Flexera

Software Vulnerability Manager 2019 Virtual Appliance

Installation Guide

Legal Information

Book Name: Software Vulnerability Manager 2019 Virtual Appliance Installation Guide

Part Number: SVM-7300-VAIG02

Product Release Date: July 2019

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Software Vulnerability Manager 2019 Virtual Appliance Installation Guide

Software Vulnerability Manager 2019 Virtual Appliance

Software Vulnerability Manager is a revolutionary tool that simplifies the troublesome area of identifying vulnerable programs and patching them.

Software Vulnerability Manager Virtual Appliance provides you with an easy way to deploy and configure Software Vulnerability Manager without the need install and configure a Linux server from scratch. The VA is designed to be easy to deploy and require minimal maintenance.

If the appliance is based on Ubuntu Server LTS 14.04 then requires VMware vSphere 5.0+ with vSphere Client to deploy and run the Virtual Appliance. Deployment on VMWare and ESX is also supported.

If the appliance is based on CentOS, deployment on VMWare and HyperV virtualization platforms is also supported.

By scanning the network, organizations can effectively protect their corporate IT infrastructure against the threat posed by unpatched vulnerabilities:

- Non-intrusive authenticated vulnerability and patch scanning
- Covers programs and plug-ins from thousands of vendors
- Unprecedented accuracy, no more false positives
- Reports security status for each program
- Reports criticality rating for each insecure program
- Reports end-of-life programs
- Identifies missing patches
- Automated patch repackaging
- Integration with WSUS for easy patch distribution

- Integration with System Center Configuration Manager for extensive patch management

Table 2-1 • Software Vulnerability Manager On-Premises Edition Virtual Appliance Installation Guide

Topic	Content
Installing Software Vulnerability Manager Ubuntu OS	The following topics appear in the order that they appear in the installation procedure. • Initial Configuration • Network Configuration • Customer Information • Server Configuration • Disk Initialization • Database Configuration • Configure Your Maria DB Server (Optional) • Proxy Configuration • Email and SMS Settings • Software Updates • LDAP Configuration
Installing Software Vulnerability Manager CentOS	The following topics appear in the order that they appear in the installation procedure. • Initial Configuration • Network Configuration • Customer Information • Server Configuration • Disk Initialization • Database Configuration • Proxy Configuration • Email and SMS Settings • Software Updates • LDAP Configuration

Table 2-1 • Software Vulnerability Manager On-Premises Edition Virtual Appliance Installation Guide

Topic	Content
Appendix A - CentOS VA migration from Ubuntu VA	Explains Migration from Ubuntu Virtual Appliance to CentOS Virtual Appliance • Actions on Ubuntu Vitrual Appliance • Actions on CentOS Virtual Appliance • Migration Steps  ***Note*** • *Flexera highly recommends to use the CentOS Virtual Appliance to deploy the Software Vulnerability Manager.*

Legal Information

Software Vulnerability Manager 2019 Virtual Appliance

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Using Help

Help is available from the [ProductName] interface help icon located at the top right of the screen or click the fields labeled with a "(?)" to access the contextual help.

Online Help

For online help, see https://helpnet.flexerasoftware.com/csionprem/Default.htm

Release Notes

For the latest product release notes, see https://helpnet.flexerasoftware.com/?product=Software%20Vulnerability%20Manager%202018%20On-Premises%20Edition&version=2018

For earlier product release notes, see https://helpnet.flexerasoftware.com/?product=Software%20Vulnerability%20Manager%202018%20On-Premises%20Edition&version=Previous

Contacting Us

Software Vulnerability Manager 2019 Virtual Appliance

Flexera is headquartered in Itasca, Illinois, and has offices worldwide. To contact us or to learn more about our products, visit our website at: https://www.flexera.com/

Product Feedback

Have a suggestion for how we can improve this product? Please come share direct feedback with the product team and vote on ideas submitted by other users in our online community at: Customer Community feedback page for Software Vulnerability Manager.

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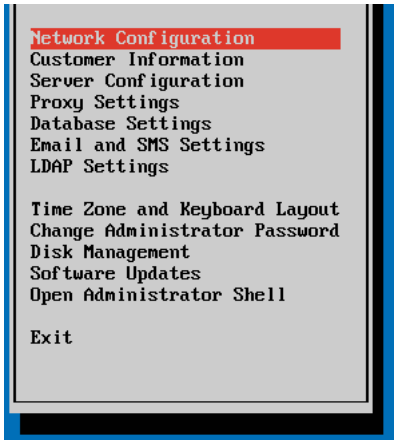
Installing Software Vulnerability Manager Ubuntu OS

Software Vulnerability Manager 2019 Virtual Appliance

The following steps appear in the order that they appear in the installation procedure. You can use the arrow and Page Up/Down keys to navigate, press ESC to go back or F2 to open an administrator shell.

- Initial Configuration
- Network Configuration
- Customer Information
- Server Configuration
- Disk Initialization
- Database Configuration
- Configure Your Maria DB Server (Optional)
- Proxy Configuration
- Email and SMS Settings
- Software Updates
- LDAP Configuration



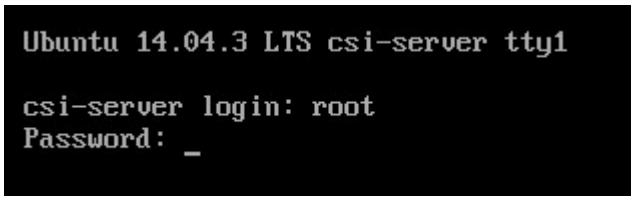
Important • *Note the below following recommendations on Virtual Appliance:*

- *Flexera highly recommends to use the CentOS Virtual Appliance to deploy the Software Vulnerability Manager.*
- *To migrate from the Ubuntu Virtual Applicance to the CentOS Virtual Appliance, see* **Appendix A - CentOS VA migration from Ubuntu VA**

Initial Configuration

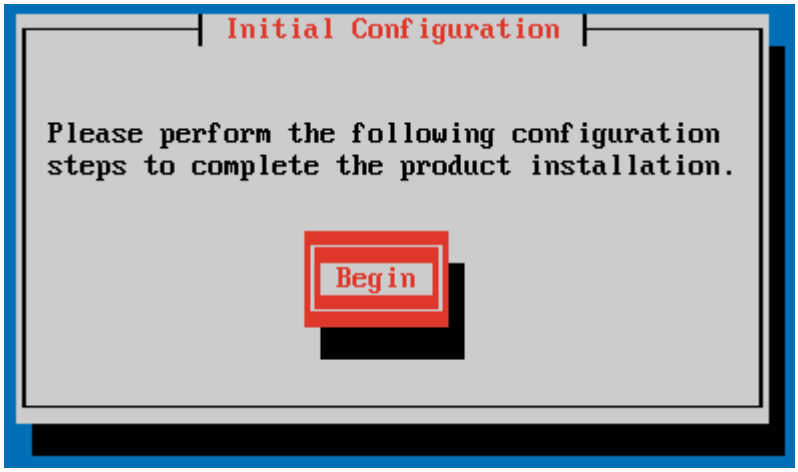
Software Vulnerability Manager 2019 Virtual Appliance

To start the configuration, login to your Software Vulnerability Manager server as root and enter the default password (flexera).



The Initial Configuration screen will appear. Click **Begin** to start configuring the Software Vulnerability Manager Virtual Appliance for the following.

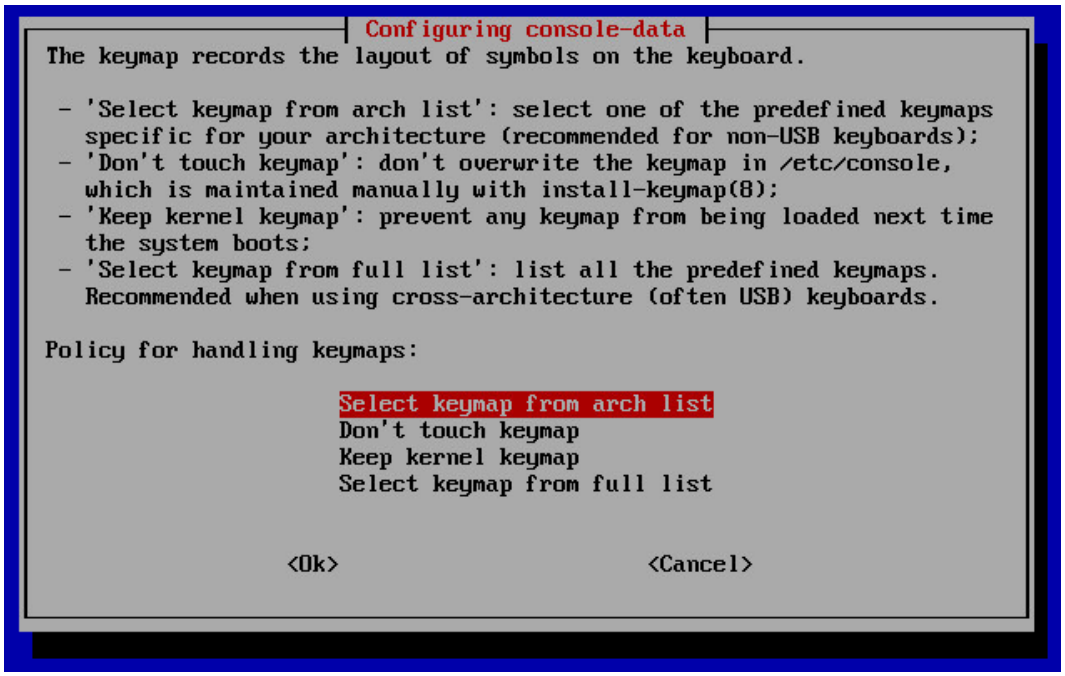
- Configure Your Console Data
- Configure Your Time Zone Data
- Change Your Administrator Password



Configure Your Console Data

Software Vulnerability Manager 2019 Virtual Appliance

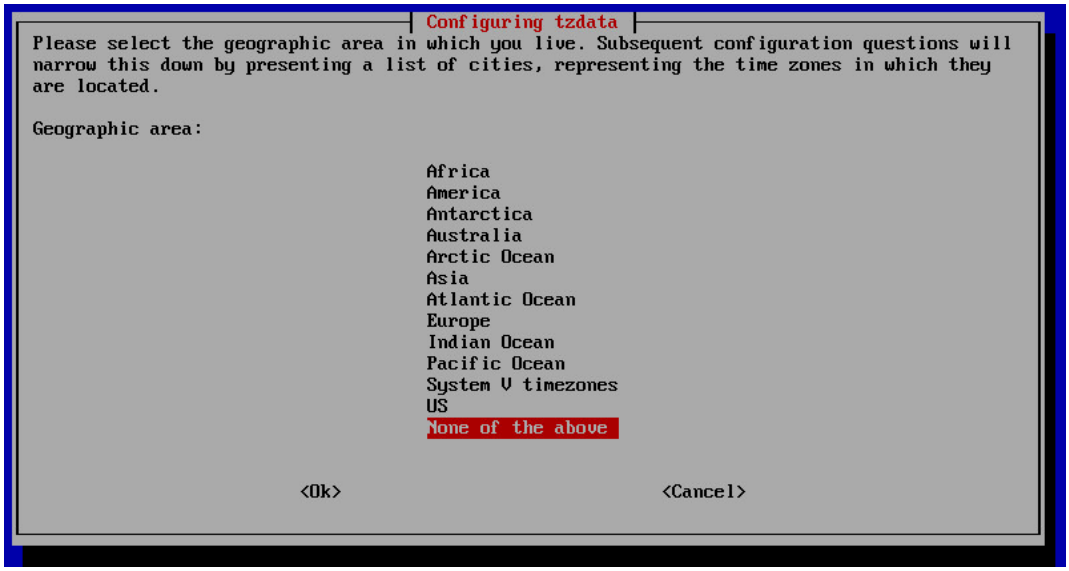
Select the policy you want to use for handling keymaps and click **OK**.



Configure Your Time Zone Data

Software Vulnerability Manager 2019 Virtual Appliance

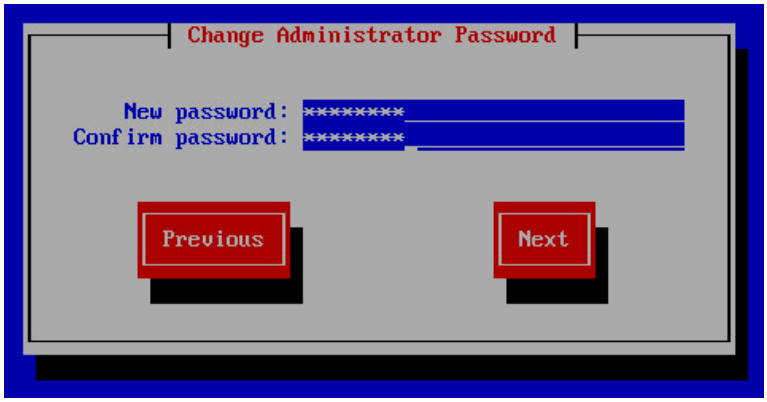
Select you geographic area from the list and click **OK**. You will then be presented with a list of cities representing the time zones in which they are located.



Change Your Administrator Password

Software Vulnerability Manager 2019 Virtual Appliance

Enter and confirm a new root account password for the Ubuntu Linux install on the VA and click **Next**.

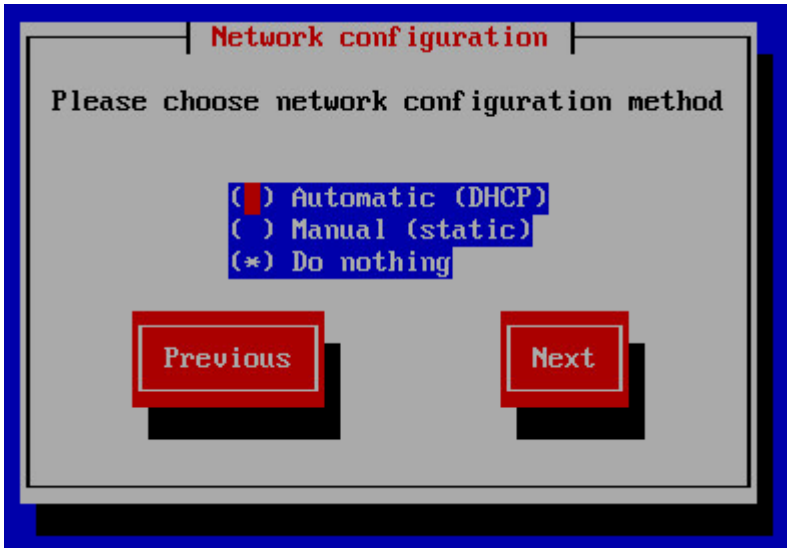


Network Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Choose the network configuration method to use and click **Next** to configure the following.

- Automatic (DHCP) Network Configuration
- Manual (Static) Network Connection
- Do Nothing



Automatic (DHCP) Network Configuration

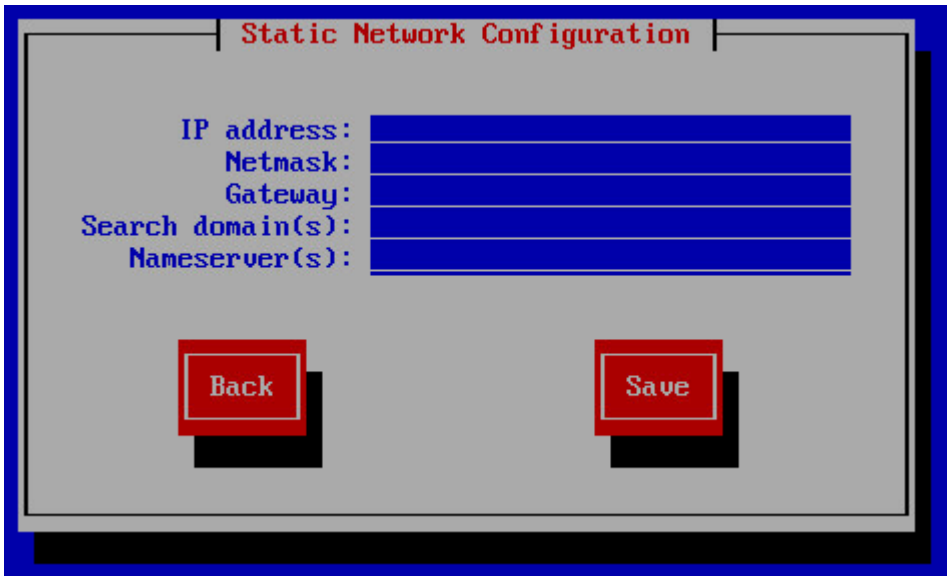
Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Automatic (DCHP)** in the previous step no further action is required.

Manual (Static) Network Connection

Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Manual (static)** in the previous step you must enter the required details and click **Save**.



Do Nothing

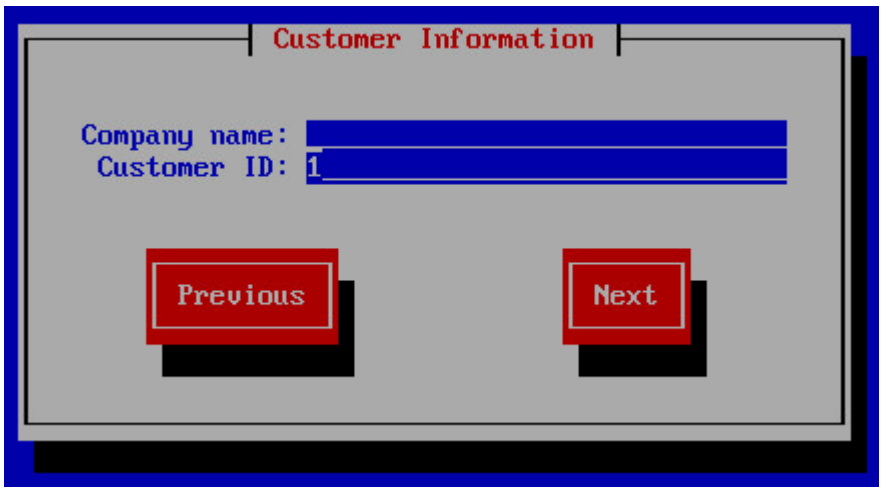
Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Do nothing** in the previous step no further action is required.

Customer Information

Software Vulnerability Manager 2019 Virtual Appliance

Enter the name of your company, your Customer ID number that was supplied by Flexera and click **Save**.

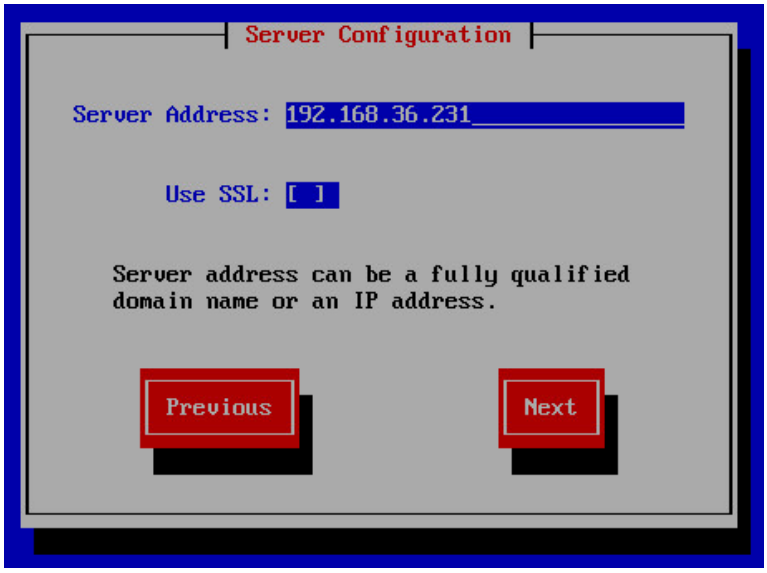


Server Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Enter your Server Address, which can be a fully qualified domain name or an IP address, and click **Next** to Create Server Certificate.

Note • *This needs to match the URL that will be used to access the server via HTTP/HTTPS.*

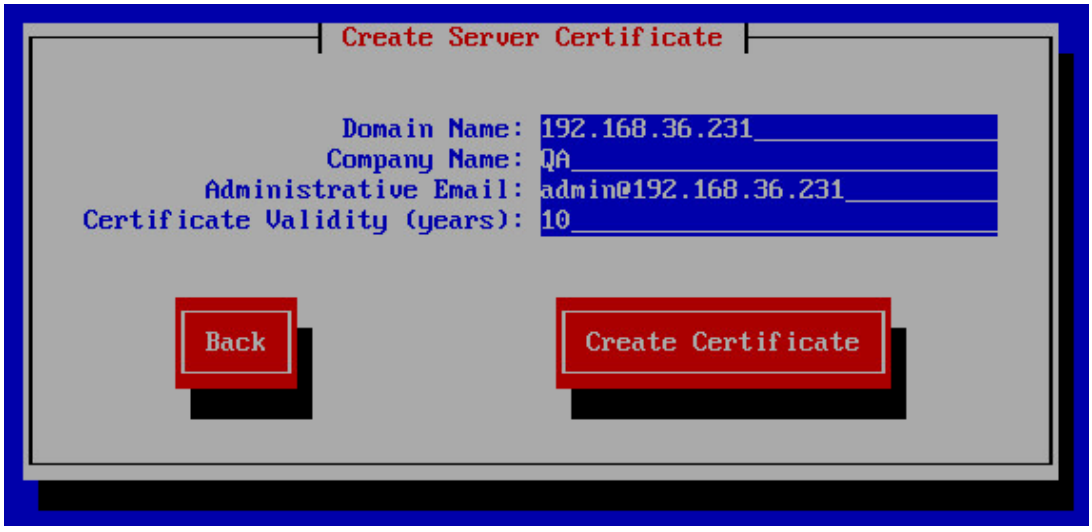


Create Server Certificate

Software Vulnerability Manager 2019 Virtual Appliance

Enter your Domain Name, Company Name, Administration Email and Certificate Validity (years) and click **Create Certificate**.

This generates a self-signed certificate. It is necessary to distribute the certificate to all hosts running the UI, System Center Plugin, Daemon and agents. Currently the public certificate can be recovered either by copying it from inside the VA (it is saved as /etc/csi/) or by exporting it from Internet Explorer.

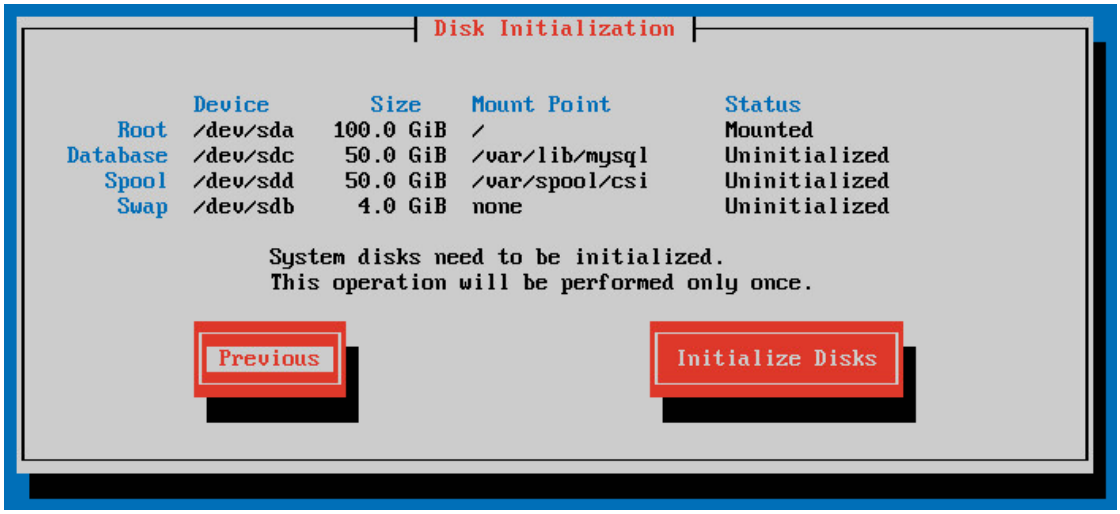


Disk Initialization

Software Vulnerability Manager 2019 Virtual Appliance

Click **Initialize Disks** to partition your drives to ensure that you have enough disk space for the Software Vulnerability Manager Virtual Appliance.

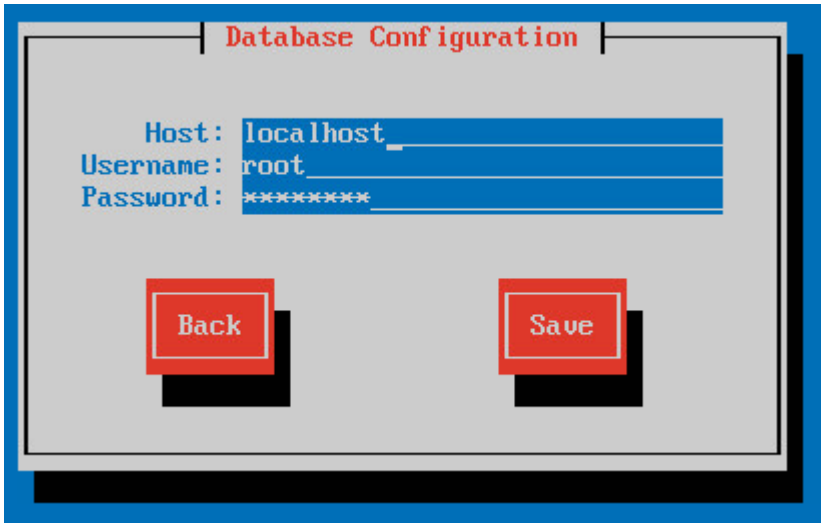
When completed, click **Next**.



Database Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Enter the Host, Username and Password details and then click **Next**.

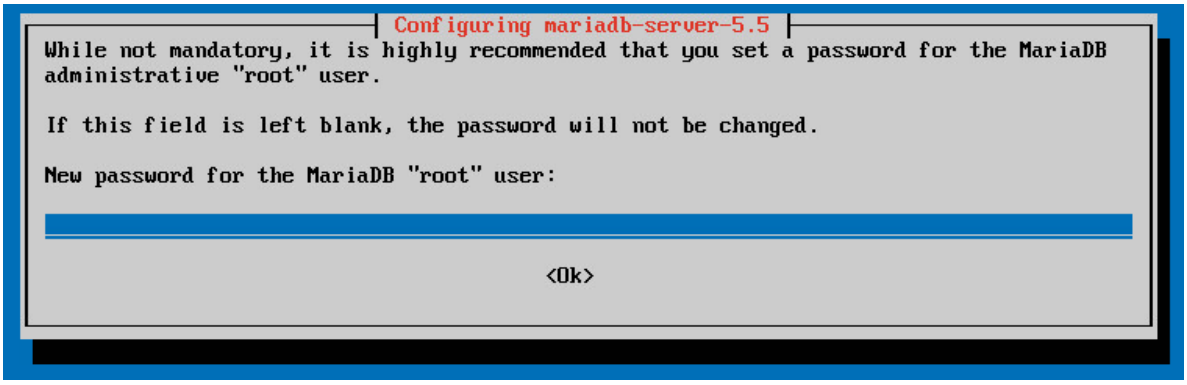


Configure Your Maria DB Server (Optional)

Software Vulnerability Manager 2019 Virtual Appliance

Enter a new password for your MariaDB administrative root server (optional) and click **OK**. You will be asked to repeat the password.

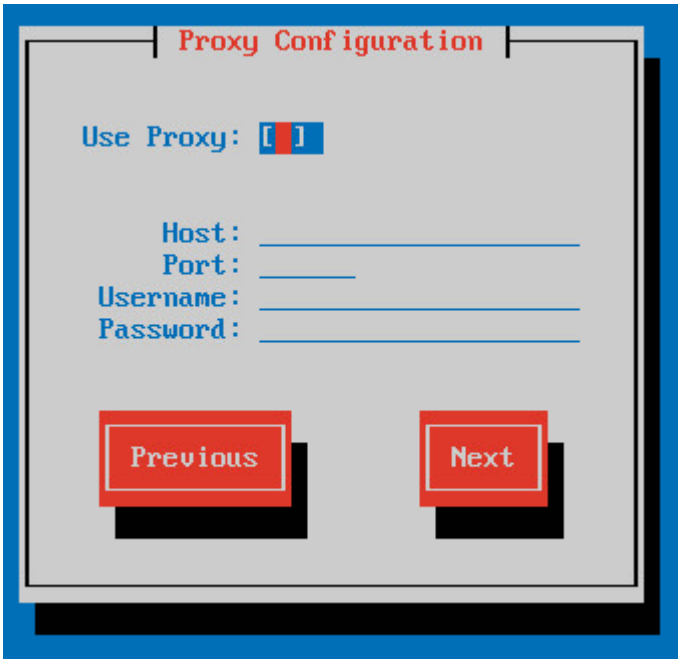
When completed, click **Ok**.



Proxy Configuration

Software Vulnerability Manager 2019 Virtual Appliance

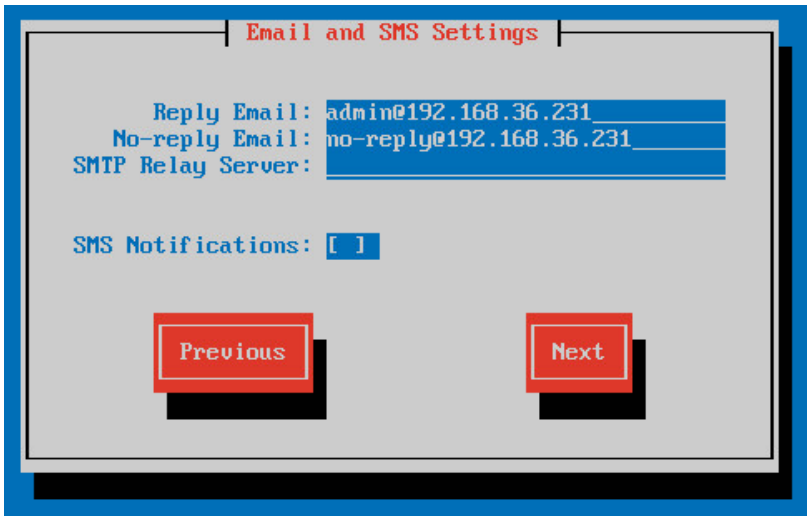
If your network uses a proxy to connect to the Internet, you can select **Use Proxy**, enter the Host, Port, Username and Password details and then click **Next**.



Email and SMS Settings

Software Vulnerability Manager 2019 Virtual Appliance

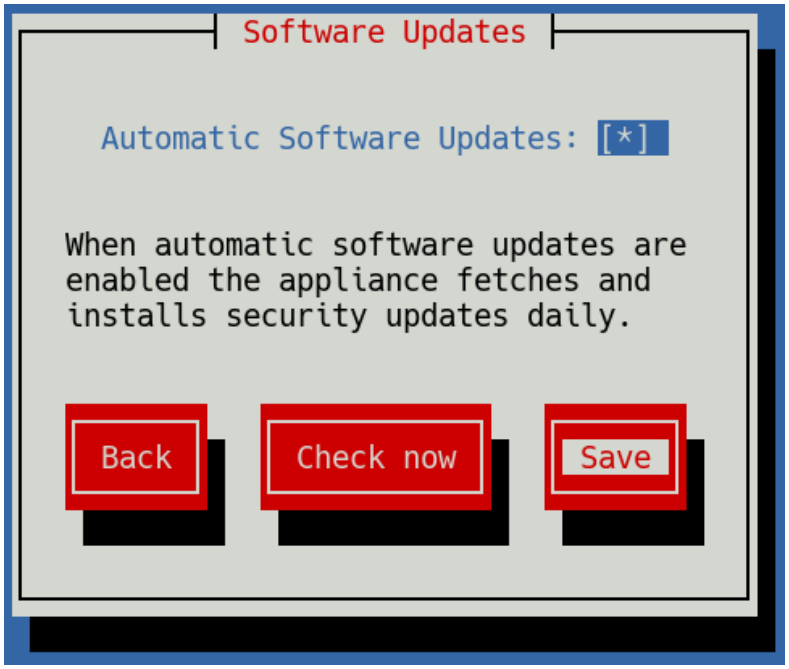
Enter the Email and SMS notification details and click **Next**.



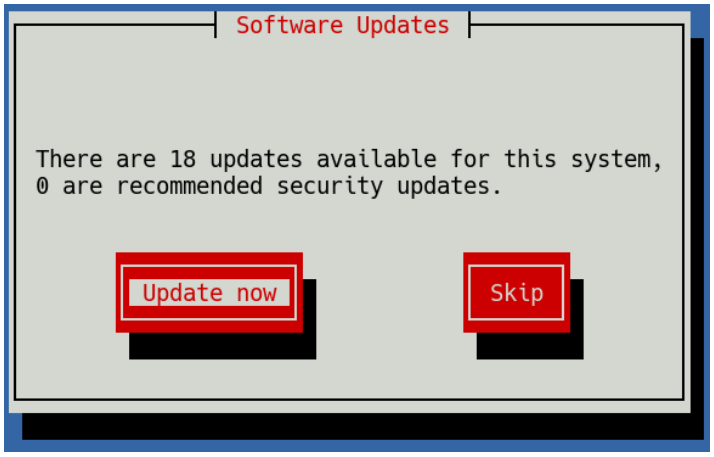
Software Updates

Software Vulnerability Manager 2019 Virtual Appliance

Enable automatic software updates to check for, and install, security updates on a daily basis.



You will be informed of all available security updates and given the option to **Update now** or **Skip** them.



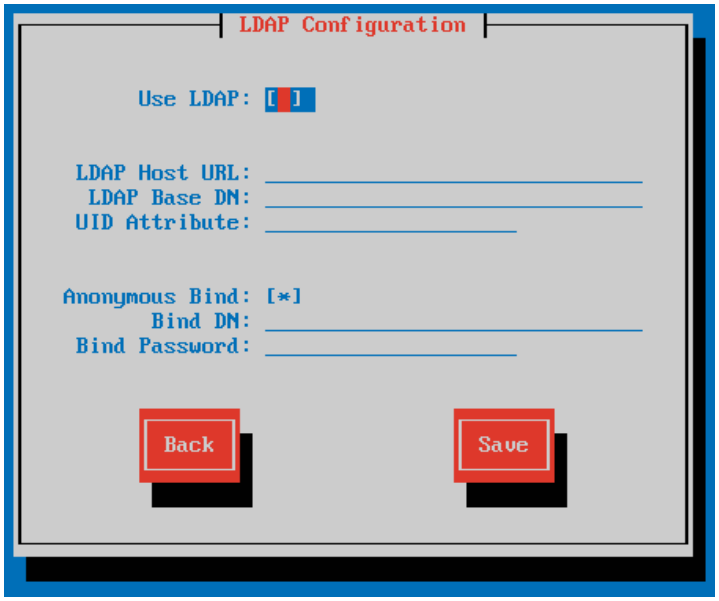
LDAP Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Before configuring LDAP support you will need the following:

- The LDAP URL for your LDAP server
- The Base DN for the point in the directory where user-lookups will be made (the Base DN must contain at least one user account)
- The LDAP UID attribute that the usernames will be compared to
- The Bind DN for user-lookups or, alternatively, existing support for anonymous bind lookups

Select **Use LDAP**, enter the LDAP Host URL, LDAP Base DN, UID Attribute, and Bind details and then click **Save**.



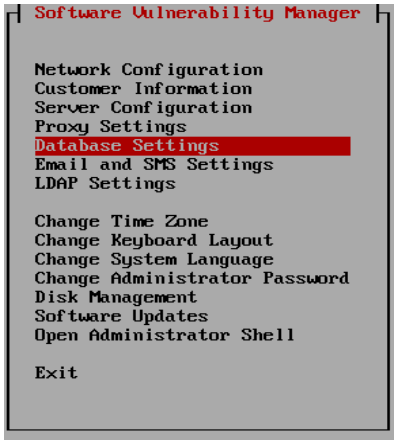
4

Installing Software Vulnerability Manager CentOS

Software Vulnerability Manager 2019 Virtual Appliance

The following steps appear in the order that they appear in the installation procedure. You can use the arrow and Page Up/Down keys to navigate, press ESC to go back or F2 to open an administrator shell.

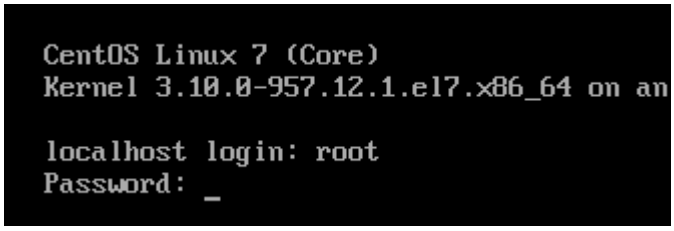
- Initial Configuration
- Network Configuration
- Customer Information
- Server Configuration
- Disk Initialization
- Database Configuration
- Proxy Configuration
- Email and SMS Settings
- Software Updates
- LDAP Configuration



Initial Configuration

Software Vulnerability Manager 2019 Virtual Appliance

To start the configuration, login to your Software Vulnerability Manager 2019 server as root and enter the default password (flexera).



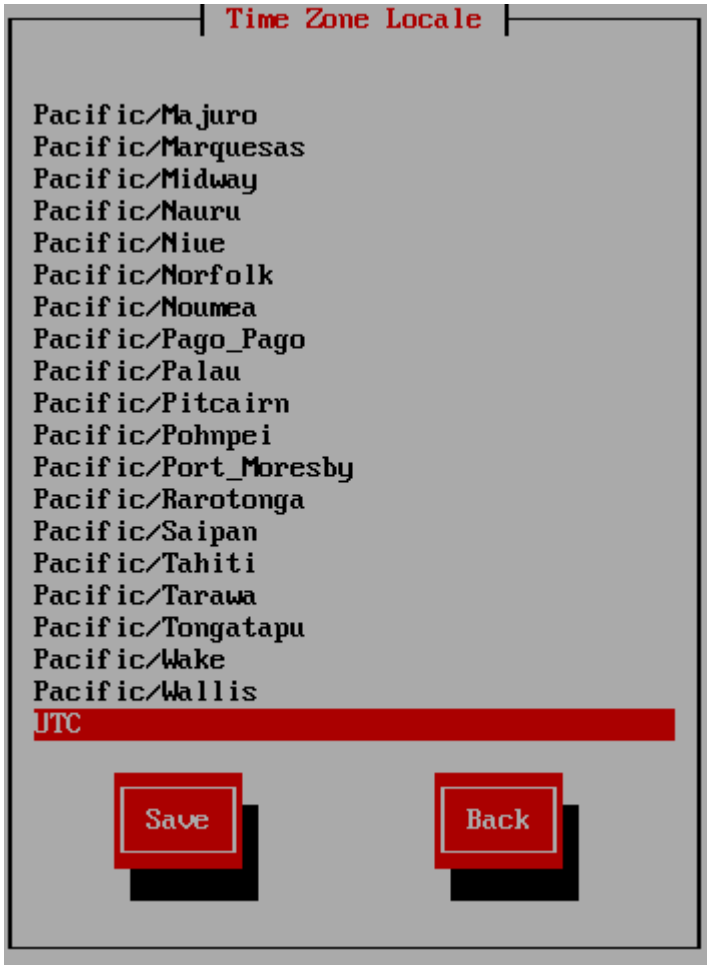
The Initial Configuration screen will appear. Click **Begin** to start configuring the Software Vulnerability Manager 2019 Virtual Appliance for the following.

- Configure Your Time Zone
- Configure Your keyboard Layout
- Configure Your System Language

Configure Your Time Zone

Software Vulnerability Manager 2019 Virtual Appliance

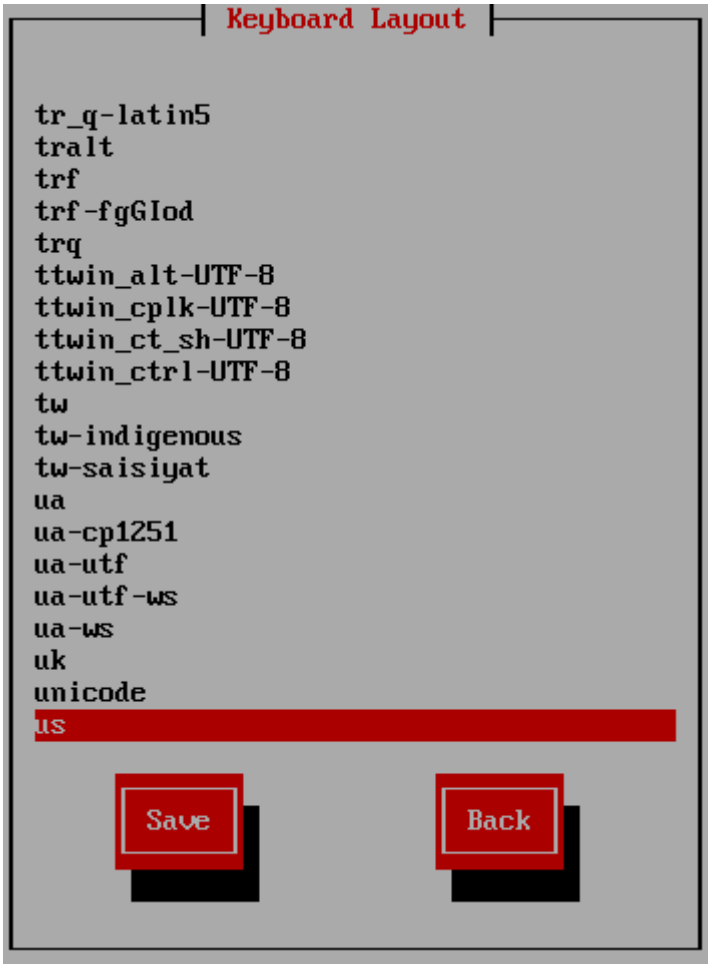
Select your time zone from the list and click **Save**



Configure Your keyboard Layout

Software Vulnerability Manager 2019 Virtual Appliance

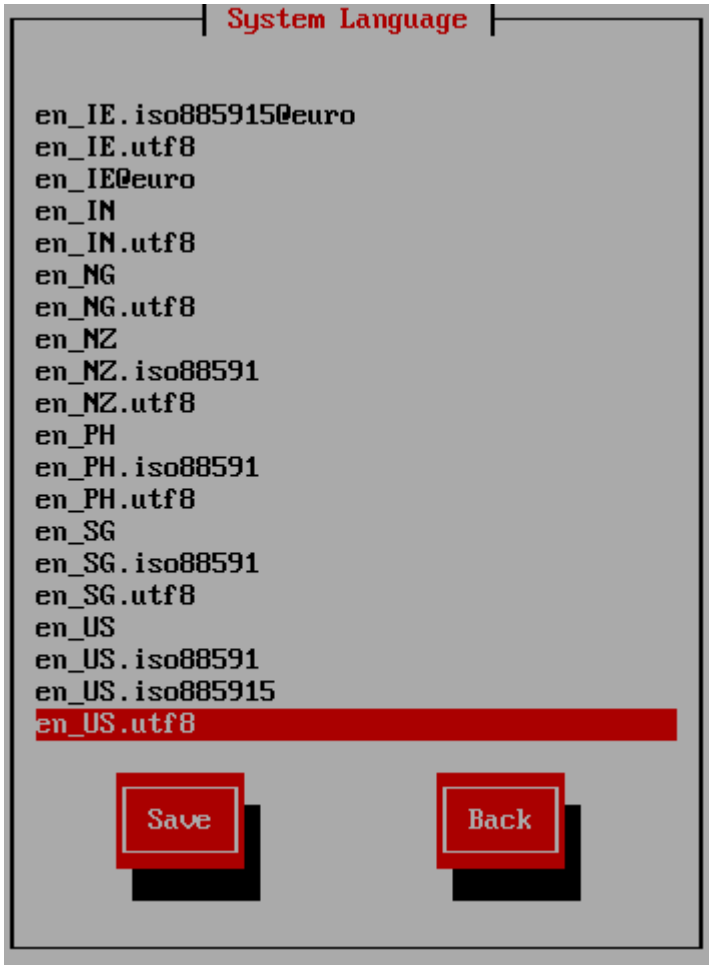
Select your keyboard layout from the list and click **Save.**



Configure Your System Language

Software Vulnerability Manager 2019 Virtual Appliance

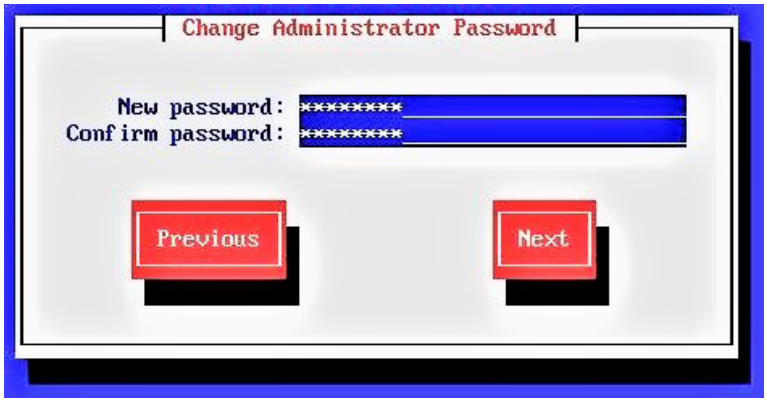
Select your system language from the list and click **Save.**



Change Your Administrator Password

Software Vulnerability Manager 2019 Virtual Appliance

Enter and confirm a new root account password for the CentOS Linux install on the Virtual Appliance and click **Next**.

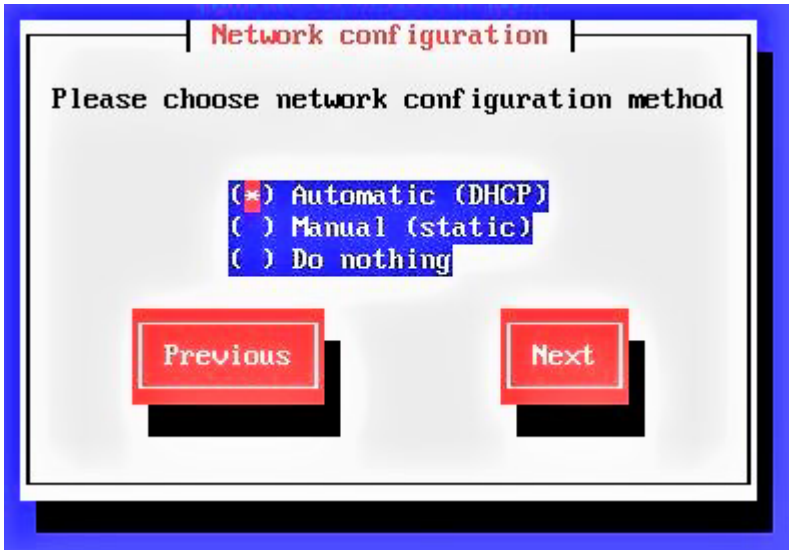


Network Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Choose the network configuration method to use and click **Next** to configure the following.

- Automatic (DHCP) Network Configuration
- Manual (Static) Network Connection
- Do Nothing



Note • *To select any network configuration method, use* ***Space Bar*** *in the key board*

Automatic (DHCP) Network Configuration

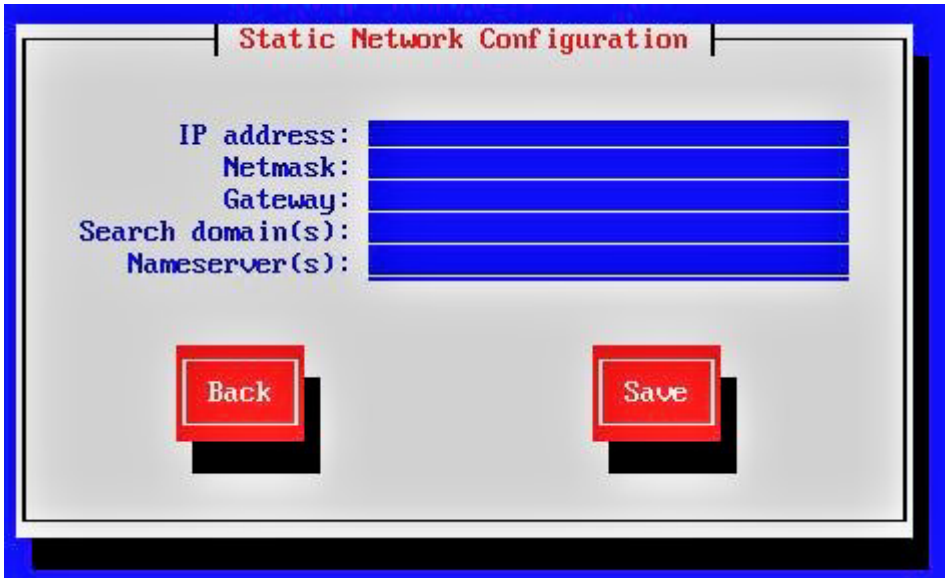
Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Automatic (DCHP)** in the previous step no further action is required.

Manual (Static) Network Connection

Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Manual (static)** in the previous step you must enter the required details and click **Save**.



Do Nothing

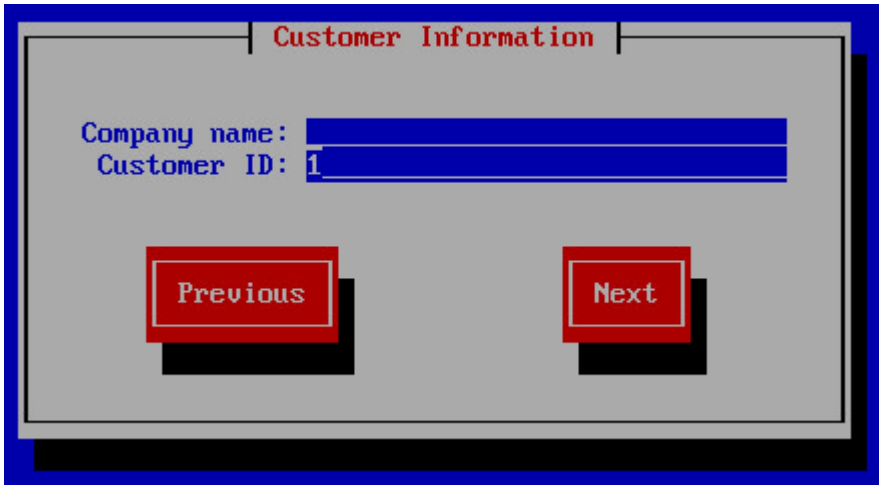
Software Vulnerability Manager 2019 Virtual Appliance

If you selected **Do nothing** in the previous step no further action is required.

Customer Information

Software Vulnerability Manager 2019 Virtual Appliance

Enter the name of your company, your Customer ID number that was supplied by Flexera and click **Save**.

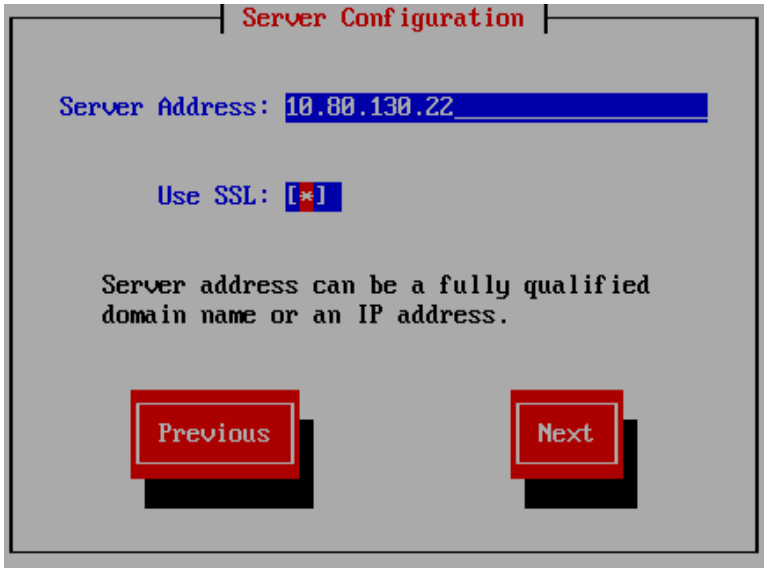


Server Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Enter your Server Address, which can be a fully qualified domain name or an IP address, and click **Next** to Create Server Certificate.

Note • *This needs to match the URL that will be used to access the server via HTTP/HTTPS.*

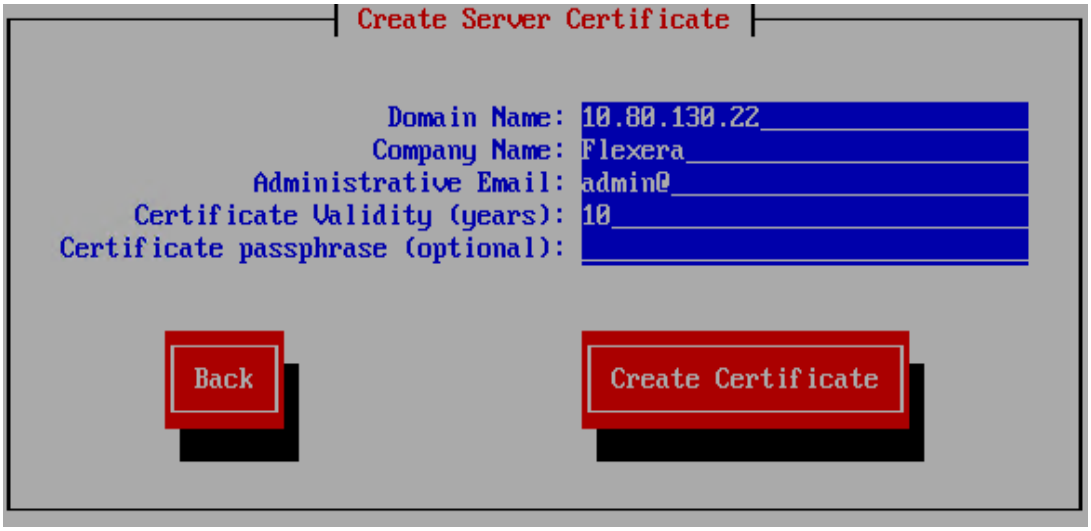


Create Server Certificate

Software Vulnerability Manager 2019 Virtual Appliance

Enter your Domain Name, Company Name, Administration Email and Certificate Validity (years) and click **Create Certificate**.

This generates a self-signed certificate. It is necessary to distribute the certificate to all hosts running the UI, System Center Plugin, Daemon and agents. Currently the public certificate can be recovered either by copying it from inside the Virtual Appliance (it is saved as /etc/csi/) or by exporting it from Internet Explorer.

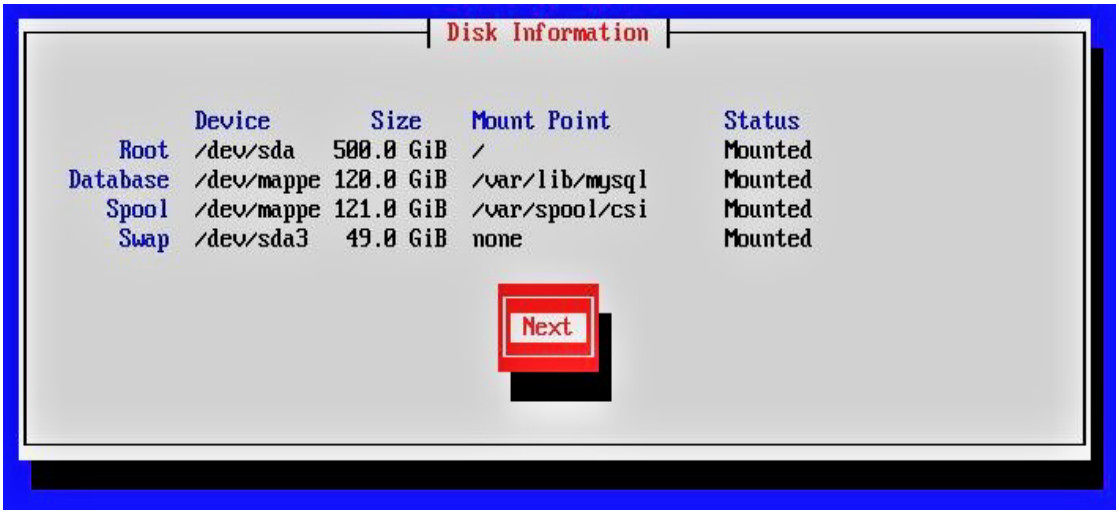


Disk Initialization

Software Vulnerability Manager 2019 Virtual Appliance

Click **Initialize Disks** to partition your drives to ensure that you have enough disk space for the Software Vulnerability Manager 2019 Virtual Appliance.

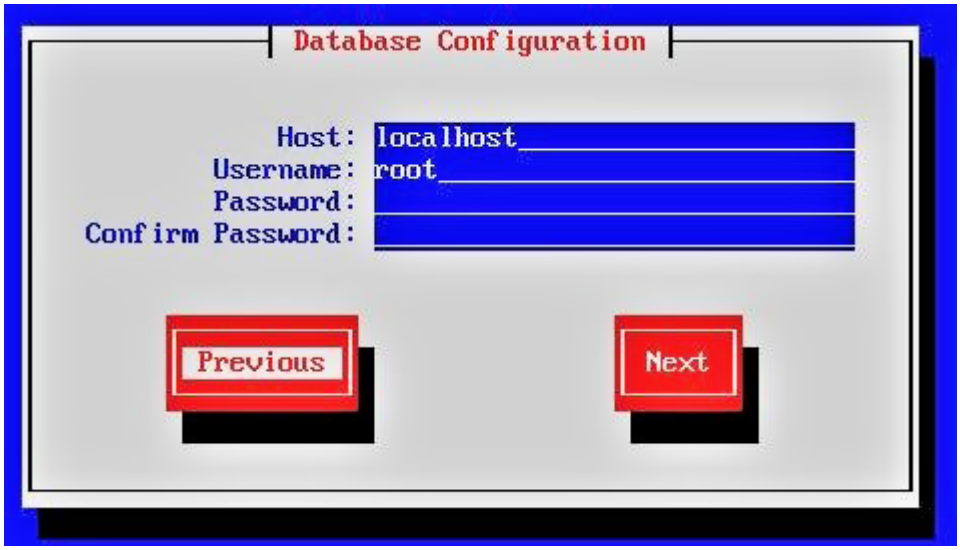
When completed, click **Next**.



Database Configuration

Software Vulnerability Manager 2019 Virtual Appliance

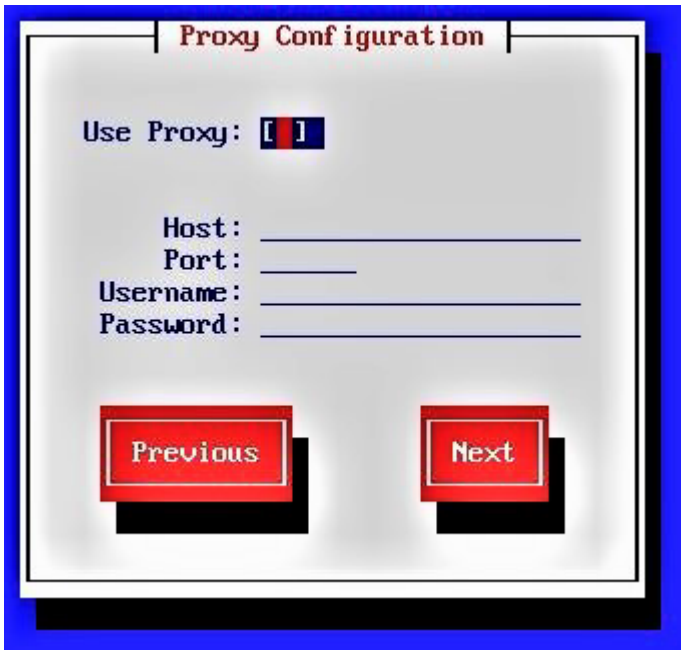
Enter the Host, Username and Password details and then click **Next**.



Proxy Configuration

Software Vulnerability Manager 2019 Virtual Appliance

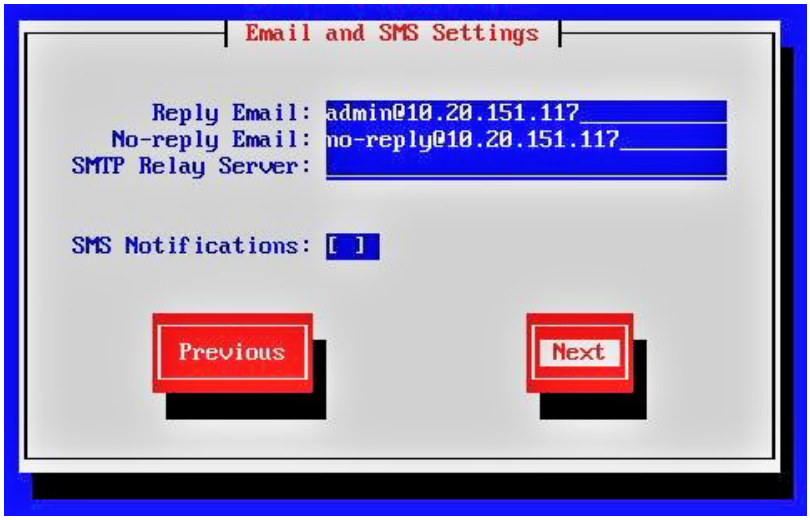
If your network uses a proxy to connect to the Internet, you can select **Use Proxy**, enter the Host, Port, Username and Password details and then click **Next**.



Email and SMS Settings

Software Vulnerability Manager 2019 Virtual Appliance

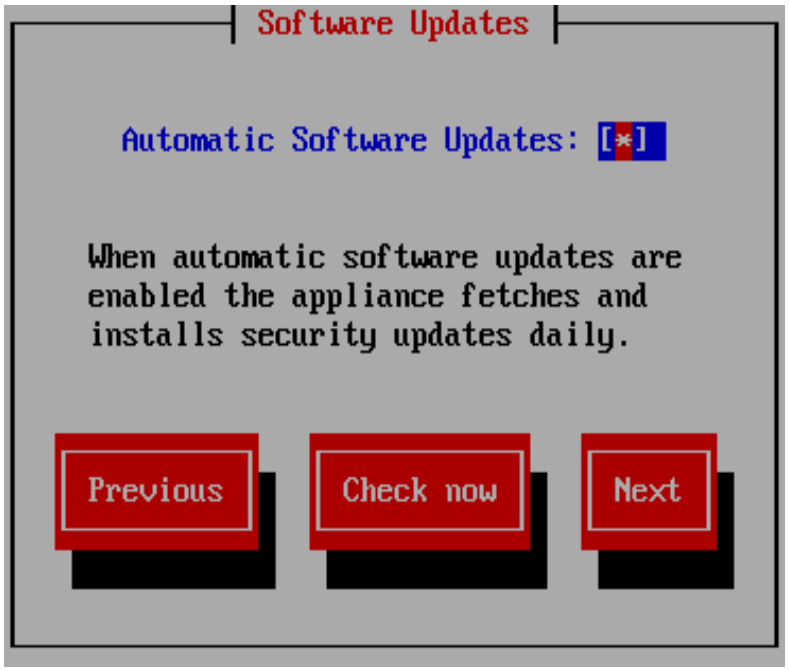
Enter the Email and SMS notification details and click **Next**.



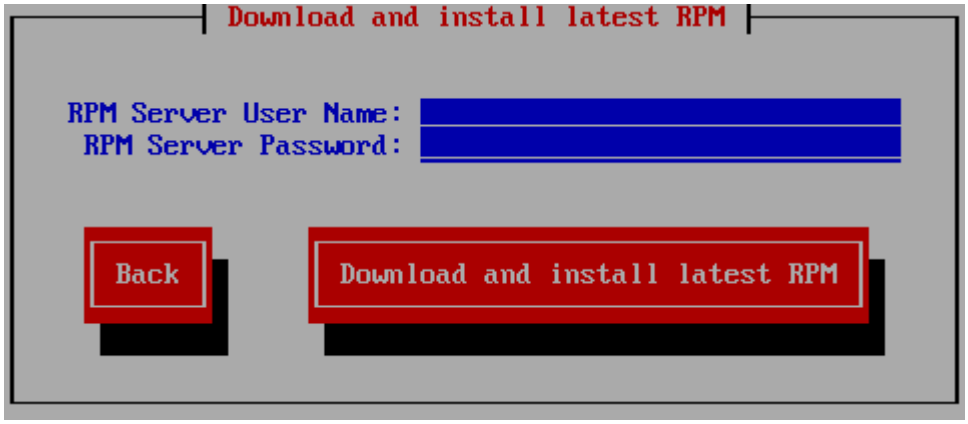
Software Updates

Software Vulnerability Manager 2019 Virtual Appliance

Enable automatic software updates to check for, and install, security updates on a daily basis.



Enter the **RPM Server User Name** and **Password**, click **Download and install latest RPM** to install the latest updates.



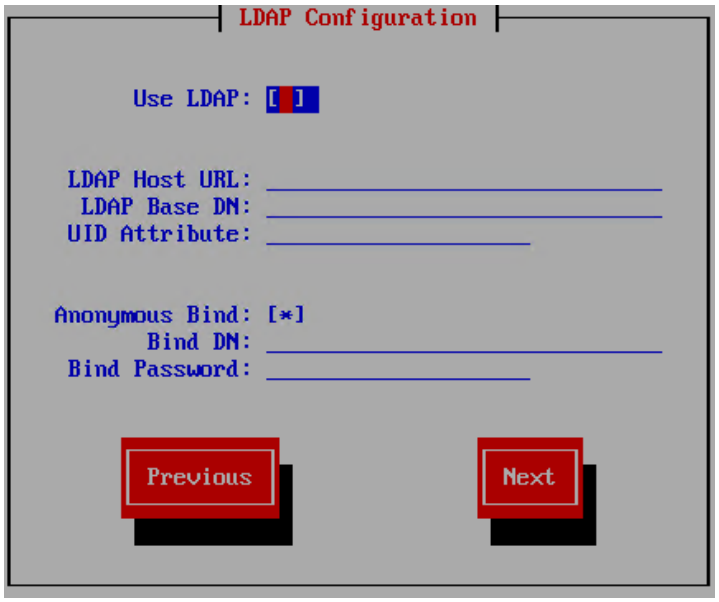
LDAP Configuration

Software Vulnerability Manager 2019 Virtual Appliance

Before configuring LDAP support you will need the following:

- The LDAP URL for your LDAP server
- The Base DN for the point in the directory where user-lookups will be made (the Base DN must contain at least one user account)
- The LDAP UID attribute that the usernames will be compared to
- The Bind DN for user-lookups or, alternatively, existing support for anonymous bind lookups

Select **Use LDAP**, enter the LDAP Host URL, LDAP Base DN, UID Attribute, and Bind details and then click **Save**.



A

Appendix A - CentOS VA migration from Ubuntu VA

Software Vulnerability Manager 2019 Virtual Appliance

Migration from Ubuntu Virtual Appliance to CentOS Virtual Appliance includes the following steps:

- **Actions on Ubuntu Vitrual Appliance**
- **Actions on CentOS Virtual Appliance**
- **Migration Steps**

Important • *Before starting the migration, make sure the vuln_track database is synced.*

Actions on Ubuntu Vitrual Appliance

Software Vulnerability Manager 2019 Virtual Appliance

To migrate to the CentOS Virtual Appliance, follow the below preparatory steps in Ubuntu Virtual Appliance:

- Create **admin migration user** using the below command:

  GRANT ALL PRIVILEGES ON *.* TO 'mig_admin'@'%' IDENTIFIED BY 'MIG_ADMIN' WITH GRANT OPTION;

  FLUSH PRIVILEGES;

- **Stop the services** using the below commands:

  service scandaemon stop

  service sgdaemon stop

  service haproxy stop

- Connect to the database and truncate **nsi_result** table from all the private databases for fast completion:

  TRUNCATE ca_<custid>.nsi_result;(delete from all partitions).

  TRUNCATE ca.scan_queue; (Ideally no entries, when scan is not pending)

- Check for enough disk space, tmp space, free RAM before proceeding.
- Make sure that **Apache** service is running in both the servers.

Actions on CentOS Virtual Appliance

Software Vulnerability Manager 2019 Virtual Appliance

To migrate from the Ubuntu Virtual Appliance, follow the below preparatory steps in CentOS Virtual Appliance:

- Create **admin migration user** using the below commands:

  GRANT ALL PRIVILEGES ON *.* TO 'mig_admin'@'%' IDENTIFIED BY 'MIG_ADMIN' WITH GRANT OPTION;

  FLUSH PRIVILEGES;

- Add the below entries in /etc/my.cnf to [mysqld] section and restart MariaDB server to apply the new settings:

  net_read_timeout=1000

  connect_timeout=1000

  On terminal: systemctl restart mariadb.service

- Using the below command, try connecting to Ubuntu VA using mig_admin user from the new CentOS VA:

  mysql –umig_admin –pMIG_ADMIN -h<ubuntu VA IP>

- Using the below command, try connecting to CentOS VA from Ubuntu VA:

  mysql –umig_admin –pMIG_ADMIN -h<Centos VA IP>

Note *• Make sure both the servers can connect each other, if any issue found in MySQL connection then check /**etc/mysql/my.cnf file** and comment **# bind-address 127.0.0.0** (or) change the bind address to **0.0.0.0.***

- Stop the services, using the below commands:

  systemctl stop sgdaemon.service

  systemctl stop scandaemon.service

  systemctl stop haproxy.service

- Drop the common and private databases (Centos VA) using the below commands:

  DROP DATABASE ca;

  DROP DATABASE ca_; (Private database starts with ca_)

- Drop the private db mysql users (which starts with customer id) using the below commands:

  DROP USER '<cust_id*>'@'localhost'

  FLUSH PRIVILEGES;

Migration Steps

Software Vulnerability Manager 2019 Virtual Appliance

After successfully creating the **admin migration user**, follow the below migration steps:

- In CentOS VA make the following files executable:

  chmod +x /usr/local/Secunia/csi/install/util/migratedb.sh

  chmod +x /usr/local/Secunia/csi/install/util/dumpPDB.php

- In CentOS VA run the below script:

  /usr/local/Secunia/csi/install/util/migratedb.sh

- After running the script, you can see a log folder get created at **/usr/local/Secunia/csi/install/util/** with the migration successful message. If a log folder is not created then you need to verify the permission of **dumpPDB.php, migratedb.sh** files. Now run the below script:

  /usr/local/Secunia/csi/install/util/migratedb.sh

- Script will ask for the below details of source server (Ubuntu) and destination server (CentOS):

  Source IP

  Source MySQL username

  Source MySQL password

  Destination IP

  Destination MySQL username

  Destination MySQL password

- In Ubuntu VA, run the below commands for permission and to copy the previously generated reports (pdf & csv):

  On CentOS - **Chmod a+rwx /usr/local/Secunia/csi/reports**

  On Ubuntu - **scp /usr/local/Secunia/csi/reports/ root@<centos ip>:/var/spool/On centoscsi/reports/*.***

- Start services using the below commands:

  systemctl start sgdaemon.service

  systemctl start scandaemon.service

  systemctl start haproxy.service

- After migration, remove mysql user - 'mig_admin'@'%' from both the servers using the below commands:

  DROP USER 'mig_admin'@'%';

  FLUSH PRIVILEGES;