

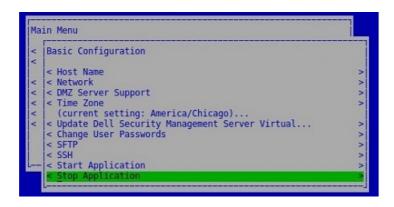
Dell Security Management Server Virtual v11.9 Installation Guide

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Dell Security Management Server Virtual v11.9



• NOTE: A NOTE indicates important information that helps you make better use of your product.

- **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
- WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Quick Start Guide

This Quick Start Guide is for more experienced users, to get the Dell Server up and running fast. As a general rule, Dell recommends installing the Dell Server first, followed by the installation of clients. For more detailed instructions, see the Security Management Server Virtual Installation Guide. For information about Dell Server prerequisites, see Security Management Server Virtual Prerequisites, Management Console Prerequisites, and Proxy Mode Prerequisites. For information on how to update an existing Dell Server, see Update Security Management Server Virtual.

Installation

- 1. Browse to the directory where the Dell Data Security files are stored and double-click to import into VMware the Security Management Server Virtual v11.x.x Build x.ova.
 - **NOTE:** OVA is now SHA256 signed and will fail to import within the VMware thick client. For formation, see https://kb.vmware.com/s/article/2151537.
- 2. Power on Security Management Server Virtual.
- 3. Follow the on-screen instructions.

Configuration

Before you activate users, it is recommended to complete the following configuration tasks at the Security Management Server Virtual terminal:

- · Configure SMTP Settings
- Import an Existing Certificate or Enroll a New Server Certificate
- Update Security Management Server Virtual
- Install an FTP client that supports SFTP on port 22, and Set up File Transfer (FTP) Users. If your organization has external-facing devices, see Install and Configure Proxy Mode.

Open Management Console

Open the Management Console at this address: https://server.domain.com:8443/webui/ The default credentials are superadmin/changeit. For a list of supported web browsers, see Management Console Prerequisites.

Administrative Tasks

If you have not launched the Management Console, do so now. The default credentials are super admin/change it. Dell Technologies recommends that you assign administrator roles as soon as it is convenient. To complete this task now, see Assign Dell Administrator Role. Click "?" in the upper right corner of the Management Console to launch AdminHelp. The Get Started page displays. Click Add Domains. Baseline policies have been set for your organization but should be modified depending on your specific needs, as follows (licensing and entitlements guide all activations):

- Policy-based encryption will be enabled with Common-Key encryption.
- Computers with self-encrypting drives are encrypted.
- BitLocker Management is disabled.
- Advanced Threat Prevention is disabled.
- · Threat Protection is disabled.
- External media will not be encrypted.
- · Ports will not be managed by Port Control.
- Devices with Full Disk Encryption installed will not be encrypted.

See the AdminHelp topic Manage Policies to go to Technology Groups and policy descriptions. Quick Start tasks are complete.

Detailed Installation Guide

This Installation Guide is for less experienced users, to install and configure Security Management Server Virtual. As a general rule, Dell recommends installing the Security Management Server Virtual first, followed by the installation of clients.

For information on how to update an existing Security Management Server Virtual, see Update Security Management Server Virtual.

About Security Management Server Virtual

The Management Console allows administrators to monitor the state of endpoints, policy enforcement, and protection across the enterprise. Proxy mode provides a front-end DMZ mode option for use with Security Management Server Virtual. Security Management Server Virtual has the following features:

- · Centralized management of up to 3,500 devices
- · Role-based security policy creation and management

- · Administrator-assisted device recovery
- · Separation of administrative duties
- Automatic distribution of security policies
- Trusted paths for communication between components
- Unique encryption key generation and automatic secure key escrow
- · Centralized compliance auditing and reporting
- · Auto-generation of self-signed certificates

Contact Dell ProSupport for Software

Call 877-459-7304, extension 4310039 for 24×7 phone support for your Dell product. Additionally, online support for Dell products is available at dell.com/support. Online support includes drivers, manuals, technical advisories, FAQs, and emerging issues. Be sure to help us quickly connect you to the right technical expert by having your Service Tag or Express Service Code available when you call. For phone numbers outside of the United States, see Dell ProSupport for Software international phone numbers.

Requirements

Security Management Server Virtual

Hardware

The recommended disk space for Security Management Server Virtual is 80 GB.

Virtualized Environment

Security Management Server Virtual v11.7 has been validated with the following virtualized environments. Dell currently supports hosting the Dell Security Management Server or Dell Security Management Server Virtual within a Cloud-hosted Infrastructure as a Service (IaaS) environment, such as Amazon Web Services, Azure, and several other vendors. Support for these environments is only limited to the functionality of the application server hosted within these Virtual Machines, the administration and security of these Virtual Machines is up to the administrator of the IaaS solution. Additional infrastructure requirements (Active Directory, as well as SQL Server for the Dell Security Management Server) are still required for proper functionality.

Virtualized Environments

- VMware Workstation 14.0
 - 64-bit CPU required
 - 8 GB RAM required
 - 80 GB Hard Drive Space
 - · Host computer with at least two cores
 - See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
 - Hardware must conform to minimum VMware requirements.
 - See https://kb.vmware.com/s/article/1003746 for more information.
- VMware Workstation 14.1
 - 64-bit CPU required
 - 8 GB RAM required
 - 80 GB Hard Drive Space
 - Host computer with at least two cores
 - See http://www.vmware.com/resources/compatibility/search.php?

<u>deviceCategory=software&testConfig=17</u> for a complete list of supported Host Operating Systems.

- Hardware must conform to minimum VMware requirements.
- See https://kb.vmware.com/s/article/1003746 for more information.
- VMware Workstation 15.0
 - 64-bit CPU required
 - 8 GB RAM required
 - 80 GB Hard Drive Space
 - Host computer with at least two cores
 - See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
 - Hardware must conform to minimum VMware requirements.
 - See https://kb.vmware.com/s/article/1003746 for more information.
- VMware Workstation 15.1
 - 64-bit CPU required
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 - 80 GB Hard Drive Space
 - · Host computer with at least two cores
 - See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
 - Hardware must conform to minimum VMware requirements.
 - See https://kb.vmware.com/s/article/1003746 for more information.
- VMware ESXi 6.0
 - 64-bit x86 CPU required
 - Host computer with at least two cores
 - 8 GB RAM minimum required
 - 80 GB Hard Drive Space
 - · An Operating System is not required.
 - See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
 - Hardware must conform to minimum VMware requirements.
 - See https://kb.vmware.com/s/article/1003746 for more information.
- VMware ESXi 6.5
 - 64-bit x86 CPU required
 - · Host computer with at least two cores
 - 8 GB RAM minimum required

Virtualized Environments

- 80 GB Hard Drive Space
- An Operating System is not required.
- See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
- Hardware must conform to minimum VMware requirements.
- See https://kb.vmware.com/s/article/1003746 for more information.

VMware ESXi 6.7

- 64-bit x86 CPU required
- · Host computer with at least two cores
- 8 GB RAM minimum required
- 80 GB Hard Drive Space
- · An Operating System is not required.
- See http://www.vmware.com/resources/compatibility/search.php?
 deviceCategory=software&testConfig=17 for a complete list of supported Host Operating Systems.
- Hardware must conform to minimum VMware requirements.
- See https://kb.vmware.com/s/article/1003746 for more information.

Hyper-V Server (Full or Core installation)

- 64-bit x86 CPU required
- · Host computer with at least two cores
- 8 GB RAM minimum required
- 80 GB Hard Drive Space
- An operating system is not required.
- Hardware must conform to minimum Hyper-V requirements.
- Must be run as a Generation 1 Virtual Machine.

NOTE: For information about setting up Hyper-V, follow the instructions for Endpoint Operating Systems: https://docs.microsoft.com/en-us/virtualization/hyper-v or Server Operating Systems: https://docs.microsoft.com/en-us/windows-server/virtualization/hyper-v/get-started/install-the-hyper-v-role-on-windows-server.

Management Console

Internet Browsers

NOTE:

The browser must accept cookies. The following table details supported Internet browsers.

Internet Browsers

- Mozilla Firefox 41. x or later
- Google Chrome 46. x or later
- Microsoft Edge (Chromium)
- · Microsoft Edge

Access the Management Console

Since Internet Explorer is no longer supported, you must install a third-party browser to properly access the Management Console. If Internet Explorer is required to validate the Management Console, you must disable Internet Explorer Enhanced Security Configuration for the account type that corresponds to the logged-in administrator.

Proxy Mode

Hardware

The following table details the minimum hardware requirements.

Processor

Modern Dual-Core CPU (1.5 GHz +)

RAM

2 GB minimum dedicated RAM / 4 GB dedicated RAM recommended

Free Disk Space

1.5 GB free disk space (plus virtual paging space)

Network Card

10/100/1000 network interface card

Miscellaneous

IPv4, IPv6, or a combination of IPv4 and IPv6 are supported.

Software

The following table details the software that must be in place before installing the proxy mode server.

Prerequisites

· Windows Installer 4.0 or later

Windows Installer 4.0 or later must be installed on the server where the installation is taking place.

• Microsoft Visual C++ 2010 Redistributable Package

If not installed, the installer installs it for you.

Microsoft .NET Framework Version 4.6.1

Microsoft has published security updates for .NET Framework Version 4.6.1.

NOTE:

Universal Account Control (UAC) must be disabled when installing in a protected directory. After disabling UAC, you must reboot the server for this change to take effect. Registry location for Windows Servers: HKLM\SOFTWARE\Dell. The following table details the software requirements for the proxy mode server.

Operating System

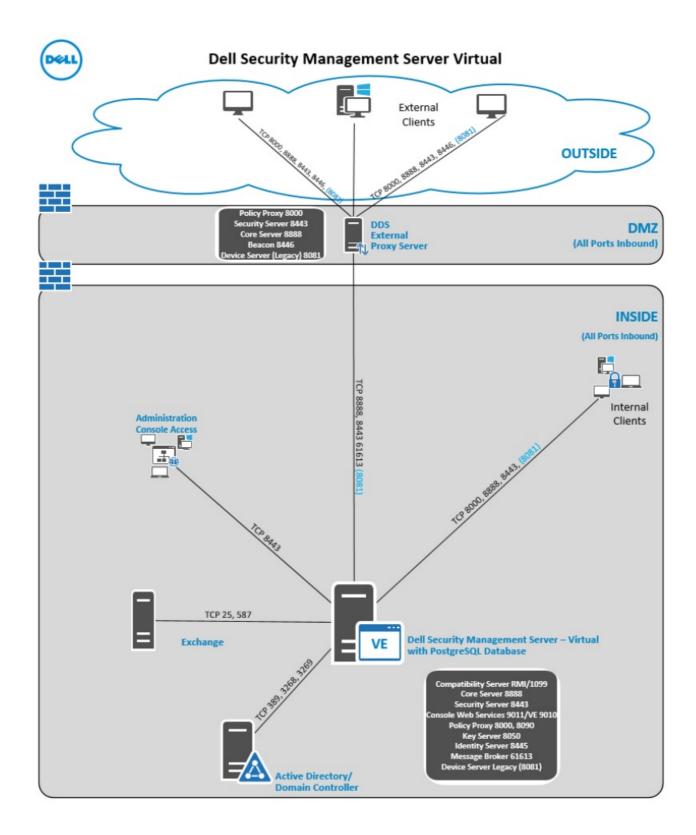
- Windows Server 2022
 - Standard Edition
 - Datacenter Edition
- Windows Server 2019
 - Standard Edition
 - Datacenter Edition

Windows Server 2016

- · Operating System
 - Standard Edition
 - Datacenter Edition
- Windows Server 2012 R2
 - Standard Edition
 - Datacenter Edition
- LDAP Repository
 - Active Directory 2008 R2
 - Active Directory 2012 R2
 - Active Directory 2016
 - Hybrid Azure Active Directory

Security Management Server Virtual Architecture Design

The Encryption Enterprise and Endpoint Security Suite Enterprise solutions are highly scalable products, based on the number of endpoints targeted for encryption in your organization. Architecture Components Below is a basic deployment for the Dell Security Management Server Virtual.



Download and Install the OVA File

At initial installation, Security Management Server Virtual is delivered as an OVA file, an Open Virtual Application used to deliver software that runs on a virtual machine. The OVA file is available at www.dell.com/support, on the Product Support pages for the following Dell Data Security products

- Encryption
- Endpoint Security Suite Enterprise

To download the OVA file:

1. Navigate to the Drivers and Downloads page for the appropriate product listed above.

- 2. Click Drivers & downloads.
- 3. Select the appropriate VMware ESXi version.
- 4. Download the appropriate bundle.

To install the OVA file:

Before you begin, ensure that all system and virtual environment Requirements are met.

1. Do one of the following:

VMware	In the Dell installation media, locate <i>Security Manage ment Server Virtual v11.x.x Build x.ova</i> and double-click to import into VMware. Follow the on-screen instructions. NOTE: If the import fails when using VMware, then the web client is the suggested path for importing the OVA file. For more information, see https://kb.vmw are.com/s/article/2151537 .
Hyper-V Follow instructions for Windows 10 https://docs.microsoft.com/en-us/virtualizatio n/hyper- v-on-windows/about/.	Requirements: Generation 1 virtual machine Security Management Server Virtual comes in V HDX format. A disk should not be defined, and the disk should be added to the virtual machine after it is c reated within Hyper-V. See https://docs.microsoft.com/en-us/ windows-server/virtualization/hyper-v/get-started /create- a-virtual-machine-in-hyper-v.
Server-based Operating Systems	Follow instructions: https://docs.microsoft.com/en-us/windows-server dows- server/virtualization/hyper-v/get-started/install-the-hyper-v-role-on-windows-server.
ESXi Follow instructions: https://kb.vmware.com/s/article/2109708	OVA import process: See https://docs.vmware.com/en/VMware-vSpher e/6.7/ com.vmware.vsphere.html.hostclient.doc/G UID-FBEED81C- F9D9-4193-BDCC-CC4A60C20A 4E_copy.html.

- 2. Power on Security Management Server Virtual.
- 3. Select the language for the license agreement, and select Display EULA.
- 4. Read the agreement, and select Accept EULA.
- 5. If an update is available, select Accept.
- 6. Select Connected Mode or Disconnected Mode.

NOTE:

If you select Disconnected Mode, it can never be changed to Connected Mode. Disconnected mode isolates

the Dell Server from the Internet and an unsecured LAN or other network. All updates must be performed manually. For more information about Disconnected mode and policies, refer to AdminHelp.

7. In Set delluser Password, enter the current (default) password, delluser, then enter a unique password, reenter the unique password, and select Apply.

Passwords must include the following:

- At least 8 characters
- At least 1 uppercase letter
- · At least 1 digit
- At least 1 special character

NOTE: It is possible to retain the default password by selecting Cancel, or by pressing Escape on the keyboard.

- 8. Select close to enter into the configure hostname window.
- 9. In Configure Hostname, use the backspace key to remove the default hostname. Enter a unique hostname and select OK.
- 10. In Configure Network Settings, choose either option below, then select OK.
 - (Default) Use DHCP (IPv4)
 - (Recommended) InUse DHCP, press the space bar to remove the X and manually enter these addresses, as applicable: Static IP

Network Mask

Default Gateway

DNS Server 1

DNS Server 2

DNS Server 3

Either IPv6 or IPv4 can be selected for a static configuration.

- NOTE: When using a static IP, you must also create a host entry in the DNS server.
- 11. At the time zone confirmation prompt, select OK.
- 12. When the message displays to indicate that the first boot configuration is completed, select OK.
- 13. Configure SMTP Settings.
- 14. Import an Existing Certificate or Enroll a New Server Certificate.
- 15. Update Security Management Server Virtual.
- 16. Install an FTP client that supports SFTP on port 22, and Set up File Transfer (FTP) Users. Security Management Server Virtual installation tasks are complete.

Open Management Console

Open the Management Console at this address: https://server.domain.com:8443/webui/ The default credentials are superadmin/changeit. For a list of supported web browsers, see Management Console Prerequisites.

Install and Configure Proxy Mode

Proxy mode provides a front-end (DMZ mode) option for use with the Dell Server. If you intend to deploy Dell components in the DMZ, ensure that they are properly protected against attacks. To install, you need the fully qualified hostname of the DMZ server.

1. In the Dell installation media, go to the Security Management Server directory. Extract (DO NOT copy and paste or drag and drop) Security Management Server-x64 to the root directory of the server where you are

installing Security Management Server Virtual. Copying and pasting or dragging and dropping produces errors and an unsuccessful installation.

- 2. Double-click setup.exe.
- 3. Select the language for installation, and then click OK.
- 4. If prerequisites are not already installed, a message displays to inform you of which prerequisites will be installed. Click Install.
- 5. Click Next in the Welcome dialog.
- 6. Read the license agreement, accept the terms, and then click Next.
- 7. Enter the 32-character Product Key and then click Next. The Product Key is located in the EnterpriseServerInstallKey.ini file.
- 8. Select Front End Install and click Next.
- 9. To install the front-end server to the default location of C:\Program Files\Dell, click Next. Otherwise, click Change to select another location, and then click Next.
- 10. You have a choice of digital certificate types to use.

NOTE: It is highly recommended that you use a digital certificate from a trusted certificate authority. Select option "a" or "b" below:

- To use an existing certificate that was purchased from a CA authority, select Import an existing certificate and click Next.
- To create a self-signed certificate, select Create a self-signed certificate import it to the key store and click Next.
- At the Create Self-Signed Certificate dialog, enter the following information:
- Fully qualified computer name (example: computername.domain.com)
- Organization
- Organizational Unit (example: Security)
- City
- State (full name)
- Country: Two-letter country or region abbreviation
- · Click Next.

NOTE: The certificate expires in 10 years, by default.

- 11. In the Front-End Server Setup dialog, enter the fully qualified hostname or DNS alias of the back-end server, select Dell Security Management Server, and click Next.
- 12. From the Front-End Server Install Setup dialog, you can view or edit hostnames and ports.
 - To accept the default hostnames and ports, in the Front-End Server Install Setup dialogue, click Next.
 - To view or edit hostnames, in the Front-End Server Setup dialog, click Edit Hostnames. Edit hostnames only if necessary. Dell Technologies recommends using the defaults.

NOTE

A hostname cannot contain an underscore character ("_"). Clear a proxy only if certain that you do not want to configure it for installation. If you clear a proxy in this dialogue, it is not installed.

When finished, click OK.

- To view or edit ports, in the Front-End Server Setup dialog, click either Edit External Facing Ports or Edit Internal Connecting Ports. Edit ports only if necessary. Dell Technologies recommends using the defaults. If you clear a proxy in the Edit Front-End Host Names dialogue, its port does not display in the External Ports or Internal Ports dialogues. When finished, click OK.
- 13. In the Ready to Install Program dialog, click Install.

14. When the installation is completed, click Finish.

Basic Terminal Configuration Tasks

Basic configuration tasks are accessed from the Main Menu.

Check System Dashboard

- To check the status of Dell Server services, in the Main Menu, select System Dashboard.
- The System Information widget displays the current version, hostname, and IP address, as well as the usage for CPU, memory and disk.
- The Version History widget displays versioned database schema changes. Data comes from the 'information' table and is sorted by time, with the newest version on top.
- The following table describes each service and its function in the Service Health widget.

Name	Description
Message Broker	Enterprise Server Bus
Identity Server	Handles domain authentication requests.
Compatibility Server	A service for managing the enterprise architecture.
Security Server	Provides the mechanism for controlling commands an d communication with Active Directory.
Core Server	A service for managing the enterprise architecture. Thi s service also handles all activation, policy and invento ry gathering from "Agent" based devices.
Core Server HA (High Availability)	A high-availability service that allows for increased sec urity and performance of HTTPS connections when m anaging the enterprise architecture.
Inventory Server	Processes the inventory queue.
Forensic Server	Provides web services for forensic API.
Policy Proxy	Provides a network-based communication path to deliver security policy updates and inventory updates.

Services are monitored and restarted automatically if necessary.

NOTE: If the database customizer process fails, servers move to the Execution Failed state. To check the Databasecustomizer log, in the Main Menu, select View Logs.

Change Host Name

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

- 1. From the Basic Configuration menu, select Host Name.
- 2. Use the backspace key to remove the existing hostname then replace it with a new hostname and select OK.

Change Network Settings

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

- 1. From the Basic Configuration menu, select Network.
- 2. In the Configure Network Settings screen, choose either option below then select OK.
 - (Default) Use DHCP (IPv4).
 - (Recommended) In Use DHCP, press the space bar to remove the X and manually enter these addresses, as applicable:
 - · Static IP
 - Network Mask
 - Default Gateway
 - DNS Server 1
 - DNS Server 2
 - DNS Server 3
 - Either IPv6 or IPv4 can be selected for a static configuration.

NOTE:

When using a static IP, you must create a host entry in the DNS server.

Set DMZ Server Support

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

- 1. From the Basic Configuration menu, select DMZ Server Support.
- 2. Use the space bar to enter an X in the Enable DMZ Server Support field
- 3. Enter the fully qualified domain name of the DMZ server and select OK.

NOTE: To leverage a DMZ server, please reference the installation instructions for a proxy server above Install and Configure Proxy Mode.

Change Time Zone

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

- 1. From the Basic Configuration menu, select Time Zone.
- 2. In the Time Zone screen, use the arrow keys to highlight your time zone and select Enter.

Update Security Management Server Virtual

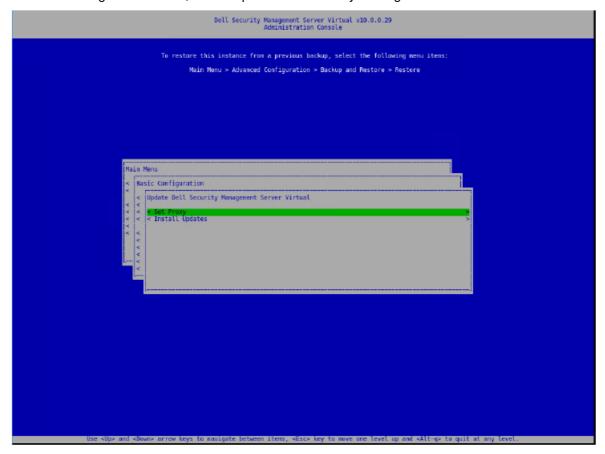
For information about a specific update, see Security Management Server Virtual Technical Advisories, located at dell.com/support. To see the version and installation date of an update that is already applied, check the System Dashboard.

To receive email notifications when Dell Server updates are available, see Configure SMTP Settings. If policy changes have been made but not committed in the Management Console, commit the policy changes before updating the Dell Server:

- 1. As a Dell administrator, log in to the Management Console.
- 2. In the left menu, click Management > Commit.
- 3. Enter a description of the change in the Comment field.
- 4. Click Commit Policies.
- 5. When the commit is complete, log off the Management Console.

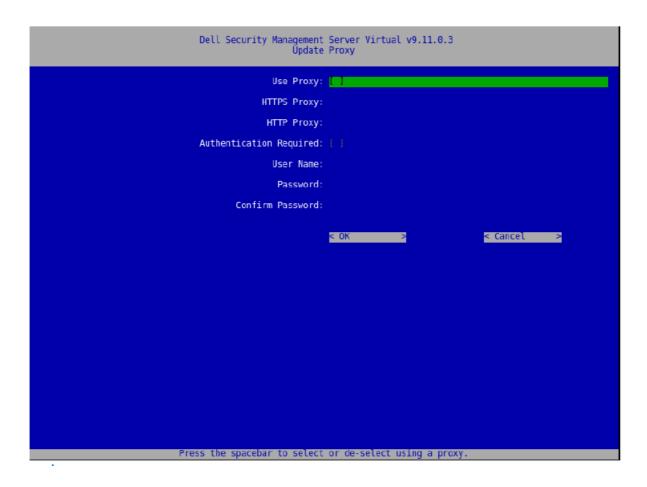
Update Security Management Server Virtual (Connected Mode)

- 1. Dell recommends performing a regular backup. Before updating, ensure that the backup process has been functioning properly. See Backup and Restore.
- 2. From the Basic Configuration menu, select Update Dell Security Management Server Virtual.



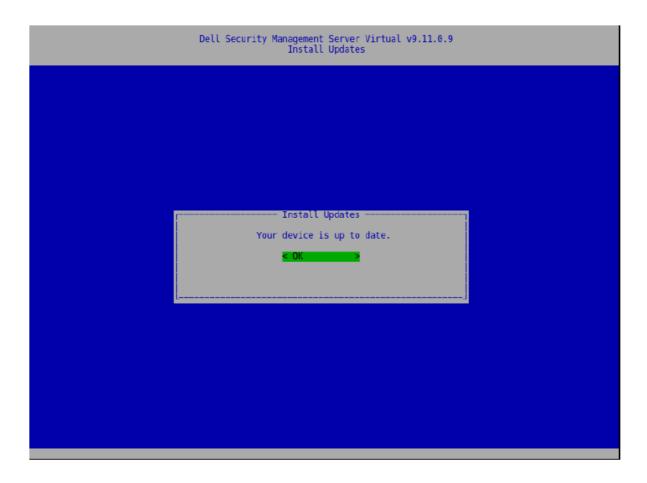
- 3. Select the desired action:
 - Set Proxy Settings Select this option to set the proxy settings for downloading updates. In the
 Configure Proxy Settings screen, press the space bar to enter an X in Use Proxy. Enter the HTTPS and
 HTTP. If firewall authentication is required, press the space bar to enter an X in Authentication Required.
 Enter the username and password, and select OK.

NOTE: This Set Proxy option also now updates the proxy settings for the various Java-based applications for pulling On-The-Box licenses as well as communication to the Endpoint Security Suite Enterprise SaaS and the Dell/Credant back-end infrastructure.



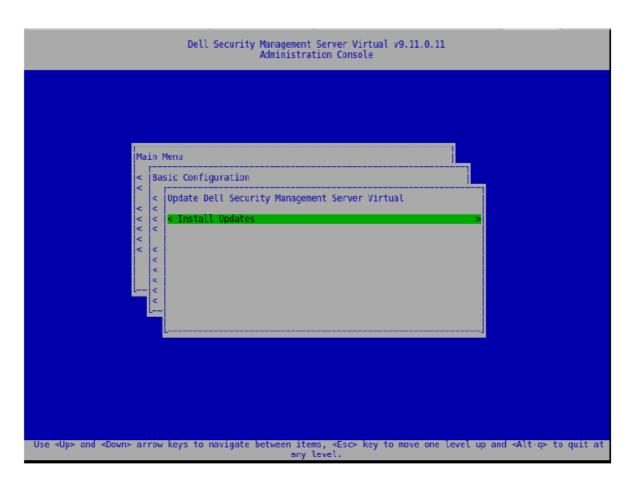
 When selecting Install Updates, the Security Management Server Virtual queries the built-in, default Ubuntu repositories and dist.ddspproduction.com, Dell's custom repository containing application updates.

NOTE: Dell queries dist.ddspproduction.com through port 443 and port 80 for all Ubuntu updates. Any available updates are downloaded. The proxy settings defined in Set Proxy are used for port 443 and port 80 connections for download.



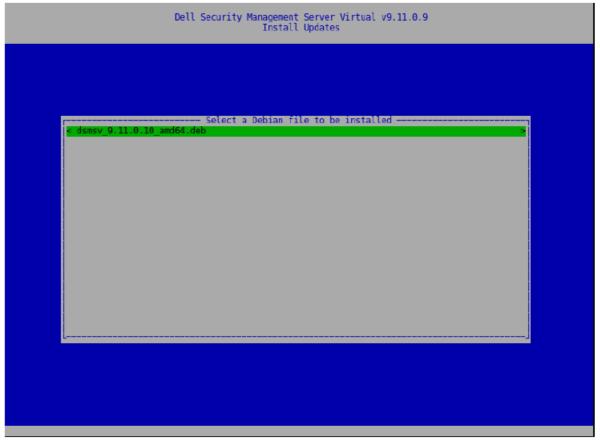
Update Security Management Server Virtual (Disconnected Mode)

- 1. Dell recommends performing a regular backup. Before updating, ensure that the backup process has been functioning properly. See Backup and Restore.
- 2. Obtain the .deb file that contains the latest Dell Server update from Dell ProSupport.
- 3. Store the .deb file in the /var/opt/dell/dsmsv/FTP/files/updates folder on the secure FTP server of the Dell Server. Ensure that the FTP client supports SFTP on port 22, and an FTP user is set up. See Set up File Transfer (FTP) Users.
- 4. From the Basic Configuration menu, select Update Security Management Server Virtual.
- 5. Select Install Updates and press Enter.



NOTE: The version number may differ from the attached screen capture. If the .deb file does not display, ensure that the .deb file is stored in the proper location.

6. Select the .deb update file you want to install and press Enter.



7. Select Yes to stop the Security Management Server Virtual's services.



8. The Debian package is verified and upgraded.

```
Dell Security Management Server Virtual v10.2.4.11
Install Updates

Verifying Debian signature...
Processing /var/opt/dell/dsmsv/ftp/files/updates/dsmsv_10.2.6.8_amd64.deb...
GOODSIG _gpgdsmsv 7662F15378C0AE35CB4A9727B6A2D750D8BFD78E 1558297741

Upgrading dsmsv package...
(Reading database ... 140845 files and directories currently installed.)
Preparing to unpack .../dsmsv_10.2.6.8_amd64.deb ...
Unpacking dsmsv (10.2.6.8) over (10.2.4.11) ...
Setting up dsmsv (10.2.6.8) ...
```

9. After the update completes, change the database password.

```
Dell Security Management Server Virtual v10.2.6.8
Database Access

Enable Remote Access (IPv4): [ ]
Enable Remote Access (IPv6): [ ]

Password:
Password is required.

Confirm Password:

< Reboot Appliance >
```

Change User Passwords

This task can be completed at any time. It is not required to begin using Security Management Server Virtual. You can change passwords for these users:

- dell user (Terminal administrator) This user has access to the Dell Server terminal and its menus.
- dellconsole (shell access) This user has Dell Server shell access. Shell access is available for a network administrator to check and troubleshoot network connectivity.
- dell support (Dell ProSupport administrator) This user has "sudo" rights and should be used sparingly. For security purposes, you control the password for this account.
- 1. From the Basic Configuration menu, select Change User Passwords.
- 2. In the Change User Passwords screen, select the user password to change and select Enter.
- 3. In the Set Password screen, enter the current password, enter the new password, re-enter the new password, and select OK.

Passwords must include the following:

- · At least 8 characters
- At least 1 uppercase letter
- · At least 1 digit
- At least 1 special character

NOTE:

To select different user accounts, use the "spacebar" key on the keyboard to display the selection list.

Set up Secure File Transfer (SFTP) Users

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

- 1. From the Basic Configuration menu, select SFTP.
- 2. In the SFTP screen, to add an SFTP user and define a password, press Enter or the down key in Status for the user. Pressing the space bar key offers the option to update or delete an existing user. To disable an SFTP user, select Delete after selecting user and then select Yes on the SFTP confirmation screen.
- 3. Enter a username and password for the SFTP user.

Passwords must include the following:

- · At least 8 characters
- At least 1 uppercase letter
- · At least 1 digit
- · At least 1 special character
- 4. When you are finished entering SFTP users, select Apply.

Enable SSH

This task can be completed at any time. It is not required to begin using Security Management Server Virtual. You can enable SSH for the support administrator login, shell access, and the terminal command-line interface.

- 1. From the Basic Configuration menu, select SSH.
- 2. Highlight the user for which you want to enable SSH, press the space bar to enter an X, and select OK.

Start or Stop Services

Perform this task only if needed.

- 1. To simultaneously start or stop all services, from the Basic Configuration menu, select either Start Application or Stop Application.
- 2. At the confirmation prompt, select Yes.

NOTE:

Server state changes may require up to two minutes to complete.

Reboot the Appliance

Perform this task only if needed.

- 1. From the Basic Configuration menu, select Reboot Appliance.
- 2. At the confirmation prompt, select Yes.
- 3. After restart, log in to Security Management Server Virtual.

Shut down the Appliance

Perform this task only if needed.

- 1. From the Basic Configuration menu, scroll down and select Shutdown Appliance.
- 2. At the confirmation prompt, select Yes.
- 3. After restart, log in to Security Management Server Virtual.

Advanced Terminal Configuration Tasks

Advanced configuration tasks are accessed from the Main Menu.

Configure Log Rotation

NOTE: The instructions below define log rotate for applications on the Dell Security Management Server Virtual that support log rotation.

This task can be completed at any time. It is not required to begin using Security Management Server Virtual. Daily log rotation is enabled by default. To change the default log rotation, from the Advanced Configuration menu, select Logrotate Configuration. To disable log rotation, use the space bar to enter an X in No rotation and select OK. To enable log rotation, follow these steps:

- 1. To enable daily, weekly, or monthly rotation, use the Spacebar to enter an X in the appropriate field. For weekly rotation, use the dropdown menu to select the appropriate day of the week. For monthly rotation, input the appropriate day of the month.
- 2. Enter a time for rotation in Logrotate Time.
- 3. Select OK.

Backup and Restore

Backups can be configured or performed at any time and are not required to begin using Security Management

Server Virtual. Dell recommends that you configure a regular backup process. For more information see <a href="http://www.dell.com/support/article/us/en/19/sln304943/how-to-back-up-and-restore-dell-security-management-server-virtual-dell-data-protection-virtual-edition?lang=en. When stored on the Dell Server and the disk is at 90 percent capacity, no new backups are stored. If email notifications have been configured, you will receive an email notification that disk allocation space is low.

NOTE

To preserve disk partition space and prevent automatic deletion of backups, remove unnecessary backups from storage. Backups are run daily, by default. Dell recommends storing backups to an external secure FTP server at a frequency that meets the requirements of the organization for backups and appropriate use of storage space. To configure a backup schedule, from the Advanced Configuration menu, select Backup and Restore > Configuration and follow these steps:

- 1. To enable daily, weekly, or monthly backups, use the space bar to enter an X in the appropriate field. For weekly or monthly backups, enter the appropriate day of the week or month as a numeral, where Monday=1. To disable backups, use the space bar to enter an X in backups and select OK.
- 2. Enter a time for backup in Backup Time.
- 3. Select OK.

To perform an immediate backup, from the Advanced Configuration menu, select Backup and Restore > Backup now. When the backup confirmation displays, select OK.

NOTE

Before beginning a restore operation, all Dell Server services must be running. Check Server Status. If all services are not running, restart the services. For more information, see Start or Stop Services. Begin to restore only when all services are running. To restore from a backup, from the Advanced Configuration menu, select Backup and Restore > Restore then select the backup file to be restored. At the confirmation screen select Yes. The backup is restored after reboot. Store backups to a secure FTP server

To store backups to an FTP server, the FTP client must support SFTP on port 22. According to backup requirements of the organization, backups can be downloaded in the following ways:

- Manually
- · Through automated script
- Through the organization's approved backup solution

To download backups using the organization's backup solution, obtain detailed instructions from your backup solution vendor.

NOTE:

The Dell Server is based on Linux Debian Ubuntu x64.

Log on to the Dell Server as dellsupport, and use the sudo command to configure your backup solution: sudo <instructions from backup solution vendor> Back up contents of the following folders: /backup (required) /certificates (strongly recommended) /support (optional) When the sudo process is complete, type exit and press Enter until the login prompt displays.

Configure SMTP Settings

To receive email notifications, follow the steps in this section to configure SMTP settings. Email notifications inform recipients of Dell Server status error states, password updates, availability of Dell Server updates, and client license issues. It is a best practice to restart the services any time a settings change is made. To configure SMTP settings, follow these steps:

- 1. From the Advanced Configuration menu, select E-mail Notifications.
- 2. In the E-mail Notifications screen, to enable email alerts, press the space bar to enter an X in Enable -Email Alerts.
- 3. Enter the SMTP Server fully qualified domain name.
- 4. Enter the SMTP Port.
- 5. Enter the SMTP User
- 6. Enter the SMTP Password
- 7. In Send Notifications From, enter the email account ID to send email notifications.
- 8. In Send Server Status to, enter an email account ID to send server status notifications. Recipients are separated with commas or semicolons.
- 9. In Send Password Changes to, enter an email account ID to send password change notifications.
- 10. In Send Software Updates to, enter an email account ID to send software update notifications.
- 11. In Service alert reminder, to enable reminders, press the space bar to enter an X then set the reminder interval in minutes. A Service alert reminder is triggered when the reminder interval has passed after a notification is sent about a system health issue and the host or service remains in the same state.
- 12. In the Summary Report field, to enable reports of notifications, select the desired interval (Daily, Weekly, or Monthly) and then press the space bar to enter an X.
- 13. Select OK.

Import an Existing Certificate or Enroll a New Server Certificate

You can import an existing certificate or create a certificate request through Security Management Server Virtual. It is a best practice to restart the services any time a settings change is made.

Import an Existing Server Certificate

- 1. Export the existing certificate and its full chain of trust from its keystore.
 - **NOTE:** Keep the export password because you will enter it when you import the certificate into Security Management Server Virtual.
- 2. On the FTP Server of the Dell Server, store the certificate to /certificates.
- 3. From the Advanced Configuration menu, select Server Certificates.
- 4. Select Import Existing Certificate.
- 5. Select a certificate file to be installed on the Dell Server.
- 6. When prompted, enter the certificate export password and select OK.
- 7. When the import is complete, select OK.

NOTE: For further information, refer to <a href="http://www.dell.com/support/article/us/en/19/sln302996/dell-data-protection-virtual-edition-dell-security-management-server-virtual-manual-csr-creation-and-certificate-import?lang=en

Enroll a New Server Certificate

- 1. From the Advanced Configuration menu, select Server Certificates.
- 2. Select New Server Certificate.
- 3. Select Create Certificate Request.

- 4. Complete the fields Generate Certificate Request:
 - Country Name: Two-letter country code.
 - State/Province: Enter the unabbreviated state or province name (for example, Texas).
 - Locality Name/City. Enter the appropriate value (for example, Dallas).
 - Organization: Enter the appropriate value (for example, Dell).
 - Organizational Unit: Enter the appropriate value (for example, Security).
 - **Common Name:** Enter the fully qualified domain name of the Dell Server. This fully qualified name includes the hostname and the domain name (for example, <u>server.domain.com</u>).
 - Email ID: Enter the email address to which your CSR will be sent.
- 5. Follow your organizational process for acquiring an SSL server certificate from a Certificate Authority. Send the contents of the CSR file for signing.
- 6. When you receive the signed certificate, export the certificate as a .p7b file, and download the full chain of trust in .der format.
- 7. Make backup copies of the certificate and chain of trust.
- 8. Upload the certificate file and its full chain of trust to the FTP Server of the Dell Server.
- 9. From the Advanced Configuration menu, select Server Certificates.
- 10. Select New Server Certificate.
- 11. Select Complete Certificate Enrollment.
- 12. Select the certificate file to be installed on the Dell Server.
- 13. If prompted, enter the Certificate Password: change it.

To enable trust validation on Windows-based Encryption clients, see Enable Manager Trust Chain Check.

Create and Install a Self-signed Certificate

NOTE: The default generated self-signed certificates are generated for 10 years.

- 1. From the Dell Server Advanced Configuration menu, select Server Certificates.
- 2. Select Create and Install Self-signed Certificate.
- 3. To confirm that you want to replace the pre-installed certificate with a new certificate, click Yes.
- 4. Enter the Certificate Password: changeit.
- 5. After the new certificate is installed, select OK and wait for services to restart.

The services automatically restart.

Enable Database Access

This task can be completed at any time. It is not required to begin using Security Management Server Virtual.

NOTE: Dell recommends that you enable database access only if necessary and disable after the necessity has been completed.

- 1. From the Advanced Configuration menu, select Database Access.
- 2. Use the space bar to enter an X in Enable Database Access and select OK. If the database password has not yet been configured, a prompt for the database password displays.
- 3. Enter the database password.
- 4. Re-enter the database password. Dell Data Security application components stop automatically.

Set or Change Terminal Language

It is a best practice to restart the services any time a settings change is made.

- 1. In the Main Menu, select Set Language.
- 2. Use the arrow keys to select the preferred language.

View Logs

To check the following logs, in the Main Menu, select View Logs.

System Logs

- Syslog Log
- Mail Log
- Auth Log (SSH)
- Postgres Log
- Monitor Log

Server Logs

- Message Broker
- Identity Server
- Compatibility Server
- Security Server
- Core Server
- Core Server HA
- Inventory Server
- Forensic Server
- Policy Proxy

Administration Console

- pybackup.log
- pyconsole.log
- pydatabase.log
- update.log
- Databasecustomizer Log

NOTE: To navigate through this screen, use the following:

- To go to the end of the log you can hold the right alt key and then press the "/" key on the keyboard
- To exit the log, hold left control and press "x" on the keyboard.
- arrow keys allow for navigation.
- page up and page down go up and down pages one at a time.
- space bar progresses the logs by one page.

Open the Command Line Interface

To open the command line interface, in the Main Menu, select Launch Shell. To exit the command-line interface, type exit and press Enter.

Generate a System Snapshot Log

To generate a System Snapshot Log for Dell ProSupport, in the Main Menu, select Support Tools.

- 1. From the Support Tools menu, select Generate System Snapshot Log.
- 2. At the indication that the file is created, select OK.

Maintenance

Remove unneeded Security Management Server Virtual backups. Only the ten most recent backups are retained. If disk partition space is at ten percent or less, no more backups are stored. If this condition occurs, you will receive an email notification that disk allocation space is low.

Troubleshooting

If an error occurs, and you have configured email notifications, you will receive an email notification. Based on the information in the email notification, follow these steps:

- 1. Check applicable log files.
- 2. Restart services, as needed. It is a best practice to restart the services any time a settings change is made.
- 3. Generate a System Snapshot Log.
- 4. Contact Dell ProSupport. For more information, see Contact Dell ProSupport.

Post-Installation Configuration

After installation, some components of your environment may need to be configured, based on the Dell Data Security solution used by your organization.

After installing the Security Management Server Virtual, the following defaults should be modified:

- Change the backend server password at the following location: C:\Program Files\Dell\Enterprise
 Edition\Message Broker\conf\application.properties
- Change the password for every front-end server in your environment at the following location: C:\Program Files\DELL\Enterprise Edition\Beac\conf\application.properties

The password displays as follows: proxy-server.password=ENC(<texthere>) To change the password:

- 1. Select: ENC(<texthere>)
- 2. Change the selected text to CLR(<newpasswordhere>)

After the service restart, the modified line changes to ENC from CLR and the password is encrypted.

NOTE: The proxy server. username may also be modified, but this must match within the Message Broker's application.properties file and all active front-end servers.

Validate Manager Trust Chain Check

If a self-signed certificate is used on the Security Management Server Virtual for SED or BitLocker Manager, SSL/TLS trust validation must remain disabled on the client computer. Before enabling SSL/TLS trust validation on the client computer, the following requirements must be met:

- A certificate signed by a root authority (for example, Entrust or Verisign) must be imported into the Dell Server.
 See Import an Existing Certificate or Enroll a New Server Certificate.
- The full chain of trust of the certificate must be stored in the Microsoft keystore on the client computer.

To disbale SSL/TLS trust validation, on the client computer, change the value of the following registry entry to 1: [HKLM\System\CurrentControlSet\Services\DellMgmtAgent\Parameters] DisableSSLCertTrust=REG_DWORD (32-bit):1

Timeout properties for Management Console

To modify the timeout property for the Management Console, go to the application.properties file, and modify the default values:

- idle. warn.seconds=1080
- idle. timeout.seconds=1200

Management Console Administrator Tasks

Assign Dell Administrator Role

- As a Security Management Server administrator, log in to the Management Console: https://server.domain.com:8443/webui/.

 The default credentials are superadmin/changeit.
- 2. In the left pane, click Populations > Domains.
- 3. Click a domain to add a user to.
- 4. On the Domain Detail page, click the Members tab.
- Click Add User.
- 6. Enter a filter to search the user name by Common Name, Universal Principal Name, or sAMAccountName. The wild card
 - character is *. A Common Name, Universal Principal Name, and sAMAccountName must be defined in the enterprise directory server for every user. If a user is a member of a Domain or Group but does not display in the Domain or Group Members list in the Management, ensure that all three names are properly defined for the user in the enterprise directory server. The query will automatically search by common name, then UPN, and then sAMAccount name until a match is found.
- 7. Select users from the Directory User List to add to the Domain. Use <Shift><click> or <Ctrl><click> to select multiple users.
- 8. Click Add.
- 9. From the menu bar, click the Details & Actions tab of the specified user.
- 10. Scroll across the menu bar, and select the Admin tab.
- 11. Select the administrator roles to add to this user.
- 12. Click Save.

Log in with the Dell Administrator Role

- 1. Log out of the Management Console.
- 2. Log in to the Management Console and log in with Domain user credentials. Click "?" in the upper right corner of the Management Console to launch AdminHelp. The Get Started page displays. Click Add Domains.

Baseline polices have been set for your organization but should be modified to your specific needs, as follows (licensing and entitlements guide all activations):

- Policy Based Encryption will be enabled with Common-Key encryption
- · Computers with self-encrypting drives will be encrypted
- · BitLocker Management is not enabled
- · Advanced Threat Prevention is not enabled
- Threat Protection is disabled
- External media will not be encrypted
- · Ports will not be managed by Port Control
- · Devices with Full Disk Encryption installed will not be encrypted

See the AdminHelp topic Manage Policies for policy descriptions.

Commit Policies

- Commit policies when installation is completed.
- To commit polices after installation or, later, after policy modifications are saved, follow these steps:
- 1. In the left pane, click Management > Commit.
- 2. In Comment, enter a description of the change.
- 3. Click Commit Policies.

Ports

The following table describes each component and its function.

Name	Default Port	Description
Access Group Service	TCP/ 8006	Manages various permissions and group access for various Dell Security products. NOTE: Port 8006 is not currently secured. Ensur e this port is properly filtered through a firewall. T his port is internal only.
Management Console	HTTPS/ 8443	Administration console and control centre for the entire enterprise deployment.
Core Server	HTTPS/ 8887 (closed)	Manages policy flow, licenses, and registration fo r Preboot Authentication, SED Management, BitL ocker Manager, Threat Protection, and Advanced Threat Prevention. Processes inventory data for use by the Management Console. Collects and st ores authentication data. Controls role-based acc ess.
Core Server HA (High Availability)	HTTPS/ 8888	A high-availability service that allows for increase d security and performance of HTTPS connections with the Management Console, Preb oot Authentication, SED Management, FDE, BitL ocker Manager, Threat Protection, and Advanced Threat Prevention.
Security Server	HTTPS/ 8443	Communicates with Policy Proxy; manages foren sic key retrievals, activations of clients, and SED-PBA and Full Disk Encryption-PBA communicatio n.
Compatibility Server	TCP/ 1099 (closed)	A service for managing the enterprise architectur e. Collects and stores initial inventory data during activation and policy data during migrations. Processes data based on user groups. NOTE: Port 1099 should be filtered through a fire wall. Dell suggests this port be internal only.
Message Broker Service	TCP/	Handles communication between services of the Dell Server. Stages

Name	Default Port	Description
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	61616 (closed) and STOMP/ 61613 (closed or, if configured fo r DMZ, 61613 is open)	policy information created by the Compatibility Se rver for Policy Proxy queuing. NOTE: Port 61616 should be filtered through a fir ewall. Dell recommends this port be internal only. NOTE: Port 61613 should only be opened to Sec urity Management Servers configured in Front-End mode.
Identity Server	8445 (closed)	Handles domain authentication requests, includin g authentication for SED Management.
Forensic Server	HTTPS/ 8448	Allows administrators that have appropriate privil eges to get encryption keys from the Management Console for use in data unlocks or decryption tasks. Required for Forensic API.
Inventory Server	8887	Processes the inventory queue.
Policy Proxy	TCP/ 8000	Provides a network-based communication path to deliver security policy updates and inventory updates. Required for Encryption Enterprise (Windows and Mac)
PostGres	TCP/ 5432	Local database used for eventing data. NOTE: Port 5432 should be filtered through a fire wall. Dell recommends this port be internal only.

		Port 389 – This port is used for requesting inform ation from the local domain controller. LDAP requests sent to port 389 can be used to search
	389/636, 3268/326	for objects only within the global catalogue's hom e domain. However, the requesting application can obtain all of the attributes for those objects. For example, a request to port 389 could be used to obtain a user's department.
LDAP	9 RPC – 135, 49125+	Port 3268 – This port is used for queries specifically targeted for the global catalogue. LD AP requests sent to port 3268 can be used to search for objects in the entire forest.
		However, only the attributes marked for replication to the global catalogue can be returned. For example, a user's department could not be returned using port 3268 since this attribute is not replicated to the global catalogue.

Name	Default Port	Description
Client Authentication	HTTPS/ 8449	Allows client servers to authenticate against the Dell Server. Required for Server Encryption

Documents / Resources



<u>Dell Security Management Server Virtual v11.9</u> [pdf] Installation Guide Security Management Server Virtual v11.9, Security, Management Server Virtual v11.9, Server Virtual v11.9, Virtual v11.9

DOLLTschnologies

References

• User Manual

Manuals+, Privacy Policy