Management</u>.
  - If you are deploying Tenable Core + Tenable Nessus in a cloud environment, refer to your cloud platform's documentation for information about increasing disk space.
- (Optional) If Dynamic Host Configuration Protocol (DHCP) is not available on the network where you deployed Tenable Core, <u>configure an IP address</u> for your Tenable Core + Tenable Nessus deployment.
- 5. (Optional) If necessary, log in as a wizard user and create an administrator account, as described in <u>Create an Initial Administrator User Account</u>.

**Note**: You must create an administrator account if you deployed Tenable Core + Tenable Nessus via one of the following methods:

- As a virtual machine
- On hardware

If you deployed Tenable Core + Tenable Nessus in a cloud environment and you did not create a password during deployment, you must <u>create a password for your administrator</u> <u>account</u>.

6. Log In to Tenable Core with your new administrator credentials.

- 7. (Optional) If you want to create more user accounts, see Create New User Account.
- 8. (Optional) If you want to configure Tenable Core to use a proxy server, see <u>Configure a Proxy</u> <u>Server</u>.

 $\bigcirc$ 

9. <u>Configure Nessus</u> to meet the specifications you want for your application.

For more information about configuring and operating Tenable Nessus, see the <u>Nessus User</u> <u>Guide</u>.

 Configure and manage Tenable Core. To access the application interface, see <u>Configure and</u> <u>Manage</u>.

## **Tenable Core Requirements**

You can deploy Tenable Core + Tenable Nessus on any system that meets the following Tenable Core and Tenable Nessus environment requirements.

**Note:** Tenable does not recommend deploying multiple applications on a single instance of Tenable Core. If you want to deploy several applications on Tenable Core, deploy a unique instance for each application.

System and License Requirements

Access Requirements

**Default Security Configuration Standards** 

## **System and License Requirements**

To install and run Tenable Core + Tenable Nessus, your application and system must meet the following requirements established for Tenable Nessus. For more information about Tenable Nessus requirements, see Nessus in the *General Requirements User Guide*.

**Note:** Tenable Support does not assist with issues related to your host operating system, even if you encounter them during installation or deployment.

Environment		Tenable Core File Format	More Information
Virtual Machine	VMware	.ova file	<u>Deploy Tenable Core in</u> <u>VMware</u>
	Microsoft Hyper-V	.zipfile	Deploy Tenable Core in Hyper-V
Cloud	Microsoft Azure	n/a	Deploy Tenable Core in Microsoft Azure
Cloud	Amazon Web Services (AWS)	n/a	Deploy Tenable Core in AWS
Hardware		.iso image	Install Tenable Core on Hard- ware

**Note:** While you could use the packages to run Tenable Core in other environments, Tenable does not provide documentation for those procedures.

### License Requirements

To deploy Tenable Core + Tenable Nessus, your Tenable Nessus application must meet the requirements described in <u>Nessus Licensing Requirements</u> in the *General Requirements User Guide*.

### **Tenable Nessus Hardware Requirements**

Enterprise networks can vary in performance, capacity, protocols, and overall activity. Resource requirements to consider for Tenable Nessus deployments include raw network speed, the size of the network being monitored, and the Tenable Nessus configuration.

**Note:** Tenable does not recommend deploying multiple applications on a single instance of Tenable Core. If you want to deploy several applications on Tenable Core, deploy a unique instance for each application.

### Tenable Nessus Scanners and Tenable Nessus Professional Hardware Requirements

Scenario	Minimum Recommended Hardware		
Scanning up to 50,000	CPU: 4 2GHz cores		
hosts per scan	Memory: 4 GB RAM (8 GB RAM recommended)		
	<b>Disk space:</b> 30 GB, not including space used by the host oper- ating system		
	<b>Note:</b> Your usage (e.g., scan results, plugin updates, and logs) increases the amount of disk space needed over time.		
Scanning more than	CPU: 8 2GHz cores		
50,000 hosts per scan	Memory: 8 GB RAM (16 GB RAM recommended)		
	<b>Disk space:</b> 30 GB, not including space used by the host oper- ating system		
	<b>Note:</b> Your usage (e.g., scan results, plugin updates, and logs) increases the amount of disk space needed over time.		

#### Tenable Nessus Manager Hardware Requirements

Scenario	Minimum Recommended Hardware
Nessus Manager with 0-10,000	CPU: 4 2GHz cores
agents	Memory: 16 GB RAM
	<b>Disk space:</b> 5 GB per 5,000 agents per concurrent scan

Scenario	Minimum Recommended Hardware			
	<b>Note:</b> Scan results and plugin updates require more disk space over time.			
Nessus Manager with 10,001-20,000	CPU: 8 2GHz cores			
agents	Memory: 32 GB RAM			
	<b>Disk space:</b> 5 GB per 5,000 agents per concurrent scan			
	<b>Note:</b> Scan results and plugin updates require more disk space over time.			
	<b>Note:</b> Engage with your Tenable representative for large deployments.			

### Tenable Nessus Supported Browsers

Nessus supports the following browsers:

- Google Chrome (76+)
- Apple Safari (10+)
- Mozilla Firefox (50+)
- Microsoft Edge (102+)

### **Access Requirements**

Your Tenable Core + Tenable Nessus deployment must meet the following requirements.

- Internet Requirements
- Port Requirements

### Internet Requirements

You must have internet access to download Tenable Core files.

After you transfer a file to your machine, internet access requirements to deploy or update Tenable Core vary depending on your environment.

Environment		Tenable Core Format	Internet Requirement
Virtual	VMware	.ova file	You do not need internet access to deploy
Machine	Microsoft Hyper- V	.zipfile	or update Tenable Core.
Cloud	Amazon Web Services (AWS)	n/a	Requires internet access to deploy or update Tenable Core.
Cloud	Microsoft Azure	n/a	
Hardware		.iso image	Requires internet access to install or update Tenable Core.

**Tip:** You do not need access to the internet when you install updates to Tenable Core + Tenable Nessus via an offline .iso file. For more information, see <u>Update Tenable Core Offline</u>.

### Port Requirements

Your Tenable Core deployment requires access to specific ports for inbound and outbound traffic.

#### Inbound Traffic

Allow inbound traffic to the following ports listed.

**Note**: Inbound traffic refers to traffic from users configuring Tenable Core, etc.

Port	Traffic
TCP 22	Inbound SSH connections.
TCP 8000	Inbound HTTPS communications to the Tenable Core interface.
TCP 8090	Inbound HTTPS communications for restoring backups. Inbound communications with the file upload server.
TCP 8834	Inbound communications to the Tenable Core + Tenable Nessus interface.

0 -

#### Outbound Traffic

Allow outbound traffic to the following ports listed.

Port	Traffic
TCP 22	Outbound SSH connections, including remote storage connections.
TCP 443	Outbound communications to the sensor.cloud.tenable.com server for sys- tem updates.
UDP 53	Outbound DNS communications for Tenable Nessus and Tenable Core.

## **Default Security Configuration Standards**

By default, Tenable Core applies security configurations based on the following Center for Internet Security (CIS) standards. For more information about CIS standards, see <u>cisecurity.org</u>.

**Note**: **SELinux:** is enabled by default on the Tenable Core operating system.

### **CIS Standards**

**CIS Benchmarks:** Tenable has implemented the following parts of the CIS Level 1 Benchmark on the Tenable Core:

#### CIS Level 1 - 1.x

- CIS 1.1.1.\* (Disable mounting of miscellaneous filesystems)
- CIS 1.1.21 (Ensure sticky bit is set on all world-writable directories)
- CIS 1.4.\* (Bootloader adjustments)
  - CIS 1.4.1 Ensure permissions on bootloader config are configured
- CIS 1.7.1.\* (Messaging/banners)
  - Ensure message of the day is configured properly
  - Ensure local login warning banner is configured properly
  - Ensure remote login warning banner is configured properly
  - Ensure GDM login banner is configured banner message enabled
  - Ensure GDM login banner is configured banner message text

#### CIS Level 1 - 2.x

- CIS 2.2.\* (disabled packages)
  - x11
  - avahi-server
  - CUPS

- nfs
- Rpc

#### CIS level 1 - 3.x

- CIS 3.1.\* (packet redirects)
  - 3.1.2 Ensure packet redirect sending is disabled 'net.ipv4.conf.all.send\_redirects = 0'
  - 3.1.2 Ensure packet redirect sending is disabled 'net.ipv4.conf.default.send\_redirects =
     0'
- CIS 3.2.\* (ipv4, icmp, etc)
  - 3.2.1 Ensure source routed packets are not accepted 'net.ipv4.conf.all.accept\_source\_ route = 0'
  - 3.2.1 Ensure source routed packets are not accepted 'net.ipv4.conf.default.accept\_ source\_route = 0'
  - 3.2.2 Ensure ICMP redirects are not accepted 'net.ipv4.conf.all.accept\_redirects = 0'
  - 3.2.2 Ensure ICMP redirects are not accepted 'net.ipv4.conf.default.accept\_redirects = 0'
  - 3.2.3 Ensure secure ICMP redirects are not accepted 'net.ipv4.conf.all.secure\_redirects
     = 0'
  - 3.2.3 Ensure secure ICMP redirects are not accepted 'net.ipv4.conf.default.secure\_ redirects = 0'
  - 3.2.4 Ensure suspicious packets are logged 'net.ipv4.conf.all.log\_martians = 1'
  - 3.2.4 Ensure suspicious packets are logged 'net.ipv4.conf.default.log\_martians = 1'
  - 3.2.5 Ensure broadcast ICMP requests are ignored
  - 3.2.6 Ensure bogus ICMP responses are ignored
  - 3.2.7 Ensure Reverse Path Filtering is enabled 'net.ipv4.conf.all.rp\_filter = 1'

• 3.2.7 Ensure Reverse Path Filtering is enabled - 'net.ipv4.conf.default.rp\_filter = 1'

0 -

- 3.2.8 Ensure TCP SYN Cookies is enabled
- CIS 3.3.\* (IPv6)
  - 3.3.1 Ensure IPv6 router advertisements are not accepted
  - 3.3.2 Ensure IPv6 redirects are not accepted
- CIS 3.5.\* (network protocols)
  - 3.5.1 Ensure DCCP is disabled
  - 3.5.2 Ensure SCTP is disabled
  - 3.5.3 Ensure RDS is disabled
  - 3.5.4 Ensure TIPC is disabled

#### CIS Level 1 - 4.x

- CIS 4.2.\* (rsyslog)
  - 4.2.1.3 Ensure rsyslog default file permissions configured
  - 4.2.4 Ensure permissions on all logfiles are configured

#### CIS Level 1 - 5.x

- CIS 5.1.\* (cron permissions)
  - 5.1.2 Ensure permissions on /etc/crontab are configured
  - 5.1.3 Ensure permissions on /etc/cron.hourly are configured
  - 5.1.4 Ensure permissions on /etc/cron.daily are configured
  - 5.1.5 Ensure permissions on /etc/cron.weekly are configured
  - 5.1.6 Ensure permissions on /etc/cron.monthly are configured
  - 5.1.7 Ensure permissions on /etc/cron.d are configured
  - 5.1.8 Ensure at/cron is restricted to authorized users at.allow

- 5.1.8 Ensure at/cron is restricted to authorized users at.deny
- 5.1.8 Ensure at/cron is restricted to authorized users cron.allow
- CIS 5.3.\* (password/pam)
  - 5.3.1 Ensure password creation requirements are configured dcredit
  - 5.3.1 Ensure password creation requirements are configured Icredit
  - 5.3.1 Ensure password creation requirements are configured minlen
  - 5.3.1 Ensure password creation requirements are configured ocredit
  - 5.3.1 Ensure password creation requirements are configured ucredit
  - 5.3.2 Lockout for failed password attempts password-auth 'auth [default=die] pam\_faillock.so authfail audit deny=5 unlock\_time=900'
  - 5.3.2 Lockout for failed password attempts password-auth 'auth [success=1 defaultt=bad] pam\_unix.so'
  - 5.3.2 Lockout for failed password attempts password-auth 'auth required pam\_faillock.so preauth audit silent deny=5 unlock\_time=900'
  - 5.3.2 Lockout for failed password attempts password-auth 'auth sufficient pam\_faillock.so authsucc audit deny=5 unlock\_time=900'
  - 5.3.2 Lockout for failed password attempts system-auth 'auth [default=die] pam\_faillock.so authfail audit deny=5 unlock\_time=900'
  - 5.3.2 Lockout for failed password attempts system-auth 'auth [success=1 default=bad] pam\_unix.so'
  - 5.3.2 Lockout for failed password attempts system-auth 'auth required pam\_faillock.so preauth audit silent deny=5 unlock\_time=900'
  - 5.3.2 Lockout for failed password attempts system-auth 'auth sufficient pam\_faillock.so authsucc audit deny=5 unlock\_time=900'
  - 5.3.3 Ensure password reuse is limited password-auth
  - 5.3.3 Ensure password reuse is limited system-auth

- CIS 5.4.\* (user prefs)
  - 5.4.1.2 Ensure minimum days between password changes is 7 or more
  - 5.4.1.4 Ensure inactive password lock is 30 days or less
  - 5.4.4 Ensure default user umask is 027 or more restrictive /etc/bashrc
- CIS 5.6.\* (wheel group)
  - 5.6 Ensure access to the su command is restricted pam\_wheel.so
  - 5.6 Ensure access to the su command is restricted wheel group contains root

#### CIS Level 1 - 6.x

- CIS 6.1.\* (misc conf permissions)
  - 6.1.6 Ensure permissions on /etc/passwd- are configured
  - 6.1.8 Ensure permissions on /etc/group- are configured

## **Deploy or Install Tenable Core**

You can run Tenable Core + Tenable Nessus in the following environments.

**Note:** Tenable Support does not assist with issues related to your host operating system, even if you encounter them during installation or deployment.

Environment		Tenable Core File Format	More Information
Virtual Machine	VMware	.ova file	<u>Deploy Tenable Core in</u> <u>VMware</u>
	Microsoft Hyper-V	.zipfile	Deploy Tenable Core in Hyper-V
Cloud	Microsoft Azure	n/a	Deploy Tenable Core in Microsoft Azure
Cloud	Amazon Web Services (AWS)	n/a	Deploy Tenable Core in AWS
Hardware		.iso image	Install Tenable Core on Hard- ware

**Note:** While you could use the packages to run Tenable Core in other environments, Tenable does not provide documentation for those procedures.

### **Deploy Tenable Core in VMware**

To deploy Tenable Core + Tenable Nessus as a VMware virtual machine, you must download the Tenable Core + Tenable Nessus .ova file and deploy it on a hypervisor.

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in <u>Sys</u>tem and License Requirements.
- Confirm your internet and port access will support your intended use of the instance, as described in <u>Access Requirements</u>.

#### VMware Version Support

VMware vCenter: Tenable supports versions 7 and 8. The SOAP API is supported on versions 7 and 8, and the REST API is supported on versions 7.0.3 and later.

VMware vSphere: Tenable supports versions 7 and 8. The SOAP API is supported on versions 7 and 8, and the REST API is not supported.

To deploy Tenable Core + Tenable Nessus as a VMware virtual machine:

- 1. Download the **Tenable Core Nessus Installation ISO** file from the <u>Tenable Downloads</u> page.
- 2. Open your VMware virtual machine in the hypervisor.
- Import the Tenable Core + Tenable Nessus VMware .ova file from your computer to your virtual machine. For information about how to import a .ova file to your virtual machine, see <u>VMware documentation</u>.
- 4. In the setup prompt, configure the virtual machine to meet your organization's storage needs and requirements, and those described in System and License Requirements.
- 5. Launch your Tenable Core + Tenable Nessus instance.

The virtual machine boot process appears in a terminal window.

**Note**: The boot process may take several minutes to complete.

When the virtual machine boot process finishes, the Tenable Core + Tenable Nessus deployment is complete . What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

O

## **Deploy Tenable Core in Hyper-V**

To deploy Tenable Core + Tenable Nessus as a Microsoft Hyper-V virtual machine, you must download the Tenable Core + Tenable Nessus .zip file and deploy it on the host where you want to launch Tenable Core + Tenable Nessus.

**Note:** After you download the .zip file, you can use an external storage device to deploy it on another machine. You do not need internet access on the machine hosting Tenable Core.

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in System and License Requirements.
- Confirm your internet and port access will support your intended use of the instance, as described in <u>Access Requirements</u>.

To deploy Tenable Core + Tenable Nessus as a Hyper-V virtual machine:

- 1. Download the **Tenable Core Nessus HyperV Image** file from the <u>Tenable Downloads</u> page.
- Navigate to your Hyper-V Manager on the machine where you want to deploy Tenable Core + Tenable Nessus.
- 3. Extract the .zip file you previously downloaded. Extracting may take a few minutes.
- 4. In your Hyper-V Manager, create a new virtual machine.

The Hyper-V Manager wizard appears.

5. In the setup wizard, adjust the virtual machine configurations to meet your organization's storage needs, and the requirements described in System and License Requirements.

**Note:** Tenable recommends that you select **Generation 1** when the Hyper-V Manager wizard prompts you during the configuration.

- 6. When prompted to Connect to a Virtual Hard Disk in the wizard, select **Use an existing vir-tual hard disk.**
- 7. Click **Browse** and select the .vhd file.

#### 8. Click Finish.

The Hyper-V setup completes.

- 9. (Optional) If you want to increase the number of CPUs on your virtual machine:
  - a. In the Virtual Machines table, right-click the row for your machine and click Settings.

The settings window appears.

- b. In the Hardware section, click Processor.
- c. Modify the settings as necessary.
- d. Click Ok.
- 10. In the **Virtual Machines** table, right-click the row for your machine and click **Start** or **Connect**.

The virtual machine load process appears in a console. The load process may take several minutes to complete.

What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

## **Deploy Tenable Core in AWS**

You can deploy Tenable Core + Tenable Nessus in Amazon Web Services (AWS) via the AWS Marketplace.

0

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in <u>System and License Requirements</u>.
- Confirm your internet and port access will support your intended use of the instance, as described in <u>Access Requirements</u>.

To deploy a Tenable Core virtual machine in AWS:

- 1. Log in to AWS. For more information, see the AWS Documentation.
- 2. Navigate to the Amazon Marketplace.
- 3. In the Amazon Marketplace search bar, type **Tenable Core + Tenable Nessus**.
- 4. Click the result for **Tenable Core + Tenable Nessus**.

The product overview page appears.

5. Click Continue to Subscribe.

Either a terms and conditions window or the basic configurations page appears.

- a. If the terms and conditions window appears, click Accept Terms.
- b. Click Continue to Configuration.

The basic configurations page appears.

- 6. Select the region where you want to operate your virtual machine. AWS preselects fulfillment and software versions for the AMI based on your region.
- 7. Click Continue to Launch.

The launch options page appears.

8. In the **Choose Action** drop-down box, select one of the following:

 Launch from Website – Continue deploying in a simplified launch page with limited configuration options. For more information, see <u>Deploy Tenable Core in AWS with Limited</u> <u>Options</u>.

0 -

\_\_\_\_\_

• Launch through EC2 — Continue deploying in an advanced launch instance wizard with complete configuration options, including options for cloud-init. For more information, see Deploy Tenable Core in AWS with Advanced Options.

What to do next:

• Create a Password for the Initial Administrator User Account

# **Deploy Tenable Core in AWS with Limited Options**

When deploying Tenable Core in Amazon Web Services (AWS), you can deploy via Amazon Elastic Cloud Compute (Amazon EC2) using a simplified launch page with limited configuration options. If you need to configure cloud-init or other advanced options, see <u>Deploy Tenable Core in AWS with Advanced Options</u>.

Before you begin:

• Begin deploying Tenable Core + Tenable Nessus, as described in <u>Deploy Tenable Core in AWS</u>.

To continue deploying via the website:

- Click the instance type you want to use to deploy Tenable Core + Tenable Nessus. AWS
  preselects your Tenable-recommended instance type.
- 2. Select the virtual private cloud (VPC) where you want to launch your Tenable Core instance, based on your organization's network requirements.

**Tip**: For information about your organization's network requirements, contact your system administrator.

- 3. In the **Subnet** section, select the subnet you want to use.
- 4. In the **Security Group Settings** section, create or select a security group that meets the requirements described in <u>Port Requirements</u>.
- 5. In the **Key Pair Settings** section, select the SSH key pair option you want to use for the default administrator account in Tenable Core.
- 6. Click Launch.

AWS deploys and launches your Tenable Core instance as a virtual machine in AWS.

What to do next:

<u>Create a Password for the Initial Administrator User Account</u>

# **Deploy Tenable Core in AWS with Advanced Options**

When deploying Tenable Core in Amazon Web Services (AWS), you can deploy via Amazon Elastic Cloud Compute (Amazon EC2) using an advanced launch instance wizard with complete configuration options, including options for cloud-init. If you want a more streamlined experience and you do not need to configure cloud-init options, see <u>Deploy Tenable Core in AWS with Limited</u> <u>Options</u>.

Before you begin:

• Begin deploying Tenable Core + Tenable Nessus, as described in <u>Deploy Tenable Core in AWS</u>.

To continue deploying via Amazon EC2:

- Configure the options based on the specifications you want for your instance and the requirements described in <u>Tenable Core Requirements</u>. For information about specific configurations in AWS, see the AWS Documentation.
- 2. Click the **Configure Instance** tab.

In the **Advanced Settings** section, in the text box, paste the following:

```
#cloud-config
runcmd:
# Link Nessus to tenable.io
-
-
- /opt/nessus/sbin/nessuscli
- managed
- link
- --key "your Tenable Vulnerability Management linking key"
- "--cloud"
```

**Tip**: You can add more configurations (for example, password, new users, and groups) to your instance by modifying the configurations and values in this text. For more information, see the *cloud-init Documentation*.

3. Click Launch.

An SSH key pair window appears.

4. In the drop-down box, select the key pair option you want to use for your instance.

**Caution**: Do not select the option to proceed without a key pair. If you launch your Tenable Core instance without a key pair you cannot connect to the instance, and you cannot add an SSH key pair later.

5. In the lower-left corner, click Launch Instances.

AWS deploys and launches your Tenable Core instance as a virtual machine in AWS.

What to do next:

• Create a Password for the Initial Administrator User Account

# **Deploy Tenable Core in Microsoft Azure**

It is typically simplest to create and configure Tenable Core + Tenable Nessus using the Microsoft Azure portal, as described in Deploy Tenable Core in Microsoft Azure via the Portal.

O

In some cases, you may prefer to use the Microsoft Azure command line interface (CLI) to deploy Tenable Core in Azure, as described in <u>Deploy Tenable Core in Microsoft Azure via the CLI</u>.

# **Deploy Tenable Core in Microsoft Azure via the Portal**

It is typically simplest to create and configure Tenable Core + Tenable Nessus using the Microsoft Azure portal.

In some cases, you may prefer to use the Microsoft Azure command line interface (CLI) to deploy Tenable Core in Azure, as described in <u>Deploy Tenable Core in Microsoft Azure via the CLI</u>.

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in <u>System and License Requirements</u>.
- Confirm your internet and port access will support your intended use of the instance, as described in <u>Access Requirements</u>.

To deploy a Tenable Core + Tenable Nessus virtual machine via the Azure portal:

- 1. Log in to the Microsoft Azure portal. For more information, see the Microsoft Azure Documentation.
- 2. Create a new resource by searching for the **TenableCore Nessus** template.
- 3. Configure all desired options.

**Note:** If you want Tenable Core + Tenable Nessus to link automatically to Tenable Vulnerability Management on first boot, enter the following in the advanced settings using the custom data box:

```
#cloud-config
runcmd:
# Link Nessus to tenable.io
-
-
- /opt/nessus/sbin/nessuscli
- managed
- link
- "--key=<Your Tenable.io linking key>"
- "--cloud"
```

4. Start the virtual machine deployment.

Azure begins the virtual machine deployment. Azure displays a success message when finished.

0 \_\_\_\_\_

What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

# Deploy Tenable Core in Microsoft Azure via the CLI

It is typically simplest to create and configure Tenable Core + Tenable Nessus using the Microsoft Azure portal, as described in <u>Deploy Tenable Core in Microsoft Azure via the Portal</u>.

In some cases, you may prefer to use the Microsoft Azure command line interface (CLI) to deploy Tenable Core in Azure.

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in <u>System and License Requirements</u>.
- Confirm your internet and port access will support your intended use of the instance, as described in <u>Access Requirements</u>.

To deploy a Tenable Core + Tenable Nessus virtual machine via the Azure CLI:

- 1. In a text editor, open a new file.
- 2. If you want Tenable Core + Tenable Nessus to link automatically to Tenable Vulnerability Management on first boot, copy and paste the following configuration variables:

```
#cloud-config
runcmd:
# Link Nessus to tenable.io
-
-
- /opt/nessus/sbin/nessuscli
- managed
- link
- "--key=<Your Tenable.io linking key>"
- "--cloud"
```

- 3. Save and close the configuration file.
- 4. Log in to the Azure CLI.
- 5. In the Azure CLI, run the az vm create command to deploy the file, using the following variables:

az vm create --size <The size of your virtual machine> --image <tenable:tenablecorenessus:tenablecorenessusbyol:latest> --resource-group <Your resource group name> --location <Your location (for example, eastus)> --name <The name you want to call your VM (for example, Nessus\_123)> --admin-username <The username for your Tenable Core administrator> --admin-password <The password for your Tenable Core administrator>

**Tip:** For more information about the Azure CLI, see the *Microsoft Azure CLI Documentation*.

The system deploys your Tenable Core + Tenable Nessus virtual machine.

What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

### Install Tenable Core on Hardware

You can install Tenable Core + Tenable Nessus directly on hardware using an .iso image. When you install Tenable Core via an .iso image on your computer, Tenable Core replaces your existing operating system with the Tenable Core operating system.

**Note:** Tenable Core currently supports two host operating system options: Oracle Linux 8 (OL8) and CentOS (EL7).

Before you begin:

- Confirm your environment will support your intended use of the instance, as described in <u>System and License Requirements</u>.
- Confirm your internet and port access will support your intended use of the instance, as described in Access Requirements.

To install Tenable Core + Tenable Nessus on hardware:

- 1. Download the **Tenable Core Nessus Installation ISO** file from the <u>Tenable Downloads</u> page.
- 2. Boot the .iso. For more information, see your environment documentation.

**Caution:** Booting the .iso replaces your existing operating system with the Tenable Core operating system.

**Tip:** To monitor the progress of the installation, select **Install TenableCore using serial console** from the boot menu. For more information about the Tenable OT Security serial console, see the *Tenable OT Security User Guide*.

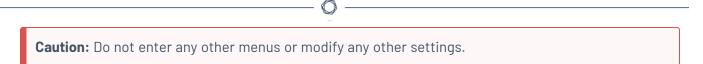
The installer installs Tenable Core + Tenable Nessus on your hardware.

3. The installation begins if there are no configuration errors.

For Tenable Core deployments with EL7 operating systems:

The **Installation** menu appears if there are configuration errors.

If you need to resolve configuration errors [!] with your **4) Installation source** or **5) Software selection** settings, see <u>Edit the Network Configuration</u> or <u>Edit the Proxy Configuration</u>.



The installation runs and the server restarts.

#### For Tenable Core deployments with OL8 operating systems:

The **Installation** menu appears if there are configuration errors (such as errors after setting up a Base Repository, for example):

© tenable	INSTALLATION SUMMARY		TENABLE CORE 8 INSTALLATION
	LOCALIZATION         Image: Support English (US)         Image: Support English (United States)         Image: Support English (United States)	SOFTWARE Solution Source Error setting up base repository	SYSTEM         Image: Installation Destination         Warning checking storage         configuration         Image: I
	A Please complete items marked with this icon b		Quit Begin Installation won't touch your disks until you click 'Begin Installation'.

The installation runs and the server restarts.

What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

## **Edit the Network Configuration**

During installation, you may need to edit the network configuration settings. Perform this procedure to resolve errors [!] with your **4) Installation source** and/or **5) Software selection** settings.

**Caution:** Do not enter any other menus or modify any other settings.

To edit the network configuration:

- 1. From the **Installation** menu, press the **8** key.
- 2. Press the **Enter** key.

The Network Configuration menu appears.

- 3. Press the **2** key.
- 4. Press the **Enter** key.

The **Device Configuration** menu appears.

Review the 1) IPv4 address or "dhcp" for DHCP, 2) IPv4 netmask, 3) IPv4 gateway, and 6)
 Nameservers settings and, if necessary, edit them.

For example, you must edit these settings if you are installing Tenable Core on a static network without DHCP.

- 6. Check 8) Apply configuration in installer.
- 7. Press the **c** key until you return to the **Installation** menu.
- 8. Press the **r** key to refresh the menu.
- 9. Confirm that settings 1-7 show an **[x]**. If the settings all show an **[x]** proceed to step 11.
- 10. If 4) Installation source still shows a [!]:

Refresh the repository URL:

- a. Press the **4** key.
- b. Press the **Enter** key.

The Installation Source menu appears.

- c. Press the **3** key.
- d. Press the **Enter** key.

The Installation Source submenu appears.

- e. Press the **2** key.
- f. Press the **Enter** key.

The Specify Repo Options menu appears.

- g. Press the **c** key.
- h. Press the **Enter** key.

The system refreshes the repository URL and the **Installation** menu appears.

Ø

- 11. Press the **r** key to refresh the menu.
- 12. Press the **c** key until you return to the **Installation** menu.

# **Edit the Proxy Configuration**

During installation, you may need to edit the proxy configuration settings to identify the proxy you want to use for internet access.

**Caution:** Do not enter any other menus or modify any other settings.

To edit the proxy configuration:

- 1. From the **Installation** menu, press the **3** key.
- 2. Press the **Enter** key.

The **Proxy Configuration** menu appears.

3. Type the proxy you want to use. For example, https://username:password@192.0.2.221:3128.

**Note:** If your password includes a special character, the special character must be HTML URL encoded.

- 4. Press the **Enter** key.
- 5. If your proxy is a man-in-the-middle proxy that intercepts SSL traffic, a prompt appears.

In the prompt:

- 1. Type yes.
- 2. Press the **Enter** key.

The system temporarily disables SSL verification. The system automatically re-enables SSL verification after the installation completes.

The **Installation** menu appears.

- 6. Press the **4** key.
- 7. Press the **Enter** key.

The Installation Source menu appears.

- 8. Press the **3** key.
- 9. Press the **Enter** key.

The **Installation Source** submenu appears.

- 10. Press the **2** key.
- 11. Press the **Enter** key.

The Specify Repo Options menu appears.

- 12. Press the **c** key.
- 13. Press the **r** key, then the **Enter** key.
- 14. If necessary, continue pressing the **r** key, then the **Enter** key until **4) Installation source** no longer says (**Processing...**).

O

The system refreshes the repository URL.

# Migrate to Oracle Linux 8 Tenable Core (Nessus)

To migrate Nessus from an existing Tenable Core instance to a new Oracle Linux 8 Tenable Core instance, you will need to perform two tasks: backup your current Nessus installation on the current Tenable Core and restore that backup on the new Tenable Core instance.

**Note**: During a backup or a restore, Tenable Core stops the Tenable Nessus application service. You cannot use Tenable Nessus or the Tenable Nessus interface during this time.

After the backup or restore completes, your services restart and Tenable Nessus resumes normal function.

Before you begin:

- Configure your remote storage host, as described in <u>Configure Remote Storage Host</u>.
- Check your firewall settings and confirm that your computer can access port 8090 on Tenable Core, as described in <u>Access Requirements</u>.

**Caution**: When you back up Nessus, your license information and settings are preserved. Nessus does not back up scan results.

#### Back up the current Tenable Nessus configuration:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Backup/Restore**.

The **Backup/Restore** page appears.

3. In the AVAILABLE MODULES section, click Take Backup Now next to Nessus (Configuration Only).

The **BACKUP IN PROGRESS** window appears. The window disappears after the system completes the backup.

#### **Restore the Nessus configuration to Oracle Linux 8 Tenable Core:**

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Backup/Restore**.

The **Backup/Restore** page appears.

3. In the UPLOAD AND RESTORE section, click Choose a file.

Your file manager appears.

- 4. Select the desired backup file.
- 5. Click **Open**.

A details window for the backup appears.

6. If prompted, confirm that you want to upgrade or downgrade your current Tenable Core application version to match the application version from your backup file.

#### a. Click Install Correct Version.

A confirmation window appears.

#### b. Click Replace.

Tenable Core installs the correct version of your application.

The restore window appears.

#### 7. Click Restore.

The system restores your backup to Tenable Core.

**Note**: Do not log out of Tenable Core or close your browser until after the **Uploading the archive** task is complete. If you end your session early, the restore fails.

When the restore finishes, a success message appears.

**Tip**: If the restore attempt fails, an error message appears with details and remediation instructions. Resolve the errors and click **Retry**.

# **Disk Management**

You can use the Tenable Core interface to manage some aspects of your Tenable Core machine disk space. Tenable Core uses Linux logical volume management (LVM) for disk management.

Disk management via the Tenable Core interface assumes you understand basic LVM terminology:

- Volume group A group of one or more physical volumes.
- Physical volume A hard disk, hard disk partition, or RAID unit.
- Logical volume A block of space on the volume group sized to mirror several or all of your physical volumes.
- File system The file system on the logical volume.
- Mount point The location where you mounted the file system in your operating system.

For more information about these concepts, see general documentation for Linux.

### **Tenable Core Partitions**

Tenable Core deploys with the following preconfigured partitions:

- /boot
- Swap
- /
- /var/log
- /opt

To add more storage space to Tenable Core (typically, in /opt), add a disk or expand a disk as described in Add or Expand Disk Space.

## Add or Expand Disk Space

If you need more space in Tenable Core to meet the <u>requirements</u>, add space to your machine by expanding an existing disk or adding a new disk. For general information about Tenable Core disk management, see <u>Disk Management</u>.

**Caution:** You cannot reassign disk space after you have assigned the space to a file system.

To add or expand existing disk space on your Tenable Core machine:

- 1. Power down your machine, as instructed by your local administrator or the documentation for your local environment.
- 2. Add a new disk or expand an existing disk in your machine configuration, as instructed by your local administrator or the documentation for your local environment.
- 3. Power up your machine, as instructed by your local administrator or the documentation for your local environment.
- 4. Log in to Tenable Core.

The **System** page appears.

5. In the left navigation bar, click **Storage**.

The **Storage** page appears.

 In the Filesystems section, locate the file system with /opt as the Mount Point and note the file system Name (for example, /dev/vg0/00).

**Tip:** Typically, you want to add space to /opt. To add more storage space to a less common partition (for example, / or /var/log), locate the file system for that partition.

 Click the row for the file system Name that includes your preferred partition as the Mount Point.

The Volume Group page appears.

8. In the **Physical Volumes** section, click the + button.

The Add Disks window appears.

- 9. Click the check box for the space you added.
- 10. Click **Add**.

The **Volume Group** page appears, updated to show the added space in the **Physical Volumes** section.

- 11. In the **Logical Volumes** section, expand the section for the file system **Name** that includes your preferred partition as the **Mount Point**.
- 12. Click **Grow**.

The Grow Logical Volume window appears.

- 13. Use the slider to increase the size of the file system to your desired size (typically, to the new maximum).
- 14. Click **Grow**.

The system expands the logical volume and the file system.

The **Volume Group** page appears, refreshed to reflect the new size.

# Manually Configure a Static IP Address

If you deploy Tenable Core in an environment where DHCP is configured, Tenable Core automatically receives network configurations (including your IP address). If DHCP is not configured, you must manually configure a static IP address in Tenable Core.

For more information about the default NIC configuration in your environment, see <u>System and</u> <u>License Requirements</u>.

Before you begin:

- Deploy or install Tenable Core + Tenable Nessus, as described in <u>Deploy or Install Tenable</u> <u>Core</u>.
- Contact your network administrator and obtain your network's netmask and the IP address for your Tenable Core + Tenable Nessus deployment.

To configure a static IP address manually:

1. In the command-line interface (CLI) in Tenable Core, type the following to log in as a wizard user:

tenable-y3u1xwh1 login: wizard
Password: admin

A prompt appears asking if you want to configure a static IP address.

2. Press the **y** key.

(Optional) If the prompt does not appear, in the command-line interface (CLI) in Tenable Core, run the following command to access the configuration user interface:

nmtui edit

The list of connections page appears.

- 3. Select the connection you want to configure.
- 4. Press Tab to select <Edit>.

5. Press Enter.

The Edit Connection window appears.

- 6. In the IPv4 Configuration row, press Tab to select <Automatic>.
- 7. Press Enter.
- 8. Select **<Manual>** from the drop-down box.
- 9. Press Enter.
- 10. Press Tab to select <Show>.
- 11. Press Enter.

More configuration fields appear.

**Note**: Type the value for each configuration field as four numbers separated by a period. Refer to the examples for each field.

12. In the **Addresses** field, type the IPv4 IP address for your Tenable Core + Tenable Nessus deployment, followed by a forward slash and your netmask.

Example:

192.0.2.57

13. In the **Gateway** field, type your gateway IP address.

Example:

192.0.2.177

14. In the **DNS servers** field, type your DNS server IP address.

Example:

192.0.2.176

15. Press Tab to select <Add...>.

**Note**: Complete steps 12-15 only if you have more DNS server IP addresses to add. Repeat for each IP address.

16. Press Enter.

An empty box appears in the **DNS servers** row.

17. In the new row, type your second DNS server IP address.Example:

192.0.2.8

- 18. Select the check the box in the **Require IPv4 addressing for this connection** row.
- 19. Press Tab to select <OK>.

The list of connections appears.

- 20. Press Tab to select <Quit>.
- 21. Press Enter.

If you log in with a wizard, a prompt appears asking if you want to create an administrator account.

To create an administrator account, see Create a First-Time User Account.

You are logged out of the wizard account.

- 22. Log into the CLI using the administrator account.
- 23. Restart the connection. In the command-line interface (CLI) in Tenable Core, run the following command:

\$ nmcli connection down "Wired connection 1" && nmcli connection up "Wired connection 1"

**Note**: Restarting the connection enables the system to recognize your static IP address. You can reboot the system instead to trigger the response.

What to do next:

 Confirm that the Tenable Core **nic1** MAC address matches the NIC MAC address in your VMware passive scanning configuration. If necessary, modify your VMware configuration to match your Tenable Core MAC address. For more information, see <u>System and License</u> <u>Requirements</u>.

O

## **Create an Initial Administrator User Account**

The first time you access Tenable Core + Tenable Nessus, you log in as a wizard user.

Then, you create an initial administrator account.

**Tip:** If you delay creating an initial administrator account, after a few minutes, the system locks you out of the wizard user account. Reboot Tenable Core to proceed with the initial administrator account creation.

Before you begin:

 Deploy or install Tenable Core + Tenable Nessus, as described in <u>Deploy or Install Tenable</u> <u>Core</u>.

To create an initial administrator user account:

1. Navigate to the URL for your Tenable Core virtual machine.

The login page appears.

- 2. In the **User name** field, type **wizard**.
- 3. In the **Password** field, type **admin**.
- 4. Click Log In.

The Create New Administrator window appears.

- 5. In the **Username** field, type the username you want to use for your administrator account.
- 6. In the **Password** field, type a new password for your administrator account.

**Note**: Your password must meet the following minimum requirements:

- Minimum 14 characters long
- One capital letter
- One lowercase letter
- One numeric digit (0-9)
- One special character (~`!@#\$%^&\*()+=\_-{}[]\!:;"?/<>,.)

• Cannot be a palindrome (i.e., a word or phrased spelled the same backward and forward)

O

7. Click Create Account.

A confirmation window appears.

8. Click Finish Setup.

Tenable Core creates your user account.

9. Click Log Out.

Tenable Core logs you out.

#### What to do next:

- (Optional) If you want to log in again, see <u>Log In to Tenable Core</u>.
- (Optional) If you want to create another user account, see Create New User Account.

**Note**: Log in again to create a new user account.

# **Create a Password for the Initial Administrator User Account**

If you deployed Tenable Core + Tenable Nessus in a <u>cloud environment</u> and did not create a password during deployment, you cannot access the Tenable Core interface. Create a password for your administrator account via SSH to access the Tenable Core interface.

You do not need to create a password via SSH when deploying Tenable Core + Tenable Nessus in any of the other supported environments.

Before you begin:

• Confirm you have an SSH client installed that can access your Tenable Core server.

To create a password for the initial administrator user account:

- 1. Open a connection to Tenable Core with your SSH client via one of the following methods:
  - If your SSH client uses a command-line interface (CLI), run the following command:

ssh <your administrator username>@<your Tenable Core hostname or IP address>

• If your SSH client uses a user interface, open the interface and follow the prompts to connect to Tenable Core via SSH.

Tenable Core connects to your SSH client.

**Note:** When prompted, provide your Tenable Core username via one of the following methods:

- If you deployed in Amazon Web Service (AWS), type ec2-user as your username.
- If you deployed in Microsoft Azure, type the username you configured during your deployment.
- 2. Run the sudo passwd command.

#### sudo passwd "\$USERNAME"

The SSH client prompts you to provide a password.

3. Type the password you want to use for your administrator account.

**Note**: Your password must meet the following minimum requirements:

- Minimum 14 characters long
- One capital letter
- One lowercase letter
- One numeric digit (0-9)
- One special character (~`!@#\$%^&\*()+=\_-{}[]\\:;"?/<>,.)
- Cannot be a palindrome (i.e., a word or phrased spelled the same backward and forward)
- 4. Press Enter.

Tenable Core assigns the password to your administrator account.

5. Run the exit command to log out of Tenable Core.

#### What to do next:

• Continue getting started with Tenable Core + Tenable Nessus, as described in <u>Get Started</u>.

## Log In to Tenable Core

Log in to Tenable Core to configure and manage your Tenable Core + Tenable Nessus instance in the Tenable Core interface.

Before you begin:

• Deploy Tenable Core + Tenable Nessus, as described in <u>Deploy or Install Tenable Core</u>.

**Note:** For information on inbound and outbound port requirements, see <u>Access Requirements</u>.

To log in to Tenable Core:

1. Navigate to the URL for your Tenable Core virtual machine.

The login page appears.

- 2. In the **User name** field, type your username.
- 3. In the **Password** field, type your password.
- 4. (EL7 deployments only) Select the Reuse my password for privileged tasks check box.

**Note**: You cannot configure or manage your instance of Tenable Core + Tenable Nessus if you do not select the **Reuse my password for privileged tasks** check box.

5. Click Log in.

Tenable Core logs you in to the user interface.

To access administrative or limited access modes (OL8 deployments only):

• You can access an administrative access mode by clicking the **Administrative access** button at the top of the page. In administrative access mode, you can switch back to a limited access mode by clicking the 🗅 Limited access button in the same location.

O

	Limited access	🕐 Help 🝷	🔹 Session 👻
Web console is running in limited access mode. Turn on administrative access			
tenable-umwey6bv running Oracle Linux Server 8.7			

## **Configure Tenable Nessus in the Tenable Nessus User Interface**

After you deploy Tenable Core + Tenable Nessus and complete the initial configuration tasks, complete the configuration steps for Tenable Nessus.

To configure Tenable Nessus:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Nessus**.

The **Nessus** page appears.

3. In the **Nessus Installation Info** section, next to **URLs**, click the URL hyperlink.

The Welcome to Nessus page appears.

4. Complete the confirmation tasks for your selected Tenable Nessus product, as described in Configure Nessus in the Tenable Nessus User Guide.

### **Configure and Manage**

You can use the Tenable Core user interface to configure and manage Tenable Core + Tenable Nessus.

View the Dashboard

Add a Server

Edit a Server

Delete a Server

Synchronize Accounts

Manage the System

**Change Performance Profile** 

Restart Tenable Core

Shut Down Tenable Core

Edit Your Tenable Core Hostname

Edit Your Time Settings

View the System Log

Filter the System Log

Manage System Networking

Add a Bonded Interface

Add a Team of Interfaces

Add a Bridge Network

Add a VLAN

Manage System Storage

Rename a Filesystem

Delete a Filesystem

Manage User Accounts

Create New User Account

Edit a User Account

Delete a User Account

Manage Services

Create a Timer

Generate a Diagnostic Report

Access the Terminal

Configure Tenable Nessus in Tenable Core

Configure a Proxy Server

Start, Stop, or Restart Your Application

Manage Updates

Manage Certificates

Application Data Backup and Restore

**SNMP Agent Configuration** 

Configure an SNMP Agent via the User Interface

Configure an SNMP Agent via the CLI

Take a Virtual Machine Snapshot

Ø

## **View the Dashboard**

You can use the **Dashboard** page to view usage statistics and manage your attached servers.

O

To view the Tenable Core dashboard:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. Hover over the left navigation bar and click **Overview**.

The **Overview** page appears.

You can:

Section	Action
Data	• View a graph of the <b>CPU</b> usage on your instance.
graphs	• View a graph of the <b>Memory</b> usage on your instance.
	• View a graph of the <b>Network</b> bandwidth usage on your instance.
	• View a graph of the <b>Disk I/O</b> bandwidth usage on your instance.
	• To change the time range for data displayed in the graph:
	1. In the top-right corner of the graph, click the drop-down box.
	2. Select a time range.
	The system refreshes the graph.
Servers	• Add a server, as described in <u>Add a Server</u> .
table	• Edit a server, as described in <u>Edit a Server</u> .
	• Delete a server, as described in <u>Delete a Server</u> .
	• Synchronize user accounts, as described in <u>Synchronize Accounts</u> .
	<ul> <li>To view detailed information about a server, click a server row. For more information, see <u>System</u>.</li> </ul>

### Add a Server

To add a server:

Note: You can add as many servers to the Dashboard as you want.

1. Hover over the far-left navigation bar.

The left navigation plane appears.

2. Click Dashboard.

The **Dashboard** page appears.

3. Click the 🔁 icon.

The Add Machine to Dashboard window appears.

- 4. In the **Address** field, type the IP address or hostname for the server you want to add.
- 5. In the **Color** field, click the color you want to represent the server.
- 6. Click Add.

A confirmation window appears.

**Note**: If Tenable Core cannot establish authentication, the Unknown Host window appears. Contact your administrator to confirm your server's name or IP address.

#### 7. Click Connect.

A credentials window appears.

8. Type your credentials in the **User name** and **Password** fields.

**Note**: To synchronize your accounts so that your account information and passwords are the same across multiple servers, click the *synchronize accounts and passwords* link. Refer to <u>Synchronize</u> <u>Accounts</u> for more information.

#### 9. Click Log In.

Tenable Core adds the server to your list of servers in the **Servers** table.

Note: If the server does not appear in the list right away, refresh the browser.

### **Edit a Server**

To edit a server:

1. From the top bar in the **Servers** table, click the 🗸 icon.

A pencil icon ( $\checkmark$ ) and a trashcan icon ( $\degree$ ) appear next to each server name.

O

2. Click the 🖊 icon.

The Edit Server window appears.

- 3. Do any of the following:
  - In the **Host Name** box, type the name you want for your server.
  - Update the server color:
    - In the **Color** box, click the color bar.

A color menu appears.

• Click the color you want to represent the server.

The server color changes.

4. Click Set.

Tenable Core updates your server information.

## **Delete a Server**

To delete a server:

1. From the top bar in the **Servers** table, click the check mark icon.

A pencil icon and a trashcan icon appear next to each server name.

Ø

2. Click the trashcan icon.

The server disappears from the server list.

# Synchronize Accounts

If you have multiple user accounts but do not want to manage credentials for each one, you can synchronize your accounts, which allows you to navigate seamlessly between accounts without providing a different username and password for each account.

**Note**: You can synchronize accounts while either adding or editing servers in the <u>Dashboard</u>.

To synchronize accounts:

 While either adding or editing a server, click the Synchronize users link in the dialogue box. The SYNCHRONIZE USERS dialogue box appears with a list of your accounts.

**Note**: If you are adding a server, the linked text in the dialogue box is **synchronize accounts and passwords**.

- 2. Check the boxes next the accounts you want to synchronize.
- 3. Click Synchronize.

## Manage the System

You can use the **System** page to view usage statistics and manage system settings.

To manage the Tenable Core system:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

O

The **System** page appears.

You can:

Section	Action
System details section	• View summary information about your Tenable Core instance.
Section	Change the performance profile for your instance, as described in <u>Change Performance Profile</u> .
	<ul> <li>Restart or shut down your instance, as described in <u>Restart Ten-able Core</u> and <u>Shut Down Tenable Core</u>.</li> </ul>
	• Edit the hostname for your instance, as described in <u>Edit Your</u> <u>Tenable Core Hostname</u> .
	<ul> <li>Edit the time and time zone settings for your instance, as described in <u>Edit Your Time Settings</u>.</li> </ul>
Data graphs	• View a graph of the <b>CPU</b> usage on your instance.
	• View a graph of the <b>Memory &amp; Swap</b> usage on your instance.
	• View a graph of the <b>Disk I/O</b> bandwidth usage on your instance.
	<ul> <li>View a graph of the <b>Network Traffic</b> bandwidth usage on your instance.</li> </ul>
	• To change the time range for data displayed in the graphs:
	<ol> <li>In the top-right corner of the graph, click the drop-down box.</li> </ol>
	2. Select a time range.

The system refreshes the graph.

### **Change Performance Profile**

To change the performance profile for your Tenable Core instance:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click the **Overview** option.

The **Overview** page displays.

- 3. Click on the**edit** link next to the **Performance profile** option in the **Configuration** tile. A new window appears displaying **Performance Profile** options.
- 4. Select the desired **Performance Profile**. The recommended profile is labeled in the list.
- 5. Click **Change Profile** to confirm the new selection.

Change Performance Profile	
powersave Optimize for low power consumption	•
throughput-performance Broadly applicable tuning that provides excellent performance workloads. This is the default profile for RHEL7.	e across a variety of common server
virtual-guest Optimize for running inside a virtual guest.	recommended
	Cancel Change Profile

### **Restart Tenable Core**

To restart your Tenable Core instance:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click the **System** option.

The **System** page displays.

3. Next to the **Power Options** item, click the **Restart** button or select it from the drop-down box.

A new window appears.

- 4. Enter a message for the users in the text box.
- Select the delay time from the drop-down menu. This is the time that the restart begins. Choose from one of the minute increments or enter a specific time. There is also an option to restart immediately with no delay.
- 6. Click the **Restart** button to initiate and save the updated information.

Restar	t	
Messag	ge to logged in users	
Delay	1 Minute 🗸	
		Cancel Restart

### Shut Down Tenable Core

To shut down your Tenable Core instance:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click the **System** option.

The **System** page displays.

 Next to the Power Options item, click the arrow by Restart to display the drop-down menu. Select Shut Down.

A new window appears.

- 4. Enter a message for the users in the text box.
- Select the delay time from the drop-down menu. This is the time that the shutdown begins. Choose from one of the minute increments or enter a specific time. There is also an option to Shut Down immediately with no delay.
- 6. Click **Shut Down** to initiate and save the updated information.

Shut Down	
Message to logged in users	
Delay 1 Minute ~	
	Cancel Shut Down

## **Edit Your Tenable Core Hostname**

To edit the hostname for your Tenable Core instance:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click the **Overview** option.

The **Overview** page displays.

3. Click the edit link next to the Hostname option in the Configuration tile.

A new window appears with the options to enter or edit the **Pretty Host Name** and **Real Host Name**.

4. Enter the **Pretty Host Name** for the machine.

The Real Host Name updates as you enter the Pretty Host Name.

5. Click **Change** to update the name.

The new name displays next to the **Hostname** option.

Change Host Nam	e
Pretty Host Name	New Host Machine
Real Host Name	new-host-machine.dev
	Cancel Change

## **Edit Your Time Settings**

To edit the system time and time zone settings for your Tenable Core instance:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click the **Overview** option.

The **Overview** page displays.

3. Next to **System time**, click the link.

The Change System Time window appears.

4. In the **Time Zone** drop-down box, select your time zone.

**Tip:** Type the first few letters of the desired time zone to filter the list.

5. In the **Set Time** drop-down box, select your preferred method for time synchronization.

Tip: By default, Tenable Core is set to Automatically using NTP.

#### 6. Click Change.

Tenable Core saves the change.

## **View the System Log**

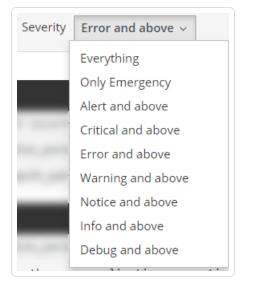
You can use the **System Log** page to view errors encountered in the system. The system log lists, categorizes, and stores system issues that have occurred within the last seven days. Click on an individual entry (row) to get additional information.

Ø

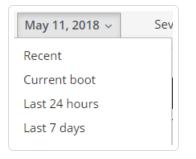
ug	ust 24,	2017 ~	, S	everity	Problem	s, Error	s v																		
ıgı	ust 24, :	2017																							
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACKI	T DEVI	CE to ,	/dev/sr2	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	1	
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr1	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro	storaged	1	
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr0	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	ł	
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr2	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	I	
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr1	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	I	
	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr0	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	ł	
•	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr2	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	i i	
•	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr1	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro	storaged	l .	
•	11:21	Error	r probin	g device	Error	sendin	ng ATA	command	IDENTI	Y PACK	T DEVI	CE to ,	/dev/sr0	: ATA d	ommand	failed:	error=0>	(01 cou	nt=0x02	status=	0x50 (g-	io-erro…	storaged	ł	
וסו	ust 21, 1	2017																							
			L: Read	From soc	ket fai	led: Co	onnecti	on rese	t by pe	er [prea	auth]												sshd		2 ►
ıgı	ust 16, 3	2017																							
	15:55	Faile	ed to st	art Cras	n recov	ery ker	nel ar	ming.															systemd		
	15:55	Faile	ed to st	art Netw	ork Man	ager Wa	it Onl	ine.															systemd		
	15:54	piix4	1_smbus (	000:00:	97.3: Н	ost SMB	lus con	troller	not en	abled!													kernel		
	15:54	sd 0:	0:0:0:	sda] As	suming	drive c	ache:	write t	hrough														kernel		

# Filter the System Log

Several log type filters are available. The **Everything** option is selected by default. Select another option using the drop-down menu at the top of the page. The logs are listed with the most recent entry displayed first. Previous days are divided into sections with the corresponding date displayed in the header.



Filter the logs using the drop-down menu. Click on the date to display the filter options for the logs.



# Manage System Networking

You can use the **Networking** page to view real-time system network traffic information, interface connection options, and logs.

O

To manage Tenable Core system networking:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Networking**.

The **Networking** page appears.

#### You can:

Section	Action
Graphs	<ul> <li>View a graph of the Sending (outbound) network traffic on your instance.</li> <li>View a graph of the Receiving (inbound) network traffic on your instance.</li> </ul>
Firewall sec- tion	<ul><li>View Firewall rules.</li><li>Add Zones.</li><li>Add Allowed Services.</li></ul>
<b>Interfaces</b> table	<ul> <li>Aggregate multiple network interfaces into a single-bonded interface, as described in <u>Add a Bonded Interface</u>.</li> <li>Add a team of interfaces, as described in <u>Add a Team of Interfaces</u>.</li> <li>Add a bridge to create a single aggregate network from multiple communication networks, as described in <u>Add a Bridge Network</u>.</li> <li>Add a VLAN, as described in <u>Add a VLAN</u>.</li> </ul>
Networking Logs table	View a log of activity for the system network.

# Add a Bonded Interface

You can add a bond to aggregate multiple network interfaces into a single-bonded interface.

 $\bigcirc$ 

To add a bonded interface to Tenable Core:

- 1. In the left navigation pane, click the **Networking** option. The **Networking** page displays.
- 2. In the **Interfaces** heading, click the **Add Bond** button on the **Interfaces** section. A new window appears.
- 3. Enter a **Name** for the bond.
- 4. Select the members (interfaces) to bond to in the **Members** section.
- 5. Select an option for **MAC**.
- 6. Select the **Mode**.
- 7. Select a **Primary**.
- 8. Select the type of **Link Monitoring**. Labeled in the drop-down list is the recommended type.

9. Enter the **Monitoring Intervals** with options to link up or down delay increments.

0 -

Bond Settings	
Name	bond0
Members	🔲 ens160
	ens32
MAC	
Mode	Active Backup ~
Primary	~
Link Monitoring	MII (Recommended) ~
Monitoring Interval	100
Link up delay	0
Link down delay	0
	Cancel Apply

### Add a Team of Interfaces

To add a team of interfaces to Tenable Core:

- 1. In the left navigation pane, click the **Networking** option. The **Networking** page displays.
- 2. In the **Interfaces** heading, click the **Add Team** button on the **Interfaces** section. A new window appears.
- 3. Enter the **Team Name**.
- 4. Select the **Ports** needed for the new team.
- 5. Select the **Runner** and **Link Watch** from the drop-down list.
- 6. Enter the Link up and Link down delay increments.

Team Settings		
Name	team0	
Ports	ens192	
Runner	Active Backup	~
Link Watch	Ethtool	~
Link up delay	0	
Link down delay	0	
	Cancel	Apply

# Add a Bridge Network

You can add a bridge to create a single aggregate network from multiple communication networks.

To add a bridge network to Tenable Core:

- 1. In the left navigation pane, click the **Networking** option. The **Networking** page displays.
- In the Interfaces heading, click the Add Bridge button on the Interfaces section. A new window appears.
- 3. Enter a **Name** for the bridge.
- 4. Select the **Ports** that you want to connect to the bridge.
- 5. Click the box next to **Spanning Tree Protocol (STP)** to get more STP options.
- 6. Click **Apply** to add the new bridge.

Bridge Settings	
Name	bridge0
Ports	ens192
	ens192.1
Spanning Tree Protocol (STP)	
STP Priority	32768
STP Forward delay	15
STP Hello time	2
STP Maximum message age	20
	Cancel Apply

# Add a VLAN

To add a VLAN to Tenable Core:

1. Click the **Add VLAN** button on the Interfaces section. A new window appears.

O

- 2. Select the **Parent** from the drop-down list.
- 3. Enter the **VLAN Id** and name.
- 4. Click **Apply** to add the **VLAN**.
- 5. The new **VLAN** displays in the **Interface** list.

VLAN Set	tings
Parent	ens192 ~
VLAN Id	1
Name	ens192.1
	Cancel Apply

# Manage System Storage

You can use the **Storage** page to view real-time system storage graphs, filesystem information, and logs. For more information, see <u>Disk Management</u>.

 $\bigcirc$ 

To manage Tenable Core storage:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Storage**.

The **Storage** page appears.

You can:

Section	Action
Graphs	<ul> <li>View a graph of the <b>Reading</b> storage activity on your instance.</li> <li>View a graph of the <b>Writing</b> storage activity on your instance.</li> </ul>
Filesystems table	<ul> <li>View information about each filesystem.</li> <li>Click a row to view more details about the filesystem.</li> <li>Rename a filesystem, as described in <u>Rename a Filesystem</u>.</li> <li>Delete a filesystem, as described in <u>Delete a Filesystem</u>.</li> </ul>

### **Rename a Filesystem**

To rename a filesystem in Tenable Core:

1. In the left navigation pane, click **Storage**.

The **Storage** page appears.

2. In the File Systems section, click on the individual file in the file systems list.

O

The details page appears.

3. Click the **Rename** button in the upper right section of the window.

A new window appears.

- 4. Enter the new name for the **File System**.
- 5. Click **Create**.

The new name appears on the page.

# **Delete a Filesystem**

To delete a filesystem in Tenable Core:

- 1. In the left navigation pane, click the **Storage** option. The **Storage** page displays.
- 2. In the **File System** section, click the individual file in the files systems list. The details page appears.
- 3. Click the red **Delete** button in the system heading.
- 4. Confirm that you want to delete the File System.

his device has filesystems that are currently	y in use. Proceeding will unmount all filesystems on it.
/	/dev/centos/root
	Deleting a volume group will erase all data on it
	Cancel Delete

**Caution:** Deleting a volume group erases all data on it.

# Manage User Accounts

You can use the **Accounts** page to manage user accounts for your Tenable Core instance.

O

To manage Tenable Core user accounts:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Accounts**.

The **Accounts** page appears.

Do any of the following:

- Create a new user account, as described in <u>Create New User Account</u>.
- Edit a user account, as described in Edit a User Account.
- Delete a user account, as described in <u>Delete a User Account</u>.

#### **Create New User Account**

#### Required User Role: Administrator

You can create a new user account from the **Accounts** page.

To create a new user account:

- 1. Log in to Tenable Core, as described in Log In to Tenable Core.
- 2. In the left navigation bar, click **Accounts**.

The **Accounts** page appears.

3. Click Create New Account.

The Create New Account window appears.

- 4. In the **Full Name** box, type the user's full name.
- 5. In the **User Name** box, type a username for the user account.
- 6. In the **Password** box, type a password for the user account.

**Note**: Your password must meet the following minimum requirements:

- Minimum 14 characters long
- One capital letter
- One lowercase letter
- One numeric digit (0-9)
- One special character (~`!@#\$%^&\*()+=\_-{}[]\!:;"?/<>,.)
- Cannot be a palindrome (i.e., a word or phrased spelled the same backward and forward)
- 7. In the **Confirm** box, retype the password.
- 8. Click Create.

Tenable Core creates the new account and displays it on the **Accounts** page.

What to do next:

• (Optional) If you want to configure the user account, see <u>Edit a User Account</u>.

\_\_\_\_\_ O\_\_\_\_\_

• (Optional) If you want to delete the user account, see <u>Delete a User Account</u>.

### Edit a User Account

#### Required User Role: Administrator

You can edit a user account configuration, including the user's full name, password, roles, access, and public SSH keys.

Before you begin:

To edit a user account:

- 1. Log in to Tenable Core, as described in Log In to Tenable Core.
- 2. In the left navigation bar, click **Accounts**.

The **Accounts** page appears.

3. Click the user account you want to edit.

The account page for the user account appears.

4. On the user account page, you can:

Section	Action
Full Name	Type a name for the user account.
Roles	<ul> <li>To grant the user account administrator access, select the Server Administrator check box.</li> <li>To remove administrator access from the user account, clear the Server Administrator check box.</li> </ul>
Access	<ul> <li>To lock the user account, select the Lock Account check box to lock the user account.</li> <li>To unlock the user account, clear the Lock Account check box to unlock the user account.</li> <li>To configure the account to remain unlocked indefinitely:</li> <li>Note: If you do not configure the account to remain unlocked indef-</li> </ul>

	initely, Tenable Core automatically locks the account on the set expir- ation date.
	1. Click Never lock account.
	The Account Expiration window appears.
	2. Select the Never lock account option.
	3. Click Change.
	Tenable Core sets the account to remain unlocked indef- initely.
	• Select an expiration date for the account:
	1. Click Never lock account.
	The Account Expiration window appears.
	2. Select the Lock account on option.
	3. Click the box next to the <b>Lock account on</b> option.
	A calendar drop-down box appears.
	<ol> <li>In the calendar drop-down box, select the date when you want the account to age out.</li> </ol>
	5. Click <b>Change</b> .
	Tenable Core sets the expiration date for the user account.
Password	• To set a new user account password:
	1. Click Set Password.
	The Set Password window appears.
	<ol> <li>In the New Password box, type the password you want to use for the account.</li> </ol>
	<b>Note</b> : Your password must meet the following minimum

requirements:
Minimum 14 characters long
One capital letter
One lowercase letter
• One numeric digit (0-9)
<ul> <li>One special character (~`!@#\$%^&amp;*()+={}</li> <li>[]\ :;"?/&lt;&gt;,.)</li> </ul>
<ul> <li>Cannot be a palindrome (i.e., a word or phrased spelled the same backward and forward)</li> </ul>
3. Click <b>Set</b> .
Tenable Core updates the user account password.
• To force a user to change their user account password:
1. Click Force Change.
The Force password change window appears.
2. Click <b>Reset</b> .
Tenable Core disables the password for the user account. The user must change the password on the next log in attempt.
<ul> <li>Configure the user account password to remain active indef- initely:</li> </ul>
<b>Note</b> : If you do not configure the password to remain active indef- initely, Tenable Core automatically ages out the password on the set expiration date.
1. Click Never expire password.
The <b>Password Expiration</b> window appears.
2. Select the <b>Never expire password</b> option.

- 87 -

	Ø
	3. Click <b>Change</b> .
	Tenable Core sets the password to remain active indef- initely.
	• Select an expiration date for the user account password:
	1. Click Never expire password.
	The <b>Password Expiration</b> window appears.
	<ol> <li>Select the Require password change every [blank] days option.</li> </ol>
	3. In the <b>Require password change every</b> [blank] <b>days</b> section, type the number of days that you want to pass between password expiration dates (for example, type 90 if you want the password to age out every 90 days).
	4. Click <b>Change</b> .
	Tenable Core sets the expiration date for the user account password.
Authorized	• To add a public SSH key to the user account:
Public SSH Keys	1. In the Authorized Public SSH Keys table, click the 🎴 icon.
Reje	The <b>Add public key</b> window appears.
	2. In the text box, type or paste your public SSH key.
	3. Click <b>Add key</b> .
	Tenable Core adds the SSH key to the user account.
	• To remove a public SSH key:
	<ol> <li>In the Authorized Public SSH Keys table, next to the key you want to remove, click the icon.</li> </ol>
	Tenable Core removes the SSH key from your account.

#### **Delete a User Account**

Required User Role: Administrator

You can delete a user account from the **Accounts** page.

To delete a new user account:

- 1. Log in to Tenable Core in a browser, as described in Log In to Tenable Core.
- 2. In the left navigation bar, click **Accounts**.

The **Accounts** page appears.

3. Click the user account you want to delete.

The account page for the user account appears.

4. In the upper-right corner, click **Delete**.

The delete window for the user account appears.

5. (Optional), if you want to delete files attached to the user account, select the **Delete Files** check box.

**Note**: This file deletion is permanent. If you do not delete them, the files remain attached to the Tenable Core instance, along with their existing access permissions. Users who were previously granted access can still access the files.

6. Click **Delete**.

Tenable Core delete the user account.

# **Manage Services**

You can use the **Services** page to view information about targets, system services, sockets, timers, and paths.

O

To manage Tenable Core services:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Services**.

The **Services** page appears.

#### You can:

Tab	Action
Targets	1. Click Stop, Start, Restart, or Reload.
	<b>Note</b> : Restarting a service completely stops and restarts the service. Reloading a service only reloads the service's configuration files.
	The system changes the status of the service.
System Ser-	• View a list of system services.
vices	• Click a row to view detailed information about a service.
	• To change the status of a service:
	1. Click a row.
	The service details page appears.
	2. Click Stop, Start, Restart, or Reload.
	<b>Note</b> : Restarting a service completely stops and restarts the service. Reloading a service only reloads the service's configuration files.
	The system changes the status of the service.

Sockets	<ul> <li>View a list of socket services.</li> <li>Click a row to view detailed information about a service.</li> <li>To change the status of a service: <ol> <li>Click a row.</li> <li>Click a row.</li> </ol> </li> <li>2. Click Stop, Start, Restart, or Reload.</li> </ul> <li>Note: Restarting a service completely stops and restarts the service. Reloading a service only reloads the service's configuration files. <ul> <li>The system changes the status of the service.</li> </ul> </li>
Timers	<ul> <li>View a list of timer services.</li> <li>Click a row to view detailed information about a service.</li> <li>Create a new timer, as described in <u>Create a Timer</u>.</li> <li>To change the status of a service: <ol> <li>Click a row.</li> <li>Click a row.</li> <li>Click Stop, Start, Restart, or Reload.</li> </ol> </li> <li>Note: Restarting a service completely stops and restarts the service. Reloading a service only reloads the service's configuration files.</li> <li>The system changes the status of the service.</li> </ul>
Paths	<ul> <li>View a list of path services.</li> <li>Click a row to view detailed information about a service.</li> <li>To change the status of a service:</li> </ul>

	(i)					
1	Click a row.					
	The service details page appears.					
2	. Click Stop, Start, Restart, or Reload.					
	<b>Note</b> : Restarting a service completely stops and restarts the service. Reloading a service only reloads the service's configuration files.					
	The system changes the status of the service.					

#### **Create a Timer**

To create a timer:

1. In the left navigation pane, click the **Services** option. The **Services** page displays.

O

2. In the **Services** page heading, click the **Create Timers** button.

A new window appears.

- 3. Enter the Service Name, Description, Command, and Run information.
- 4. Click Save.

The new timer displays in the enabled section of the list.

Create Timers				
Service name Description Command				
Run	After system boot v	After	00	Seconds ~
				Cancel Save

## **Generate a Diagnostic Report**

You can use diagnostic reports to assist with troubleshooting Tenable Core.

To generate a diagnostic report for troubleshooting:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

O

The **System** page appears.

2. In the left navigation bar, click **Diagnostic Reports**.

The **Diagnostic Reports** page appears.

- 3. Click the **Create Report** button.
- 4. A new window with a status bar appears as the report generates.
- 5. When the report is complete, the status displays **Done**.
- 6. Click the **Download Report** button to save and print the report.

# Access the Terminal

The **Terminal** page provides a console to access a user-specific command-line interface.

Ø



# **Configure Tenable Nessus in Tenable Core**

The **Nessus** page displays summary information about your Tenable Nessus configuration.

# Tenable Nessus Installation Info

The **Nessus Installation Info** section provides information for the Tenable Nessus application. You can view the URLs, Service Status, License, Challenge Code, Application version, and Binary version.

After you start up Tenable Core + Tenable Nessus, the message Error: Invalid/Expired Activation Code appears until you fully configure the Tenable Nessus application. For more information, see <u>Configure Nessus</u> in the *Tenable Nessus User Guide*.

### Edit Tenable Nessus Users

The **Edit Nessus Users** section provides a place where you can update user passwords and configure user rules.

To update a password:

- 1. Select the user from the drop-down list.
- 2. Enter the New Password in the **New Password** field.
- 3. Confirm the New Password in the **Confirm New Password** field.

4. Click **Reset Password**. A green success message displays at the bottom of the card.

User	admin	v	
New Password	•••••		
Confirm New Password	•••••		
<ul> <li>Success: Password reset suc</li> </ul>	ccessfully.		

To configure user rules:

- 1. Select the user from the drop-down list.
- 2. Click the **Configure User Rules** link. A new window opens with a text box to enter the user rules.
- 3. Enter the user rules and click **Save**.
- 4. A success message appears at the bottom of the **Edit Nessus User** card.

#### **Tenable Nessus Plugin Management**

The **Nessus Plugin Management** section enables users to update their Tenable Nessus plugin set manually. This is useful in offline situations where Tenable Security Center will not have direct access to the Tenable plugin servers. It is important to disable the Tenable Security Center nightly plugin update process when using the manual method.

**Note:** While performing these builds, Tenable Nessus cannot be running. Stop Tenable Nessus by selecting the Stop option in the Service Status section on the Tenable Nessus Installation Info card.

To rebuild the plugin database:

- 1. Click the **Rebuild Plugin Database** button.
- 2. A message with a status update that the system is rebuilding the plugin database appears at the bottom of the card.
- 3. A green Success message appears when the rebuild is complete.

#### To remove plugins:

- 1. Click the **Remove Plugins** button.
- 2. A message with a status update that the system is removing the plugins appears at the bottom of the card.
- 3. A green **Success** message appears when the removal is complete.

#### Tenable Nessus Webserver Authentication

The Web Server Authentication section controls the configuration of the SSL Client Certificate authentication permissions. The two options are password or SSL Client Certificate. This setting controls the option available for users to log into the Tenable Nessus server via SSL client certificate or password authentication.

- The **SSL Client Certificate** option configures the Tenable Nessus web server to accept only connections from browsers that present a valid SSL client certificate. The web server rejects other connection attempts with the exact message displayed, dependent on the browser in use.
- The **Password** option configures the Tenable Nessus web server to ignore any SSL client certificates but allow the browser connection. This is the default setting and works with most browsers without issue.

To change the Tenable Nessus Webserver Authentication:

- Click the arrow in the drop-down menu to display the options on the Nessus Webserver Authentication card.
- 2. Select the desired type of authentication.
- 3. Click Set Authentication Type to save the new selection. A green **Success** message appears to confirm the update and prompts you to restart Tenable Nessus for the changes to take

#### effect.

SU	IS® WEBSERVER AUTHENTICATION:	
(	Current Authentication Type:	SSL Client Certificate 🔻
s	Set Authentication Type	
~	Success: Authentication type set to '	SSL Client Certificate'.
Ple	ease restart Nessus for settings change	to take effect

### Edit Tenable Nessus Rules

This section allows you to define the **nessusd.rules**, that function the same as the user rules discussed above, to forbid or allow **nessusd** to connect to some or all ports for the specified IP address or Plugin ID. These rules affect Tenable Nessus globally regardless of the defined Tenable Nessus user rules.

- 1. Make edits directly in the text box displayed.
- 2. Click **Save Nessus Rules** to confirm the update.

### Tenable Nessus Logs

The Tenable Nessus Logs section contains four different log types. Click on the drop-down menu to view the Backend log, Webserver log, Error log, and nessussd.messages log. After making your selection, click view log.

# **Configure a Proxy Server**

If your organization configured a proxy server to conceal your IP address, share an internet connection on your local network, or control internet access on your network, set the proxy configuration in Tenable Core.

**Note:** This proxy configuration only applies to updates and Tenable Core + Tenable Web App Scanning connections. The proxy configuration for the application updates itself needs to be completed from the application user interface.

Before you begin:

• Log in to Tenable Core in a browser, as described in Log In to Tenable Core.

To configure a proxy server:

1. In the left navigation bar, click **Update Management**.

The **Updates** page appears.

- 2. In the **Proxy Host** box, type the hostname and port for your proxy server in the format *host-name:port* (for example, https://192.0.2.1:2345).
- 3. (Optional) In the **Proxy Username** box, type a username for your proxy server.
- 4. (Optional) In the **Proxy Password** box, type a password for the proxy.
- 5. Click Save Proxy.

The system initiates your proxy configuration.

# Start, Stop, or Restart Your Application

To start, stop, or restart your application via the user interface:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

O

The **System** page appears.

2. In the left navigation bar, click **Tenable Nessus**.

The application page appears.

3. In the Installation Info section, click Start, Stop, or Restart.

To start, stop, or restart your application via the CLI:

1. Log in to Tenable Core via the **Terminal** page or command line interface (CLI).

The command line appears.

2. To change the status of your application, see Tenable Nessus see, <u>Start or Stop Tenable Nes</u>sus, in the *Tenable Nessus User Guide*.

# Manage Updates

You can use the **Updates Management** page to manage your Tenable Core and application updates. If your deployment is online, Tenable recommends:

Ø

- Configuring automatic updates. For more information, see <u>Configure Automatic Updates</u>.
- Performing on-demand updates, as needed. For more information, see <u>Update On Demand</u>.

If your deployment is offline, you can perform offline updates. For more information, see <u>Update</u> <u>Tenable Core Offline</u>.

# **Configure Automatic Updates**

By default, Tenable Core has automatic updates enabled.

If you deploy Tenable Core in an online environment, Tenable recommends keeping automatic updates enabled. When performing an automatic update, Tenable Core retrieves and installs:

- The latest version of Tenable Nessus.
- The latest version of host operating system included in Tenable Core.
- The latest version of any additional packages required by Tenable Core.
- The latest version of any additional host operating system packages you installed.

**Note:** Automatic updates described here only apply to the Tenable Core operating system. For information on Tenable Security Center feed updates, see the <u>Tenable Security Center user guide</u>.

To configure automatic updates:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **Update Management**.

The **Update Management** page appears.

3. In the AUTOMATIC UPDATES section, click the Edit link in the Unit State row.

The **Services** details page appears, displaying the details for the **Scheduled System Updates** service.

- 4. Confirm that you have set **Unit State** to enabled (set to enabled by default).
- Review the schedule for the automatic updates and modify, if needed, as described in <u>Con-figure Your Automatic Update Schedule</u>.

# **Configure Your Automatic Update Schedule**

By default, Tenable Core has automatic updates set to enabled.

If you deploy Tenable Core in an online environment, Tenable recommends keeping automatic updates enabled.

To configure the schedule for your automatic updates:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **Update Management**.

The **Update Management** page appears.

3. In the AUTOMATIC UPDATES section, click the link in Timer Config Line.

The Edit Timer Configuration window appears.

4. Modify the schedule.

**Note:** If you set both a **Day of week** and a **Day of month**, the system only performs updates on days when those two parameters are true. For example, if you set **Wednesday** as the **Day of week** and **8** as the **Day of month**, Tenable Core performs automatic updates only on the 8th of the month if it is a Wednesday.

**Tip**: Tenable Core uses Eastern Time as your default time zone, unless you modify it as described in <u>Edit Your Time Settings</u>.

5. Click Save.

Tenable Core modifies the schedule for automatic updates.

# **Update On Demand**

If you deploy Tenable Core in an online environment, you can perform updates on demand. When updating on demand, Tenable Core retrieves and installs the following:

- The latest version of Tenable Nessus.
- The latest version of host operating system included in Tenable Core.
- The latest version of any additional packages required by Tenable Core.
- The latest version of any additional host operating system packages you installed.

**Note:** Tenable Core currently supports two host operating system options: Oracle Linux 8 (OL8) and CentOS (EL7).

Before you begin (Tenable Core deployments with EL7 operating systems):

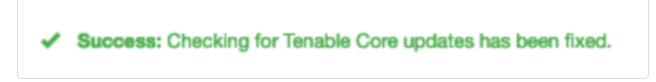
- Configure for Update Checks:
  - 1. Navigate to the **Updates Management** page.
  - 2. Click **Configure** when this pop-up appears:

CONFIGURE TENABLE CORE UPDATE CACHING

This system is not configured to display the latest Tenable Core updates on the "Software Updates" page. Click "Configure" to configure it.

Configure Close

Confirmation of the upgrade success appears:



To update on demand (Tenable Core deployments with OL8 operating systems):

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

0 -

The **System** page appears.

2. In the left navigation pane, click **Update Management**.

System	Updates			
Overview				
System Log	JTOMATIC UPDATES:		PROXY CONFIGURATION:	
Networking	On-boot System Updates		Please complete the following if a proxy server is required for internet access.	
Storage	Unit State	enabled Edit 🕑	Proxy Host:	
Accounts	Task State	inactive (dead)	Proxy Username:	
			Proxy Password:	
Services			Save Proxy	
Diagnostic Reports	Scheduled System Updates			
Terminal	Unit State	disabled Edit C	UPDATE STATUS:	
	Task State	inactive (dead)	* Checking for updates	
Tools	Last Run	unknown	Install Updates	}
Remote Storage	Timer Config Line	*-*-* 04:30:00 Edit 🕑	Reboot when finished	ed
Update Management 🛛 🛕				
SSL/TLS Certificates				
AV Backup/Restore	/AILABLE UPDATES:			
SNMP	Package		Version	

The **Update Status** section on the page shows the number of available updates:

System	pdates		
Overview			
System Log	OMATIC UPDATES:		PROXY CONFIGURATION:
Networking	On-boot System Updates		Please complete the following if a proxy server is required for internet access.
Storage	Unit State	enabled Edit 🖸	Proxy Host:
Accounts	Task State	inactive (dead)	Proxy Username:
Services			Proxy Password:
			Save Proxy
Diagnostic Reports	Scheduled System Updates		
Terminal	Unit State	disabled Edit G	
	Task State	inactive (dead)	UPDATE STATUS:
Tools	Next Run	N/A	15 updates available Install Updates
	Last Run	unknown	Last check: a minute ago
Remote Storage	Timer Config Line	*-*-* 04:30:00 Edit 🖸	Reboot when tinished
Update Management 🛛 🛕			
SSL/TLS Certificates	ILABLE UPDATES:		
Backup/Restore			
SNMP	Package		Version

- 3. (Optional) Click the S button to refresh the page with available updates in the Update
   Status section
- 4. Click the **Install Updates** button.

Tenable Core installs the updates:

System	lpdates		
Overview			
System Log	FOMATIC UPDATES:		PROXY CONFIGURATION:
Networking	On-boot System Updates		Please complete the following if a proxy server is required for internet access.
Storage	Unit State	enabled Edit 🖸	Proxy Host:
	Task State	activating (start)	Proxy Username:
Accounts			Proxy Password:
Services			Save Proxy
Diagnostic Reports	Scheduled System Updates		
Terminal	Unit State	disabled Edit C	UPDATE STATUS:
	Task State	inactive (dead)	
Tools	Next Run	unknown	<ul> <li>Installing updates</li> <li>Last check: a few seconds ago</li> </ul>
Remote Storage	Timer Config Line	*-*-* 04:30:00 Edit 🕑	Reboot when finished
Update Management			
SSL/TLS Certificates			
Backup/Restore	ILABLE UPDATES:		
SNMP	Package		Version

k

5. Tenable Core confirms your system is up to date and prompts you to reboot, if required by any of the installed updates:

System				
Overview	A reboot is required to apply updates to the following packages: <ul> <li>kernel</li> <li>linux-firmware</li> </ul>			
System Log	Liedataa			
Networking	Updates			
Storage	On-boot System Updates		Please complete the following if a proxy server is required for internet access.	
Accounts	Unit State	enabled Edit 🖸	Proxy Host:	
Services	Task State	inactive (dead)	Proxy Username:	
			Proxy Password:	
Diagnostic Reports			Save Proxy	
Terminal	Scheduled System Updates			
	Unit State	disabled Edit G		
Tools	Task State	inactive (dead)	UPDATE STATUS:	
Remote Storage	Next Run	N/A	✓ This system is up to date Install Updates	
Update Management 🛛 🛕	Last Run	unknown	Last check: a few seconds ago	
SSL/TLS Certificates	Timer Config Line	*-*-* 04:30:00 Edit 🕑		
SSL/ ILS Certificates				
Backup/Restore				
SNMP	SYSTEM UPDATE HISTORY			

6. If prompted, restart your system.

To update on demand (Tenable Core deployments with EL7 operating systems):

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **Software Updates**.

The **Software Updates** page appears.

3. Click Check for Updates.

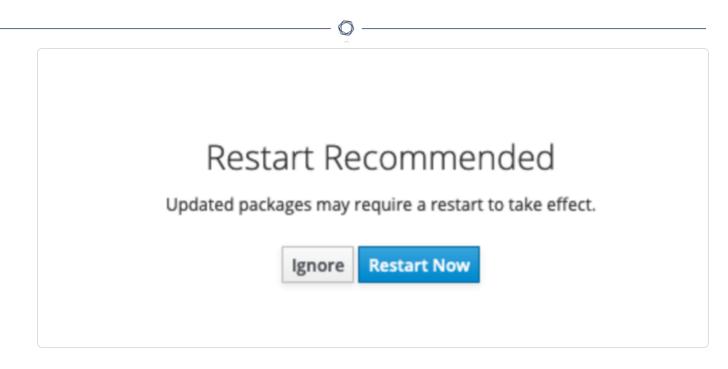
The page refreshes and displays available updates.

4. If updates are available, click **Install all updates**.

Tenable Core confirms the updates are successfully completed.

What to do next (Tenable Core deployments with EL7 operating systems):

- If the update included any of the following packages, restart Tenable Core as described in <u>Restart Tenable Core</u>.
  - kernel
  - glibc
  - linux-firmware
  - systemd
- 2. After manually updating, a pop-up screen appears directing you to restart:



3. Restart your system.

# **Update Tenable Core Offline**

Tenable recommends applying all offline updates, in order, to your offline Tenable Core machine. Do not skip offline updates.

For information about the contents of individual offline update files, see the <u>Tenable Core Release</u> <u>Notes</u>.

To upload a Tenable Core offline update .iso file:

- 1. Navigate to the Tenable Core Offline Update ISO section of the <u>Tenable Downloads</u> page.
- 2. Click and download the offline update .iso file.
- 3. Rename the offline update .iso file as **tenable-offline-updates.iso**.
- 4. Upload the file via scp. For example:

scp local-iso-file.iso user@host:/srv/tenablecore/offlineiso/tenableoffline-updates.iso

**Note:** The target line may vary; however, the destination must be the following path: /srv/tenablecore/offlineiso/tenable-offline-updates.iso

After the upload, updates apply automatically at the configured time. You can also install updates manually.

**Note:** Once you upload the **.iso** file, no further action is needed. However, you can make subsequent updates by replacing the existing **.iso** file if desired.

# Manage Certificates

From the **SSL/TLS Security Certificates** page, you can manage the certificates used by Tenable Core and your application.

Ø

# Manage the Server Certificate

When you first deploy Tenable Core, Tenable provides a default server certificate for accessing the Tenable Core and application interfaces.

**Tip:** By default, Tenable Core uses the same certificates for Tenable Core as well as Tenable Nessus. To use a different server certificate for Tenable Nessus, see <u>Use Different Certificates for Tenable Core and</u> <u>Your Application</u>.

**Note:** The default certificate is not signed by a recognized certificate authority (CA). If your browser reports that the Tenable Core or application server certificate is untrusted, Tenable recommends uploading a custom server certificate signed by a trusted certificate authority (CA) for Tenable Core and application use. For more information, see <u>Upload a Custom Server Certificate</u>. Alternatively, you can download the Tenable-provided CA certificate (cacert.pem) for your server certificate and upload it to your browser.

If you upload a custom server certificate signed by a custom CA, you must also provide certificates in the chain to validate your custom server certificate.

For more information, see:

- Upload a Custom Server Certificate
- Remove a Custom Server Certificate

# **Upload a Custom Server Certificate**

If you do not want to use the Tenable-provided server certificate, you can upload a custom server certificate to Tenable Core. For more information, see Manage the Server Certificate.

You cannot upload multiple custom server certificates to Tenable Core. Uploading a new file replaces the existing file.

**Tip:** By default, Tenable Core uses the same certificates for Tenable Core as well as Tenable Nessus. To use a different server certificate for your application, see <u>Use Different Certificates for Tenable Core and</u> <u>Your Application</u>.

Before you begin:

- Confirm your custom server certificate and key files use the \*.der, \*.pem, or \*.crt extension.
- Move the custom server certificate and key files to a location accessible from your browser.

To upload a custom server certificate for Tenable Core:

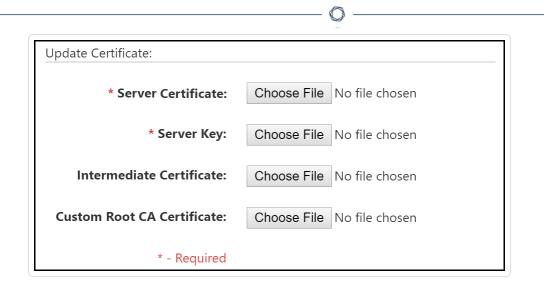
1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **SSL/TLS Certificates**.

The SSL/TLS Certificates page appears.

- 3. Click the **System Certificate** tab.
- 4. Locate the Update Certificate section in the SERVER CERTIFICATES section.



- 5. Provide your **Server Certificate**.
  - a. Click Choose File.

The upload window appears.

b. Browse to and select the file.

Tenable Core loads the file.

- 6. Provide your **Server Key**.
  - a. Click Choose File.

The upload window appears.

b. Browse to and select the file.

Tenable Core loads the file.

- (Optional) If your custom server certificate is signed by a custom CA that requires an intermediate certificate to validate the custom server certificate, provide your Intermediate Certificate.
  - a. Click Choose File.

The upload window appears.

b. Browse to and select the file.

Tenable Core loads the file.

### (Optional) If your custom server certificate is signed by a custom CA, upload your Custom Root CA Certificate.

Ø

\_\_\_\_\_

a. Click Choose File.

The upload window appears.

b. Browse to and select the file.

Tenable Core loads the file.

#### 9. Click Install Server Certificates.

Tenable Core uploads the files. A success message appears to confirm the upload succeeded.

10. In the left navigation pane, click **Services**.

The **Services** page appears.

11. Restart the **Cockpit** service, as described in <u>Manage Services</u>.

The **Cockpit** service restarts and enables the new certificate.

# **Remove a Custom Server Certificate**

If you no longer want to use your custom server certificate for Tenable Core, you can remove the certificate and revert to using a Tenable-provided server certificate. For more information, see <u>Manage the Server Certificate</u>.

To remove a custom server certificate and revert to the Tenable-provided default certificate:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **SSL/TLS Certificates**.

The SSL/TLS Certificates page appears.

- 3. Click the System Certificate tab.
- 4. In the SERVER CERTIFICATES section, in the Update Certificate section, click Reset Server Certificates.

A confirmation window appears.

5. Click **Reset**.

A success message appears to confirm the reset succeeded.

# Upload a Certificate for a Trusted Certificate Authority

You can upload a trusted certificate authority (CA) certificate for any of the following purposes:

- You want to use certificate authentication for user accounts on Tenable Nessus.
- You want to configure Tenable Nessus Manager to use your custom certificates when communicating with Tenable Nessus Agents.

You do not need to upload a trusted CA certificate for any other reasons. You can upload any number of trusted CA certificates to Tenable Core.

**Note:** By default, Tenable Core uses the same certificates for Tenable Core as well as Tenable Nessus. To decouple the certificates used for your Tenable Core system and your application, see Use Different Certificates for Tenable Core and Your Application.

If you decouple the certificates, Tenable Core disregards the custom CA certificate configuration on the **System Certificate** tab. Tenable Core does not use custom CA certificates for reasons other than the application use.

To view details about an existing certificate, click to expand the **Filename** section for a certificate. To remove an existing certificate, select the certificate and click the **Delete** button.

Before you begin:

- Confirm the trusted CA certificate is in .der, .pem, or .crt format.
- Move the trusted CA certificate to a location accessible from your Tenable Core server.

Upload a trusted CA certificate:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **SSL/TLS Certificates**.

The **SSL/TLS Certificates** page appears.

3. Click the System Certificate tab.

4. In the **TRUSTED CERTIFICATE AUTHORITIES** section, in the **Add Certificate Authority** section, next to **Certificate**, click **Choose File**.

O

Current Authorities:		
Filename:	cacert.pem	×
Add Certificate Authority:	Choose File No file chose	en
* - R	equired	

The upload window appears.

5. Browse to and select the certificate file.

Tenable Core uploads the certificate file.

6. Click Install Certificate Authority.

A success message appears to confirm the upload succeeded.

# **Use Different Certificates for Tenable Core and Your Application**

By default, Tenable Core uses the same certificates for Tenable Core as well as Tenable Nessus. If needed, you can decouple your system and application certificates and customize them independently.

Before you begin:

• Upload a custom server certificate for Tenable Core, as described in <u>Upload a Custom Server</u> <u>Certificate</u>.

To decouple and customize your application certificates:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation pane, click **SSL/TLS Certificates**.

The SSL/TLS Certificates page appears.

3. Click the application tab.

The application tab appears.

4. Clear the Reuse System Certificate check box.

The application tab refreshes to display the settings in edit mode.

- 5. Remain on the application tab and configure the settings for your application-specific server certificate, as described in <u>Upload a Custom Server Certificate</u>.
- Remain on the application tab and configure the settings for one or more custom certificate authority (CA) certificate, as described in <u>Upload a Certificate for a Trusted Certificate Author-</u> <u>ity</u>.

**Note:** If you upload a custom CA certificate on the application tab, Tenable Core disregards the custom CA certificate configuration on the **System Certificate** tab. Tenable Core does not use custom CA certificates for reasons other than the application use described in <u>Upload a Certificate for a</u> <u>Trusted Certificate Authority</u>.

# **Application Data Backup and Restore**

Backup and restore requires a connection to a remote storage host. When Tenable Core begins a scheduled or on-demand backup, your files are stored temporarily in /op-

t/tenablecore/backup/spool before being sent to the configured remote storage host.

Later, you can restore your backup data by uploading your backup file to Tenable Core.

For more information, see:

- Configure a Remote Storage Host
- Perform an On-Demand Backup
- Change the Scheduled Backup Time
- <u>Restore a Backup</u>

If you want to enable or disable a scheduled backup, click **Scheduled backups can be configured Here**.

**Note**: During a backup or a restore, Tenable Core stops the Tenable Nessus application service. You cannot use Tenable Nessus or the Tenable Nessus interface during this time.

After the backup or restore completes, your services restart and Tenable Nessus resumes normal function.

**Tip:** A virtual machine snapshot backs up the entire virtual machine (application-installed files, application data, OS files, and configurations.) To take a snapshot of your virtual machine, see <u>Take a Snapshot</u>.

# Remote Storage Host Requirements

The location where you store your backups must:

- Have rsync installed.
- Have an SSH server installed and running.
- Have sufficient storage space to hold your application's backup data. While application data size, and file compression varies, you could safely size your remote storage host by doubling the disk space currently in use on your application.
- Have a user with write permissions to manage the remote storage host location.

**Note:** Tenable Core does not manage your remote storage system. If you have concerns about space on your remote storage system, remove backup files manually when you no longer need them.

## Configuration-only Backups

Tenable recommends performing regular backups of your Tenable Core configuration in addition to your Tenable Core + Tenable Security Center data. You can restore a configuration backup to resume normal Tenable Core operation quickly as part of your disaster recovery plan. Along with standard backups, you can also perform a configuration-only backup:

nclude in s	cheduled backups	
	Tenable.sc	Take Backup Now
	Tenable.sc Configuration Only	Take Backup Now

**Note:** Tenable Core + Tenable Security Center configuration-only backups don't include any of their data.

RESTORE SC-CONFIG-20211117-162157-TNSTENABLECORE-5_19_1.TAR.GZ?				
This appears to be a Te restored. Note: clicking rest				nts, but it is able to pass it to Tenable.sc to be on.
Backup taken for	Tenable.sc			
Backed up RPM version	unknown			
Backed up binary version	unknown			
Version currently installed	5.20.0		5.20.0	
unpackagedSize:	unknown			
				Restore Cance

**Caution:** Restoring a Tenable Core + Tenable Security Center configuration-only backup erases all data before performing the restore.

For more information on Tenable Security Center configuration backups, see <u>Backup and Restore</u> in the Tenable Security Center documentation.

Tenable Core configuration backups do not include configurations for managed Tenable Core + Tenable Security Center instances, such as scans, scan policies, or credentials. Perform a separate backup for each Tenable Core + Tenable Security Center instance.

Configuration-only backups do not include data (such as vulnerability data, trend data, licenses, or secure connection settings). When your repositories contain new vulnerability data, you can use your dashboards, reports, and analysis tools to assess your network.

**Note:** After you restore a configuration backup, Tenable recommends performing discovery scans to repopulate your repositories with vulnerability data. For more information, see *Scanning Overview* in the <u>Tenable Security Center documentation</u>.

Configuration-only backup requirements:

 Restore a backup file to a Tenable Core + Tenable Security Center running the same version.
 For example, you cannot restore a backup file created on version 5.20.0 to a Tenable Core + Tenable Security Center running a later version.

**Note:** For best performance after restoring a configuration backup, ensure the hostname associated with the configuration backup file matches the hostname on the receiving Tenable Core + Tenable Security Center.

## Configurations Included in a Configuration-only Backup

For a complete list of configurations included in a configuration-only backup for Tenable Core + Tenable Security Center, see <u>Configurations Included in a Configuration Backup</u> in the Tenable Security Center documentation.

# **Configure a Remote Storage Host**

Before you back up application data, you must establish a remote storage host with SSH key authentication and configure that host in Tenable Core.

Before you begin:

- Confirm your SSH private key for authenticating to the remote storage host is in OpenSSH key format.
- Prepare your remote storage host environment, as described in the <u>Remote Storage Host</u> <u>Requirements</u>.
- Confirm that you can log in to your remote storage host using SSH key authentication.

**Note**: There are several ways to create your own SSH private key. These are not Tenable-specific processes. Consult your system administrator.

To configure your remote storage host:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Remote Storage**.

The **Remote Storage Configuration** page appears.

- 3. In the **Remote Host** box, type the hostname for the remote storage host where you want to store your backup files.
- 4. In the **Remote Path:** box, type the location on the remote host where you want to store your backup files.
- 5. In the **User** box, type the username for a user on the remote host with edit permissions for the remote path location.
- 6. In the **SSH private key** box, paste the SSH private key for authenticating to the remote storage host.
- 7. Click Save Configuration.

What to do next:

- Perform a backup, as described in <u>Perform a Backup on Demand</u>.
- (Optional) Change your automatic backup schedule, as described in <u>Change Your Automatic</u> <u>Backup Schedule</u>.

0 -

\_\_\_\_\_

• (Optional) Restore a backup, as described in <u>Restore a Backup</u>.

# Perform an On-Demand Backup

Perform a backup of your application data anytime between scheduled backups. For more information about scheduled backups, see Change the Scheduled Backup Time.

**Note**: During a backup or a restore, Tenable Core stops the Tenable Nessus application service. You cannot use Tenable Nessus or the Tenable Nessus interface during this time.

After the backup or restore completes, your services restart and Tenable Nessus resumes normal function.

Before you begin:

• Configure your remote storage host, as described in <u>Configure Remote Storage Host</u>.

To perform an on-demand backup:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Backup/Restore**.

The **Backup/Restore** page appears.

- In the AVAILABLE MODULES section, select the box next to the application you want to back up.
- 4. Click Take Backup Now.

The **BACKUP IN PROGRESS** window appears. The window disappears after the system completes the backup.

What to do next:

• (Optional) Restore the backup, as described in <u>Restore a Backup</u>.

# Change the Scheduled Backup Time

By default, Tenable Core backs up your applications daily at 2:30 AM local time. You can edit your schedule preferences in Tenable Core to change the time and frequency of your scheduled backups.

For more information about managing your time preferences, see Edit Your Time Settings.

**Note**: Tenable Core cannot perform a backup (scheduled or on-demand) until you configure a remote storage host on your computer. For more information, see <u>Configure a Remote Storage Host</u>.

To change the scheduled backup time:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Backup/Restore**.

The **Backup/Restore** page appears.

- 3. In the AUTOMATIC BACKUPS table, locate the Timer Config Line row.
- 4. Click Edit.

The EDIT TIMER CONFIGURATION window appears.

5. On the **EDIT TIMER CONFIGURATION** window, update the configuration based on your desired backup frequency:

**Note**: If you specify a day of the week and a day of the month for your scheduled backups, Tenable Core performs the backups only when those values overlap. For example, if you specify *Monday* and 15, Tenable Core performs your backups only on Mondays that fall on the 15th day of the month.

Frequency	Configuration
Daily	<ul> <li>In the Day of Week and Day of Month boxes, type an asterisk (*).</li> </ul>
	• In the <b>Hour</b> box, type the hour when you want Tenable Core to per- form a backup as an integer between 0 and 23.
	• In the <b>Minute</b> box, type the minute when you want Tenable Core to

	perform a backup as an integer between 0 and 59.
Weekly	• In the <b>Day of Week</b> box, type the day of the week when you want Tenable Core to perform a backup (for example, <i>Monday</i> or <i>Mon</i> ).
	<ul> <li>In the Day of Month box, type an asterisk (*).</li> </ul>
	• In the <b>Hour</b> box, type the hour you want Tenable Core to perform a backup as an integer between 0 and 23.
	• In the <b>Minute</b> box, type the minute you want Tenable Core to per- form a backup as an integer between 0 and 59.
Monthly	<ul> <li>In the Day of Week box, type an asterisk (*).</li> </ul>
	<ul> <li>In the Day of Month box, type the day of the month when you Ten- able Core to perform a backup as an integer (for example, 15).</li> </ul>
	• In the <b>Hour</b> box, type the hour you want Tenable Core to perform a backup as an integer between 0 and 23.
	• In the <b>Minute</b> box, type the minute you want Tenable Core to per- form a backup as an integer between 0 and 59.

 $\bigcirc$ 

### 6. Click Save.

Your scheduled backup time updates.

What to do next:

- (Optional) Perform an on-demand backup, as described in <u>Perform a Backup On Demand</u>.
- (Optional) Restore the backup, as described in <u>Restore a Backup</u>.

# **Restore a Backup**

You can restore a backup to return an application to a prior state.

**Note**: During a backup or a restore, Tenable Core stops the Tenable Nessus application service. You cannot use Tenable Nessus or the Tenable Nessus interface during this time.

After the backup or restore completes, your services restart and Tenable Nessus resumes normal function.

Before you begin:

• Check your firewall settings and confirm that your computer can access port 8090 on Tenable Core, as described in Access Requirements.

To restore an application backup:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **Backup/Restore**.

The **Backup/Restore** page appears.

3. In the **UPLOAD AND RESTORE** section, click **Choose a file**.

Your file manager appears.

- 4. Select the desired backup file.
- 5. Click Open.

A details window for the backup appears.

6. If prompted, confirm that you want to upgrade or downgrade your current Tenable Core application version to match the application version from your backup file.

#### a. Click Install Correct Version.

A confirmation window appears.

b. Click Replace.

Tenable Core installs the correct version of your application.

The restore window appears.

#### 7. Click **Restore**.

The system restores your backup to Tenable Core.

**Note**: Do not log out of Tenable Core or close your browser until after the **Uploading the archive** task is complete. If you end your session early, the restore fails.

When the restore finishes, a success message appears.

**Tip**: If the restore attempt fails, an error message appears with details and remediation instructions. Resolve the errors and click **Retry**.

# **SNMP Agent Configuration**

If your organization uses a Simple Network Monitoring Protocol (SNMP) network management station (NMS) for device monitoring, you can install a net-snmp agent onto Tenable Core to report device data to your NMS.

You can use the user interface to configure common SNMPv2 or SNMPv3 settings. To configure other advanced or uncommon SNMP settings, use the CLI.

- Configure an SNMP Agent via the User Interface
- Configure an SNMP Agent via the CLI

To stop, start, restart, or reload the SNMP service in Tenable Core, or to view SNMP logs, see <u>Manage Services</u>.

# **Configure an SNMP Agent via the User Interface**

Required User Role: Administrator with Reuse my password for privileged tasks enabled

If your organization uses a Simple Network Monitoring Protocol (SNMP) network management station (NMS) for device monitoring, you can install a net-snmp agent onto Tenable Core to report device data to your NMS.

You can use the user interface to configure common SNMPv2c or SNMPv3 settings. To configure other advanced or uncommon SNMP settings, use the CLI as described in <u>Configure an SNMP Agent</u> via the CLI.

To install and configure an SNMP agent on Tenable Core via the user interface:

1. Log in to Tenable Core via the user interface, as described in Log In to Tenable Core.

The **System** page appears.

2. In the left navigation bar, click **SNMP**.

If you already installed an SNMP agent on Tenable Core, the **SNMP** page appears. If you do not have an SNMP agent installed on Tenable Core, the **Install SNMP Packages** window appears.

 (Optional) In the Install SNMP Packages window, click Install SNMP to install the SNMP service.

Tenable Core installs the SNMP service and opens inbound ports 161 and 162 on Tenable Core.

The **SNMP** page appears.

4. In the **SNMP common setup** section, configure the contact properties you want to appear on your NMS for this instance of Tenable Core.

Option	Description
Contact	A name, email address, or other identifier for the person you want to list as the contact for questions about this instance of Tenable Core.
Location	A geographic, organizational, or other location descriptor for the person you want to list as the contact for questions about this instance of Ten- able Core.

 If you want to grant an SNMPv2c NMS access to Tenable Core, in the SNMPv2c access control setup section, configure one or both of the settings:

0

Option	Description
read-only access community name	Specifies the read-only community string for the SNMPv2c NMS.
read-write access community name	Specifies the read-write community string for the SNMPv2c NMS.

If you want to grant an SNMPv3 NMS read-only access to Tenable Core, in the SNMPv3 access control setup section, configure the settings:

Option	Description
Read-only Hash algorithm	Specifies the read-only hash algorithm for the SNMPv3 NMS.
Read-only access user- name	Specifies the username and password for an account on the SNMPv3 NMS.
Read-only access user password	

If you want to grant an SNMPv3 NMS read-write access to Tenable Core, in the SNMPv3 access control setup section, configure the settings:

Option	Description
Read-write Hash algorithm	Specifies the read-write hash algorithm for the SNMPv3 NMS that you want to grant read-write access on Tenable Core.
Read-write access username Read-write	Specifies the username and password for an account on the SNMPv3 NMS.
access user pass- word	

8. Click Save Configuration.

Tenable Core saves your SNMP configuration.

\_\_\_\_\_

0 -

# **Configure an SNMP Agent via the CLI**

#### Required User Role: Root user

If your organization uses a Simple Network Monitoring Protocol (SNMP) network management station (NMS) for device monitoring, you can install a net-snmp agent onto Tenable Core to report device data to your NMS.

To install and configure an SNMP agent on Tenable Core via the CLI:

- 1. Prepare the net-snmp agent configuration file and add it to Tenable Core, as described in the Net-SNMP Documentation.
- 2. Log in to Tenable Core via the Terminal page or command line interface (CLI).

The command line appears.

3. In the /etc/snmp/ directory, open the snmpd.local.conf file.

The file opens.

- 4. Locate the **IncludeFile** line in the file.
- 5. Comment out the **IncludeFile** line to instruct Tenable Core to ignore all current and future configurations on the **SNMP** page of the Tenable Core user interface.

Tenable Core ignores SNMP configurations in the Tenable Core user interface.

# Take a Virtual Machine Snapshot

You can take a snapshot to back up your entire machine, including application-installed files, application data, OS files, and configurations.

O

Before you begin:

• Stop your instance of Tenable Core + Tenable Nessus, as described in <u>Start, Stop and Restart</u> <u>Tenable Core</u>.

To take a snapshot of Tenable Core:

1. Take a snapshot, as described in the documentation for your environment.

# FAQ

# When are Tenable Core offline update ISOs released?

Tenable Core releases offline updates throughout the year on a quarterly basis, within two weeks after the end of a quarter.

# Can I skip offline updates?

Tenable recommends that you apply updates in order. Tenable does not test, or support, skipping updates. If you have an old version of Tenable Core, it is best to back up the data and restore it on a newer version of Tenable Core.

## **Does Tenable provide old Tenable Core ISOs?**

The <u>downloads page</u> has the current ISO and images from the last four quarters. Tenable does not provide any ISOs older than what is available on the downloads page. If you are looking for an older ISO to downgrade one of the products, you can follow the Tenable Core <u>documentation</u>.

# How can I find out what updates are in an offline Tenable Core ISO?

The <u>release notes</u> for offline ISOs have a section for package updates that are present in the ISO.

# How long does it take for a Tenable software update to be available in Tenable Core?

Tenable Core holds a new version of Tenable Nessus until the general availability (GA) date in Tenable Vulnerability Management. This is usually a week after the stand-alone Tenable Nessus GA. Releases for other products on Tenable Core usually occur within 24 hours of the GA date.

## How can I disable or reenable automatic updates?

Automatic update configuration is in Tenable Core documentation.

## Can I use a local repository for software updates?

Tenable Core does not support this feature. Tenable encourages you to submit a feature request.

# How long will Tenable Core support RHEL/CentOS 7?

Tenable Core bases off of CentOS 7 and support ends when RHEL 7 support officially ends.

## Why is Tenable Security Center down every morning?

Tenable Core shuts down Tenable Security Center if you have automatic updates enabled while detecting an updated version. If the update fails for any reason, or stalls because a service is not stopping, Tenable Security Center remains down pending user intervention. Automatic backups can also shut down Tenable Security Center, and if a problem occurs, it may not properly restart.

# Does Tenable support X software that I installed on my Tenable Core instance?

You can install any software you wish on Tenable Core instances. Tenable does not support the additional software, but fully supports Tenable Core and the installed product in that situation. Tenable reserves the right to require that you remove the additional software if it is impacting an issue you are having, and requesting support for.

# How do I reset my administrator password in Tenable Core?

The process to reset your password is in this <u>Tenable Community Knowledge Article</u>.